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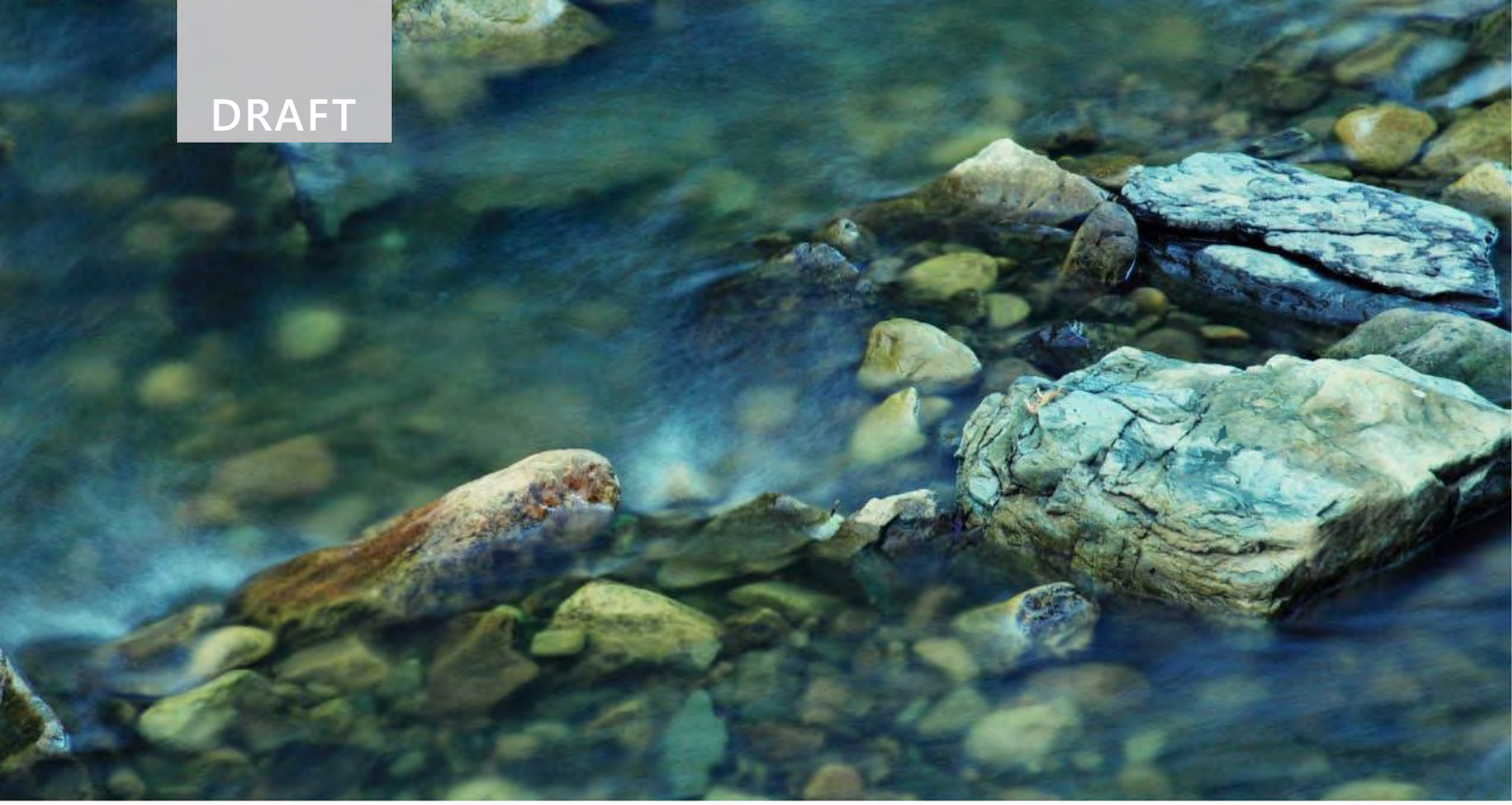

February 2026
Former Intalco Smelter Site

ANCHOR QEA

Demolition Interim Action Work Plan

Prepared for Intalco Aluminum, LLC

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February 2026
Former Intalco Smelter Site

Demolition Interim Action Work Plan

Prepared for
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4050 Mountain View Road
Ferndale, Washington 98248

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Project Number: 230002-05.09
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ABBREVIATIONS

ACM	asbestos-containing material
AltaGas	AltaGas Ltd./Petrogas Inc.
AO	Agreed Order
AST	aboveground storage tank
bgs	below ground surface
CFR	*Code of Federal Regulations*
CMF	compliance monitoring framework
COC	contaminant of concern
cPAH	carcinogenic polycyclic aromatic hydrocarbon
CRMP	*Cultural Resource Management Plan*
cy	cubic yard
DIAWP	*Demolition Interim Action Work Plan*
DLL	double-lined landfill
Ecology	Washington State Department of Ecology
EDB	ethylene dibromide
EDC	1,2-dichloroethane
EPA	U.S. Environmental Protection Agency
FS	feasibility study
HASP	health and safety plan
HII	heavy impact industrial
HTF	heat transfer fluid
HVOC	halogenated volatile organic compound
Intalco	Intalco Aluminum, LLC
mg/kg	milligram per kilogram
MHD	magnetohydrodynamic
MIDP	*Monitoring and Inadvertent Discovery Plan*
MTBE	methyl tertiary butyl ether
MTCA	Model Toxics Control Act
NDPES	National Pollutant Discharge Elimination System
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PID	photoionization detector
Plant	former Intalco smelter
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
RI	remedial investigation

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SEPA	State Environmental Policy Act
SPCC	Spill Prevention, Control, and Countermeasure
SPL	spent potliner
SQAPP	*Sampling Quality Assurance Project Plan*
SVOC	semivolatile organic compound
TPH	total petroleum hydrocarbons
TEQ	toxicity equivalence
TLL	triple-lined landfill
VOC	volatile organic compound
WAC	Washington Administrative Code
WSIA	Waste Site Impoundment Area
WTP	wastewater treatment plant

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1 Introduction

This *Demolition Interim Action Work Plan* (DIAWP) has been prepared by Anchor QEA on behalf of Intalco Aluminum, LLC (Intalco), and applies to cleanup activities performed in parallel to demolition of the former Intalco smelter (Plant) located at 4050 Mountain View Road, in Ferndale, Washington, (Figure 1). This DIAWP provides a framework for assessing field conditions and performing soil sampling and potential cleanup activities concurrently with planned demolition activities. Soil screening and sampling data will be evaluated to assess the need for interim remedial action during the demolition stage (i.e., shallow soil removal). The DIAWP has been prepared to satisfy the requirements of Washington State Department of Ecology (Ecology) Washington Administrative Code (WAC) 173-340-430 to perform remedial actions, if identified, concurrently to planned demolition activities to reduce potential threats to human health or the environment prior to the preparation of the remedial investigation (RI) and feasibility study (FS) for the site.

The purpose of the planned demolition is to remove buildings and structures associated with the former aluminum smelter. AltaGas Ltd./Petrogas Inc. (AltaGas) has entered into a purchase agreement with Intalco to own and develop approximately 1,600 acres of Intalco property. Details of the proposed development are unknown; however, the property is anticipated to remain as industrial use. Areas of demolition include the former aluminum smelter and associated buildings, immediately adjacent support areas, stormwater and utility infrastructure, and shoreline where alumina silos are located. These areas are shown in Figure 2 and discussed further in Section 3.

Interim remedial actions associated with demolition are expected to include the excavation of and permanent removal via off-site disposal of adversely affected soil that pose an immediate risk to human health and/or the environment from select areas that are suitable for interim action during, or immediately following, demolition. This DIAWP does not consider alternative, less permanent interim remedial actions (e.g., capping). The investigations conducted under this DIAWP will be used to guide potential interim remedial actions that can be feasibly completed during demolition. The evaluation of additional remedial actions will be based on the information and data gathered during the RI and analysis of cleanup alternatives in the FS in accordance with the requirements of WAC 173-340-350. The DIAWP will be implemented in accordance with WAC 173-340-430 and is pursuant to and enforceable under Agreed Order (AO) No. 24369. Intalco reserves the right to defer investigation activities and/or interim action in any work area to the RI or a separate interim action phase to address potential unforeseen or unexpected site conditions that may be determined to be an immediate risk to human health and/or the environment by Ecology. Additional interim actions outside of demolition will be completed in accordance with the AO.

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2 Site Description and Background Information

2.1 Location and Historical Use

The Plant encompasses approximately 383 acres located at 4050 Mountain View Road west of Ferndale, Washington. The Plant property includes Whatcom County Tax Property ID Nos. 186684, 186663, 186709, 186714, and 186715.

The Plant is located west of the city of Ferndale, in Whatcom County, approximately 13 miles south of the United States-Canada border (Figure 1). Ferndale has a population of approximately 16,000. The primary land uses in the area are residential, agricultural, and industrial. The Plant property is bordered to the north and south by heavy industrial operations, to the east by rural residential and agricultural lands, and to the west by the Strait of Georgia. The Plant and surrounding area are zoned for heavy impact industrial (HII).

Plant construction began in 1965, with the first aluminum metal produced in 1966. Construction continued through 1968 with the completion of the third potline. Alumax, Inc., was the majority owner of the Intalco facility until July 1998 when Alcoa Corp. acquired Alumax. At the height of production, the Plant employed 1,350 full-time hourly and salaried staff and was capable of producing 307,000 tons of aluminum per year. Normal three-line operating capacity was less than 300,000 tons of aluminum per year. Operations were curtailed in 2020 and officially closed in March 2023.

The production process employed at Intalco involved the electrolytic reduction of aluminum oxide (alumina) to aluminum metal (Hall-Héroult process). This process entailed passing an electrical current through a carbon anode in contact with molten alumina dissolved in an electrolyte bath all contained within a cathodic "pot." Each pot was constructed with an outer steel casing, called a pot shell, and connected with others in an electrical circuit line called a potline. The Plant operated three potlines, each with approximately 240 pots, housed within 6 potrooms. Other operations include a casting house, a carbon plant for anode production, a series of water treatment facility structures, and several material storage, maintenance, and administrative facilities, which are detailed further in Section 4.

Outside of the Plant, Intalco constructed and operated a double-lined landfill (DLL) and a dangerous waste landfill (the triple-lined landfill [TLL]). Circa 1975 prior to the construction of the DLL and TLL facilities in 1986, waste was managed at a location known as the Waste Site Impoundment Area (WSIA). Consolidation and closure of this disposal area was documented in the 1992 Part B permit application (Intalco 1992). Prior to 1975, solid wastes and construction debris were managed in three landfills, known as Beach I, Beach II, and the Closed Construction Debris Landfills, located along the shoreline bluffs. These areas were remediated between 2005 and 2007 under Consent Decree

07-00181-2 between Ecology and Intalco. Beach I and Beach II were restored to natural habitats at the completion of the cleanup (Anchor QEA 2009).

2.2 Ownership and Management

Intalco entered into an agreement with AltaGas to own and develop approximately 1,600 acres of land. To date, Intalco has transferred ownership of the dock and lands outside of the footprint of the smelter to AltaGas. Upon the completion of site demolition and remediation, the smelter parcels will transfer to AltaGas, which are approximately 144.95 acres. Intalco will retain ownership of the WSIA, TLL, and DLL (referred to as the Landfill Complex), which are approximately 40.32 acres.

2.3 Geology and Hydrogeology

The Plant and surrounding properties are located within the Puget Sound Lowland, a north-south trending structural and topographical depression bordered by the Olympic Mountains to the west and the Cascade Mountains to the east. Pleistocene glaciomarine deposits overly Tertiary volcanic, sandstone, and shale bedrock of Tertiary age at the property and surrounding area. The glaciomarine deposits are exposed at the surface, and the underlying bedrock is buried as much as 300 feet below the surface. The Pleistocene deposits are of variable thickness, extent, and character, reflecting the complex history of glacial advance and retreat episodes.

Data from reports of previous regional geologic investigations by Easterbrook (1976a, 1976b, 1976c) indicate that the Chuckanut Formation lies stratigraphically below the Cherry Point Formation. The Chuckanut is considered the bedrock beneath the site and is thought to be approximately 100 to 150 feet below sea level at the Beach I and Beach II landfill locations. The Chuckanut Formation has an undetermined thickness at this site and consists of interbedded shale and sandstone.

Seven distinct subsurface stratigraphic units have been encountered during various exploration programs conducted at the Intalco site: topsoil, fill material, surficial sand and gravel, the Bellingham Glaciomarine Drift, the Kulshan Glaciomarine Drift, the Esperance Sand (also referred to as the Mountainview Sand and Gravel), and the Cherry Point Formation.

Three potential water-bearing units have been identified at Intalco, including the following: 1) the regional sea level aquifer (middle member of the Cherry Point Formation, approximately 200 to 220 feet below ground surface [bgs]); 2) the shallow aquifer (basal portion of the Esperance Sand); and 3) the surficial aquifer (i.e., perched zones of limited extent in the drift deposits). No aquifers containing potable water are known to exist below the regional sea-level aquifer. Saline water is expected to occur near the base of the Cherry Point Formation due to the proximity to the Strait of Georgia along the shoreline.

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The presence and extent of surficial or perched groundwater within the former smelter area is anticipated to be variable and discontinuous. Groundwater at the site will be investigated during the pending RI process. Demolition activities discussed further in Section 3 may encounter perched water, which would be managed in accordance with the National Pollutant Discharge Elimination System (NPDES) permit, as appropriate. Further, fill and grade activities are scheduled to occur during the dry months, reducing the likelihood of encountering shallow groundwater.

2.4 Current Site Conditions

The Plant is currently undergoing demolition; however, it is currently mostly devoid of vegetation and comprises impervious surfaces (concrete foundations and asphalt surface cover). Grass and lightly vegetated areas are present between the potroom buildings and other isolated areas where stormwater swales are present. Peripheral areas of the Plant are vegetated, which increases between the Plant and shoreline to the west. The condition of the Plant within demolition work areas will continue to change throughout demolition and site grading until its completion, which is expected in 2027.

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3 Demolition Activities and Permitting

Demolition activities include demolishing buildings, structures, equipment, storage tanks, and utilities within the Plant, immediately surrounding support areas, and alumina silos along the shoreline. Work Area 1 is approximately 145 acres and includes six potrooms, rectifiers, and ancillary structures, anode production facilities, ingot casting facilities, support warehouses, and repair shops. Work Area 2 is approximately 67 acres and includes an alumina storage area located along the shoreline, sanitary treatment facility, administration buildings parking areas, and support buildings. Work areas are shown in Figure 2 and detailed in the State Environmental Policy Act (SEPA) Checklist provided in Appendix A. The two phases will be completed on separate timelines due to the longer permitting process anticipated for work along the shoreline for Area 2.

Demolition activities will be performed in accordance with Whatcom County requirements and facility permits by Intalco's selected contractor. Table 1 provides a list of permits and approvals obtained for the demolition and grading for the project. Copies of these permits and approvals are provided in Appendix A.

Table 1
Site Permits and Approvals

Permit or Approval	Agency	Permit No./Authorization
SEPA Determination	Whatcom County	SEPA2024-00038
Washington State NPDES Permit	Ecology	WA0002950
Demolition Permit for Work Area 1	Whatcom County	COM2024-00068
Land Fill and Grade Permit for Work Area 1	Whatcom County	LFG2024-00108
Demolition Permit for Work Area 2	Whatcom County	Pending
Land Fill and Grade Permit for Work Area 2	Whatcom County	Pending
Shoreline Substantial Development Permit for Work Area 2	Whatcom County	Pending
Asbestos/Demolition Notification and Permit	Northwest Clean Air Agency	Notification No. 25-167

Prior to demolition, cleaning phases will be completed to remove and empty the buildings and structures, including removal of asbestos containing materials (ACMs). Following cleaning and ACM removal, facility equipment, buildings, and structures will be removed, including above grade concrete and asphalt paving. Removal of below grade concrete structure, foundations, and footers will generally be completed to at least 3 feet below grade. Utilities shallower than 3 feet will also be removed.

Additional concrete may be removed pending future field decisions. Concrete slabs that will remain after demolition will be permeated by a hydraulic hammer prior to backfilling. Following demolition, voids, depressions, and basement structures will be backfilled and compacted following the facility's Land Fill and Grade Permit issued by Whatcom County.

According to the Land Fill and Grade Permit, it is estimated that approximately 5,000 cubic yards (cy) of clean backfill material will be imported, with the majority of the soils being used to fill the foundations of Silos #1, #2, and #3. Approximately 260,000 cy of material is anticipated to be exported from the Plant, including concrete for disposal and recycling, demolition debris, industrial waste, and recyclable materials and metals. Imported and exported material will be managed by the contractor under Intalco's Whatcom County Land Fill & Grade Permit for Work Area 1, in accordance with all federal, state, and local regulations.

The facility's NPDES permit for wastewater and stormwater was renewed addressing the demolition activities in November 2024 (Ecology 2024). Currently, stormwater and wastewater are collected on site, treated, and discharged to the Strait of Georgia in accordance with the facility's NPDES permit. The majority of the ditches and stormwater collection systems will remain in place and will continue to drain to the existing outfall. During demolition, stormwater from the demolition areas will be managed under the Ecology-approved plan to prevent contaminated stormwater discharging to the strait.

Entry roads to the administration building and plant roads leading from alumina Silos #1, #2, and #3, and between potlines and the Cast House, stormwater pond, and pump house will remain after Plant demolition. Remaining roads after demolition are depicted in Figure 3 of the SEPA Environmental Checklist Application prepared by Intalco (Appendix A). Demolition maps prepared by Grette Associates are provided in Appendix B.

3.1 Work Area 1 – Plant Interior

Work Area 1 consists of demolishing buildings and structures within the main plant. The buildings and structures included in this phase are as follows:

- **Work Area 1A—Potlines and Associated Structures:** Potlines, substations, and emission control equipment
- **Work Area 1B—Metal Casting and Associated Structures:** Cast houses, guard house, medical and storage buildings, laboratories, and associated structures and equipment
- **Work Area 1C—Maintenance, Warehouses, and Wastewater Treatment:** Maintenance and engineering buildings, warehouses, primary wastewater treatment facilities, and compressor buildings
- **Work Area 1D—Carbon Plant and Associated Structures:** Carbon bakes, Green Mill/Paste Plant, coke storage, pitch storage, Rod Shop, and associated structures and equipment

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- **Work Area 1E—Wastewater Treatment, Emissions Control, and Storage:** Secondary wastewater treatment, emission control systems, propane storage, and associated structures and equipment

3.2 Work Area 2 – Plant Exterior

Work Area 2 consists of demolishing buildings and structures outside the main plant. The buildings and structures included in this phase are as follows:

- **Work Area 2A—Alumina Storage and Handling:** Alumina silo, unloading building, alumina handling equipment, and associated structures and equipment
- **Work Area 2B—Administration:** Administration building, storage building, and associated structures and equipment
- **Work Area 2C—Outer Buildings:** Barns, temporary offices, fire training, and associated structures and equipment
- **Work Area 2D—Alumina Storage:** Alumina silos, handling equipment, and associated structures and equipment
- **Work Area 2E—Sanitary Treatment Area:** Sanitary sewer lagoon and associated structures and equipment
- **Work Area 2F—Water Treatment:** Water treatment building, water treatment tanks, and associated structures and equipment

3.3 Demolition Schedule

In April 2025, Intalco began the process of preparing buildings for demolition, including asbestos abatement, emptying and closing storage containers, and industrial cleaning. Demolition activities began in August 2025. Demolition is anticipated to be completed in late 2026. Fill and grade activities are permitted to occur in the dry season, which is anticipated to begin in summer 2027.

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4 Former Plant Operations

This section provides an overview of the former Plant operations that are within each of the various demolition work areas. Plant operations included activities related to electrode production, potrooms, ingot casting, material storage and handling, and maintenance of equipment and vehicles. Figure 3 and Figures 4a through 4h show the approximate location of facility buildings, ancillary equipment, and features within each area of the Plant. This section summarizes the industrial products used within each area. A preliminary evaluation of the potential contaminants of concern (COCs) that may be present within each former operational area was conducted and is provided in Section 4.9. The COCs may be refined as demolition progresses as part of Stage 3, as described in Section 6. As part of the forthcoming RI, a preliminary conceptual site model will be developed based on the understanding of former Plant operations discussed in Sections 4.1 through 4.8 and will be supplemented by the information and data gathered through the framework discussed in Section 6.

4.1 Bulk Material Storage and Handling

The Plant stored bulk quantities of raw materials either as new products or byproducts generated as part of the smelting process as noted in the *Release Prevention, Control, and Countermeasure Plan* (Intalco 2018) that was followed during Plant operation. Those products include but are not limited to water treatment chemicals (sodium hydroxide, sulfuric acid, sodium hypochlorite, and polymers); coal tar pitch and petroleum coke for carbon anode production; propane to heat buildings and fuel equipment; cryolite to increase smelting efficiency (aluminum solvent/temperature reduction); and mineral oil to support substation operations. Residual waste/byproducts include but are not limited to casting waste (dross), spent potliner (SPL) from primary aluminum smelting cells, inert bulk materials (e.g., refractory bricks), water treatment sludge, used waste oils, used solvents, and universal waste.

In accordance with 40 *Code of Federal Regulations* (CFR) 112.1, a Spill Prevention, Control, and Countermeasure (SPCC) Plan (Appendix C) has been developed and maintained for the facility to implement measures to prevent discharges of petroleum products and oil to navigable waters (Strait of Georgia). The current SPCC Plan was developed for the demolition activities and details various petroleum products and oils currently stored or recently stored at the facility. As summarized in the facility's SPCC Plan, petroleum products stored at the facility include heat transfer fluid (HTF), gasoline and diesel used for fueling on-site vehicles and equipment, various hydraulic oils and lubricating oils used in process equipment, solvents used in maintenance operations, used oils and solvents, portable fueling containers, and transformer oils in electrical transformers. The approximate locations of fixed storage tanks (aboveground and underground) are presented in Figures 4a through 4h and discussed in further detail in the following subsections. Portable petroleum storage

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containers have also been used throughout the Plant, and those features are summarized in the SPCC Plan provided in Appendix C.

4.2 Intalco Substation

Intalco's substation is a crucial component in aluminum smelting due to the high, continuous, and specific power requirements of the Hall-Héroult process. The facility's substation has three yards (A, B, and C) that supply power to the three corresponding potlines (A, B, and C). The Intalco substation, substation oil and support building, and aboveground storage tank (AST) areas are located in Work Area 1A and shown in Figure 4a. Each containment impoundment has a grated sump. At the bottom of the sump is a pipe that discharges into the facility drainage system.

Outside of the substation, within the production area of the Plant, there were approximately 80 oil-filled transformers, 60 of which are or previously were SPCC-regulated and contained between 123 and 5,490 gallons of oil to support production. Transformers are listed in the SPCC Plan and shown in Figures 4a through 4h. According to the facility records, all known polychlorinated biphenyl (PCB) transformers (containing greater than 50 parts per million [ppm] PCBs) were removed from service by 2002, as well as large (greater than 3 pounds) capacitors containing PCBs. Transformers outside of the substation are discussed in subsequent sections and depicted in Figures 4b through 4h.

Three approximately 9,000- to 10,000-gallon ASTs (tanks SS-T2, SS-T3, and SS-T4) are located within the Intalco substation formerly containing transformer oil and used transformer oil. The ASTs are located at the northern end of Potroom B-1 within an area of secondary containment consisting of curbed concrete catchment with drain leading into a rock-lined clay containment impoundment. As part of the demolition, these ASTs will be decommissioned; the closure of the tanks is discussed further in Section 5.2.1.

The transformer service building for the substation was historically used for the maintenance and repair of facility electrical equipment.

4.3 Carbon Plant and Rodding

The Carbon Plant consists of the Anode Baking building, Green Mill/Paste Plant, Rod Shop, and pitch and coke storage areas located on the west side of the Plant, which were used for producing the carbon anodes used in the electrolysis process. The Carbon Plant and associated support buildings/features are within Work Area 1D included in Figure 4b. The pre-baked carbon anodes were produced by mixing calcined petroleum coke (a byproduct of oil refining), coal tar pitch (a binder derived from coal tar), and recycled carbon anodes (spent anode butts).

The raw materials (calcined petroleum coke, coal tar pitch, and recycled anodes) were stored in the Green Mill/Paste Plant area. The materials were used to create carbon paste that was pressed into

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green anodes. Green anodes are carbon blocks that have not gone through the final baking process. The anodes were formed by sizing, mixing, and heating calcined petroleum coke, coal tar pitch, and recycled anodes. The green anode blocks were moved to the Anode Baking building.

Raw carbon components (calcined petroleum coke and coal tar pitch) were brought into the Plant via rail located south of the Green Mill/Paste Plant building. The coal tar pitch was originally brought on site as pencil pitch and stored in the pitch storage area. The plant switched to liquid coal tar pitch, and this was formerly stored in three 100,000-gallon ASTs referred to as Silo #1, #2, and #3 (CP-T1, CP-T2, and CP-T3, respectively) west of the Green Mill/Paste Plant building. The coal tar pitch tanks were heated to maintain the pitch in a molten state using an oil heat transfer system using an HTF. HTF was heated and used to jacket the mixers and pitch system to maintain a temperature conducive to pitch fluidity. The HTF system was a closed loop heating system that passed through tanks, supported by a reservoir tank (CP-T4) containing HTF. The pitch tanks were closed in 2021 in accordance with 40 CFR 112.2 (Intalco 2022). Three 3,000-ton silos (A, B, and C) and adjacent rail line were used to import and store calcined petroleum coke on the east side of the Green Mill/Paste Plant.

The Butts Storage building, located adjacent to the Green Mill/Paste Plant, stored anode butts (left over portions of carbon anodes after they have been consumed in the Hall-Héroult electrolysis process). Butts were collected in the building for recycling.

The Rod Shop is located immediately adjacent to the Anode Baking building. The Rod Shop handled both recycled anodes and recently baked anodes. Anodes butts were brought into the building to be cleaned and sized for recycling. The anode butts were sent back to the Green Mill for addition to the anode paste. The new baked anodes were fitted to rod assemblies, preparing them for the smelting process. Cast iron was prepared for attaching the rod assemblies to the anodes prior to their use in the potrooms. Material cleaned from the recycled anodes was sent to the Autogenous Mill/crushing facility located in the northwest corner of the Plant. The Autogenous Mill/crushing facility used mechanical methods to grind material into smaller more manageable fragments for reuse in the potrooms.

Immediately north of the Rod Shop is the Annex building, which served as a subsidiary structure to provide various support and auxiliary functions essential for potline operation. This building supported construction of the cathode and managed the cleaning, repairs, and maintenance of the aluminum transport crucibles. The crucibles were used to transport molten aluminum from the potroom to the Cast House. Periodically, these crucibles needed to be cleaned and maintained, and this work was completed in the Annex building. Cathode construction consisted of placing layers of materials in the steel pot shell. The layers included refractory brick and carbon cathode materials. Above the refractory brick were the carbon cathode blocks with a collector bar inserted into the block. Spaces around the blocks were sealed with cathode paste, which was made from petroleum

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pitch and anthracite coal. A seamless air-tight connection between the carbon blocks and cathode paste with the collector bars was essential in the electrolytic reduction of alumina as they carried the electric current into the cathode, which passed through the molten alumina to the carbon anodes.

A scrubber system (Bake Oven Scrubber) is present immediately west of the Carbon Plant. Emissions from the carbon bakes were treated through a dry coke scrubber in the associated baghouse. Gasses generated during the baking process were treated within the Bake Oven Scrubber where they were mixed with coke and filtered back through the baghouse. The coke was then recycled into the paste mix in the Green Mill.

Oil-containing equipment or storage in the Carbon Plant included two out-of-service ASTs supplying hydraulic oil and HTF (tanks CP-T5 and CP-T19). The HTF AST (CP-T5) is located indoors within a subgrade concrete containment vault. The press hydraulic oil AST (tank CP-T19) is also located indoors within the Green Mill/Paste Plant sitting on concrete and within containment. Other ancillary equipment with hydraulic reservoirs (e.g., conveyors, presses, mixers, transformers, and furnaces) were used within or adjacent to these buildings ranging from 20 to 3,600 gallons in size to support the production process.

4.4 Potrooms and Associated Baghouses

Three potlines, each with two potrooms, were used in the reduction of alumina to pure molten aluminum (A-1, A-2, B-1, B-2, C-1, and C-2). The potrooms are located in the central plant area between the Carbon Plant and the Cast House in Work Area 1A and presented in Figure 4c. Alumina was placed into electrolytic cells, or pots, covered with bath (aluminum salts such as cryolite [sodium aluminum fluoride]) to reduce the melting point of alumina and heated until molten using electric current. The pots were arranged in an electrical series along the potline. Each pot consisted of a steel pot that was lined with carbon that acted as a cathode. Within each pot, an electric current was passed through the alumina mixture to a carbon anode that was manufactured on site at the Carbon Plant, thereby creating the electrolytic process that reduced the alumina to pure aluminum and oxygen. The oxygen attached to the carbon anode and consumed the anode by producing carbon dioxide and carbon monoxide. The salt bath was reused and recycled. Portable hydraulic oil ASTs (P-T1 and P-T2) were stored immediately east of Potrooms A-2 and C-2 to support operations in the area.

Over several years, the cathode would deteriorate and require replacement. As a result, a portion of the pot with the carbonaceous materials would be removed and generated as a waste referred to as SPL. SPL was initially listed by the U.S. Environmental Protection Agency (EPA) as a hazardous waste in 1988. In the early years of the plant operation, and prior to the construction of the TLL, SPL was accumulated in areas around the Plant and stored in the WSIA. SPL was stored in the TLL after it was constructed until closure of the TLL in 2012. After then, SPL was transported and disposed of at

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off-site, regulated facilities via the SPL Shipping Pad/Reline 90-Day Area located in the northwest corner of the Plant, discussed further in Section 4.8.1.

Baghouse buildings located between the potrooms consisted of a dry scrubbing process that used alumina ore as a filter media due to its adsorptive efficiency for emission control and fluoride recovery. The fluoride off-gasses from the potroom smelting operation were collected at the baghouses. Due to the volume of off-gas treatment, the baghouses were routinely maintained. Alumina ore that was used in the baghouse was sent to the potrooms as the alumina feed for the pots to produce aluminum. The used alumina was commonly referred to as "reacted." Fresh alumina was continuously fed into the baghouses. The potlines also had wet roof scrubbers to reduce emissions. Potline return water from the potline roof scrubber system was routed to the Plant's Primary Wastewater Treatment Plant (WTP), discussed further in Section 4.5.

4.5 Wastewater and Water Treatment Facilities

Intalco operated a Primary WTP located in the southern portion of the Plant (Work Area 1C, Figure 4e) and a Secondary WTP located in the western portion of the Plant (Work Area 1E, Figure 4d). Other wastewater treatment facilities include the stormwater pond located southwest of the Plant (Figure 2) and the Cast House cooling towers. Additionally, a water treatment tower and associated structures are located east of the Primary WTP (Figure 4e).

The Primary WTP, which began operation in December 1971, received approximately 0.38 million gallons per day of potline return water from the potline roof scrubber system. The potline return water treatment was implemented to capture fluoride. The water from the wet scrubbers drained via underground piping to a sump within the Primary WTP (Chrystal Engineering 2004). Primary wastewater treatment consisted of pH adjustment with sodium carbonate and clarification. Treated wastewater was recycled back to the wet scrubber system (Intalco 2018). Purge water from the Primary WTP was routed to the 1,050,000-gallon equalization tank that fed the Secondary WTP or was routed directly through the Secondary WTP system, which began operation in May 1986. Prior to 2013, leachate from the TLL was also routed through the Secondary WTP.

The Secondary WTP used calcium chloride, flocculation, and clarification to treat the wastewater (Intalco 2018). Treated effluent was discharged into the Strait of Georgia through outfall 001, in accordance with the facility's NPDES permit requirements. Sludge generated by the Secondary WTP was previously disposed of in the TLL prior to its closure. Later the sludge was placed in trucking containers for off-site disposal. The Secondary WTP and associated truck loading area consists of an approximately 407-square-foot concrete pad with curbing sloped to a drainage line tied back into the Secondary WTP. The transfer pad will be closed per the *Hazardous Waste Areas Closure Plan* (Anchor QEA [forthcoming]).

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Other treatment chemicals used at the Primary and Secondary WTPs to support wastewater treatment operations included caustic soda, sodium hydroxide, sulfuric acid, water treatment polymers, and ferrous sulfate.

A third wastewater treatment area includes the Cast House WTP, which provided water for heat transfer in the casting of various products in the Cast House. After water was used in the casting process in the direct casting pits, the wastewater was pumped back to the Cast House WTP. The wastewater was treated to remove oil and other debris using an oil-water separator system, including a Floc Tank and WEMCO unit. After the wastewater was treated, it was pumped to the cooling towers within the southeast corner of the Plant. After cooling, the wastewater was then used again in the casting pits. Because the cooling system was a closed loop, water quality monitoring was performed to monitor contaminant build up. Bleed stream water was routed through the Primary WTP as needed based on contaminant levels and if excess water was present (Intalco 2018).

The Plant's stormwater pond and collection system is anticipated to remain after demolition. Stormwater is collected in catch basins and concrete conveyance ditches throughout the Plant and transmitted via gravity flow to the stormwater retention pond. The stormwater pond covers an area of approximately 1.4 acres. The level of the stormwater retention pond is maintained at a constant, maximum height via an outlet weir structure. From the stormwater retention pond, water flows to catch basin monitoring point D-10, which is equipped with a continuously operating oil skimmer. Under normal conditions, stormwater flows from catch basin monitoring point D-10 to outfall 001, located off AltaGas's deep-water pier (Anchor QEA 2025a). Under high-flow conditions that exceed outfall 001 capacity, water is diverted to outfall 002. Catch basin monitoring point D-10 and outfalls 001 and 002 are shown in Figure 2.

4.6 Cast House

The former Cast House is located on the eastern boundary of the Plant adjacent to Potroom A-1 in Work Area 1B depicted in Figure 4f. At the Cast House, the molten aluminum collected from pots was batch-treated in holding furnaces to remove impurities by using a fluxing agent (typically chlorine gas). After fluxing the molten aluminum, the impurities would rise to the surface of the aluminum and would be removed. This material was called dross and was sent off site for processing and recycling to recover entrapped aluminum. After treatment, alloying metals were added to the aluminum and then cast into ingots or billets. Ingots were casted by a direct chill casting process where molten aluminum was lowered into a water-cooled mold within the pit. Billets were cast in a similar manner, through water cooled casting techniques and then reheated in a homogenizing furnace. The billets and ingots were then moved on site or off site to fabrication facilities. Water used in the casting pits was scrubbed and recycled through the Cast House cooling towers as discussed in Section 4.5.

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South of the main Cast House is the magnetohydrodynamics (MHD) Casting Facilities 1 and 2. The MHD buildings were intended to be used for specialized casting methods; however, they have more prominently been used for additional warehouse space. The MHD buildings are to remain after demolition.

4.7 Warehouses

Four general warehouse buildings (Warehouses 2, 4, 5, and 6), paint shop, plant maintenance building, main warehouse, automotive maintenance shop, meter and instrument shop, and potline maintenance building were used by the facility for general upkeep, storage of materials, and repair of equipment, machinery, and/or infrastructure (Figures 4b and 4g). General processes including automotive and parts maintenance and repair, parts cleaning/degreasing, and vehicle and equipment fueling occurred within and adjacent to the maintenance shops and fueling areas. A wide range of oil, water-based lubricants, cutting fluids, fuels, hydraulic fluids, greases, cleaning solvents, and paints were likely used for Plant maintenance. Five 2,000-gallon out-of-service ASTs (tanks MR-T1 through MR-T5) containing new oil were formerly used on the southern end of the automotive maintenance shop. One 500-gallon AST formerly containing used oil is also located in the same area (tank MR-T6).

The 90-Day Drum Storage Shed is located in the southern portion of the plant and was previously used for storing oily waste, nonhazardous waste, and hazardous waste drums. The area is planned to continue waste storage operations until the end of the demolition activities. Specific areas within the shed are denoted for hazardous and nonhazardous materials. There are three ASTs, including a 4,000-gallon waste oil AST (tank E-T2), 1,000-gallon waste oil AST (tank E-T3), and a 1,500-gallon solvent waste AST (tank E-T5), which are associated with the 90-day storage yard. The ASTs are set within secondary containment constructed of concrete including two sumps. All three ASTs have been emptied and were last used as part of facility operations in October 2020. The building and ASTs are included in the *Hazardous Waste Areas Closure Plan* (Anchor QEA [forthcoming]).

4.8 Other Supporting Plant Operation Areas

4.8.1 SPL Shipping Pad/Reline 90-Day Area

The SPL Shipping Pad is located outside the main facility gate and was previously used for storage of SPL before the material was transferred to rail cars on the adjacent rail line. SPL was stored in metal containers while awaiting shipment. The area is composed of a large concrete and asphalt pad approximately 366 feet in length. The pad is approximately 40 feet in width along the northern side and approximately 90 feet along the southern side, closest to the road. Along the western side of the pad is an asphalt swale that was lightly vegetated and seasonally can contain stormwater. The SPL Shipping Pad is shown in Figure 4h. This area is being closed per a separate plan developed to

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comply with WAC 173-303-200(12)(c) and EPA Resource Conservation and Recovery Act (RCRA) Subtitle C regulations.

4.8.2 Incinerator (Decommissioned)

Intalco formerly operated an "Air Curtain Open Pit Burner-Permanent Installation" incinerator unit. Approximately 6 tons per week of plant burnable waste from offices and lunchrooms were incinerated within the unit (approximately 1 day a week for 6 hours). Material placed in the incinerator included natural vegetation, wood wastes, cardboard, and combustible trash (paper, cardboard, rags, and rubber) (Chrystal Engineering 2004). The incinerator was approximately 12 feet deep and located adjacent to Warehouse #6 in the southern portion of the Plant in Work Area 1C and presented in Figure 4g.

4.8.3 Alumina Silos

The Plant operated multiple silos to store raw alumina for the smelting process. Near the pier, three 30,000-ton silos (Silos #1, #2, and #3) stored alumina prior to being transported to Silo #4 located in the northwest corner of the Plant (Figure 2). The silos were loaded via overwater conveyor system and trucked into the Plant via service roads. Silos #1, #2, and #3 provided climate-controlled storage for alumina powder. Silo #4 was considered a buffer silo storing a smaller amount of alumina near the potlines, located in Work Area 1D and shown in Figure 3.

4.8.4 Fire House and Training Area

Intalco maintained a fire engine and fire hall to respond to Plant emergencies. The fire hall building is located immediately south of the main Plant gate (Figure 4f). In addition, Intalco used an approximate 1,120-square-foot concrete pad for fire training purposes northwest of the main Plant area and railroads. Grading after demolition is not currently planned for these areas; therefore, the investigation of potential releases from fire training operations will be investigated as part of the pending RI.

4.8.5 Laboratory

Intalco operated an environmental laboratory to perform quality control and process management. Testing included raw material to determine purity and composition, in-process monitoring, and pollutant monitoring. The laboratory is located immediately adjacent to the Cast House shown in Figure 4f.

4.8.6 Sanitary Lagoon

The sanitary treatment lagoon is located southwest of the main Plant. The lagoon provides on-site treatment for domestic wastewater generated by facility personnel. The lagoon was designed in 1965 for approximately 770 Plant personnel and consists of a collection system, inlet vault, sanitation

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lagoon treatment system, outlet weir box, ultraviolet disinfection system, and discharge piping to outfall 001. As part of the demolition activities, the area will be graded to remove the existing earthen berm/gravel road on the east and south sides of the sanitary lagoon and tie into the adjacent landscape. Closure activities will be conducted as documented in the *Sanitary Lagoon Closure Plan* dated September 2025 (Anchor QEA 2025b) and is currently pending Ecology approval.

4.8.7 Administration, Change Houses, and Offices

To support the Plant operations, numerous support buildings are present, including administrative and offices, control buildings, contractor buildings, employee change houses, lunchrooms, Kynell barns, record storage building, and safety/medical building. Industrial processes or storage of chemicals were not activities within or surrounding the support buildings.

4.9 Summary of Potential Contaminants in Former Plant Operational Areas

A preliminary evaluation of potential COCs was conducted based on the knowledge of former Plant processes, operations, and material storage and handling, as summarized in Sections 4.1 through 4.8. The evaluation of potential COCs in each area will be used to refine the soil screening processes that will be used as presented in Stage 3. If COCs are positively identified during screening, refinement of post-demolition sampling and analysis plan will be conducted in Stage 4, if required, and further the implementation of any potential sampling that would occur in Stage 5. Additional COCs may be identified during the pending RI process, which will inform future investigations and evaluation during the RI/FS process. Table 2 provides a summary of potential COCs that may be present within specific locations of the former Plant operational areas.

Table 2
Summary of Former Plant Operational Areas and Potential COCs

Operational Area[1]	Potential Contaminants of Concern
Intalco Substation	• Petroleum (mineral oil), PCBs, HVOCs (waste oil storage), and metals
Carbon Plant and Rodding	• cPAHs and metals • Near former bulk product/waste oil storage areas: Petroleum (diesel and oil), VOCs, HVOCs, SVOCs, cPAHs, and metals • Near former oil containing equipment: Petroleum (mineral oil), PCBs, and metals
Potrooms and Associated Baghouses	• cPAHs, fluoride, cyanide, and metals
Wastewater Treatment Facilities	• TPH (gasoline, diesel, oil), VOCs, SVOCs, cPAHs, fluoride, cyanide, pH, and metals
Casting Facilities	• Near former oil containing equipment: Petroleum (mineral oil), PCBs, and metals • Near former bulk product/waste oil storage areas: Petroleum (diesel and oil), VOCs, HVOCs, SVOCs, cPAHs, PCBs, and metals

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Operational Area[1]	Potential Contaminants of Concern
Warehouses	• Near former bulk product/waste oil storage areas: Petroleum (diesel and oil), VOCs, HVOCs (waste oil storage and paint storage/usage), SVOCs, cPAHs, PCBs, and metals

Note:

1. Bulk material storage and handling, as described in Section 4.1, occurred at various locations within the former Plant operational areas. Related potential COCs that may be present within each operational area are presented in this table.

5 Potential Areas of Interim Action

Potential areas of interim action during the demolition stage include locations of past PCB releases within the buildings and AST areas that will be decommissioned and closed during demolition activities. With the exception of the hazardous waste management areas,[1] the remaining former operation areas described in Section 4 are not anticipated to warrant investigation and/or action during the demolition phase and instead will be investigated as part of the pending RI. The need for sampling and/or interim action in these additional areas would be based on field screening and data produced during the closure of the hazardous waste management areas.

In preparation of the RI work plan, Intalco is also in the process of reviewing historical facility records. Areas of potential concern may be identified during the historical documentation review that coincides with demolition activities. These areas may warrant additional inspection during the demolition phase. Pending initial inspection or if an area of concern is discovered during the demolition phase, the need for investigation will be evaluated through the framework process presented in Section 6. Areas outside of planned shallow soil disturbance associated with the demolition and fill and grade activities will be deferred to the RI.

The following provides a summary of areas where sampling will be conducted under this DIAWP based on known releases and ASTs.

5.1 Historical PCB and Oil Releases

According to Intalco's facility records, five releases of PCB containing oil have occurred within the Annex Building, Rod Shop, Cast House, Paste Plant, and closed wet scrubber pond. Additionally, a mineral oil release at the substation was identified in facility records. The following provides a summary of each event and where they may coincide with demolition activities. Where releases were reported the areas will undergo evaluation before and after demolition, and further investigation of underlying soil condition will be completed following the framework process outlined in Section 6.

5.1.1 Annex Induction Furnace

The Annex Area induction furnace is located in the northeast corner of the Annex building, shown in Figure 4b. The furnace was used to prepare cast iron for rodding cathode assemblies starting in 1965. The furnace used PCB-containing capacitors until December 1983. In 1988, the concrete bus trench below the furnace control panel was cleaned to support control panel replacement and

[1] The hazardous waste management areas within the Plant operations (i.e., exclusive of the TLL) include the SPL Shipping Pad, 90-Day Drum Storage Shed, and the Secondary WTP loading area. The closure of these areas is described in the forthcoming *Hazardous Waste Area Closure Plan* (Anchor QEA [forthcoming]).

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furnace upgrading. The bus trench included a drain line at the base of the trench leading outside (north) the building to a gravel drainage area.

According to facility records, a sample of dust was collected and analyzed for PCBs, and laboratory analysis reported a concentration of 191,000 ppm PCBs. Two soil samples (samples B8 and B9; refer to Figure 5) were subsequently collected 3 inches beneath the concrete slab reporting concentrations of PCBs at 3.5 and 2.5 ppm, respectively, which was above the Model Toxics Control Act (MTCA) Method A Unrestricted Use cleanup level of 1 ppm. Incremental soil excavation and sampling was completed down to approximately 6 feet bgs, removing the associated cast iron drain line. Soil with PCB concentrations up to 339 ppm was removed from the excavation. Confirmational soil samples (B15 through B21; Figure 5) were collected from the base of the excavation within the building, at approximately 5 feet. The PCB concentration at location B21 was reported at 15 ppm, and the remainder of the soil samples were below 1 ppm. Due to structural concerns, the excavation was not advanced any further and terminated within dense clay material.

Following the drainage line excavation within the building, the drainage area was excavated to approximately 6 feet bgs terminating in the same dense clay material. PCB concentrations in all final soil samples collected from the base of the drain field excavation were reported below 1 ppm.

Based on the limited soil data within the Annex remedial excavation area, additional investigation of underlying soil is warranted.

5.1.2 Rod Shop Induction Furnaces

The Rod Shop included two induction furnaces with PCB-containing capacitors. The approximate former furnace areas are shown in Figure 4b. In 1989, during removal of capacitors at the Phase A induction furnace, a release of PCB oil was identified via a wipe sample collected under the pouring platform (71 micrograms per wipe). At the direction of Ecology, a metal barricade was installed to prevent inadvertent exposure to the PCB contaminated area. Soil beneath the concrete floor has not been evaluated.

5.1.3 Cast House Induction Furnace

In 1987 and 1988, it was identified that PCB-containing capacitors had contaminated a cabinet, sump, and adjacent concrete. Wipe sampling completed on the concrete floor adjacent to the sump identified PCB concentrations of 2,300 to 6,100 ppm. The basement containing the sump was approximately 7 feet below the Cast House floor grade. The induction furnace and cabinet were demolished, and the area including the basement and sump were reportedly cleaned and backfilled; however, details of follow-up wipe sampling and methods for backfilling the basement are currently unavailable. The concrete in the area was replaced, and the area was demarcated with floor paint and signage to prevent inadvertent exposure if present. Further investigation will be completed in this

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area during demolition to evaluate if impacted soil is present beneath the concrete foundation. Proposed investigation includes the former footprint of the induction furnace and immediately surrounding area as shown in Figure 4f.

5.1.4 Paste Plant Mixers

Prior to 1974, HTF was used within the Phase A and Phase B mixers at the Paste Plant. Facility records indicate previous identification of detectable PCB concentrations in the concrete surrounding the mixers. Details regarding the number of sample locations or laboratory reports have not been identified in subsequent reports. The area was subsequently barricaded to prevent inadvertent exposure during routine Plant operations. The mixer areas are both approximately 475 square feet in size and shown in Figure 4b.

5.1.5 Closed Wet Scrubber Pond Area

A release of PCBs to shallow soil was reported to Ecology in April 1999 near the Bake Oven Scrubber located in the southeast portion of the Carbon Plant (Figure 4b). During a routine construction project involving regrading and paving, approximately 326 tons of soil was stockpiled for disposal. The stockpiled soil was sampled for waste characterization purposes and identified elevated concentrations of PCBs. Subsequent surficial soil sampling was conducted outside of the paved area to determine if additional contaminated soil existed in surrounding undisturbed soil (Alcoa 1999).

A total of 10 surficial samples were collected as shown in Figure 6. According to the provided laboratory reports, concentrations of PCBs above the MTCA Method A screening level of 1 milligram per kilogram (mg/kg) were reported at sample locations 1, 2, 3, 4, 5, 6, and 8. Concentrations of total polycyclic aromatic hydrocarbons (PAHs) above the MTCA Method A screening level of 2 mg/kg were reported at sample locations 1 through 9.

Additional remedial activities in this area are currently unknown. Intalco anticipates this area shown in Figure 4b will undergo some level of surficial soil disturbance during fill and grade activities warranting additional investigation of soil quality during demolition.

5.1.6 Substation Mineral Oil Spill

In January 2012, a mineral oil spill was reported at the substation yard. The spill was approximately 500 to 750 gallons and originated from a mobile tank used to store drained used oil from transformers within the substation. It was determined that after the initial release, a high intensity rain event mobilized some of the mineral oil into the Plant stormwater system. According to facility records, approximately 157 tons of visibly impacted soil and groundwater were reportedly removed from the substation area. Absorbent material was used within the stormwater system to address visible sheen. Follow-up sampling was conducted within the stormwater system and outfall 001 to

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confirm the release was adequately remediated and no further material was mobilized through the stormwater system.

Intalco anticipates this area shown in Figure 4a will have some level of surficial soil disturbance during fill and grade activities warranting additional investigation of soil quality during demolition.

5.2 AST Decommissioning

To support operations, Intalco operated numerous portable and stationary ASTs within buildings and outside of buildings. The following subsections describe two areas of bulk fuel storage that are outside of buildings and that will be closed as part of demolition activities. In addition, the 90-day storage yard, which will be addressed as part of the waste area closure process summarized in Section 5.3, included three ASTs: two storing waste oil and one storing used solvents.

The bulk storage containers or ASTs at the Plant are regulated by EPA's SPCC regulation 40 CFR Part 112. Closure procedures include removing all liquid and sludge from the container and connecting lines prior to disconnecting all lines and piping. All containers should have conspicuous signs noting that the containers are closed, including the date of the closure. Intalco is currently completing tank closures around the Plant in preparation for demolition.

Releases from the ASTs have not been reported; however, sampling will be conducted to identify the potential for impacts. Soil sampling will be conducted as specified in Section 6.4, to evaluate the condition of the soil beneath/surrounding the ASTs located outside of buildings. Remaining ASTs within buildings and their potential for releases to underlying soil will be evaluated through the post-demolition evaluation process specified in the interim action framework discussed in Section 6.

5.2.1 Intalco Substation Waste Oil and New Oil ASTs

Three approximately 9,000- to 10,000-gallon steel ASTs (tanks SS-T2, SS-T3, and SS-T4) are located within the Intalco substation formerly containing new transformer oil (AST SS-T2) and used transformer oil (ASTs SS-T3 and SS-T4). The ASTs are located at the northern end of Potroom B-1 in Yard B of the substation. The ASTs are within an area of secondary containment consisting of curbed concrete catchment (approximately 2,000 square feet) with drain leading into a rock-lined clay containment impoundment with a holding capacity of 12,586 gallons. The ASTs and another portable AST (SS-T1) known to be routinely stored in the area are shown in Figure 4a.

5.2.2 Central Fueling Area Fuel ASTs and Dispensers

The central fueling area is located in the southern portion of the Plant, immediately south of Potroom A-2 and is shown in Figures 4e and 4g. The fueling area includes one 12,000-gallon AST containing diesel (tank F1) and one 6,000-gallon AST containing gasoline (tank F2); product dispensers are connected via underground product piping and located immediately south of the

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ASTs under a single canopy. The central fueling area was used for Plant vehicle re-fueling and is currently still in use. The ASTs are sitting on a concrete foundation surrounded by soil. The ASTs and dispenser area combined are in an area approximately 2,600 square feet in size.

5.2.3 90-Day Storage Yard Waste Oil and Solvent ASTs

The ASTs associated with the 90-day storage yard consist of a 1,500-gallon solvent waste AST, a 4,000-gallon waste oil AST, and 1,000-gallon waste oil AST. The ASTs are steel and co-located in an area of secondary containment immediately south of the 90-Day Storage Shed, approximately 750 square feet in size. According to Plant records, the ASTs were emptied prior to 2020. A *Hazardous Waste Tank Storage Area Closure Plan* (Intalco 1986) developed for the Plant documents planned processes for closure including emptying and triple rinsing; however, final closure documentation has not been identified. Processes to verify the closure and as-needed closure procedures of the ASTs are provided within the *Hazardous Waste Areas Closure Plan* (Anchor QEA [forthcoming]).

5.3 Anticipated Interim Action Sampling Summary

Table 3 provides a preliminary summary of the soil sampling that may be conducted in each potential interim action area identified and described in Sections 5.1 and 5.2. Final locations, sample frequency, and analytes will be selected based on post-demolition conditions and soil screening, as discussed in the implementation framework discussed in Section 6. Additionally, Intalco plans to collect and analyze concrete samples for waste profiling ahead of demolition activities. Results of this sampling may inform final locations for collecting the soil samples within each potential interim action area.

Table 3
Summary of Anticipated Soil Sampling

Area Description	Analytes	No. of Locations
Rod Shop Induction Furnaces: Discrete samples will be collected where the former furnaces were located to evaluate the conditions within and adjacent to a historical PCB oil release (one per furnace). The areas are both approximately 400 square feet.	PCBs, mineral oil	2
Annex Furnace: Discrete samples will be collected where the former furnace was located to evaluate the conditions within and adjacent to a historical PCB oil release. The area is approximately 450 square feet.	PCBs, mineral oil	1
Paste Plant Mixers: Discrete samples will be collected where the former paste mixers were located to evaluate the conditions within and adjacent to a historical PCB oil release (one per mixer). The areas are both approximately 475 square feet.	PCBs, mineral oil	2

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Area Description	Analytes	No. of Locations
Cast House Induction Furnaces: Discrete samples will be collected where the former furnaces were located to evaluate the conditions within and adjacent to a historical PCB oil release. The area is approximately 2,775 square feet.	PCBs, mineral oil	2
Closed Wet Scrubber Pond Area: Discrete samples will be collected where the inferred locations are of the former wet scrubber pond area and historical sampling locations. The area is approximately 10,800 square feet.	PCBs, PAHs	5
Substation Mineral Oil Spill: Discrete samples will be collected within the inferred area of the 2012 mineral oil spill, near impoundment in Yard B. The area is approximately 2,400 square feet.	Mineral oil	3
Substation Waste Oil (two) and New Oil ASTs: Discrete samples will be collected at each end of the ASTs (two samples per AST). The area is approximately 2,000 square feet.	PCBs, mineral oil	6
Central Fueling ASTs and Dispenser Islands: Discrete samples will be collected at each end of the ASTs (four samples), beneath each dispenser (two samples), and product piping (two samples). Product piping is anticipated to be less than 50 feet. The area is approximately 2,600 square feet.	Gasoline- and diesel-range TPH, petroleum-related VOCs, and total lead	8

Notes:

1. 4-foot cores will be collected at each location, as feasible. The upper two intervals will be analyzed, and the lower two will be archived. Test pits may be used in areas where a 4-foot core cannot be obtained.
2. Gasoline-range TPH will be analyzed for the gasoline AST, product piping, and dispenser only. Diesel-range TPH will be analyzed for the diesel AST, product piping, and dispenser only.
3. Petroleum-related VOCs are as follows: benzene, toluene, ethylbenzene, total xylenes, ethylene dibromide (EDB), 1,2-dichloroethane (EDC), methyl tert-butyl ether (MTBE)

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6 Interim Action Implementation Framework

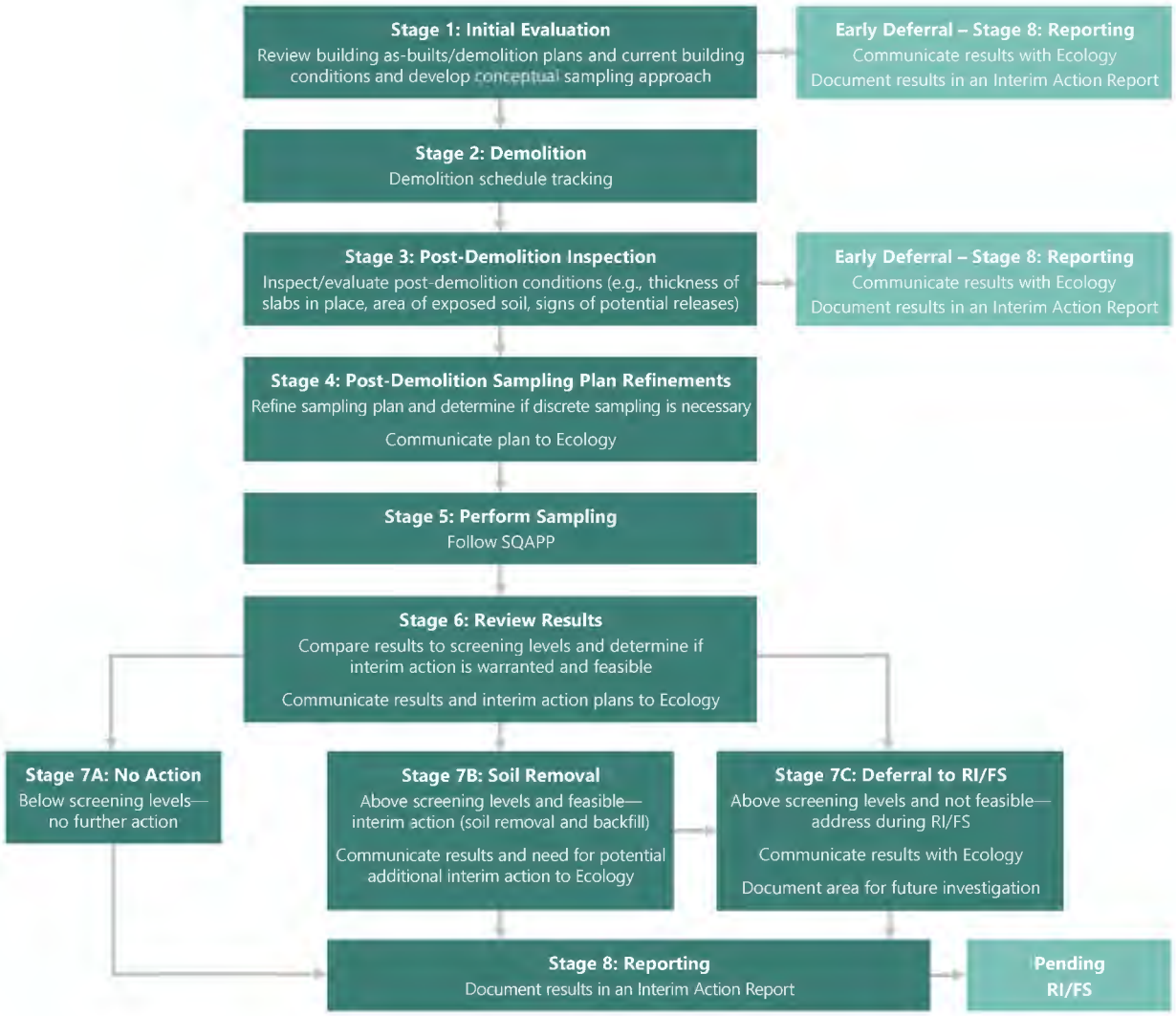
The process for determining the need for interim actions during the demolition phase of the project is documented in the framework shown in Chart 1. The framework outlines eight anticipated steps in the interim action process. The process is designed to be adaptive, meaning that pending post-demolition field conditions, certain areas may not complete all the assessment stages. At its discretion, and at any stage, Intalco may inform Ecology of work areas where additional investigation and/or interim action may be deferred and addressed through the RI/FS process or a separate interim action.

For perspective, two examples where Intalco may elect to defer interim action include the following:

- Upon demolition of the building, Intalco may determine that it is not possible to collect soil samples (e.g., beneath a thick foundation slab) and defer investigations to the RI. This is an example of an "off-ramp" that would occur at Stage 3.
- Upon initial excavation of soil exceeding cleanup screening levels, the extent of contamination may extend wider than expected, but expanding the excavation limits may not be feasible. Final investigation and action may be deferred to the RI when samples can be efficiently collected. This example off-ramp would occur during Stage 7B.

Communication touchpoints between Intalco and Ecology are anticipated throughout the process to keep Ecology informed of Intalco's refinement of sampling plans and the implementation of potential interim actions. The following sections provide a general summary of each stage outlined in Chart 1. Details regarding sampling and analyses procedures and quality assurance activities are provided in the *Sampling and Quality Assurance Project Plan* (SQAPP; Appendix D), which includes the compliance monitoring framework (CMF). Results of each stage will be documented in an Interim Action Report and the RI.

Chart 1
Interim Action Implementation Framework



Note: At any stage, Intalco may inform Ecology of work areas where additional investigation and/or interim action during the demolition process will be deferred to the future RI/FS process.

6.1 Stage 1: Initial Evaluation

Stage 1 consists of reviewing available building as-built drawings in relation to the demolition plans to predict where underlying soil may be exposed after removal of building foundations. This stage applies to all areas where demolition will occur, not just the areas defined in Section 5.3 where potential interim action sampling is expected.

Prior to foundations removal, a preliminary review of buildings and pertinent site features will be completed using historical records, including site drawings, photographs, equipment records,

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maintenance records, and operations records, if available and relevant. The review of records will include consideration of interior features and former features—including oil/PCB containing equipment, storage tanks, floor drains/piping, vaults containing-containing equipment, storage tanks, floor drains/piping, vaults containing storage tanks, and sumps, as appropriate. During field observations, stained or painted concrete will be noted for segregation and off-site disposal in an appropriate landfill. New features identified in the field (e.g., an undocumented sump) and not included on as-built drawings will be located and documented either by marking up existing site drawings or collecting survey data for future evaluation post-foundation removal. Based on the results of the initial evaluation and pre-demolition reconnaissance, Intalco may elect to defer sampling of any areas described in Section 5.3 to the RI.

A preliminary evaluation of potential COCs was conducted based on the knowledge of former Plant processes, operations, and material storage and handling and is generally documented as Section 4 of this DIAWP. After demolition, screening areas and/or sampling may be selected as part of Stages 3 and 4. Screening methodology will be selected based on the anticipated COCs (e.g., photoionization detector [PID] will be used to identify the presence of volatile constituents), as detailed in the SQAPP (Appendix D). Ecology will be consulted prior to conducting additional sampling to finalize COCs for analytical testing, methodologies for field screening, sampling density, and procedures.

6.2 Stage 2: Demolition

Stage 2 includes demolition of buildings and related structures by a third-party demolition contractor. During this stage, Intalco will monitor demolition progress and schedule and perform periodic inspections of construction to determine when areas may be accessible for sampling. In between inspections, the demolition contractor will provide necessary updates to Intalco allowing adequate time for post demolition surveying, sampling, and potential interim action to occur with limited disturbance to the demolition schedule.

6.3 Stage 3: Post-Demolition Inspection

After the removal of buildings and prior to the removal of concrete foundations, a field evaluation will be performed to collect supplemental geographic coordinate data to define the remaining building extents, inspect and field-screen previously identified areas where contaminants may be present, and collect any other spatial information to inform future sampling activities. Stage 3 will apply to areas identified in Section 5, any other areas of interest identified during Stage 1, and any other areas of interest identified after Stage 1.

After the foundations are removed to their target depth and when soil becomes accessible, soil field screening will be completed following the methods outlined in the SQAPP (Appendix D). Potential COCs based on knowledge of the operational areas are presented in Section 4.9.

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Exposed soil will be field-screened for visual and olfactory properties that may indicate potential contamination. If petroleum hydrocarbon or volatile organic compound (VOC) impacts are suspected, a PID and sheen tests will be used. Additional details regarding field screening procedures are included in the SQAPP (Appendix D). The results of Stage 3 will be used to refine post-demolition sampling and analysis plan, including areas that may be deferred for further investigation during the RI. Areas deferred to the RI will be delineated, surveyed, and documented in the final Interim Action Report.

6.4 Stage 4: Post-Demolition Sampling Plan Refinements

As the buildings are demolished and when soil becomes accessible to refine sampling locations, Intalco will provide updates to Ecology on post-demolition conditions. At this stage, Intalco will inform Ecology with any necessary refinement to the sampling locations and density, where discrete locations are adjusted based on actual conditions, or modification to soil sample analyses. Communication will include drawings and/or tables summarizing planned sampling locations, information from the field (results of soil field screening in Stage 3) where potential releases have been identified to support sample locations, and/or where soil was determined to be inaccessible. Correspondence would be held via email and as necessary in group meetings.

6.5 Stage 5: Sampling

Discrete sampling will be completed by hand auger, direct push drill rig, or excavator bucket at preliminary locations noted in Table 3 and in areas shown in Figures 4a, 4b, 4e, 4f, and 4g. Locations may be adjusted or deferred to the RI as necessary based on findings of previous stages, logistics, and safety.

Discrete samples will be collected, as feasible, in 1-foot depth intervals to approximately 4 feet bgs from the exposed surface post foundation removal. Discrete samples from the 0- to 1-foot and 1- to 2-foot intervals will be analyzed for the contaminants presented in Table 3; deeper intervals will be archived. However, if there is a field indication (visual or olfactory) of impacts that are deeper than 2 feet bgs are possible, the next depth interval(s) will be analyzed and not archived. Where necessary, sampling may be completed via excavator or hydraulic push core rig if shallow refusal is encountered via hand auger or other access issues are encountered. Based on field conditions, additional discrete samples may be collected in attempt to laterally bound visually impacted areas at intervals where impacted soil is initially observed.

Where foundations or basements are to remain in place, sampling may be completed adjacent to the structure remnant during demolition, in which case soil sampling depths will be adjusted to target elevations at the base of the structure and below the structure. Where feasible and advantageous to complete during the demolition process, Intalco may attempt to collect samples from underneath remnant foundations or basements by removing sections of concrete or via coring to access soil. Adjustments to the post-demolition sampling and analysis plan will be discussed with Ecology during

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Stage 4 after demolition is complete. Sampling procedures and methods are described in the SQAPP (Appendix D).

6.6 Stage 6: Review of Sampling Results and Interim Action Feasibility Evaluation

The results of soil analytical testing in Stage 5 will be compared to standard MTCA soil screening levels. For the purposes of determining if actionable levels of contaminants exist in shallow soil after demolition, MTCA screening levels (both Methods A and C) for industrial land use will be used. MTCA Method A industrial screening levels are based on an adult worker exposure scenario at industrial properties that meet the definition of WAC 173-340-200. The Plant property is currently zoned for industrial use and not anticipated to change after ownership transfer and redevelopment. Where MTCA Method A screening levels for industrial settings are not established, MTCA Method C screening levels will be used. Table 4 provides a summary of screening levels of key chemical indicators that will be used for evaluating concentrations of hazardous substances that may be encountered during interim action activities.

Table 4
Interim Action Soil Screening Levels

Contaminant of Concern	Screening Level (mg/kg)[1]	Basis
TPH – gasoline	30	Method A – Industrial
TPH – diesel	2,000	Method A – Industrial
TPH – oil	2,000	Method A – Industrial
TPH – mineral oil	4,000	Method A – Industrial
Benzene	0.03	Method A – Industrial
Toluene	7	Method A – Industrial
Ethylbenzene	6	Method A – Industrial
Total xylenes	9	Method A – Industrial
EDB	0.005	Method A – Industrial
EDC	1,400	Method C – Industrial
MTBE	0.1	Method A – Industrial
PCB total Aroclors[2]	1/10	Method A – Industrial
cPAH TEQ[3]	2	Method A – Industrial
Lead	1,000	Method A – Industrial

Notes:
1. Screening levels provided for key COCs only. MTCA Method A (industrial) and MTCA Method C (industrial) where Method A levels are not established will be used as screening levels following the most up to date values specified in Ecology's Cleanup Level and Risk Levels data tables.

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2. Total PCBs include the sum of the following Aroclors: 1016, 1221, 1232, 1242, 1248, 1254, and 1260. If present, Aroclors 1262 and 1268 should be reported but not included in the total PCB summation. The MTCA Method A Industrial soil cleanup level for PCBs in soil is 10 mg/kg; however, soils with PCB concentrations exceeding 1 mg/kg must be contained under an engineered cap in accordance with 40 CFR 761.61. Therefore, a soil PCB concentration of 1 mg/kg will be used as the screening level for the interim action during the demolition. If areas of total PCB soil concentrations are to remain in place above 1 mg/kg, the area will be documented for further evaluation during the RI/FS process.
3. The cPAH TEQ is total concentration of all carcinogenic PAHs using the toxicity equivalency methodology in WAC 173-340-708(8).

Intalco will provide Ecology with a summary of the sampling activities for each area, including a comparison of preliminary results to screening levels. Like in previous stages, the information would be communicated via email or during meetings. For areas with screening level exceedances, Intalco will assess feasibility of conducting an interim action that considers demolition progress and schedule, location accessibility, personnel safety, and broader RI work sequencing. Intalco will also re-evaluate if additional sampling (increased vertical or lateral characterization) may be necessary to inform the decision to undertake an interim action or to defer the area to the RI.

The following three potential outcomes are anticipated:

- **No Action:** No interim action will be performed in areas where visual inspections and soil sampling indicate that there are no exceedances of screening levels. Results will be reported in an Interim Action Report and the RI. This outcome is illustrated as Stage 7A in Chart 1.
- **Interim Action Implementation:** Where contaminant concentrations exceed screening levels, soil interim actions deemed feasible by Intalco will be undertaken. The rationale for undertaking interim action as well as the location and volume of soil removed will be documented. Results will be reported in an Interim Action Report and the RI. This outcome is illustrated as Stage 7B in Chart 1 and is described in more detail in Section 6.7.
- **Deferral to the RI:** Some areas where contaminant concentrations exceed screening levels may be deferred to the RI based post-demolition field conditions. The area will be demarcated and/or documented for revisiting the area during the RI/FS and potential subsequent interim or final remedial action phases. Results will be reported in an Interim Action Report and the RI. This outcome is illustrated as Stage 7C in Chart 1.

6.7 Stage 7: Interim Action Implementation

At the discretion of Intalco, interim actions (i.e., soil removal) will be performed in shallow soil areas where field screening and analytical testing indicate COC concentrations are greater than soil screening levels. During the demolition phase, interim actions will be limited to soil removal with available equipment and off-site disposal of impacted material. Additional screening of remediation technologies to complete cleanup at the former Plant will be completed through the formal RI/FS process under the pending AO. Stages 7A and 7C apply to areas that either do not require interim action or will have potential interim action or investigation activities deferred to the RI, respectively.

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Sampling results from Stage 5 and documentation of decisions made in Stages 7A and 7C will be reported in an Interim Action Report and the RI. Stage 7B applies to those areas where interim action was determined to be feasible by Intalco.

For each Stage 7B area, a location-specific excavation plan (i.e., drawing or memorandum) will be prepared and submitted to Ecology for information. The plan will communicate the extents of the soil excavation (as defined by the analytical results of the vertical core samples collected during Stage 5), any construction requirements or considerations, and the approximate excavation volume. In general, excavations related to interim actions are expected to be shallow and limited to approximately 3 to 4 feet bgs. The demolition contractor will be required to perform pre- and post-excavation surveys so that final excavation volumes and extents can be documented.

Intalco, or a designated environmental professional, will inspect and document interim action activities in accordance with the CMF (Section 3 of Appendix D). WAC 173-340-410 defines three types of compliance monitoring that apply to all cleanups: protection, performance, and confirmational. Protection monitoring focuses on activities to protect human health and the environment during construction and will be achieved through implementation of project health and safety plans (HASPs), stormwater pollution prevention plans, and compliance with environmental permits. Confirmation monitoring, which is performed to verify the long-term effectiveness of the interim cleanup action once performance standards have been attained, will be considered during the RI/FS. The compliance monitoring will focus primarily on performance monitoring.

Performance monitoring will be completed to confirm the interim action was effective in removing soils with COC concentrations above project screening levels. After excavation, performance monitoring samples will be collected from excavation sidewalls to verify that screening levels have been achieved. It is anticipated that the pre-excavation (post-demolition) characterization samples will be sufficient for defining the vertical extent of contamination, and no additional excavation base samples will be required to confirm a clean soil surface has been achieved. If the vertical extents are not fully defined by samples collected during Stage 5, or sidewall samples exceed screening levels, Intalco may elect to perform additional post-excavation characterization and soil removal or defer the final cleanup to the formal RI/FS process. In some cases, multiple rounds of sampling may be required as excavation activities progress. Deferred areas will be surveyed and as feasible, demarcated for further investigation during the RI. Sampling results from Stage 5 and documentation of decisions made and interim action performed in Stage 7B will be reported in an Interim Action Report and the RI.

In addition to performance monitoring, the CMF generally includes the following additional quality assurance elements:

- A description of project quality control organization, roles and responsibilities

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- A schedule and methods for monitoring progress
- A guide/checklist to be used when observing soil excavations and other interim action field activities
- A description of compliance monitoring activities and approach to designating post-excavation performance monitoring sampling locations
- A process for managing and tracking the off-site transport and disposal of contaminated soil, including procedures for sampling potential stockpiles
- A guide/checklist for documenting a completed interim action for each Stage 7B areas
- Reference to related project documents: SQAPP, HASP, and Archeological Inadvertent Discovery Plan (described in the following paragraph)

A cultural resource assessment was previously conducted at the Plant and its vicinity in coordination with Lummi Nation Tribe. Intalco has maintained ongoing engagement with Lummi Nation regarding the project and pending demolition and remediation activities. A *Cultural Resource Management Plan* (CRMP) and *Monitoring and Inadvertent Discovery Plan* (MIDP) was previously developed by AECOM on behalf of Intalco. The MIDP is provided in Appendix E; however, the CRMP is a confidential document only for the Lummi Nation, Washington Department of Archeology and Historic Preservation, and Whatcom County. The MIDP plan includes training requirements, monitoring requirements, and procedures for notification and assessment of resources to be implemented during the interim action sampling and excavation activities.

6.8 Stage 8: Reporting

In accordance with AO No. 24369, an Interim Action Report will be prepared within 90 days following the completion of all interim remedial actions and final receipt of validated performance monitoring data. The report will summarize demolition activities, initial sampling procedures and results, completed soil removal actions, associated performance monitoring results, and documentation of areas requiring no action and/or deferral to the RI/FS process.

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7 References

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Figures

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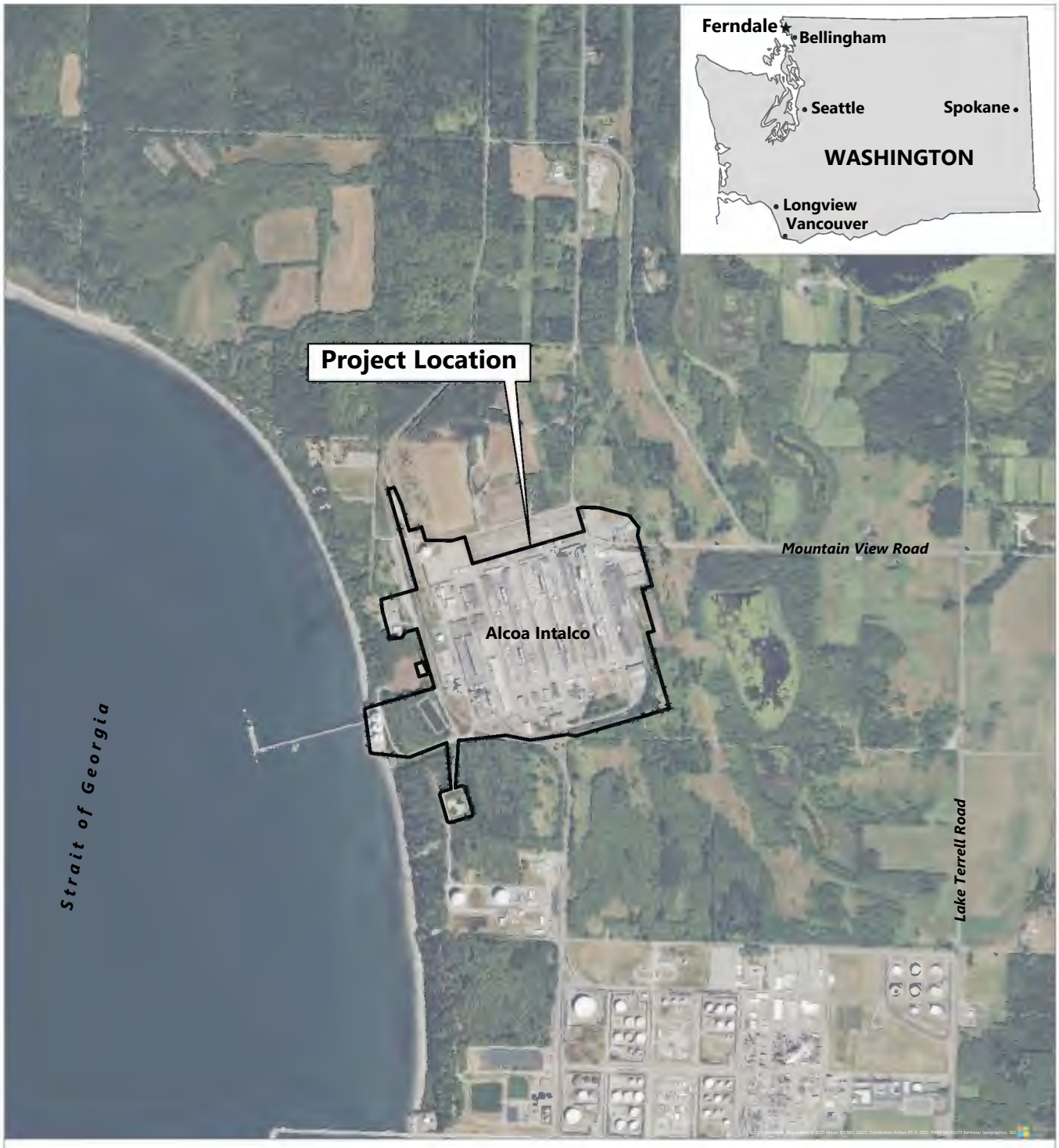

AERIAL SOURCE: ©2025 Microsoft Corporation
©2025 Maxar ©CNES (2025) Distribution Airbus DS
©2025 TMAP MOBILITY Earthstar Geographics SIO
HORIZONTAL DATUM: Washington State Plane North Zone, NAD83/91, U.S. Survey Feet

0 2000
Feet

Publish Date: 2025/11/18 2:26 PM | User: hmerrick
Filepath: K:\Projects\0002-Alcoa Inc\Alcoa-Intalco Aluminum\Alcoa-Intalco Interim Action Work Plan\0002-RP-001 Vmap.dwg Figure 1

ANCHOR QEA

Figure 1
Vicinity Map

Demolition Interim Action Work Plan
Former Intalco Smelter Site

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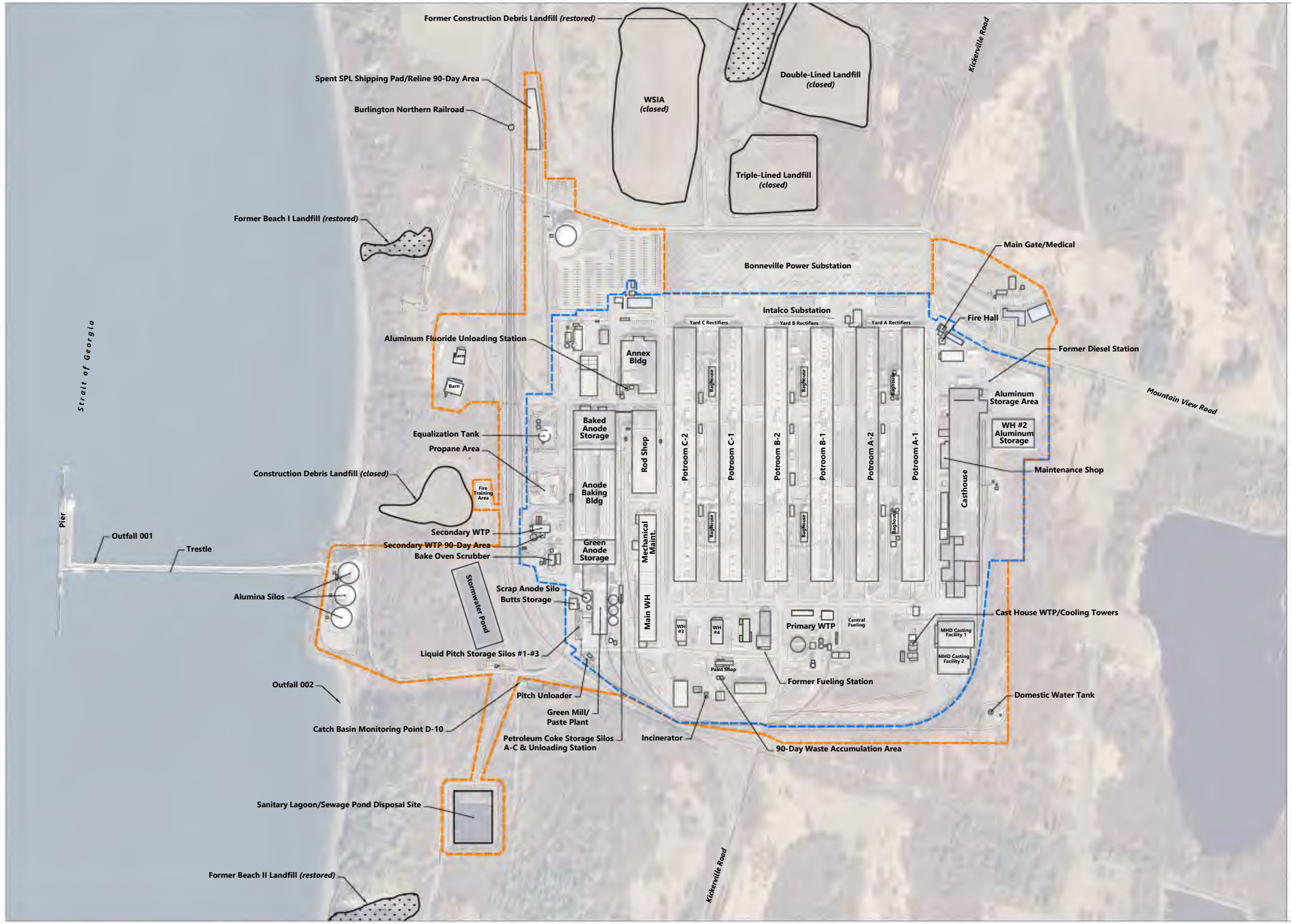

LEGEND:

- Restored Area
- Bonneville Power Substation
- Demolition Work Area #1 - Former Smelter Area
- Demolition Work Area #2 - Exterior Smelter Area
- Railroad

0 600
Feet

HORIZONTAL DATUM: Alcoa Intalco Plant Datum
AERIAL: ©2025 Google Earth Pro dated March 23, 2024
NOTES:
M&I: meter & instrument
WTP: water treatment plant
WH: warehouse
MHD: magnetohydrodynamics
SPL: spent potliner
WSIA: Waste Site Impoundment Area

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Filepath: K:\Projects\0002-Alcoa Inc\Alcoa-Intalco Aluminum\Alcoa-Intalco Interim Action Work Plan\0002-RP-002b.dwg | Figure 2

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Figure 2
Former Smelter Map and Demolition Areas

Demolition Interim Action Work Plan
Former Intalco Smelter Site

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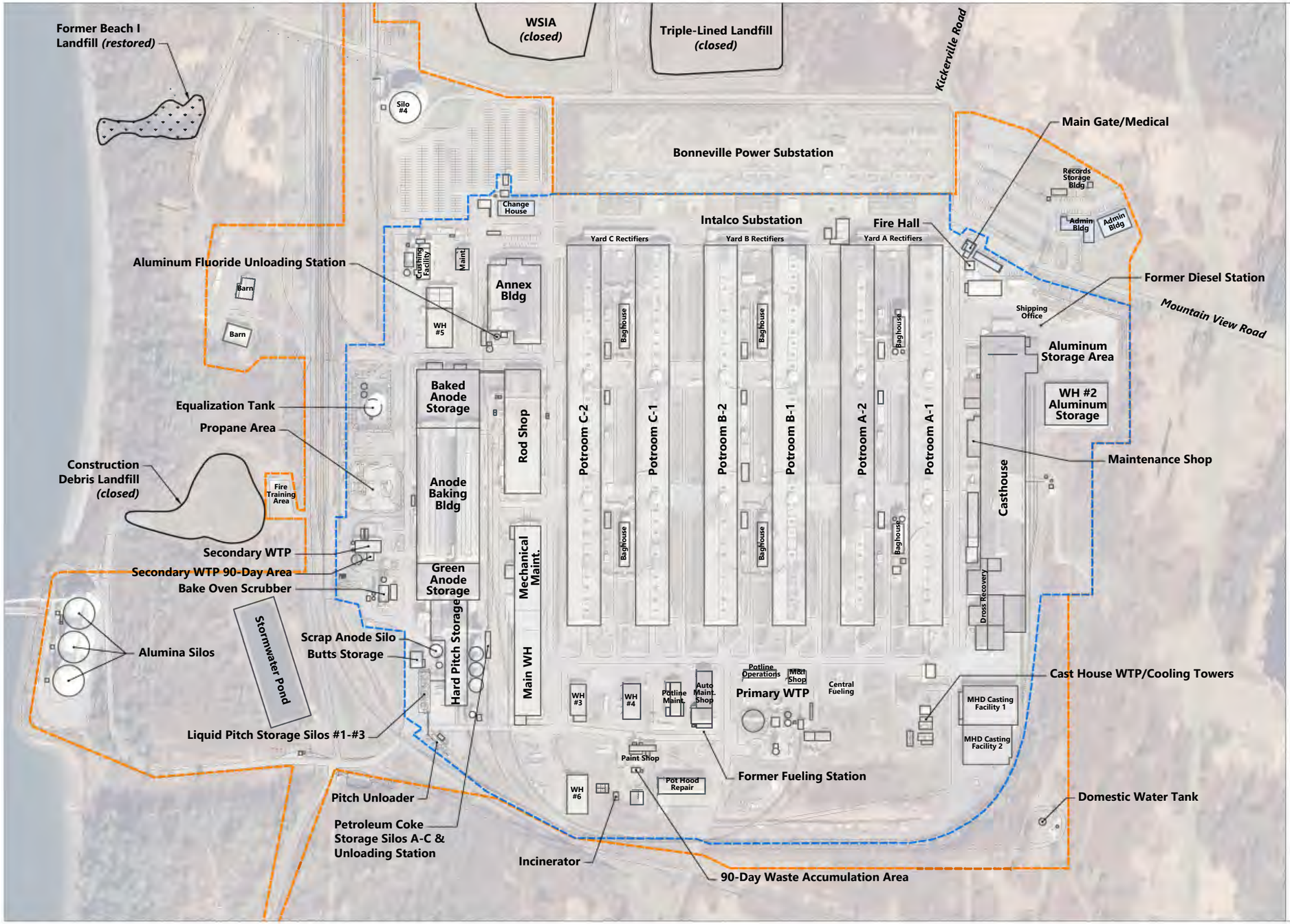

LEGEND:

- Restored Area
- Bonneville Power Substation
- Demolition Work Area #1 - Former Smelter Area
- Demolition Work Area #2 - Exterior Smelter Area
- Railroad

0 400
Feet

HORIZONTAL DATUM: Alcoa Intalco Plant Datum
AERIAL: ©2025 Google Earth Pro dated March 23, 2024
NOTES:
M&I: meter & instrument
WTP: water treatment plant
WH: warehouse
MHD: magnetohydrodynamics
WSIA: Waste Site Impoundment Area

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Figure 3
Former Smelter Operational Areas Map

Demolition Interim Action Work Plan
Former Intalco Smelter Site

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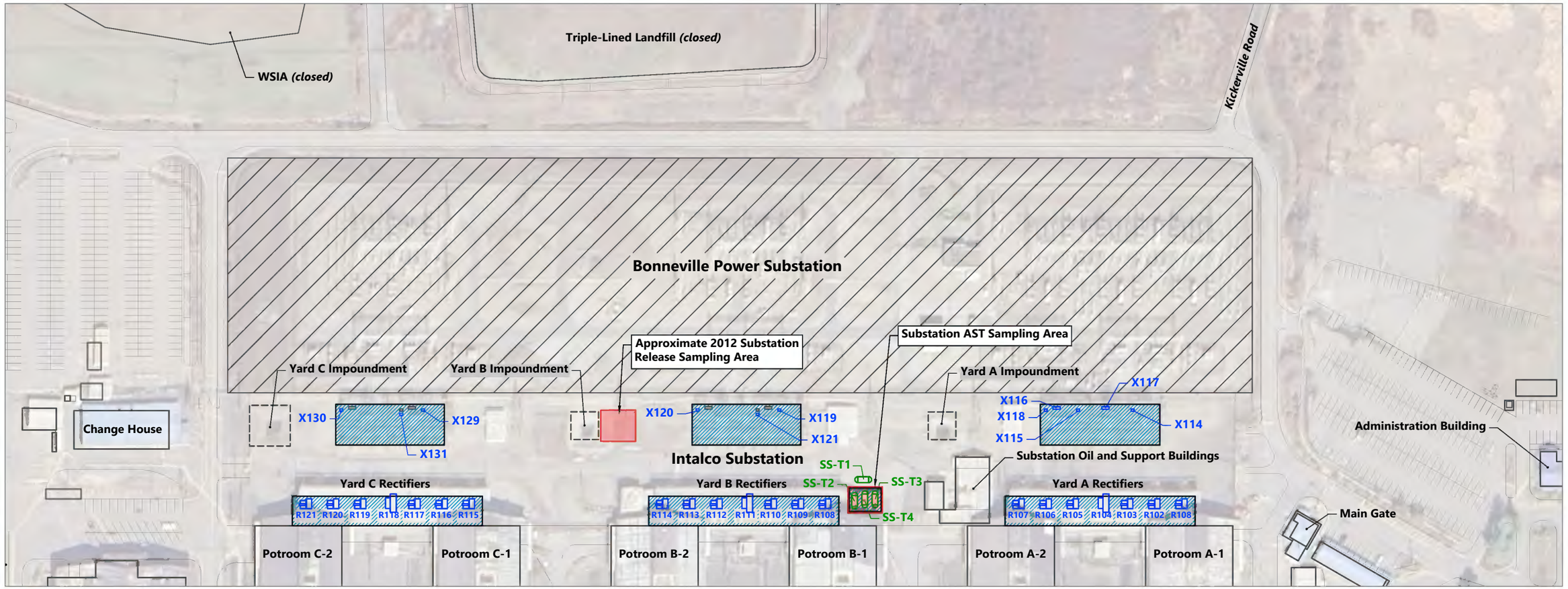

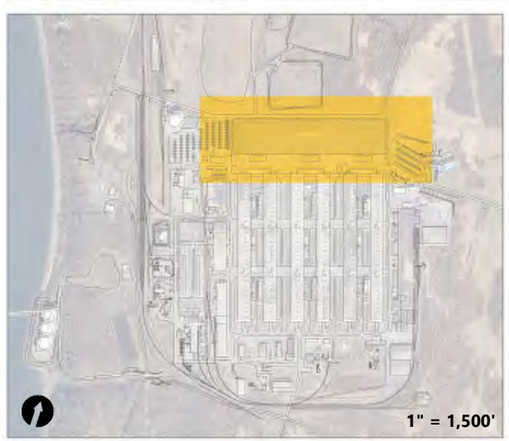

LEGEND:

- Bonneville Power Substation
- Secondary Containment Area
- Transformer/Rectifier Location (approximate)
- AST or UST Location (approximate)
- Equipment or Structure Location and Size (approximate)
- Building Location (approximate)
- Proposed Sampling Area

HORIZONTAL DATUM: Alcoa Intalco Plant Datum
AERIAL: ©2025 Google Earth Pro dated March 23, 2024
NOTES:
Structure, equipment, and tank information provided in Table 1A.
AST: aboveground storage tank
UST: underground storage tank

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Figure 4a
Intalco Substation

Demolition Interim Action Work Plan
Former Intalco Smelter Site

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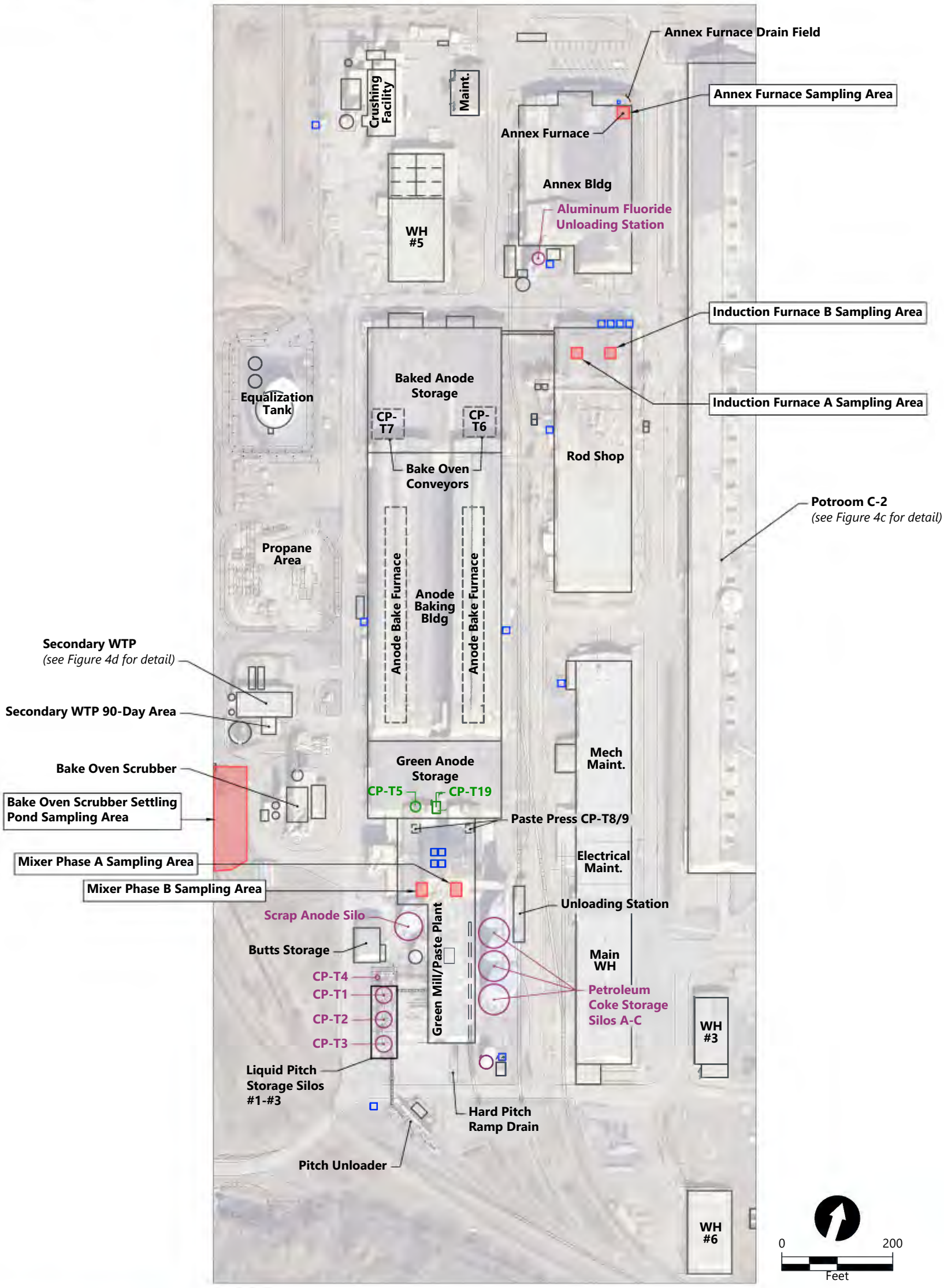

LEGEND:

- Transformer Location (approximate)
- AST or UST Location (approximate)
- Bulk Storage Container Location (approximate)
- Equipment or Structure Location and Size (approximate)
- Railroad
- Proposed Sampling Area

HORIZONTAL DATUM: Alcoa Intalco Plant Datum
AERIAL: ©2025 Google Earth Pro dated March 23, 2024
NOTES:
AST: aboveground storage tank
UST: underground storage tank

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Figure 4b
Carbon Plant and Rodding

Demolition Interim Action Work Plan
Former Intalco Smelter Site

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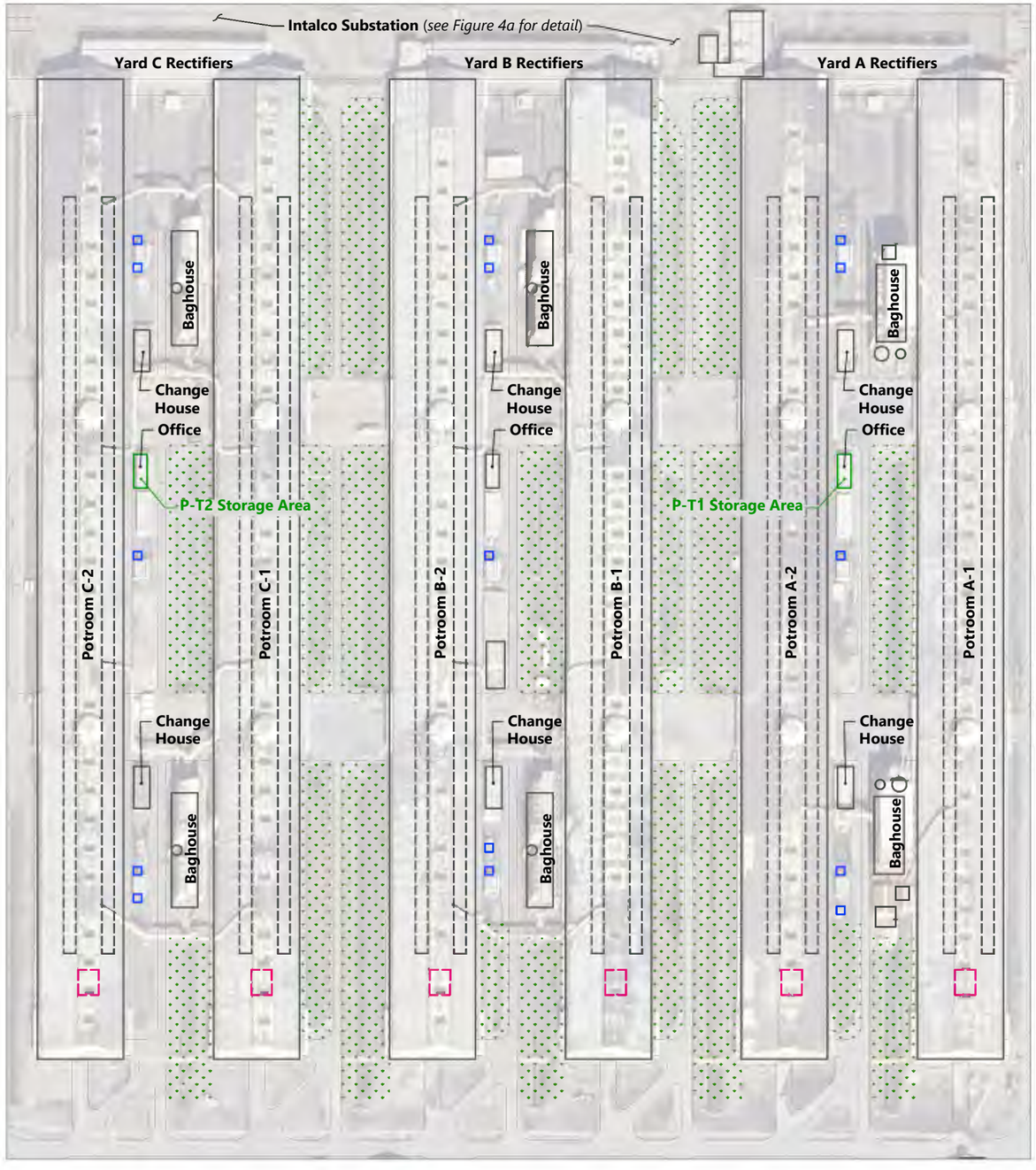

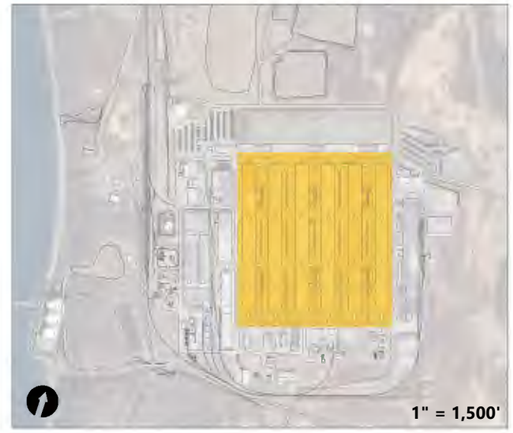

LEGEND:

- Transformer Location (approximate)
- AST or UST Location (approximate)
- Potline Location and Size (approximate)
- Potline Sump Location and Size (approximate)
- Grassed Area

0 200
Feet

HORIZONTAL DATUM: Alcoa Intalco Plant Datum
AERIAL: ©2025 Google Earth Pro dated March 23, 2024
NOTES:
AST: aboveground storage tank
UST: underground storage tank

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Figure 4c
Potrooms and Associated Baghouses

Demolition Interim Action Work Plan
Former Intalco Smelter Site

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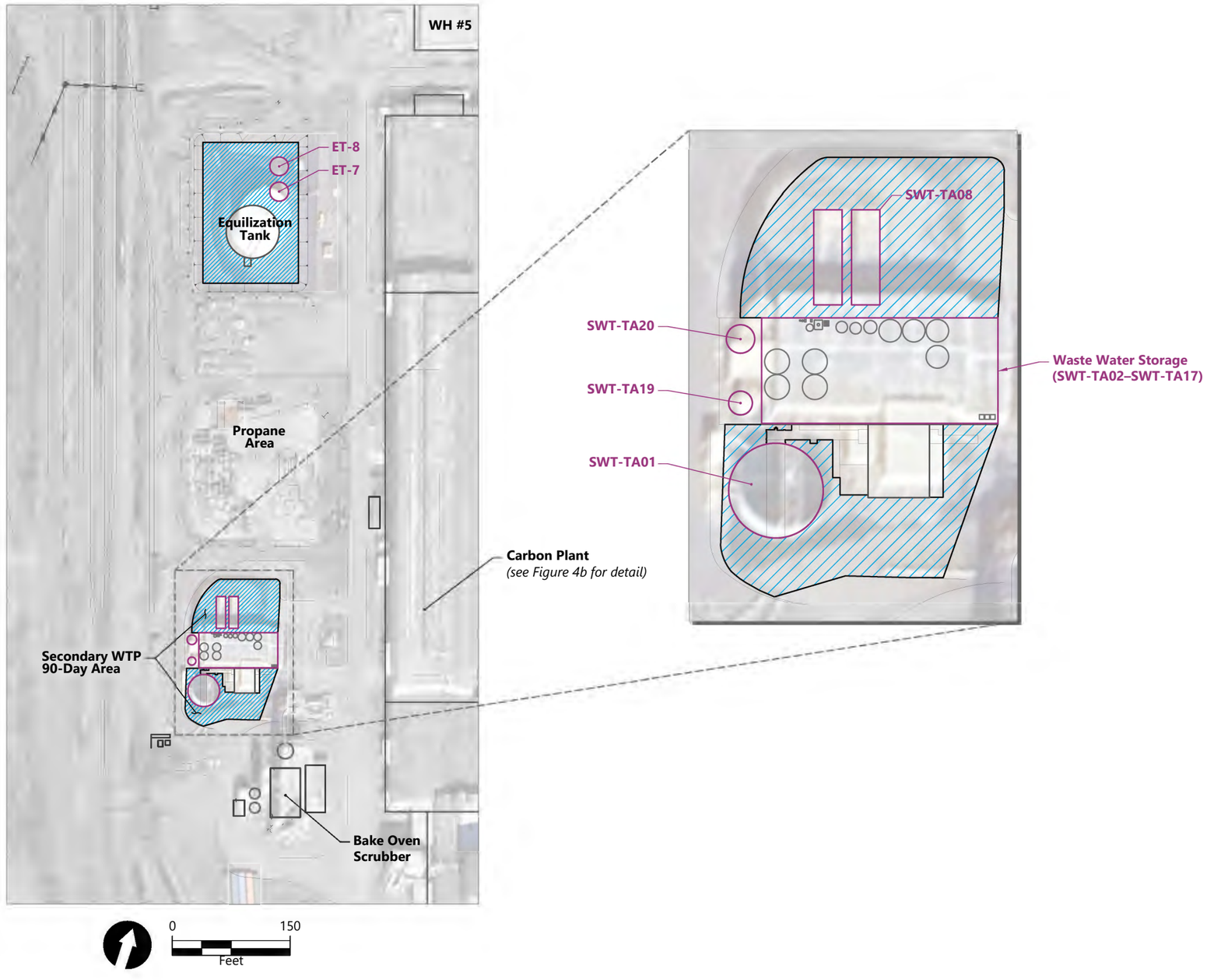

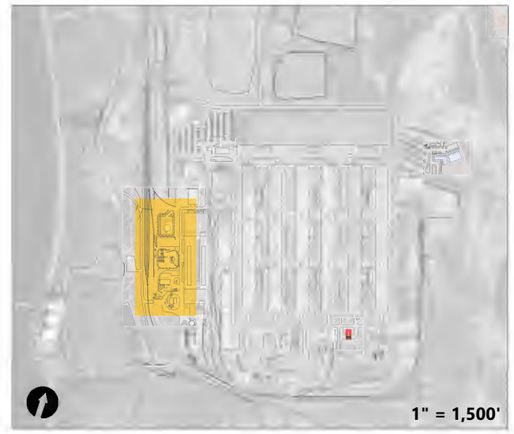

LEGEND:

- Secondary Containment Area
- Bulk Storage Container Location (approximate)
- Railroad

HORIZONTAL DATUM: Alcoa Intalco Plant Datum
AERIAL: ©2025 Google Earth Pro dated March 23, 2024
NOTES:
AST: aboveground storage tank
UST: underground storage tank
WTP: water treatment plant
WH: warehouse

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Figure 4d
Secondary Wastewater Treatment Plant

Demolition Interim Action Work Plan
Former Intalco Smelter Site

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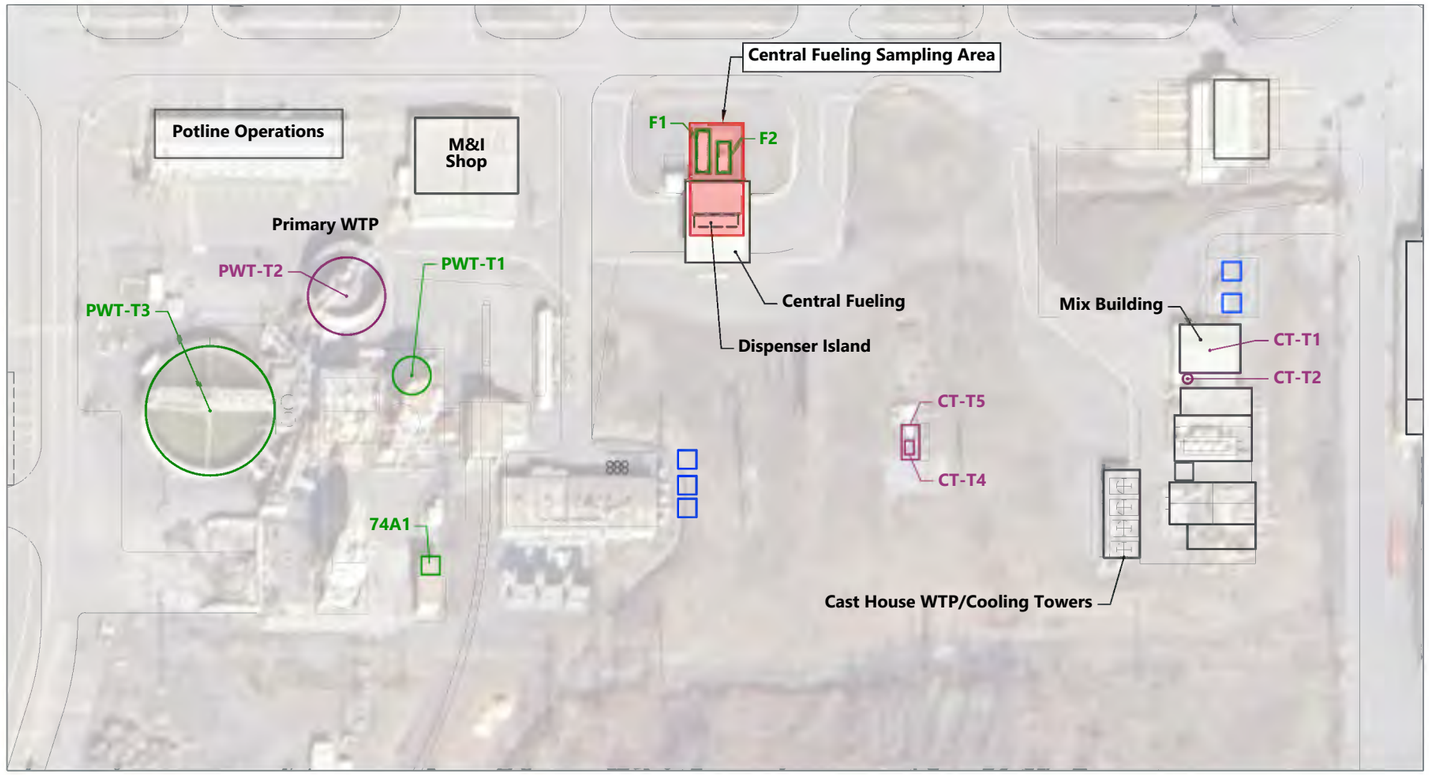

LEGEND:

- Transformer Location (approximate)
- AST or UST Location (approximate)
- Bulk Storage Container Location (approximate)
- Railroad
- Proposed Sampling Area

HORIZONTAL DATUM: Alcoa Intalco Plant Datum
AERIAL: ©2025 Google Earth Pro dated March 23, 2024
NOTES:
AST: aboveground storage tank
UST: underground storage tank
M&I: meter & instrument
WTP: water treatment plant
WH: warehouse

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Figure 4e
Primary Wastewater Treatment Plant and Cast House Wastewater Treatment Plant

Demolition Interim Action Work Plan
Former Intalco Smelter Site

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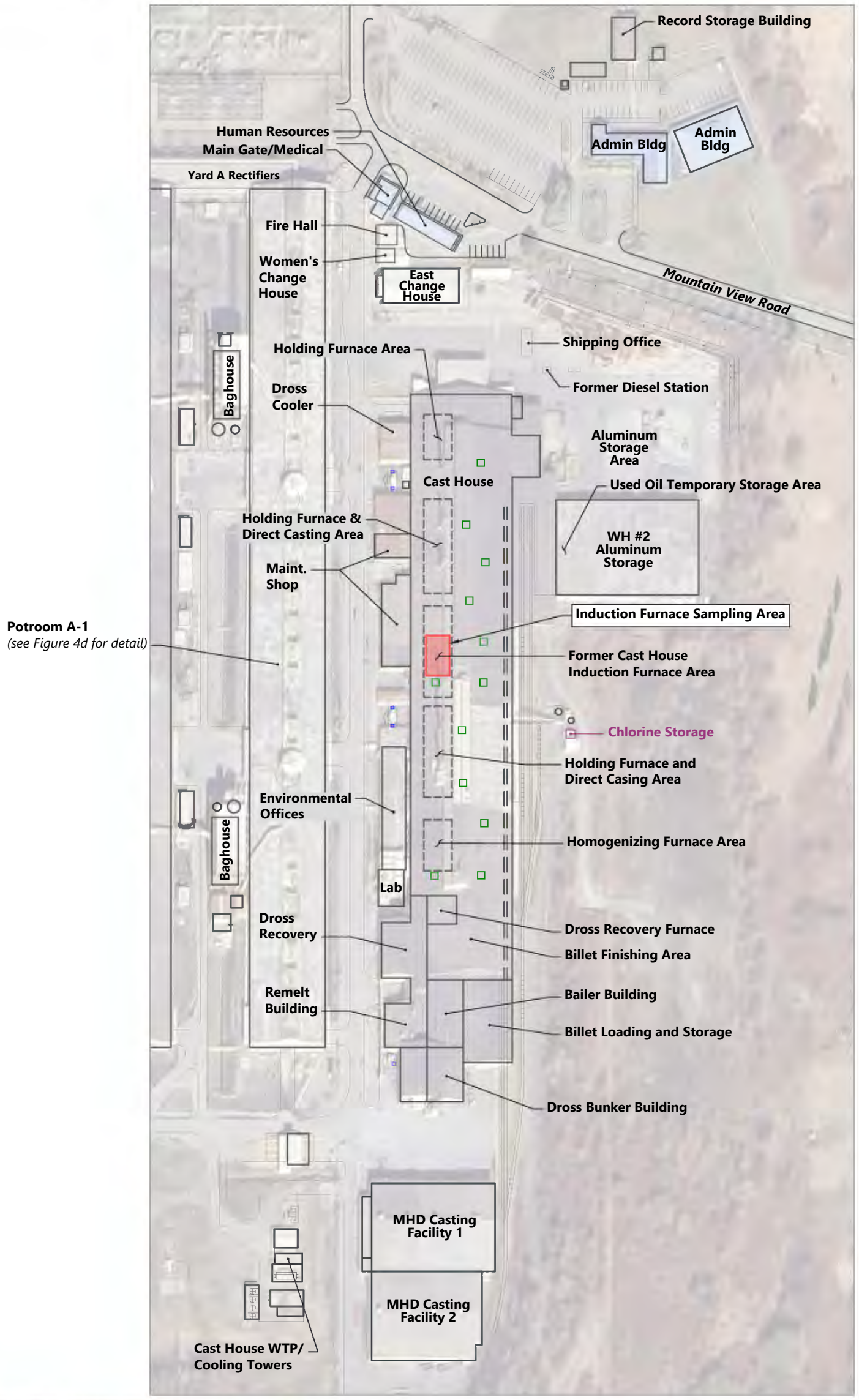

LEGEND:

- Transformer Location (approximate)
- Bulk Storage Container Location (approximate)
- Equipment or Structure Location and Size (approximate)
- Proposed Sampling Area

HORIZONTAL DATUM: Alcoa Intalco Plant Datum
AERIAL: ©2025 Google Earth Pro dated March 23, 2024
NOTES:
WH: warehouse
MHD: magnetohydrodynamics

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Figure 4f
Cast House

Demolition Interim Action Work Plan
Former Intalco Smelter Site

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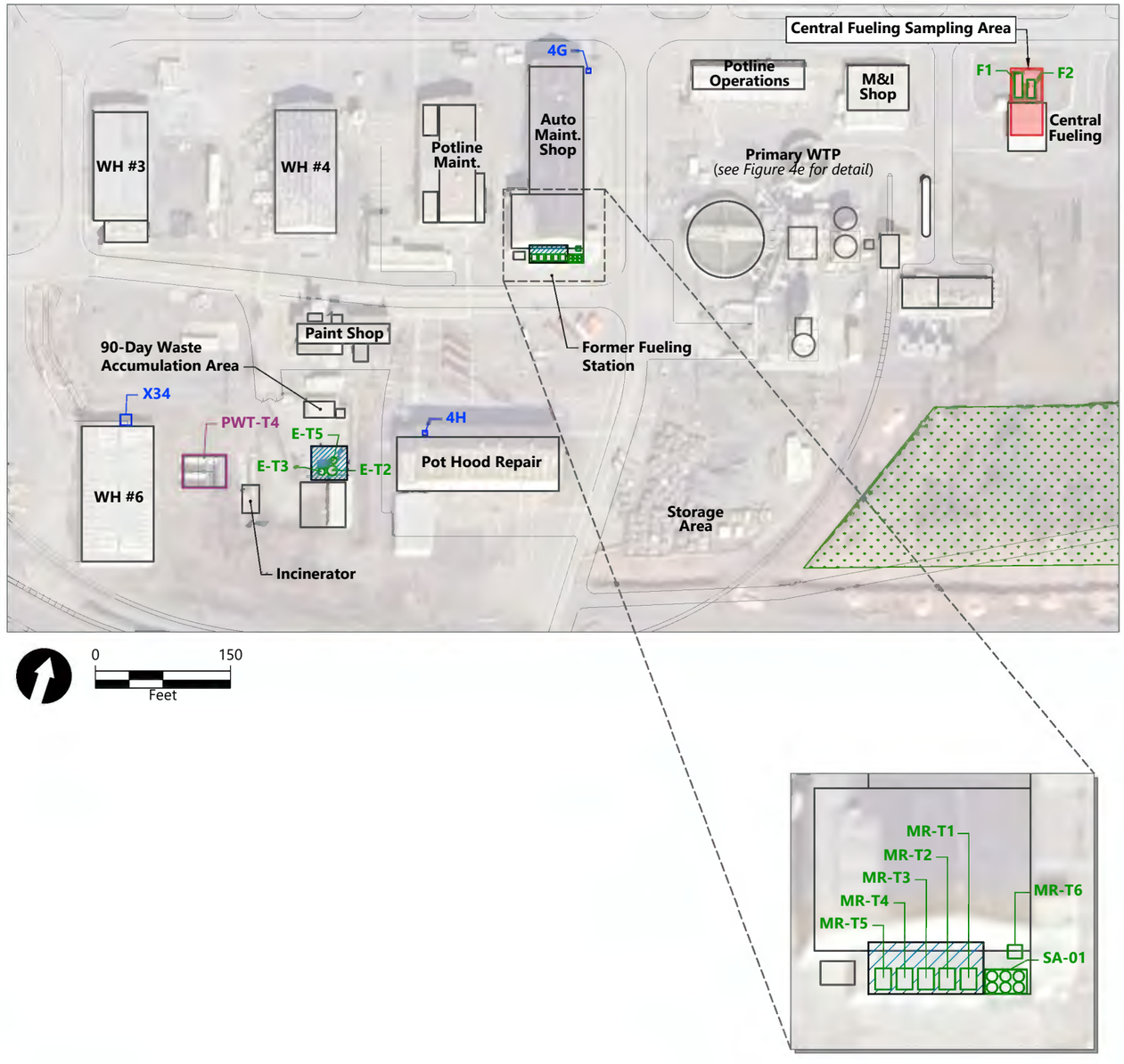

LEGEND:

- Secondary Containment Area
- Transformer Location
- AST or UST Location
- XXXX
- Railroad
- Grassed/Vegetated Area

HORIZONTAL DATUM: Alcoa Intalco Plant Datum
AERIAL: ©2025 Google Earth Pro dated March 23, 2024
NOTES:
Warehouse 5, Main Warehouse, and Mechanical Maintenance shown on Figure 4b.
AST: aboveground storage tank
UST: underground storage tank
WH: warehouse

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Figure 4g
Warehouses and Central Fueling Station

Demolition Interim Action Work Plan
Former Intalco Smelter Site

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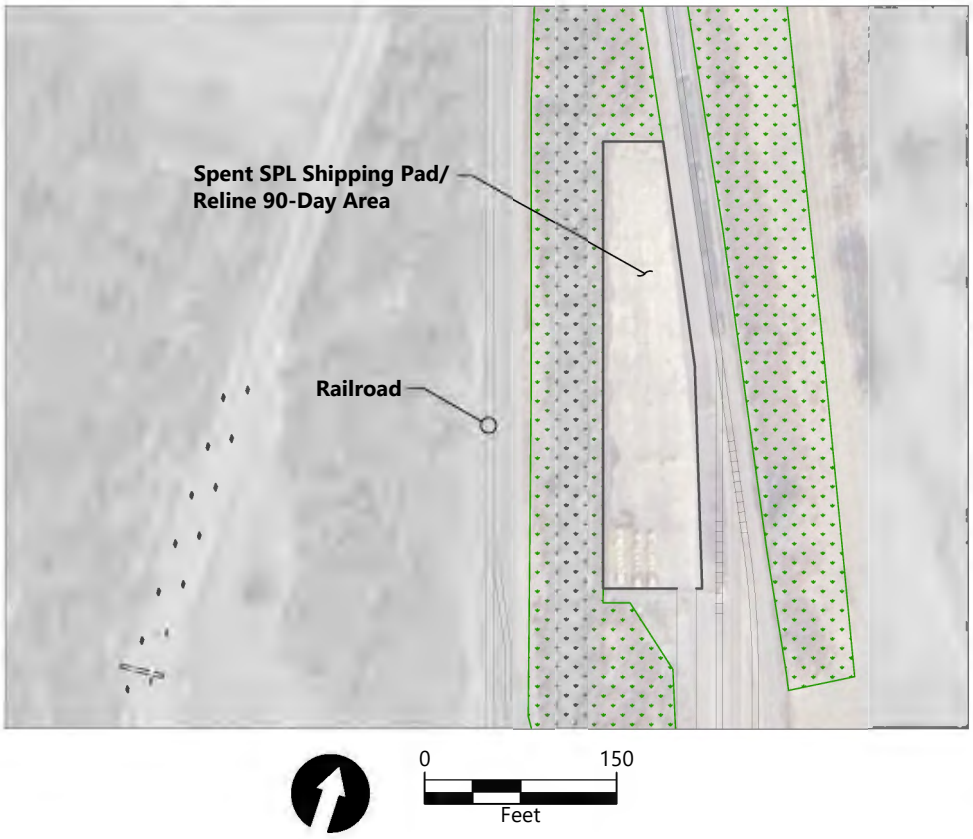

LEGEND:

Railroad

Vegetated Area

HORIZONTAL DATUM: Alcoa Intalco Plant Datum
AERIAL: ©2025 Google Earth Pro dated March 23, 2024
NOTE:
SPL: spent potliner

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Filepath: K:\Projects\0002-Alcoa Inc\Alcoa-Intalco Aluminum\Alcoa-Intalco Interim Action Work Plan\0002-RP-009.dwg | Figure 4h

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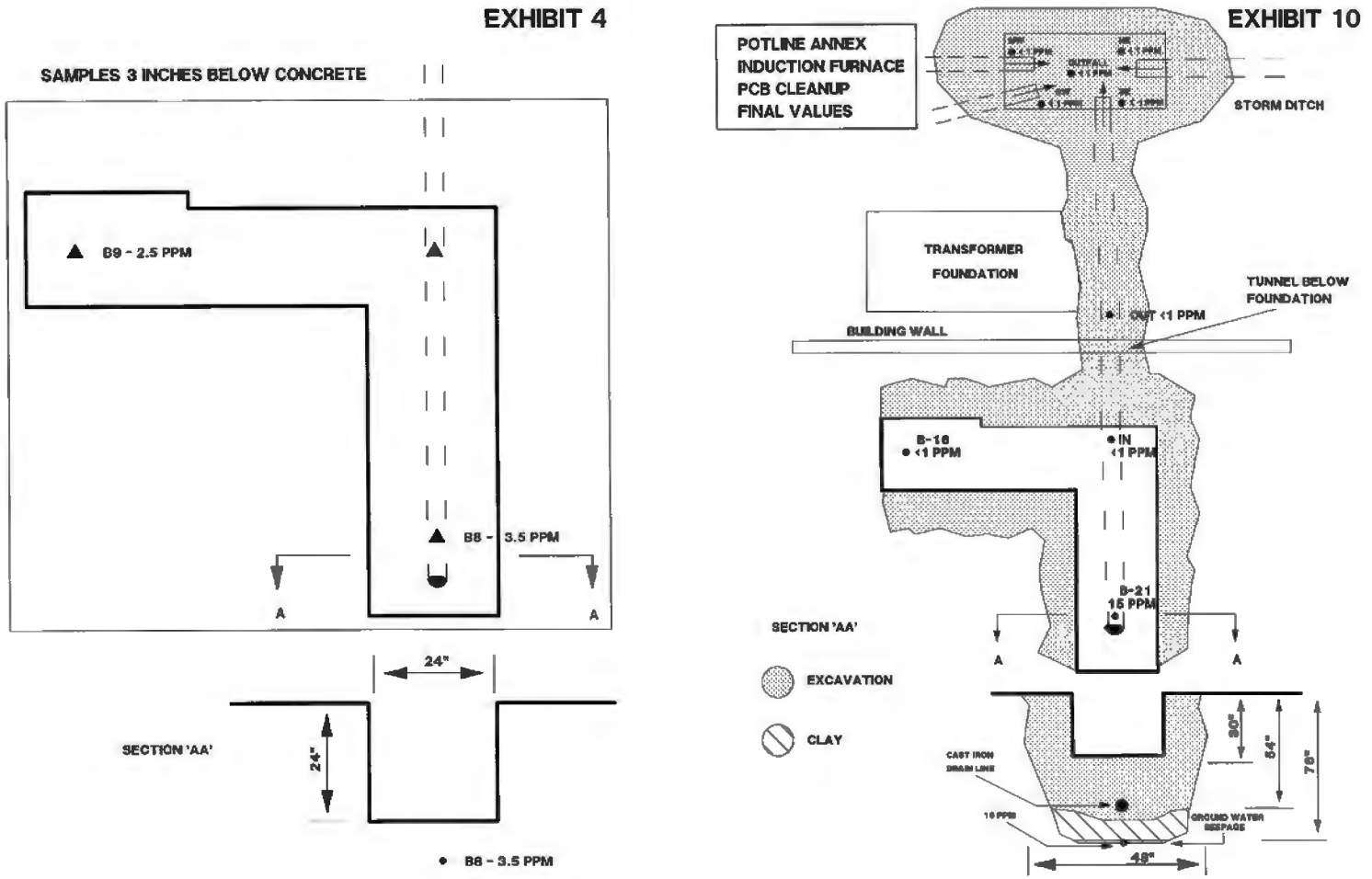
Figure 4h
Spent Potliner Shipping Pad/Reline 90-Day Area

Demolition Interim Action Work Plan
Former Intalco Smelter Site



Note:
Original exhibits taken from "PCB Clean-Up Annex Induction Furnace" technical memorandum (TM 65-88/WP), prepared by Intalco Aluminum Corporation on September 30, 1988.

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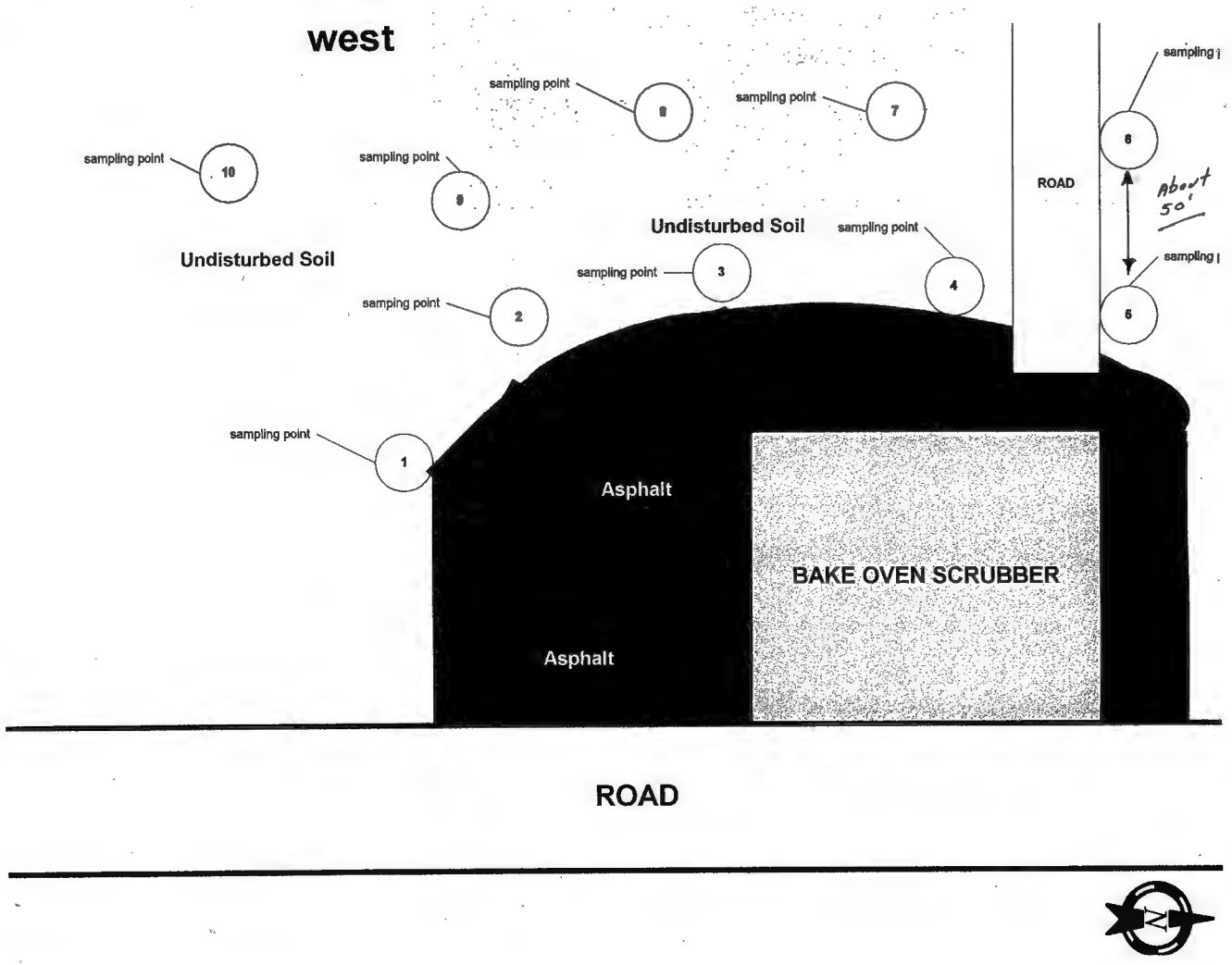
Figure 5
Location of Samples at Annex Area Induction Furnace
Demolition Interim Action Work Plan
Former Intalco Smelter Site



Source:
Alcoa, 1999. Letter to: Paul Sillingstad, Washington State Department of Ecology. Letter from: Charlie Jurges, Alcoa. Regarding: Routine construction project requiring grading and paving at Intalco Aluminum Corporation. April 21, 1999.

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Figure 6
Location of Samples at Closed Wet Scrubber Pond Area
Demolition Interim Action Work Plan
Former Intalco Smelter Site

Appendix A
Copy of Permits

Issuance Date: October 15, 2024

Effective Date: November 1, 2024

Expiration Date: October 31, 2029

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT WA0002950

State of Washington
DEPARTMENT OF ECOLOGY

Industrial Section
PO Box 47600
Olympia WA 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 1342 et seq

Intalco Aluminum LLC
4050 Mountain View Road
Ferndale, Washington 98248-0937

is authorized to discharge in accordance with the Special and General Conditions that follow.

Facility Location:
4050 Mountain View Road
Ferndale, Washington 98248-0937
Industry Type:
Shutdown Primary Aluminum Smelter
Treatment Type:
Industrial – Neutralization, chemical precipitation, flocculation, and sedimentation
Sanitary – Aeration, sedimentation, and ultraviolet disinfection
Receiving Water:
Strait of Georgia
SIC Code:
Shutdown Primary Aluminum Smelter
NAICS Code:
Shutdown Primary Aluminum Smelter

James DeMay, P.E.
Industrial Section Manager
Solid Waste Management Program
Washington State Department of Ecology

SUMMARY OF PERMIT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Table 1 – Summary of Permit Submittals

Permit Section	Submittal	Frequency	First Submittal Date
S1.D	Action Level Exceedance Report	Semiannual	January 15, 2025
S1.F	Monthly Visual Stormwater Inspection Report	Monthly	December 15, 2024
S3.A	Discharge Monitoring Report (DMR)	Monthly	December 15, 2024
S3.A	Discharge Monitoring Report (DMR)	Quarterly	January 15, 2025
S3.A	Discharge Monitoring Report (DMR)	Annual	January 15, 2026
S3.A	DMR - Priority Pollutant Data - Single Sample Data	Annual	January 15, 2026
S3.F	Reporting Permit Violations	As necessary	
S4.A	Modification to Secondary Wastewater Treatment Plant Operations and Maintenance Manual	As necessary	
S4.A	Modification to Sanitary Water Treatment Facility Operations and Maintenance Manual	As necessary	
S4.A	Treatment System Operating Plan	1/permit cycle	May 1, 2025
S4.A	Modification to Treatment System Operating Plan	As necessary	
S4.B	Reporting Bypasses	As necessary	
S5.C	Solid Waste Control Plan	1/permit cycle	February 1, 2025
S5.C	Modification to Solid Waste Plan	As necessary	
S6	Application for Permit Renewal	1/permit cycle	April 30, 2029
S8	Non-Routine and Unanticipated Wastewater Discharges	As necessary	
S9.A	Spill Control Plan	1/permit cycle	November 1, 2025
S9.A	Modification to Spill Control Plan	As necessary	
S10.B	Stormwater Pollution Prevention Plan	1/permit cycle	May 1, 2025
S10.D	Modification to Stormwater Pollution Prevention Plan	As necessary	
S11.B	Standard Construction Stormwater Pollution Prevention Plan	1/permit cycle	May 1, 2026
S11.B	Project-specific Construction Stormwater Pollution Prevention Plan	As necessary	
S11.D	Construction Stormwater Treatment BMPs Installation Extension Request	As necessary	
S11.F	Construction Stormwater Treatment BMPs Installation Extension Request	As necessary	
S12.A	Demolition Wastewater Plan	1/permit cycle	February 1, 2025
S12.A	Modification to Demolition Wastewater Plan	As necessary	

Permit Section	Submittal	Frequency	First Submittal Date
S13	Process Sewers and Stormwater Conveyance Cleaning Plan	1/permit cycle	August 1, 2025
S13	Modification to Process Sewers and Stormwater Conveyance Cleaning Plan	As necessary	
S14.A	Sediment Sampling and Analysis Plan	1/permit cycle	November 1, 2026
S14.B	Sediment Data Report	1/permit cycle	April 30, 2029
S15	Outfall 001 Inspection Report	1/5 years	January 15, 2028
S16.A	Outfall 001 Acute Toxicity: Characterization Written Report	2/Permit Cycle	September 30, 2025
S16.D	Outfall 001 Acute Toxicity: Compliance Monitoring Reports	As necessary	
S16.D	Outfall 002 Acute Toxicity: Compliance Monitoring Reports	Quarterly	January 30, 2025
S16.E	Outfall 001 Acute Toxicity: Response to Noncompliance Reporting	As necessary	
S16.E	Outfall 002 Acute Toxicity: Response to Noncompliance Reporting	As necessary	
S16.E	Outfall 001 Acute Toxicity: TI/TRE Plan	As necessary	
S16.E	Outfall 002 Acute Toxicity: TI/TRE Plan	As necessary	
S16.F	Outfall 001 Acute Toxicity Effluent Test Results - Submit with Permit Renewal Application	1/permit cycle	April 30, 2029
S17.A	Outfall 001 Chronic Toxicity Effluent Test Results - Submit with Permit Renewal Application	1/permit cycle	April 30, 2029
G1	Notice of Change in Authorization	As necessary	
G4	Permit Application for Substantive Changes to the Discharge	As necessary	
G5	Engineering Report for Construction or Modification Activities	As necessary	
G7	Notice of Permit Transfer	As necessary	
G10	Duty to Provide Information	As necessary	
G21	Compliance Schedules	As necessary	

SPECIAL CONDITIONS

S1. Discharge Limits and Action Levels

S1.A. Outfall 001 Wastewater, Sanitary Wastewater, and Stormwater Discharge Limits

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of that identified and authorized by this permit violates the terms and conditions of this permit.

The Permittee is prohibited from sending triple-lined landfill leachate or treated triple-lined landfill leachate to any onsite wastewater treatment plant or outfall.

Beginning on the effective date of this permit, the Permittee is authorized to discharge treated wastewater, treated Pitch Pit Building wastewater, treated demolition wastewater, treated sanitary wastewater, treated stormwater, and conditionally approved non-stormwater (Non-routine and Unanticipated Discharges, Condition S8) from Outfall 001 (Latitude: 48.840778, Longitude: -122.720444) to the Strait of Georgia at the permitted location subject to complying with the following limits:

1. Monitoring Point SP-10 (MP SP-10) Wastewater

MP SP-10 is located at approximately Latitude: 48.841042, Longitude: -122.715191 about 275 feet to the south of the entrance of the pier access road.

Table 2 – Effluent Limits: MP SP-10 Wastewater

Parameter	Average Monthly [a]	Maximum Daily [b]
Oil and grease	5 milligrams per liter (mg/L)	10 mg/L

Whole Effluent Toxicity Limits
The following whole effluent toxicity (WET) limit may apply if effluent characterization triggers Special Condition S16.B.
The effluent limit for acute whole effluent toxicity is: No acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC). The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the acute mixing zone, defined in Special Condition S1.H.1. The ACEC equals 4.8% effluent. See Special Condition S16.B.1 for more information.

Footnotes for Table 2:

[a] Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, the Permittee must

add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.

[b] Maximum daily effluent limit is the highest allowable daily discharge. The daily discharge is the average discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. The average daily measurement does not apply to pH.

2. Monitoring Point 051 (MP-051) Sanitary Wastewater

MP-051 is located at approximately Latitude: 48.839294, Longitude: -122.710541 at the discharge of the sanitary lagoon.

Table 3 – Effluent Limits: MP-051 Sanitary Wastewater

Parameter	Average Monthly [a]	Average Weekly [b]
Biochemical Oxygen Demand (5-day) (BOD_5)	45.0 mg/L [c]	65.0 mg/L [d]
BOD_5	22.4 pounds per day (lbs/day)	32.4 lbs/day
Total Suspended Solids (TSS)	45.0 mg/L [c]	65.0 mg/L [d]
TSS	22.4 lbs/day	32.4 lbs/day
Percent removal from influent, BOD_5 and TSS	65% [e]	none
Minimum number of operating UV tubes [f]	none	12

Parameter	Monthly Geometric Mean	Weekly Geometric Mean
Fecal Coliform Bacteria [g]	200 organisms/100 millimeters (mL)	400 organisms/100 mL

Parameter	Minimum	Maximum
pH	6.0 standard units	9.0 standard units

Footnotes for Table 3:

[a] Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, the Permittee must add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.

[b] Average weekly discharge limit means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

[c] During shutdown, the average monthly BOD_5 and TSS limits are 40.0 mg/L.

[d] During shutdown, the average weekly BOD_5 and TSS limits are 60.0 mg/L.

[e] Percent removal from the influent means the percent removal efficiency across a treatment plant for a given pollutant parameter, calculated as the monthly average influent concentration

(AIC) minus the monthly average effluent concentration, then divided by the AIC and multiplied by 100. During shutdown, there is no limit for the average monthly percent removal for BOD_5 and TSS.

[f] Monitoring for minimum number of operating ultraviolet (UV) tubes is to occur at the UV disinfection system at approximately Latitude: 48.841243, Longitude: -122.710871.

[g] Ecology provides directions to calculate the monthly and the 7-day geometric mean in publication 04-10-020, Information Manual for Treatment Plant Operators.[1] Monitoring for fecal coliform bacteria is to occur after the UV disinfection system and prior to Manhole 220 at approximately Latitude: 48.841243, Longitude: -122.710871.

3. MP-051 Alternative Sanitary Wastewater Requirements During Shutdown

As stated in Footnotes c, d, and e of Table 3, the Permittee has alternative limits for average monthly BOD_5 and TSS limits, average weekly BOD_5 and TSS limits, and average monthly percent removal for BOD_5 and TSS while the facility is shutdown. Shutdown is defined as the monthly average of the Permittee's personnel working onsite is equal to or less than 50 persons. The alternative limits revert to the limits shown in Table 3 when the monthly average of the Permittee's personnel working onsite is greater than 50 persons, or as required by Ecology in writing.

4. Monitoring Point D-10 (MP D-10) Stormwater

MP D-10 is located at approximately Latitude: 48.841137, Longitude: -122.710137 after industrial stormwater and non-industrial stormwater combines and prior to Manhole 41.

Table 4 – Effluent Limits: Outfall 001 Stormwater at MP D-10

Parameter	Average Monthly [a, b]	Maximum Daily [c]
Total Suspended Solids (TSS)	35 mg/L	75 mg/L
Fluoride	35 mg/L	50 mg/L
Aluminum	10 mg/L	15 mg/L
Benzo(a)pyrene	none	<7.5 micrograms per liter (µg/L)
Oil and grease	5 mg/L	10 mg/L

Parameter	Minimum	Maximum
pH [d]	6.0 standard units	9.0 standard units

Footnotes for Table 4:

[a] Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, the Permittee must

[1] https://apps.ecology.wa.gov/publications/SummaryPages/0410020.html

add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.

[b] Due to the unpredictable nature of stormwater discharges, during months when only one sample event is possible, the average monthly limit is not applicable for that month.

[c] Maximum daily effluent limit is the highest allowable daily discharge. The daily discharge is the average discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. The average daily measurement does not apply to pH.

[d] When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10.0 are not considered violations if no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 26 minutes per month. Any excursions below 5.0 and above 10.0 at any time are violations.

S1.B. Outfall 002 Stormwater Discharge Limit

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of that identified and authorized by this permit violates the terms and conditions of this permit.

Beginning on the effective date of this permit, the Permittee is authorized to discharge treated demolition wastewater, treated stormwater (during rainfall events when stormwater discharges exceed the hydraulic capacity of Outfall 001 or the diversion structure that carries stormwater to Outfall 001), and conditionally approved non-stormwater (Non-routine and Unanticipated Discharges, Special Condition S8) from Outfall 002 (Latitude: 48.839444, Longitude: -122.715583) to the Strait of Georgia at the permitted location subject to complying with the following limit:

Monitoring Point (MP) D-10 is located at approximately Latitude: 48.841137, Longitude: -122.710137 after industrial stormwater and non-industrial stormwater combines and prior to Manhole 41.

Table 5 – Effluent Limit: Outfall 002 Stormwater at MP D-10

Whole Effluent Toxicity Limits
The following whole effluent toxicity (WET) limit applies.
The effluent limit for acute whole effluent toxicity is: No acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC). The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the acute mixing zone, defined in Special Condition S1.H.2. The ACEC equals 5.3% effluent. See Special Condition S16.B.2 for more information.

S1.C. Stormwater Pond and Secondary Wastewater Treatment Plant Discharge Action Levels

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

Action level values are not effluent limitations. Discharges that fail to meet action level values are not automatically considered permit violations or violations of water quality standards; however, if the Permittee fails to meet action levels that trigger corrective actions and does not comply with the specific corrective action requirements in Special Condition S1.D it would be a permit violation.

1. Monitoring Point STRMP (MP STRMP) Stormwater Pond Discharge

   MP STRMP is located at approximately Latitude: 48.841625, Longitude: -122.710819 at the discharge of the stormwater pond.

Table 6 – Action Levels: Stormwater at MP STRMP

Parameter	Action Level
Total Suspended Solids (TSS)	35 mg/L
Fluoride	35 mg/L
Aluminum	10 mg/L

Parameter	Minimum	Maximum
pH	6.0 standard units	9.0 standard units

2. Monitoring Point SEC (MP SEC) Secondary Wastewater Treatment Plant (SWTP)

   MP SEC is located at approximately Latitude: 48.843336, Longitude: -122.711113 at the discharge of the SWTP.

Table 7 – Action Levels: SWTP at MP SEC

Parameter	Action Level
Total Suspended Solids (TSS)	120 mg/L
Fluoride	50 mg/L
Benzo(a)pyrene	2.5 µg/L

S1.D. Corrective Action Requirements for Action Level Exceedances

Each time the Permittee fails to meet any action level value in Special Condition S1.C, the Permittee must take the following actions:

1. Action Level Exceedance of Stormwater Pond Discharge at Monitoring Point STRMP
   a. Conduct an inspection of the drainage area for the Stormwater Pond as promptly as possible, but no later than 72 hours after receipt of sampling results. The Permittee shall also complete the following: review best management practices

(BMPs); check for spills to the stormwater system; and check ditches; and check weir integrity and placement.

b. Identify, to the extent possible, sources of stormwater contamination that are causing or contributing to the elevated levels of the action level parameter.

c. Evaluate whether any improvements or changes to existing BMPs or additional operational source control, structural source control, or treatment BMPs are warranted to reduce stormwater contamination below action values. Any elevated action level parameters demonstrated to be attributed to vegetative or naturally occurring conditions do not require additional BMPs.

d. Implement changes to existing BMPs or additional BMPs identified as needed in the investigation on a schedule approved by Ecology. Ecology may waive the requirement for additional controls and/or BMPs based on a technical demonstration by the Permittee that implementation of additional controls is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of water quality standards.

e. Include a detailed summary of inspection results and remedial actions taken in Special Conditions S1.D.1.a through S1.D.1.d with the semi-annual Action Level Exceedance Report required by Permit Condition S1.D.3.

2. Action Level Exceedance of Secondary Wastewater Treatment Plant (SWTP) at Monitoring Point SEC

a. Review the BMPs for the SWTP and check the addition rates of treatment chemicals, influent flows, and influent loading.

b. Identify, to the extent possible, industrial activity that may be causing or contributing to the elevated levels of the action level parameter.

c. Evaluate whether any improvements or changes to existing BMPs or additional operational source controls are warranted to reduce the effluent concentrations below action values.

d. Implement changes to existing BMPs or additional BMPs identified as needed in the investigation on a schedule approved by Ecology.

e. Review the Demolition Wastewater Plan to determine if pollutant source reduction BMPs are appropriate or if a different management option is necessary. If pollutant source reduction BMPs described in the Demolition Wastewater Plan are not sufficient, the Permittee must amend the Demolition Wastewater Plan to include additional pollutant source reduction BMPs to reduce pollutant loading in the demolition wastewater.

f. Include a detailed summary of the investigation, including the results from the actions associated with items Special Conditions S1.D.2.a through S1.D.2.e, and any remedial actions taken in the semi-annual Action Level Exceedance Report required by Special Condition S1.D.3.

3. Action Level Exceedance Report

a. The Permittee shall submit an Action Level Exceedance Report no later than January 15th and July 15th of each year, starting on January 15, 2025. The semi-annual reports shall represent the preceding six months, July through December and January through June, respectively. The semi-annual reports shall include corrective action documentation as required by Special Conditions S1.D.1 and S1.D.2. If corrective action is not yet completed at the time of submission of the Action Level Exceedance Report, the Permittee must describe the status of any outstanding corrective action(s).

b. The Permittee shall include the following information with each Action Level Exceedance Report:

(i) Identify the action level(s) that triggered the need for corrective action review and the number of times the action level was exceeded for that parameter in the last 12 months.

(ii) Provide the results of the initial inspection(s)/investigation(s) required by Special Conditions S1.D.1 and S1.D.2.

(iii) Describe any changes to BMPs or remedial actions that were taken in response to the exceeded action level.

(iv) If the action level for the same parameter is exceeded 6 or more times in a 12-month period, the Action Level Exceedance Report must include an analysis of whether additional operational or capital BMPs are necessary to reduce stormwater contamination below action levels and whether the action levels are appropriate for the expected pollutant loading and removal capability of the stormwater treatment system.

(v) If the analysis shows additional operational or capital BMPs are necessary to reduce stormwater contamination below action levels, the Permittee must include a schedule in the Action Level Exceedance Report to implement the additional BMPs.

S1.E. Outfalls 011, 012, and 0022 Stormwater Discharges

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

Beginning on the effective date of this permit, the Permittee is authorized to discharge stormwater and conditionally approved non-stormwater (Non-routine and Unanticipated Discharges, Special Condition S8) from Outfall 011 (Latitude: 48.842475, Longitude: -122.715581), Outfall 012 (Latitude: 48.840409, Longitude: -122.714526), and Outfall 0022 (Latitude: 48.839933, Longitude: -122.714107) to the Strait of Georgia at the permitted location subject to complying with the Monitoring Requirements in Special Condition S2.

The monitoring point for Outfall 011 is located at approximately Latitude: 48.842415, Longitude: -122.715037 at the end of pipe. The monitoring point for Outfall 012 is located at approximately Latitude: 48.840821, Longitude: -122.714257 at the catch basin. The monitoring point for Outfall 0022 is located at approximately Latitude: 48.840409, Longitude: -122.714526 at the location where stormwater falls onto the beach.

S1.F. Monthly Visual Inspections of Stormwater Discharges (MP STRMP, MP D-10, Outfall 011, and Outfall 012)

The Permittee must conduct monthly visual inspections of the Stormwater Pond discharge (MP STRMP), MP D-10, Outfall 011, and Outfall 012. The inspections must be conducted by qualified personnel. Each inspection must include visual observations of the stormwater sampling locations and areas where stormwater is discharged to waters of the state for the presence of potentially deleterious pollutants, such as floating materials, visible sheen, discoloration, turbidity, or odor; and presence of illicit discharges, such as domestic wastewater, noncontact cooling water, process wastewater, or stormwater. The inspection must include an assessment of all stormwater BMPs that have been implemented, the effectiveness of the BMPs, and whether any maintenance or changes in BMPs are needed.

If an illicit discharge is discovered, the Permittee must notify Ecology within 7 days. The Permittee must eliminate the illicit discharge within 30 days.

The Permittee must record the results of each inspection including:

1. Time and date of inspection,
2. Locations inspected,
3. Observations of potentially deleterious pollutants and the remedial actions the Permittee plans to take address their presence, and
4. Name, title, and signature of the person conducting the inspection.

The Permittee must submit the results of the monthly visual inspections with the monthly Discharge Monitoring Report required by Special Condition S3.A, starting on December 15, 2024.

S1.G. Mixing Zone Authorization

1. Mixing Zone for Outfall 001

The following paragraphs define the maximum boundaries of the mixing zones:

Chronic Mixing Zone

The mixing zone is a circle with radius of 215 feet measured from the center of each discharge port. The mixing zone extends from the bottom to the top of the water column. The concentration of pollutants at the edge of the chronic zone must meet Chronic Aquatic Life Criteria and Human Health Criteria.

Acute Mixing Zone

The acute mixing zone is a circle with radius of 21.5 feet measured from the center of each discharge port. The mixing zone extends from the bottom to the top of the water column. The concentration of pollutants at the edge of the acute zone must meet Acute Aquatic Life Criteria.

Table 8 – Dilution Factors for Outfall 001

Criteria	Dilution Factor
Acute Aquatic Life Criteria	21
Chronic Aquatic Life Criteria	52
Human Health Criteria - Carcinogen	105
Human Health Criteria - Non-carcinogen	77

2. Mixing Zone for Outfall 002

The following paragraphs define the maximum boundaries of the mixing zones:

Chronic Mixing Zone

The mixing zone is a circle with radius of 207 feet measured from the center of the discharge port. The mixing zone extends from the bottom to the top of the water column. The concentration of pollutants at the edge of the chronic zone must meet Chronic Aquatic Life Criteria and Human Health Criteria.

Acute Mixing Zone

The acute mixing zone is a circle with radius of 20.7 feet measured from the center of the discharge port. The mixing zone extends from the bottom to the top of the water column.

The concentration of pollutants at the edge of the acute zone must meet Acute Aquatic Life Criteria.

Table 9 – Dilution Factors for Outfall 002

Criteria	Dilution Factor
Acute Aquatic Life Criteria	19
Chronic Aquatic Life Criteria	33
Human Health Criteria - Carcinogen	48
Human Health Criteria - Non-carcinogen	48

S2. Monitoring Requirements

S2.A. Monitoring Schedule

The Permittee must monitor in accordance with the following schedule and the requirements specified in Appendix A.

1. Monitoring Point PUD

Monitoring Point PUD is located at approximately Latitude: 48.843606, Longitude: -122.701552, or otherwise approved by Ecology.

Table 10 – Intake Water (Monitoring Point PUD)

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Arsenic, total	µg/L	Annually [d]	Composite Sample (24 hour) or Grab

Footnotes for Table 10:

[a] µg/L means micrograms per liter.

[b] Annually means once per year.

[c] Composite Sample (24 hour) or Grab means the Permittee may choose to take a composite sample or take a grab sample. Composite Sample (24 hour) means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample. Grab means an individual sample collected over a fifteen (15) minute, or less, period.

[d] The Permittee must collect the sample during the first fall storm event. The first fall storm event means the first time on or after September 1st that precipitation occurs. The Permittee must collect the sample in conjunction with the other arsenic sampling.

2. Monitoring Point 051I

Monitoring Point 051I is located at approximately Latitude: 48.839335, Longitude: -122.710457 at the sample shed.

Table 11 – Outfall 001 Sanitary Wastewater Influent (Monitoring Point 051I)

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Biochemical Oxygen Demand (5-day) (BOD_5) [d]	mg/L	2/Month	Composite Sample (24 hour)
Total Suspended Solids (TSS) [d]	mg/L	2/Month	Composite Sample (24 hour)

Footnotes for Table 11:

[a] mg/L means milligrams per liter.

[b] 2/Month means twice per month. The samples may not be collected in the same week (Sunday through Saturday).

[c] Composite Sample (24 hour) means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.

[d] Wastewater Influent means the raw sewage flow; sample at the headworks of the treatment plant excluding any side-stream returns from inside the plant.

3. Monitoring Point 051

Monitoring Point 051 is located at approximately Latitude: 48.839294, Longitude: -122.710541 at the discharge of the sanitary lagoon.

Table 12 – Outfall 001 Sanitary Wastewater Effluent (Monitoring Point 051)

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Flow	MGD	Continuous	Metered/Recorded
Biochemical Oxygen Demand (5-day) (BOD_5)	mg/L	2/Month	Composite Sample (24 hour)
Biochemical Oxygen Demand (5-day) (BOD_5)	mg/L and lbs/day	Weekly	Calculated [d]
Biochemical Oxygen Demand (5-day) (BOD_5)	mg/L and lbs/day	Monthly	Calculated [e]
Biochemical Oxygen Demand (5-day) (BOD_5)	Percent Removal	Monthly [f]	Calculated [g]
Total Suspended Solids (TSS)	mg/L	2/Month	Composite Sample (24 hour)
Total Suspended Solids (TSS)	mg/L and lbs/day	Weekly	Calculated [d]
Total Suspended Solids (TSS)	mg/L and lbs/day	Monthly	Calculated [e]
Total Suspended Solids (TSS)	Percent Removal	Monthly	Calculated [g]
pH	Standard units	Weekly	Grab
Fecal Coliform [h]	# organisms/100 ml	2/Month	Grab
Fecal Coliform [h]	# organisms/100 ml	Weekly and Monthly	Calculated [i]

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Enterococci [h]	# organisms/100 ml	2/Month [j]	Grab
Number of operating UV tubes [k]	Number operating	Weekly	Visual Observation
Arsenic, total	µg/L	Annually [l]	Composite Sample (24 hour)

Footnotes for Table 12:

[a] The units and speciation entries are defined as follows:

- MGD means million gallons per day.
- mg/L means milligrams per liter.
- lbs/day means pounds per day.
- Percent Removal means the percentage of pollutant removed by treatment.
- # organisms/100 ml means the number of organisms per 100 milliliters.
- Number operating means the number of operating UV tubes.
- µg/L means micrograms per liter.

[b] The minimum sampling frequency entries are defined as follows:

- Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. Sample at least once every four hours when continuous monitoring is not possible, only during normal business hours.
- 2/Month means twice per month. The samples may not be collected in the same week (Sunday through Saturday).
- Weekly means once per week (Sunday through Saturday).
- Monthly means once per month.
- Annually means once per year.

[c] The sample type entries are defined as follows:

- Metered/Recorded means recording meters such as for flow, pH, and temperature.
- Composite Sample (24 hour) means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.
- Calculated means as described in the footnotes for the specific entry.
- Grab means an individual sample collected over a fifteen (15) minute, or less, period.

[d] Weekly BOD_5 and TSS is calculated as the sum of all daily discharges (in mg/L or lbs/day) measured during a week (Sunday through Saturday) divided by the number of daily discharges measured during that week. The Permittee must use the corresponding concentration, flow rate, and a conversion factor to determine the daily pollutant loading rates in lbs/day for BOD_5

and TSS. Daily pollutant loading rates are calculated using the following formula: Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = Daily pollutant loading rate (in lbs/day).

[e] Monthly BOD_5 and TSS is calculated as the sum of all daily discharges (in mg/L or lbs/day) measured during a month divided by the number of daily discharges measured during that month. The Permittee must use the corresponding concentration, flow rate, and a conversion factor to determine the daily pollutant loading rates in lbs/day for BOD_5 and TSS. Daily pollutant loading rates are calculated using the following formula: Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = Daily pollutant loading rate (in lbs/day).

[f] The percent removal calculation of BOD_5 and TSS are not required when the monthly average of the Permittee's personnel working on-site is less than or equal to 50 persons. The Permittee must calculate and report the percent removal of BOD_5 and TSS as requested by Ecology in writing, regardless of the monthly average of personnel working on-site.

[g] Calculate the percent removal of BOD_5 and TSS as follows: Percent (%) removal = [monthly average influent concentration (mg/L) – monthly average effluent concentration (mg/L)] / [monthly average influent concentration (mg/L)] x 100%.

[h] Monitoring for fecal coliform bacteria and enterococci is to occur after the UV disinfection system and prior to Manhole 220 at approximately Latitude: 48.841243, Longitude: -122.710871.

[i] Calculate numeric values for fecal coliforms following the procedures in Ecology's Information Manual for Wastewater Treatment Plant Operators[2], Publication 04-10-020. Do not report a result as Too Numerous To Count (TNTC).

[j] The Permittee must sample enterococci at the same time as when the Permittee samples fecal coliform.

[k] Monitoring for number of operating ultraviolet (UV) tubes is to occur at the UV disinfection system at approximately Latitude: 48.841243, Longitude: -122.710871.

[l] The Permittee must collect the sample during the first fall storm event. The first fall storm event means the first time on or after September 1st that precipitation occurs. The Permittee must collect the sample in conjunction with the other arsenic sampling.

4. Monitoring Point D-10

Monitoring Point D-10 is located at approximately Latitude: 48.841137, Longitude: -122.710137 after industrial stormwater and non-industrial stormwater combines and prior to Manhole 41.

[2] https://apps.ecology.wa.gov/publications/SummaryPages/0410020.html

Table 13 – Outfall 001 Stormwater (Monitoring Point D-10)

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Flow [d]	MGD	Continuous	Metered/Recorded
pH [e]	Standard units	Continuous	Metered/Recorded
Duration [f]	Minutes	Continuous	Recorded
Precipitation [g]	Inches	1/Day	Metered/Recorded
Total Suspended Solids (TSS)	mg/L	Once per storm event	Composite Sample (24 hour)
Fluoride	mg/L	Once per storm event	Composite Sample (24 hour)
Aluminum	mg/L	Once per storm event	Composite Sample (24 hour)
Oil and grease	mg/L	Quarterly	Grab
Copper, total	µg/L	Quarterly	Composite Sample (24 hour)
Zinc, total	µg/L	Quarterly	Composite Sample (24 hour)
Arsenic, total	µg/L	Annually [h]	Composite Sample (24 hour)
Benzo(a)pyrene	µg/L	Annually, during a storm event [i]	Composite Sample (24 hour)

Footnotes for Table 13:

[a] The units and speciation entries are defined as follows:

- MGD means million gallons per day.
- mg/L means milligrams per liter.
- µg/L means micrograms per liter.

[b] The minimum sampling frequency entries are defined as follows:

- Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. Sample at least once every four hours when continuous monitoring is not possible, only during normal business hours.
- 1/Day means the Permittee reports the daily precipitation values. The Permittee must also report the monthly total.
- A storm event is defined as a stormwater pond discharge greater than 3.7 cubic feet per second over any consecutive 120 minute period. However, only one 24-hour composite sample is required to be collected per storm event. In addition, the Permittee is not required to start collecting the next composite sample until at least 48 hours after the previous composite sampling was completed. Monitoring more than once per week (Sunday through Saturday) is not required.
- Quarterly means once every three months. Quarterly sampling periods are January through March, April through June, July through September, and October through December.
- Annually means once per year.

- Annually, during a storm event means once per year during a storm event as described above in this footnote.

[c] The sample type entries are defined as follows:

- Metered/Recorded means recording meters such as for flow, pH, and temperature.
- Recorded means using the pH meter to determine the number of minutes the pH value measured between 5.0 and 6.0 and between 9.0 and 10.0 for each day.
- Composite Sample (24 hour) means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.
- Grab means an individual sample collected over a fifteen (15) minute, or less, period.

[d] The Permittee must report the daily average flow for every day there is discharge.

[e] The Permittee must record and report the monthly instantaneous maximum and minimum pH. Do not average pH values.

[f] The Permittee must record and report the: number of minutes the pH value measured between 5.0 and 6.0 and between 9.0 and 10.0 for each day, and the total minutes for the month. If multiple excursions occur during the day, note the duration for each excursion in the notation field in the parameter notes.

[g] The Permittee may use local National Oceanic and Atmospheric Administration weather data for their precipitation data if the facility weather data is not available.

[h] The Permittee must collect the sample during the first fall storm event. The first fall storm event means the first time on or after September 1st that precipitation occurs. The Permittee must collect the sample in conjunction with the other arsenic sampling.

[i] The Permittee must monitor benzo(a)pyrene once per month on any month that the Permittee sends demolition wastewater to the stormwater pond. The monthly benzo(a)pyrene sampling must occur at Monitoring Point D-10 approximately during the time that treated demolition wastewater from the stormwater pond is discharging through Monitoring Point D-10. The permittee may use one of the monthly sampling events due to demolition wastewater for the annual sampling requirement if the monthly sampling event also is during a storm event defined in footnote b.

5. Monitoring Point STRMP

Monitoring Point STRMP is located at approximately Latitude: 48.841625, Longitude: -122.710819 at the discharge of the stormwater pond.

Table 14 – Stormwater Pond at Monitoring Point STRMP

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Flow [d]	cfs	Continuous	Metered/Recorded
pH [e]	Standard units	Continuous	Metered/Recorded
Total Suspended Solids (TSS)	mg/L	Once per storm event	Composite Sample (24 hour)
Fluoride	mg/L	Once per storm event	Composite Sample (24 hour)
Aluminum	mg/L	Once per storm event	Composite Sample (24 hour)

Footnotes for Table 14:

[a] The units and speciation entries are defined as follows:

- cfs means cubic feet per second.
- mg/L means milligrams per liter.

[b] The minimum sampling frequency entries are defined as follows:

- Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. Sample at least once every four hours when continuous monitoring is not possible, only during normal business hours.
- A storm event is defined as a stormwater pond discharge greater than 3.7 cubic feet per second over any consecutive 120 minute period. However, only one 24-hour composite sample is required to be collected per storm event. In addition, the Permittee is not required to start collecting the next composite sample until at least 48 hours after the previous composite sampling was completed. Monitoring more than once per week (Sunday through Saturday) is not required.

[c] The sample type entries are defined as follows:

- Metered/Recorded means recording meters such as for flow, pH, and temperature.
- Composite Sample (24 hour) means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.

[d] The Permittee must report the daily average flow in cfs for every day there is discharge.

[e] The Permittee must record and report the monthly instantaneous maximum and minimum pH. Do not average pH values.

6. Monitoring Point SECI

Monitoring Point SECI is located at approximately Latitude: 48.843491, Longitude: -122.710889 at the inlet of the SWTP.

Table 15 – Secondary Wastewater Treatment Plant Monitoring Point SECI

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Fluoride [d]	mg/L	Monthly	Grab

Footnotes for Table 15:

[a] mg/L means milligrams per liter.

[b] Monthly means once per month.

[c] Grab means an individual sample collected over a fifteen (15) minute, or less, period.

[d] The Permittee must sample fluoride that represents the influent of wastewater to the Secondary Wastewater Treatment Plant.

7. Monitoring Point SEC

Monitoring Point SEC is located at approximately Latitude: 48.843336, Longitude: -122.711113 at the discharge of the SWTP.

Table 16 – Secondary Wastewater Treatment Plant Monitoring Point SEC

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Flow [d]	MGD	Continuous	Metered/Recorded
Total Suspended Solids (TSS)	mg/L	2/Month	Composite Sample (24 hour flow-proportioned composite sample)
Fluoride	mg/L	2/Month	Composite Sample (24 hour flow-proportioned composite sample)
Aluminum, total	mg/L	Monthly	Composite Sample (24 hour flow-proportioned composite sample)
Benzo(a)pyrene	µg/L	Quarterly [e]	Composite Sample (24 hour flow-proportioned composite sample)
Cyanide (Weak Acid Dissociable or Available)	µg/L	Quarterly	Grab
Arsenic, total	µg/L	Annually [f]	Composite Sample (24 hour flow-proportioned composite sample)

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
PCBs	µg/L	Annually	Grab

Footnotes for Table 16:

[a] The units and speciation entries are defined as follows:

- MGD means million gallons per day.
- mg/L means milligrams per liter.
- µg/L means micrograms per liter.

[b] The minimum sampling frequency entries are defined as follows:

- Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. Sample at least once every four hours when continuous monitoring is not possible, only during normal business hours.
- 2/Month means twice per month.
- Monthly means once per month.
- Quarterly means once every three months. Quarterly sampling periods are January through March, April through June, July through September, and October through December.
- Annually means once per year.

[c] The sample type entries are defined as follows:

- Metered/Recorded means recording meters such as for flow, pH, and temperature.
- Composite Sample (24 hour flow-proportioned composite sample) means a series of flow-proportioned individual samples collected over a 24-hour period into a single container, and analyzed as one sample.
- Grab means an individual sample collected over a fifteen (15) minute, or less, period.

[d] The Permittee must report the daily average flow for every day there is discharge.

[e] The Permittee must monitor benzo(a)pyrene once per month on any month that the Permittee sends demolition wastewater to the Secondary Wastewater Treatment Plant. The monthly benzo(a)pyrene sampling must occur at Monitoring Point SEC approximately during the time that treated demolition wastewater from the Secondary Wastewater Treatment Plant is discharging through Monitoring Point SEC. The Permittee may use monthly sampling events due to demolition wastewater for quarterly sampling requirements. If the action level for benzo(a)pyrene at Monitoring Point SEC is exceeded, the Permittee must monitor benzo(a)pyrene weekly until the Permittee shows a sampling result for benzo(a)pyrene at Monitoring Point SEC below the action level. Weekly means once per week (Sunday through Saturday).

[f] The Permittee must collect the sample during the first fall storm event. The first fall storm event means the first time on or after September 1st that precipitation occurs. The Permittee must collect the sample in conjunction with the other arsenic sampling.

8. Monitoring Point 011

Monitoring Point 011 is located at approximately Latitude: 48.842415, Longitude: -122.715037 at the end of pipe.

Table 17 – Outfall 011 Stormwater Monitoring Point 011

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Turbidity	NTU	Quarterly [d]	Grab
Aluminum	mg/L	Quarterly [d]	Grab
Fluoride	mg/L	Quarterly [d]	Grab
pH	Standard units	Quarterly [d]	Grab
Copper, total	µg/L	Quarterly [d]	Grab
Zinc, total	µg/L	Quarterly [d]	Grab

Footnotes for Table 17:

[a] The units and speciation entries are defined as follows:

- NTU means nephelometric turbidity units.
- mg/L means milligrams per liter.
- µg/L means micrograms per liter.

[b] Quarterly means once every three months. Quarterly sampling periods are January through March, April through June, July through September, and October through December.

[c] Grab means an individual sample collected over a fifteen (15) minute, or less, period.

[d] The Permittee is allowed to not sample at Outfall 011 when all of the following five conditions are met: there has been no precipitation for the prior 10 days, the Outfall 011 discharge is clear, there has been no recent spills in the alumina silo storage area, there are no other sources of water besides groundwater seepage contributing to Outfall 011, and there is no discharge at Outfall 012.

9. Monitoring Point 012

Monitoring Point 012 is located at approximately Latitude: 48.840821, Longitude: -122.714257 at the catch basin.

Table 18 – Outfall 012 Stormwater Monitoring Point 012

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Turbidity	NTU	Quarterly	Grab
Aluminum	mg/L	Quarterly	Grab
Fluoride	mg/L	Quarterly	Grab
pH	Standard units	Quarterly	Grab
Copper, total	µg/L	Quarterly	Grab
Zinc, total	µg/L	Quarterly	Grab

Footnotes for Table 18:

[a] The units and speciation entries are defined as follows:

- NTU means nephelometric turbidity units.
- mg/L means milligrams per liter.
- µg/L means micrograms per liter.

[b] Quarterly means once every three months. Quarterly sampling periods are January through March, April through June, July through September, and October through December.

[c] Grab means an individual sample collected over a fifteen (15) minute, or less, period.

10. Monitoring Point 0022

Monitoring Point 0022 is located at approximately Latitude: 48.840409, Longitude: -122.714526 at the location where stormwater falls onto the beach.

Table 19 – Outfall 0022 Stormwater Monitoring Point 0022

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Discharge Event	Yes/No	Once per defined event [a]	Metered/Recorded

Footnote for Table 19:

[a] Once per defined event means every day stormwater enters the launder box at Monitoring Point D-10. The Permittee must enter "1" for Yes on the Discharge Monitoring Report for every day stormwater enters the launder box at Monitoring Point D-10. The Permittee must use reporting code "C" when stormwater does not enter the launder box at Monitoring Point D-10.

11. Monitoring Point PWS

Monitoring Point PWS is located at approximately Latitude: 48.842796, Longitude: -122.699028 at the domestic water treatment plant.

Table 20 – Potable Water System Monitoring Point PWS

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Flow	Million gallons per day	Once per defined event [a]	Metered/Recorded

Footnote for Table 20:

[a] Once per defined event means every day the Permittee sends filter backwash rinsate, filter conditioning water, or diverted water from the potable water system to the sanitary lagoon. The Permittee must specify in the Discharge Monitoring Report comments which (one or more) potable water system wastewater streams were sent to the sanitary lagoon.

12. Monitoring Point TLL

Monitoring Point TLL is located at approximately Latitude: 48.849391, Longitude: -122.709172 at the TLL sump.

Table 21 – Triple-lined Landfill Leak Detection System Monitoring Point TLL

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Conductivity [d]	µS/cm	Continuous	Metered/Recorded
Arsenic, total [e]	µg/L	Annually [f]	Grab
Discharge Event [g]	Yes/No	Annually	Visual Observation

Footnotes for Table 21:

[a] The units and speciation entries are defined as follows:

- µS/cm means micro Siemens per centimeter.
- µg/L means micrograms per liter.

[b] The minimum sampling frequency entries are defined as follows:

- Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. Sample at least once per day when continuous monitoring is not possible, only during normal business hours.
- Annually means once per year.

[c] The sample type entries are defined as follows:

- Metered/Recorded means recording meters such as for flow, pH, and temperature.
- Grab means an individual sample collected over a fifteen (15) minute, or less, period.

[d] The Permittee must report the highest conductivity for every day. Do not average conductivity values.

[e] The Permittee must sample total arsenic when water is flowing from the triple-lined landfill's leak detection system.

[f] The Permittee must collect the sample during the first fall storm event. The first fall storm event means the first time on or after September 1st that precipitation occurs. The Permittee must collect the sample in conjunction with the other arsenic sampling.

[g] The Permittee must annually monitor for the presence of flow from the triple-lined landfill's leachate collection system. The Permittee must enter "1" for Yes on the Discharge Monitoring Report if the triple-lined landfill's leachate collection system does contains leachate. The Permittee must use reporting code "C" if the triple-lined landfill's leachate collection system does not contain leachate.

13. Monitoring Point SP-10

Monitoring Point SP-10 is located at approximately Latitude: 48.841042, Longitude: -122.715191 about 275 feet to the south of the entrance of the pier access road.

Table 22 – Outfall 001 Wastewater (Monitoring Point SP-10)

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Flow [d, e]	MGD	Continuous	Metered/Recorded
Temperature [d, f]	°C	Continuous	Metered/Recorded
pH [d]	Standard units	Continuous	Metered/Recorded
Oil and Grease	mg/L	Quarterly	Grab
Biochemical Oxygen Demand (5-day) (BOD_5) [d]	mg/L	1/Permit Cycle	Grab
Chemical Oxygen Demand (COD) [d]	mg/L	1/Permit Cycle	Grab
Total Organic Carbon (TOC) [d]	mg/L	1/Permit Cycle	Grab
Total Suspended Solids (TSS) [d]	mg/L	1/Permit Cycle	Grab
Turbidity	NTU	4/Year	Grab
Ammonia (as N) [d]	mg/L	Annually	Grab
Cyanide (Weak Acid Dissociable or Available)	µg/L	Annually	Grab
Cyanide, total [d]	µg/L	1/Permit Cycle	Grab
Total Phenolic Compounds [d]	µg/L	Annually	Grab
Chromium (hex), dissolved	µg/L	Annually	Grab
Mercury, total [d]	ng/L	Annually	Grab
Total Metals [d, g]	µg/L	Annually [h]	Grab
Volatile Organic Compounds [d, i]	µg/L	Annually	Grab
Acid-extractable Compounds [d, j]	µg/L	Annually	Grab

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Base-neutral Compounds [d, k]	µg/L	Annually	Grab
Pesticides/PCBs [d, l]	µg/L	1/Permit Cycle	Grab
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (2,3,7,8 TCDD)	pg/L	1/Permit Cycle	Grab

Footnotes for Table 22:

[a] The units and speciation entries are defined as follows:

- MGD means million gallons per day.
- °C means degrees Celsius.
- mg/L means milligrams per liter.
- NTU means nephelometric turbidity units.
- µg/L means micrograms per liter.
- ng/L means nanograms per liter.
- pg/L means picograms per liter.

[b] The minimum sampling frequency entries are defined as follows:

- Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. Sample at least once per day when continuous monitoring is not possible, only during normal business hours.
- Quarterly means once every three months. Quarterly sampling periods are January through March, April through June, July through September, and October through December.
- 1/Permit Cycle means once per permit cycle between January 2027 through December 2027.
- 4/Year means four times in year, once in each of the following quarters: January 2027 through March 2027, April 2027 through June 2027, July 2027 through September 2027, and October 2027 through December 2027.
- Annually means once per year.

[c] The sample type entries are defined as follows:

- Metered/Recorded means recording meters such as for flow, pH, and temperature.
- Grab means an individual sample collected over a fifteen (15) minute, or less, period.

[d] The Permittee must use the sample results to complete the permit application form required by Special Condition S6.

[e] The Permittee must report the daily average flow for every day there is discharge.

[f] When measuring temperature continuously, the Permittee must determine and report a daily maximum. Continuous monitoring instruments must achieve an accuracy of 0.2 °C (or as otherwise approved by Ecology) and the Permittee must verify accuracy annually. If continuous monitoring is not possible, temperature grab samples must occur when the effluent is at or near its daily maximum temperature, which usually occurs in the late afternoon, only during normal business hours.

[g] The remaining total metals not already listed in the table include antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc.

[h] The Permittee must collect the sample during the first fall storm event. The first fall storm event means the first time on or after September 1st that precipitation occurs. The Permittee must collect the sample in conjunction with the other arsenic sampling.

[i] Volatile organic compounds means the list of parameters in Appendix A Table 5 called Priority Pollutants: Volatile Compounds.

[j] Acid-extractable compounds means the list of parameters in Appendix A Table 4 called Priority Pollutants: Acid Compounds.

[k] Base-neutral compounds means the list of parameters in Appendix A Table 6 called Priority Pollutants: Base/Neutral Compounds.

[l] Pesticides/PCBs means the list of parameters in Appendix A Table 8 called Pesticides and PCBs.

14. Monitoring Point D-10

Monitoring Point D-10 is located at approximately Latitude: 48.841137, Longitude: -122.710137 after industrial stormwater and non-industrial stormwater combines and prior to Manhole 41.

Table 23 – Outfall 002 Stormwater Characterization and Permit Renewal Application Requirements

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Chromium (hex), dissolved	µg/L	3/Permit Cycle	Grab
Mercury, total	ng/L	3/Permit Cycle	Grab
Total Metals [e]	µg/L	3/Permit Cycle	Grab
pH	Standard units	1/Permit Cycle	Grab
Total Suspended Solids (TSS)	mg/L	1/Permit Cycle	Grab
Oil and Grease	mg/L	1/Permit Cycle	Grab
Biochemical Oxygen Demand (5-day) (BOD_5) [d]	mg/L	1/Permit Cycle	Grab
Chemical Oxygen Demand [d]	mg/L	1/Permit Cycle	Grab
Phosphorus, total [d]	mg/L	1/Permit Cycle	Grab
Total Kjeldahl Nitrogen [d]	mg/L	1/Permit Cycle	Grab
Total Nitrogen (as N) [d]	mg/L	1/Permit Cycle	Grab

Footnotes for Table 23:

[a] The units and speciation entries are defined as follows:

- µg/L means micrograms per liter.
- ng/L means nanograms per liter.
- mg/L means milligrams per liter.

[b] The minimum sampling frequency entries are defined as follows:

- 3/Permit Cycle means three times per permit cycle, once in each of the following years: January 2026 through December 2026, January 2027 through December 2027, and January 2028 through December 2028.
- 1/Permit Cycle means once per permit cycle between January 2027 through December 2027.

[c] Grab means an individual sample collected over a fifteen (15) minute, or less, period.

[d] The Permittee must use the sample results to complete the permit application form required by Special Condition S6.

[e] The remaining total metals not already listed in the table include antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc.

15. Monitoring Points 011 and 012 Stormwater Characterization and Permit Renewal Application

Monitoring Point 011 is located at approximately Latitude: 48.842415, Longitude: -122.715037 at the end of pipe. Monitoring Point 012 is located at approximately Latitude: 48.840821, Longitude: -122.714257 at the catch basin.

Table 24 – Outfalls 011 and 012 Stormwater Characterization and Permit Renewal Application Requirements

Parameter	Units & Speciation [a]	Minimum Sampling Frequency [b]	Sample Type [c]
Chromium (hex), dissolved	µg/L	3/Permit Cycle	Grab
Mercury, total	ng/L	3/Permit Cycle	Grab
Total Metals [e]	µg/L	3/Permit Cycle	Grab
Oil and Grease [d]	mg/L	1/Permit Cycle	Grab
Biochemical Oxygen Demand (5-day) (BOD_5) [d]	mg/L	1/Permit Cycle	Grab
Chemical Oxygen Demand [d]	mg/L	1/Permit Cycle	Grab
Total Suspended Solids (TSS) [d]	mg/L	1/Permit Cycle	Grab
Phosphorus, total [d]	mg/L	1/Permit Cycle	Grab
Total Kjeldahl Nitrogen [d]	mg/L	1/Permit Cycle	Grab
Total Nitrogen (as N) [d]	mg/L	1/Permit Cycle	Grab

Footnotes for Table 24:

[a] The units and speciation entries are defined as follows:

- µg/L means micrograms per liter.
- ng/L means nanograms per liter.
- mg/L means milligrams per liter.

[b] The minimum sampling frequency entries are defined as follows:

- 3/Permit Cycle means three times per permit cycle, once in each of the following years: January 2026 through December 2026, January 2027 through December 2027, and January 2028 through December 2028.
- 1/Permit Cycle means once per permit cycle between January 2027 through December 2027.

[c] Grab means an individual sample collected over a fifteen (15) minute, or less, period.

[d] The Permittee must use the sample results to complete the permit application form required by Special Condition S6. Sample results from other permit requirements are also required on the permit application form, such as pH from Tables 17 and 18.

[e] The remaining total metals not already listed in the table include antimony, arsenic, beryllium, cadmium, chromium, lead, nickel, selenium, silver, and thallium.

16. Personnel Monitoring

Table 25 – Personnel

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Personnel	Number of the Permittee's personnel working onsite [a]	Monthly [b]	Estimated [c]

Footnotes for Table 25:

[a] Number of the Permittee's personnel working onsite means the average monthly number of the Permittee's personnel working onsite. This does not include contractor workers.

[b] Monthly means once per month.

[c] Estimated means using applicable records.

17. Additional Monitoring

Table 26 – Additional Monitoring

Monitoring Type	Description
Construction Stormwater	As specified in condition S11
Sediment Study	As specified in condition S14
Acute Whole Effluent Toxicity Testing	As specified in condition S16
Chronic Whole Effluent Toxicity Testing	As specified in condition S17

S2.B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 Code of Federal Regulations (CFR) Part 136[3] unless otherwise specified in this permit. Ecology may specify alternative methods only for parameters without limits and for those parameters without an EPA-approved test method in 40 CFR Part 136.

S2.C. Flow Measurement, Field Measurement, and Continuous Monitoring Devices

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain the devices to ensure the accuracy of the measurements is consistent with the accepted industry standard, the manufacturer's recommendation, and approved operation and maintenance (O&M) manuals' procedures for the device and the wastestream.
3. Calibrate continuous monitoring instruments weekly unless it can demonstrate a longer period is sufficient based on monitoring reports. The Permittee must calibrate continuous pH measurement instruments according to the manufacturer's requirements.
4. Calibrate micro-recording Temperature devices, known as thermistors, using protocols from Ecology's Standard Operating Procedure EAP080, Version 2.2, Continuous Temperature Monitoring of Freshwater Rivers and Streams[4]. Calibration

[3] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-136
[4] https://apps.ecology.wa.gov/publications/SummaryPages/2203216.html

as specified in this document is not required if the Permittee uses recording devices certified by the manufacturer.

5. Use field measurement devices as directed by the manufacturer and do not sue reagents beyond their expiration dates.
6. Establish a calibration frequency for each device or instrument in the O&M manuals that conforms to the frequency recommended by the manufacturer.
7. Calibrate flow monitoring devices at a minimum frequency of at least one calibration per year.
8. Maintain calibration records for at least three years.

S2.D. Laboratory Accreditation

The Permittee must ensure that all monitoring data required by Ecology for permit specified parameters is prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 Washington Administrative Code (WAC)[5], Accreditation of Environmental Laboratories. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from the requirement. The Permittee must obtain accreditation for conductivity and pH if it must receive accreditation or registration for other parameters.

S2.E. Request for Reduction in Monitoring

The Permittee may request a reduction of the sampling frequency after 12 months of monitoring. Ecology will review each request and at its discretion grant the request when it reissues the permit or by a permit modification.

The Permittee must:

1. Provide a written request,
2. Clearly state the parameters for which it is requesting reduced monitoring, and
3. Clearly state the justification for the reduction.

S3. Reporting and Recording Requirements

The Permittee must monitor and report in accordance with the following conditions. Falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

S3.A. Discharge Monitoring Reports

The first monitoring period begins on the effective date of the permit (unless otherwise specified). The Permittee must:

1. Summarize, report, and submit monitoring data obtained during each monitoring period on the electronic Discharge Monitoring Report (DMR) form provided by

[5] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-50

Ecology within the Water Quality Permitting Portal[6]. Include data for each of the parameters tabulated in Special Condition S2 and as required by the form. Report a value for each day sampling occurred (unless specifically exempted in the permit) and for the summary values (when applicable) included on the electronic form.

2. Submit DMRs no later than the dates specified below, unless otherwise specified in this permit.
3. Submit DMRs for parameters with the monitoring frequencies specified in Special Condition S2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must:
   a. Submit **monthly** DMRs by the 15th day of the following month.
   b. Submit **quarterly** DMRs, unless otherwise specified in the permit, by the 15th day of the month following the monitoring period. Quarterly sampling periods are January through March, April through June, July through September, and October through December. The Permittee must submit the first quarterly DMR by January 15, 2025 for the Fourth Quarter of 2024, starting November 1, 2024.
   c. Submit **annual** DMRs, unless otherwise specified in the permit, by January 15th for the previous calendar year. The annual sampling period is a calendar year. The Permittee must submit the first annual DMR by January 15, 2026 for the annual sampling period beginning on January 1, 2025.
4. Enter the "No Discharge" reporting code for an entire DMR, for a specific monitoring point, or a specific parameter as appropriate, if the Permittee did not discharge wastewater or a specific pollutant during a given monitoring period.
5. Report single analytical values below detection as "less than the Detection Level (DL)" by entering the < followed by the numeric value of the detection level (e.g. < 2.0) on the DMR. If the method used did not meet the minimum DL and Quantitation Level (QL) identified in the permit report the actual QL and DL in the comments or in the location provided.
6. Report single analytical values between the DL and the QL by entering the estimated value, the code for estimated value/below quantitation limit (J) and any additional information in the comments.
7. Submit a copy of the laboratory report as an attachment using WQWebDMR.
8. Submit bacteria monitoring results as follows:
   a. Do not report zero for bacterial monitoring. Report as required by the laboratory method.
   b. Calculate and report an arithmetic average value for each day for bacteria if multiple samples were taken in one day.
   c. Calculate the geometric mean values for bacteria (unless otherwise specified in the permit) using the reported numeric value for all bacteria samples measured

[6] https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance

above the detection value except when it took multiple samples in one day. If multiple samples are taken in one day, use the arithmetic average for the day in the geometric mean calculation. Use the detection value for those samples measured below detection.

9. Report the test method used for analysis in the comments if the laboratory used an alternative method not specified in the permit and as allowed in Appendix A or Special Condition S2.
10. Calculate average values and calculated total values (unless otherwise specified in the permit) using:
    a. The reported numeric value for all parameters measured between the detection value and the quantitation value for the sample analysis.
    b. One-half (1/2) the detection value (for values reported below detection) if the lab detected the parameter in another sample from the same monitoring point for the reporting period.
    c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for reporting period.
11. Report single-sample grouped parameters (for example: priority pollutants, PAHs, pulp and paper chlorophenolics, TTOs) on the WQWebDMR form and include: sample date, concentration detection, DL (as necessary), and laboratory QL (as necessary).

S3.B. Permit Submittals and Schedules

The Permittee must use the Water Quality Permitting Portal – Permit Submittals application (unless otherwise specified in the permit) to submittal all other written permit required reports by the date specified in the permit.

When another permit condition requires submittal of a paper (hard copy) report, the Permittee must ensure that it is postmarked or received by Ecology no later than the dates specified by this permit. Send these paper reports to Ecology at:

Water Quality Permit Coordinator
Department of Ecology
Industrial Section
PO Box 47600
Olympia, WA 98504-7600

S3.C. Records Retention

The Permittee must retain records of all monitoring information for a minimum of three years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. The Permittee must extend this period of retention during the course of any

unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

S3.D. Recording of Results

For each measurement or sample taken, the Permittee must record the following information:

1. The date, exact place, method, and time of sampling or measurement;
2. The individual who performed the sampling or measurement;
3. The dates the analyses were performed;
4. The individual who performed the analyses;
5. The analytical techniques or methods used;
6. The results of all analyses.

S3.E. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Special Condition S2 of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's DMR unless otherwise specified by Special Condition S2.

S3.F. Reporting Permit Violations

The Permittee must take the following actions when it violates or is unable to comply with any permit condition:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.
2. If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within 30 days of sampling.
   a. Immediate Reporting

      The Permittee must **immediately** report to Ecology and the Department of Health, Shellfish Program (at the numbers listed below), for all:

      - Failures of disinfection system
      - Collection system overflows discharging to marine surface waters
      - Plant bypasses discharging to marine surface waters

Northwest Regional Office	206-594-0000
Department of Health Shellfish Program	360-236-3330 (business hours) 360-789-8962 (after hours)

      The Permittee must also notify the Ecology Industrial Section permit manager by telephone for any of the above situations. Outside of normal working hours, a

voice mail notification to the Industrial Section permit manager or their designated backup will meet this requirement.

b. Twenty-Four (24) Hour Reporting

The Permittee must report the following occurrences of noncompliance by telephone, to the Industrial Section permit manager, within 24 hours from the time the Permittee becomes aware of any of the following circumstances:

(i) Any noncompliance that may endanger health or the environment, unless previously reported under immediate reporting requirements.
(ii) Any unanticipated bypass the causes an exceedance of any effluent limit in the permit (See Part S4.B., Bypass Procedures).
(iii) Any upset that causes an exceedance of an effluent limit the permit (See G15., Upset).
(iv) Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Special Condition S1.A. of this permit.
(v) Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limit in the permit. This requirement does not include industrial process wastewater overflows to impermeable surfaces which are collected and routed to the treatment works.

c. Report Within Five Days

The Permittee must also submit a written report within five days of the time that the Permittee becomes aware of any reportable event under subparts a or b, above. The report must contain:

(i) A description of the noncompliance and its cause.
(ii) The period of noncompliance, including exact dates and times.
(iii) The estimated time the Permittee expects the noncompliance to continue if not yet corrected.
(iv) Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
(v) If the noncompliance involves an overflow prior to the treatment works, an estimated of the quantity (in gallons) of untreated overflow.

d. Waiver of Written Reports

Ecology may waive the written report required in subpart c, above, on a case-by-case basis upon request if the Permittee has submitted a timely oral report.

e. All Other Permit Violation Reporting

The Permittee must report all permit violations, which do not require immediate or within 24 hours reporting, when it submits monitoring reports for Special Condition S3.A. The reports must contain the information listed in subpart c, above. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

S3.G. Other Reporting

1. Spills of Oil or Hazardous Materials

In addition to the requirements in S3.F, the Permittee must report a spill of oil or hazardous materials in accordance with the requirements of Revised Code of Washington (RCW) 90.56.280[7] and WAC 173-303-145[8]. Visit the website How to Report a Spill[9] for further instructions.

2. Failure to Submit Relevant or Correct Facts

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to Ecology, it must submit such facts or information promptly.

S3.H. Maintaining a Copy of this Permit

The Permittee must keep a copy of this permit at the facility and make it available upon request to Ecology inspectors.

S4. Operation and Maintenance

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances), which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes keeping a daily operation logbook (paper or electronic), adequate laboratory controls, and appropriate quality assurance procedures. This provision of the permit requires the Permittee to operate backup or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of this permit.

The Permittee must schedule any facility maintenance, which might require interrupting of wastewater treatment and degrade effluent equality, during non-critical water quality periods and carry this maintenance out according to the approved operation and maintenance manuals or as otherwise approved by Ecology.

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[7] https://app.leg.wa.gov/RCW/default.aspx?cite=90.56.280
[8] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-303-145
[9] https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue/Report-a-spill

S4.A. Operation and Maintenance (O&M) Manuals

1. O&M Manuals Submittals and Requirements
   The Permittee must:
   a. Review the Secondary Wastewater Treatment Plant (SWTP) O&M Manual and Sanitary Water Treatment Facility (Sanitary) O&M Manual at least annually, retain records of these reviews, and make the records available upon request to Ecology.
   b. Submit to Ecology for review substantial changes or updates to the SWTP O&M Manual and Sanitary O&M Manual.
   c. Keep the approved SWTP O&M Manual and Sanitary O&M Manual at the permitted facility.
   d. Follow the instructions and procedures of these manuals.
2. SWTP O&M Manual Components
   In addition to the requirements of WAC 173-240-150, the SWTP O&M Manual must be consistent with the guidance in Table G1-3 of the most recent edition of the Criteria for Sewage Works Design (Orange Book)[10]. The SWTP O&M Manual must include:
   a. Emergency procedures for plant shutdown and cleanup in the event of a wastewater system upset or failure.
   b. A review of system components which, if failed, could pollute surface water or could impact human health. Provide a procedure for a routine schedule of checking the function of these components.
   c. Wastewater system maintenance procedures that contribute to the generation of process wastewater.
   d. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine).
   e. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
   f. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
   g. Treatment plant process control monitoring schedule.
   h. Checking the clarifier cover in accordance with the existing inspection plan and take corrective action as needed to repair/replace missing or inadequate cover components.
3. Sanitary O&M Manual Components

[10] https://apps.ecology.wa.gov/publications/summarypages/9837.html

In addition to the requirements of WAC 173-240-080(1) through (5), the Sanitary O&M Manual must include:

a. Emergency procedures for plant shutdown and cleanup in the event of a wastewater system upset or failure.
b. A review of system components which if failed could pollute surface water or could impact human health. Provide a procedure for a routine schedule of checking the function of these components.
c. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.

4. Treatment System Operating Plan

For the purposes of this permit, a Treatment System Operating Plan (TSOP) is a concise summary of specifically defined elements of the SWTP O&M Manual and Sanitary O&M Manual.

The Permittee must submit an updated Treatment System Operating Plan to Ecology by May 1, 2025. The Permittee must update and submit the TSOP, as necessary, to include requirements for any major modifications of the treatment system, including if a wastewater treatment plant is removed during demolition.

The TSOP must not conflict with the SWTP O&M Manual and Sanitary O&M Manual and must include the following information:

a. A baseline operating condition, which describes the operating parameters and procedures, used to meet the effluent limits of Special Condition S1 at the production levels used in developing these limits.
b. In the event of production rates, which are below the baseline levels used to establish these limits, the TSOP must describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting must be described in the TSOP.
c. In the event of an upset, due to plant maintenance activities, severe stormwater events, startups or shut downs, or other causes, the TSOP must describe the operating procedures and conditions employed to mitigate the upset. The monitoring and reporting must be described in the TSOP.
d. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

5. Demolition Activities
   If a wastewater treatment plant is removed during demolition activities, the applicable requirements from Special Conditions S4.A.1, S4.A.2, S4.A.3, and S4.A.4 no longer apply.

S4.B. Bypass Procedures

A bypass is the intentional diversion of waste streams from any portion of a treatment facility. This permit prohibits all bypass except when the bypass is for essential maintenance, as authorized in Special Condition S4.B.1, or is approved by Ecology as an anticipated bypass following the procedures in Special Condition S4.B.2.

Storm events that exceed the hydraulic design criteria of stormwater treatment systems may bypass the treatment system provided the bypass does not cause an exceedance of water quality criteria.

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

This permit allows bypasses for essential maintenance of the treatment system when necessary to ensure efficient operation of the system. The Permittee may bypass the treatment system for essential maintenance only if doing so does not cause violations of effluent limits. The Permittee is not required to notify Ecology when bypassing for essential maintenance. However, the Permittee must comply with the monitoring requirements specified in Special Condition S2.

2. Anticipated bypass for non-essential maintenance.

Ecology may approve an anticipated bypass under the conditions listed below. This permit prohibits any anticipated bypass that is not approved through the following process.

a. If a bypass is for non-essential maintenance, the Permittee must notify Ecology, if possible, at least 10 days before the planned date of bypass. The notice must contain:

- A description of the bypass and the reason the bypass is necessary.
- An analysis of all known alternatives which would eliminate, reduce, or mitigate the potential impacts from the proposed bypass.
- A cost-effectiveness analysis of alternatives.
- The minimum and maximum duration of bypass under each alternative.
- A recommendation as to the preferred alternative for conducting the bypass.
- The projected date of bypass initiation.
- A statement of compliance with State Environmental Policy Act (SEPA).

- A request for modification of Water Quality Standards as provided in WAC 173-201A-410[11], if an exceedance of any Water Quality Standard is anticipated.
- Details of the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during the project planning and design process. The project-specific engineering report as well as the plans and specifications must include details of probable construction bypasses to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
c. Ecology will determine if the Permittee has met the conditions of Special Condition S4.B.2.a and b, and consider the following prior to issuing a determination letter, an Administrative Order, or a permit modification as appropriate for an anticipated bypass:

    - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.
    - If the bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. “Severe property damage” means substantial physical damage to the 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. Severe property damage does not mean economic loss caused by delays in production.
    - If feasible alternatives to the bypass exist, such as:
        - The use of auxiliary treatment facilities.
        - Retention of untreated wastes.
        - Stopping production.
        - Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance.
        - Transport of untreated wastes to another treatment facility.

[11] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-201A-410

S5. Solid Waste

S5.A. Solid Waste Handling

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

S5.B. Leachate

The Permittee must not allow leachate from solid waste material to enter state waters without providing all known, available, and reasonable methods of treatment (AKART), nor allow such leachate to cause violation of State Surface Water Quality Standards, Chapter 173-201A WAC[12], or the State Ground Water Quality Standards, Chapter 173-200 WAC[13]. The Permittee must apply for a permit or permit modification as may be required for such discharges to state ground or surface water. As specified in Special Condition S1.A, the Permittee is prohibited from sending triple-lined landfill leachate or treated triple-lined landfill leachate to any onsite wastewater treatment plant or outfall.

S5.C. Solid Waste Control Plan

The Permittee must submit an update of the Solid Waste Control Plan by February 1, 2025. The Permittee must submit all proposed revisions or modifications to the Solid Waste Control Plan to Ecology for review and approval at least 30 days prior to implementation. The Permittee must comply with the approved Solid Waste Control Plan and any modifications once approved.

S6. Application for Permit Renewal or Modification for Facility Changes

The Permittee must submit an application for renewal of this permit by April 30, 2029.

The Permittee must also submit a new application or addendum at least 180 days prior to commencement of discharges resulting from activities, listed below, which may result in permit violations. These activities include any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility.

S7. Facility Loading

S7.A. Design Criteria

The flows or wasteloads for the permitted facility must not exceed the following design criteria:

Table 27 – Design Criteria

Flow	Maximum
Secondary Wastewater Treatment Plant flow	300 gallons per minute
Secondary Wastewater Treatment Plant influent fluoride concentration	350 parts per million

[12] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-201A-410
[13] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-200

Flow	Maximum
Sanitary Lagoon flow through the UV disinfection system	350,000 gallons per day
Stormwater Pond influent flow	30 cubic feet per second [a]

Footnote for Table 27:

[a] The Stormwater Pond influent flow is 30 cubic feet per second in any consecutive 10 minute period, as determined by measuring Stormwater Pond effluent and adjusting for rainfall.

S7.B. Stormwater Treatment Design Criteria

The Permittee may divert stormwater (not including stormwater related to demolition wastewater) runoff that exceeds the hydraulic design criteria of a stormwater treatment system around the stormwater treatment system when Ecology has determined the system meets AKART requirements. Ecology does not consider these stormwater runoff flows as exceedances of the established design criteria or as meeting the definition of a bypass under Special Condition S4.B. The Permittee must not commingle these stormwater discharges with any untreated wastewaters.

S8. Non-Routine and Unanticipated Wastewater

S8.A. Notification Requirements

Beginning on the effective date of this permit, the Permittee is authorized to discharge non-routine wastewater or unanticipated wastewater to Outfall 001, Outfall 002, Outfall 011, Outfall 012, and non-stormwater discharges to the stormwater pond, and therefore not listed on the permit application, on a case-by-case basis if approved by Ecology. Prior to any such discharge, the Permittee must submit to Ecology, and at a minimum, provide the following information:

1. The proposed discharge location;
2. The nature of the activity that will generate the discharge;
3. Any alternatives to the discharge, such as reuse, storage, or recycling of the water;
4. The total volume of water it expects to discharge;
5. The results of the chemical analysis of the water;
6. The date of proposed discharge; and
7. The expected rate of discharge discharged, in gallons per minute.

S8.B. Chemical Analysis

The Permittee must analyze the water for constituents limited for the discharge and report them as required by Special Condition S8.A.5. The analysis must also include any parameter deemed necessary by Ecology. All discharges must comply with the effluent limits as established in Special Condition S1 of this permit, Water Quality Standards, and any other limits imposed by Ecology.

S8.C. Flow Limitation

The Permittee must limit the discharge rate, as referenced in Special Condition S8.A.7 above, so it will not cause erosion of ditches or structural damage to culverts and their entrances or exits.

S8.D. Approval Requirements

The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge by letter to the Permittee or by an Administrative Order. Once approved, and if the proposed discharge to a municipal storm drain, the Permittee must obtain prior approval from the municipality and notify it when it plans to discharge.

S9. Spill Control Plan

S9.A. Spill Control Plan Submittals and Requirements

The Permittee must:

1. Submit to Ecology an update to the existing Spill Control Plan by November 1, 2025.
2. Review the Spill Control Plan at least annually and update the Spill Control Plan as needed.
3. Send changes to the Spill Control Plan to Ecology.
4. Follow the Spill Control Plan and any updates throughout the term of the permit.

S9.B. Spill Control Plan Components

The Spill Control Plan must include the following:

1. A list of all oil and petroleum products and other materials used and/or stored on-site, which when spilled, or otherwise released into the environment, designate as a Dangerous Waste (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070[14]. Include other materials used and/or stored on-site which may become pollutants or cause pollution upon reaching State's waters.
2. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
3. A description of the reporting system, the Permittee will use to alert responsible managers and legal authorities in the event of a spill.
4. A description of training to implement the Spill Control Plan.
5. A description of how the Permittee will reduce potential impacts from demolition activities.

The Permittee may submit plans and manuals required by 40 CFR Part 112[15], contingency plans required by Chapter 173-303 WAC[16], or other plans required by other agencies, which

[14] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-303-070
[15] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-112
[16] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-303-070

meet the intent of this section. Approval of the Spill Control Plan with respect to this requirement does not constitute approval of the plans and manuals with respect to the underlying requirement.

S10. Stormwater Pollution Prevention

S10.A. Stormwater Pollution Prevention Plan

The Permittee must maintain and follow the Stormwater Pollution Prevention Plan (SWPPP) for the permitted facility. The SWPPP must specify the Standard Operating Procedures (SOPs), Best Management Practices (BMPs), and work practices necessary to:

1. Provide all known, available, and reasonable methods of prevention, control, and treatment (AKART) of stormwater pollution.
2. Ensure that stormwater discharges from the site do not cause or contribute to a violation of the Water Quality Standards.
3. Be consistent with the *Stormwater Management Manual for Western Washington* (2019 or later editions) or provide an equivalent level of pollution prevention approved by Ecology. The SWPPP must document that BMPs selected are demonstrably equivalent to practices contained in stormwater technical manuals approved by Ecology.

S10.B. SWPPP Update

The Permittee must update its SWPPP in accordance with the guidance document entitled *Guidance Manual for Preparing/Updating a Stormwater Prevention Plan for Industrial Facilities* (Ecology Publication No. 04-10-030). The SWPPP must be submitted to Ecology for review and approval by May 1, 2025. The Permittee must implement the approved SWPPP update and any approved modifications to the SWPPP and abide by the timeframes identified in the plan.

S10.C. SWPPP Update Components

The SWPPP update must include the following:

1. Identify any new sources of pollutants to stormwater.
2. Review, and update as necessary, the BMPs.
3. Include a site map that identifies the following applicable items:
   a. The scale or relative distances between significant structures and drainage systems.
   b. Significant features.
   c. The stormwater drainage and discharge structures and identify, by name, any other party other than the Permittee that owns any stormwater drainage or discharge structures.

d. The stormwater drainage areas for each stormwater discharge point offsite (including discharges to ground water) and use unique identifying numbers for each discharge point consistent with numbering in this permit.
e. Paved areas and buildings.
f. Areas of pollutant contact (actual or potential) associated with specific industrial activities.
g. Conditionally approved non-stormwater discharges.
h. Surface water locations (including wetlands and drainage ditches).
i. Areas of existing and potential soil erosion (in a significant amount).
j. Vehicle maintenance areas.
k. Lands and waters adjacent to the site that may be helpful in identifying discharge points or drainage routes.

4. Provide any updates to Appendix A: Best Management Practices in the SWPPP, including but not limited to:
   a. The dates (month/year) when BMPs were implemented or action items were completed, and
   b. Schedules for BMPs or action items not yet implemented or completed.
5. Include maintenance requirements for structural, treatment, or erosion and sediment control BMPs.
6. Include a review of system components which if failed could pollute surface water or could impact human health. Provide a procedure for a routine schedule of checking the function of these components.
7. Include stormwater system maintenance procedures.
8. Include any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the stormwater system.
9. Identify stormwater sampling protocols and procedures for compliance with the sampling and reporting requirements in this permit.
10. Identify minimum staffing adequate to operate and maintain the stormwater system and carry out compliance monitoring required by the permit.
11. Identify the frequency and method of cleaning out the stormwater system.

S10.D. SWPPP Modifications

The Permittee shall modify the SWPPP whenever there is a change in design, construction, operation, or maintenance, which causes the SWPPP to be less effective in controlling the pollutants. Whenever the description of potential pollutant sources or the pollution prevention measures and controls identified in the SWPPP are inadequate, the SWPPP shall be modified, as appropriate, within two (2) months of such determination. The proposed modifications to the SWPPP shall be submitted to Ecology at least 30 days in advance of implementing the proposed changes in the plan unless Ecology approves immediate

implementation. The Permittee shall provide for implementation of any modifications to the SWPPP in a timely manner. The Permittee may incorporate applicable portions of plans prepared for other purposes. Plans or portions of plans incorporated into an SWPPP become enforceable requirements of this permit. Approval of the SWPPP with respect to this requirement does not constitute approval of the plans and manuals with respect to the underlying requirement.

S10.E. SWPPP Implementation

The Permittee shall conduct two inspections per year; one during the wet season (October 1 – April 30) and the other during the dry season (May 1 – September 30).

1. The wet season inspection shall be conducted during a rainfall event by personnel trained by the Permittee in the requirements of the SWPPP to verify that the description of potential pollutant sources required under this permit are accurate; that the site map required in the SWPPP has been updated or otherwise modified to reflect current conditions; and that the controls to reduce pollutants in stormwater discharges associated with industrial activity identified in the SWPPP are being implemented and are adequate. The wet weather inspection shall include observations of the presence of floating materials, suspended solids, oil sheen, discolorations, turbidity, odor, etc. in the stormwater discharges.
2. Personnel trained by the Permittee in the requirements of the SWPPP shall conduct the dry season inspection. The dry season inspection shall determine the presence of unpermitted non-stormwater discharges such as domestic wastewater, noncontact cooling water, or process wastewater (including leachate) to the stormwater drainage system. If an unpermitted, non-stormwater discharge is discovered, the Permittee shall immediately notify Ecology.

S10.F. SWPPP Evaluation

The Permittee shall evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly implemented in accordance with the terms of the permit or whether additional controls are needed. A record shall be maintained summarizing the results of inspections and shall include a certification, in accordance with General Condition G1.4 of this permit, that the facility is in compliance with the plan and in compliance with this permit. The record shall identify any incidents of noncompliance.

S11. Construction Stormwater

Construction stormwater includes stormwater associated with construction activity and construction support activities at the construction site (an onsite portable rock crusher, equipment staging yards, material storage areas, borrow areas, etc.).

S11.A. Authorization and Conditions to Discharge Construction Stormwater

Beginning on the effective date of this permit, the Permittee is authorized to discharge construction stormwater at Outfalls 001, 002, 011, and 012 subject to the following requirements and limitations:

1. Construction stormwater discharges must 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 Part 131.36). Discharges that do not comply with these standards are not authorized.
2. Prior to the discharge of construction stormwater to waters of the state, the Permittee must apply all known, available, and reasonable methods of prevention, control, and treatment (AKART). This includes the preparation and implementation of an adequate Construction Stormwater Pollution Prevention Plan (CSWPPP) with all appropriate best management practices (BMPs) installed and maintained in accordance with the CSWPPP and the terms and conditions of this permit.
3. Ecology presumes that a Permittee complies with water quality standards unless discharge monitoring data or other site-specific information demonstrates that a discharge causes or contributes to a violation of water quality standards, when the Permittee complies with the following conditions. The Permittee must fully:
    a. Comply with all permit conditions – including planning, sampling, monitoring, reporting, and recordkeeping conditions.
    b. Implement construction stormwater BMPs contained in Ecology's *Stormwater Management Manual for Western Washington (July 2019)* or construction stormwater BMPs that are demonstrably equivalent to BMPs contained in stormwater technical manuals published or approved by Ecology, including the proper selection, implementation, and maintenance of all applicable and appropriate BMPs for on-site pollution control.
4. This authorization only applies to stormwater associated with construction activities or construction support activities conducted within the boundaries of the permitted facility. This authorization does not apply to construction stormwater that has come in contact with contaminated soil and/or contaminated groundwater.
5. All construction stormwater discharges must comply with the effluent limits in Special Condition S1 of this permit and any other limits imposed by Ecology.

S11.B. Construction Stormwater Pollution Prevention Plans

A standard Construction Stormwater Pollution Prevention Plan (CSWPPP) for construction activities greater than one acre and less than five (1-5) acres, including construction dewatering, must be updated (prepared) and submitted to Ecology by May 1, 2026. Project

details for each construction project and for any site-specific issues for that project that require additional BMPs must be submitted to the Department at least 90 days prior to the start of construction.

The Permittee must prepare a project-specific CSWPPP for construction activity occurring on sites greater than 5 acres, including construction dewatering, prior to the start of each construction project. The Permittee must submit the project-specific CSWPPP to Ecology at least 90 days prior to the start of construction.

Each CSWPPP must be prepared in accordance with the objectives and requirements identified in Appendix B of this permit. The Permittee must implement each CSWPPP in accordance with the requirements of this permit beginning with initial soil disturbance and until final stabilization.

S11.C. Site Log Book

The Permittee must maintain a site log book that contains a record of implementation of its CSWPPP and other permit requirements including the installation and maintenance of construction stormwater BMPs, site inspections, and stormwater monitoring.

S11.D. Site Inspections

The site inspections must include all areas disturbed by construction activities, all construction stormwater BMPs, and all stormwater discharge points. Construction sites one acre or larger that discharge stormwater to surface waters of the state must have site inspections conducted by a Certified Erosion and Sediment Control Lead (CESCL). Sites that are less than one acre may have a person without CESCL certification conduct inspections.

1. The Permittee must examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen. The Permittee must evaluate the effectiveness of BMPs and determine if it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges. Based on the results of the inspection, the Permittee must correct the problems identified by:
    a. Reviewing the CSWPPP for compliance with Appendix B and making appropriate revisions within 7 days of the inspection;
    b. Immediately beginning the process of fully implementing and maintaining appropriate construction stormwater source control and/or treatment BMPs as soon as possible, addressing the problems no later than within 10 days of the inspection. If installation of necessary treatment BMPs is not feasible with 10 days, Ecology may approve additional time when an extension is requested by the Permittee within the initial 10-day response period; and
    c. Documenting BMP implementation and maintenance in the site log book.

2. The Permittee must inspect all areas disturbed by construction activities, all BMPs, and all stormwater discharge points at least once every calendar week and within 24 hours of any discharge from the site. (For purposes of this condition, individual discharge events that last more than one day do not require daily inspections. For example, if a construction stormwater pond discharges continuously over the course of a week, only inspection is required that week.) The Permittee may reduce the inspection frequency for temporarily stabilized, inactive sites to once every calendar month.
3. The Permittee must have staff knowledgeable in the principles and practices of erosion and sediment control. The CESCL (sites one acre or more) or inspector (sites less than one acre) must have the skills to assess the:
    a. Site conditions and construction activities that could impact the quality of stormwater, and
    b. Effectiveness of erosion and sediment control measures used to control the quality of stormwater discharges.
4. The CSWPPP must identify the CESCL or inspector, who must be present on site or on-call at all times. The CESCL must obtain certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (see BMP C160 in the 2019 *Stormwater Management Manual for Western Washington*).
5. The inspector must summarize the results of each inspection in an inspection report or checklist and enter the report/checklist into, or attach it to, the site log book. At a minimum, each inspection report or checklist must include:
    a. Inspection date and time.
    b. Weather information, the general conditions during the inspection and the approximate amount of precipitation since the last inspection, and precipitation within the last 24 hours.
    c. A summary or list of all implemented BMPs, including observations of all erosion/sediment control structures or practices.
    d. A description of the locations of:
        (i) BMPs inspected;
        (ii) BMPs that need maintenance and why;
        (iii) BMPs that failed to operate as designed or intended; and
        (iv) Where additional or different BMPs are needed, and why.

e. A description of stormwater discharged from the construction site. The inspector must note the presence of suspended sediment, turbidity, discoloration, and oil sheen, as applicable.

f. Any water quality monitoring performed during the inspection.

g. General comments and notes, including a brief description of any BMP repairs, maintenance, or installations made following the inspection.

h. A summary report and a schedule of implementation of the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the CSWPPP and the permit.

i. The name, title, and signature of the person conducting the site inspection, a phone number or other reliable method to reach this person, and the following statement: "I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

S11.E. General Sampling Requirements

1. The Permittee must sample the stormwater discharge from construction sites > 1 acre that discharge directly off site, or from Outfall 001 Monitoring Point D-10.
2. Sampling is not required for stormwater that is discharged directly to the Permittee's onsite wastewater treatment system.
3. Sampling is not required outside of normal working hours or during unsafe conditions.
4. If a Permittee is unable to sample during a monitoring period, the Permittee must include a brief explanation in the monthly DMR.
5. Sampling is required at all discharge points where stormwater is discharged off-site, or from Outfall 001 Monitoring Point D-10.
6. The Permittee must identify all sampling point(s) on the CSWPPP site map and clearly mark these points in the field with a flag, tape, stake or other visible marker.
7. Samples must be representative of the flow and characteristics of the discharge.

The monitoring requirements for projects that discharge off-site are summarized below:

Table 28 – General Monitoring and Sampling Requirements

Size of Soil Disturbance [a]	Weekly Site Inspections	Weekly Turbidity Sampling	Weekly pH Sampling [b]	CESCL Required for Inspections?
Sites less than 1 acre	Required	Not Required	Not required unless construction activity involves significant concrete work or the use of engineered soils	No

Sites greater than or equal to 1 acre	Required	Required	Required	Yes

Footnotes for Table 28:

[a] Soil disturbance is calculated by adding together all areas that will be affected by construction activity. Construction activity means clearing, grading, excavation, and any other activity that disturbs the surface of the land, including ingress/egress from the site.

[b] If construction activity involves significant concrete work (1,000 cubic yards of poured concrete or recycled concrete over the life of a project) or the use of engineering soils (soil amendments including but not limited to Portland cement-treated base (CTB), cement kiln dust (CKD), or fly ash), the Permittee must conduct pH sampling.

S11.F. Turbidity Sampling, Benchmark, and Reporting Trigger

If construction activity involves the disturbance of 1 or more acres, the Permittee must conduct turbidity sampling in accordance with Table 29 and the requirements below. Sampling is not required on sites that disturb less than an acre.

1. The Permittee must sample all discharge points at least once every calendar week when stormwater discharges from the site. Sampling is not required when there is no discharge during a calendar week.
2. The Permittee may reduce the sampling frequency for temporarily stabilized, inactive sites to once every calendar month.
3. The Permittee must perform turbidity analysis with a calibrated turbidity meter (turbidimeter) either on-site or at an accredited laboratory. The Permittee must record the results in the site log book in Nephelometric Turbidity Units (NTU).
4. The benchmark value for turbidity is 25 NTUs or less.
    a. Turbidity 26 -249 NTUs

        If the discharge turbidity is 26 to 249 NTUs, the Permittee must:

        (i) Review the CSWPPP for compliance with Appendix B and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.

        (ii) Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems within 10 days of the date of the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.

        (iii) Document BMP implementation and maintenance in the site log book.

b. Turbidity 250 NTUs or greater

If the discharge turbidity is greater than or equal to 250 NTUs, the Permittee must complete the reporting and adaptive management process described below:

(i) Report the exceedance to the Ecology regional office at the telephone number listed below and to the Industrial Section permit manager within 24 hours, in accordance with Condition S3.F.

Department of Ecology Environmental Reporting (206) 594-0000

(ii) Review the CSWPPP for compliance with Appendix B and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.

(iii) Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems within 10 days of the date of the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.

(iv) Document BMP implementation and maintenance in the site log book.

(v) Sample discharge daily until turbidity is 25 NTUs or lower.

Table 29 – Turbidity Monitoring and Sampling Requirements for Sites Disturbing Greater Than 1 Acre

Parameter	Units	Analytical Method	Sampling Frequency	Benchmark Value	Phone Reporting Trigger Value
Turbidity	NTU	SM2130	Weekly, if discharging	25	250

S11.G. pH Sampling Requirements

For sites one acre or greater, and where construction activity involves significant concrete work or the use of engineered soils, the Permittee must conduct pH sampling.

1. For sites less than one acre, pH analysis is required once per week when there is active concrete work in progress or when engineered soils are in use.
2. For sites with significant concrete work, the Permittee must begin the pH sampling when the concrete is first poured and exposed to precipitation and continue sampling weekly throughout and after the concrete pour and curing period until the stormwater pH is in the range of 6.5 to 8.5 standard units.

3. For sites with recycled concrete work, the Permittee must begin the weekly pH sampling period when the recycled concrete is first exposed to precipitation and continue sampling weekly throughout until the recycled concrete is fully stabilized with the stormwater pH in the range of 6.5 to 8.5.
4. For sites with engineered soils, the Permittee must begin the pH sampling period when the soil amendments are first exposed to precipitation and continue sampling weekly throughout until the engineered soils are fully stabilized with the stormwater pH in the range of 6.5 to 8.5.
5. The Permittee must sample pH in the sediment trap/pond(s) or other locations that receive stormwater runoff from the area of significant concrete work or engineered soils before the stormwater discharges to surface waters.
6. The Permittee must perform pH analysis on-site with a calibrated pH meter, pH test kit, or wide range pH indicator paper.
7. The Permittee must record pH sampling results in the site log book.
8. The benchmark value for pH is 8.5. Any time sampling indicates that pH is 8.5 or greater, the Permittee must either:
    a. Prevent the high pH water (8.5 or above) from entering storm sewer systems or surface waters; or
    b. If necessary, adjust or neutralize the high pH water, until it is in the range of 6.5 to 8.5 using an appropriate treatment BMP such as carbon dioxide (CO_2) sparging or dry ice. The Permittee must obtain written approval from Ecology before using any form of chemical treatment other than CO_2 sparging or dry ice.

S11.H. Construction stormwater reporting requirements

The Permittee must report results of construction stormwater monitoring in the monthly DMR in accordance with the requirements in Special Condition S3.

S12. Demolition Wastewater

Demolition wastewater is defined as wastewater generated directly from demolition activities (including, but not limited to, wastewater from pressure washing) and stormwater that comes in contact with demolition activities (including, but not limited to, stormwater runoff that contacted demolition equipment and materials from demolition activities). All discharges of demolition wastewater, or treated demolition wastewater, must not cause or contribute to a violation of water quality standards.

S12.A. Demolition Wastewater Plan Submittals and Requirements

The Permittee must:

1. Submit to Ecology for review and approval a Demolition Wastewater Plan by February 1, 2025.
2. Submit any changes to the Demolition Wastewater Plan to Ecology (for review and approval) at least 30 days in advance of implementing the proposed changes.
3. Follow the approved Demolition Wastewater Plan and any approved updates.

S12.B. Demolition Wastewater Plan Components

The Demolition Wastewater Plan must include the following:

1. Descriptions of the activities that could generate demolition wastewater.
2. Descriptions of the locations where the Permittee could generate demolition wastewater.
3. Descriptions of the management options for demolition wastewater, including at least the following:
   a. Sending demolition wastewater to the stormwater pond,
   b. Sending demolition wastewater to the Secondary Wastewater Treatment Plant,
   c. Using pre-treatment technologies (such as bag filters or granular activated carbon) prior to sending demolition wastewater to the stormwater pond or Secondary Wastewater Treatment Plant, and
   d. Off-site disposal.
4. Descriptions of when each management option identified in Special Condition S12.B.3 will be used for demolition wastewater. All items from Special Conditions S12.B.1 and S12.B.2 must be accounted for in this description.
5. Descriptions of pollutant source reduction BMPs that the Permittee will implement to reduce pollutant loading in the demolition wastewater.

S13. Process Sewers and Stormwater Conveyance Cleaning

The Permittee must clean the process sewers and stormwater conveyance system (including sewers and open channels). Process sewers and stormwater conveyance system means any pipes, manholes, and catch basins where wastewater or stormwater is conveyed, and stormwater open channels.

The Permittee must capture process sewer and stormwater conveyance system material from the cleaning activities, properly manage the material, and properly dispose of the material.

The Permittee must submit a Process Sewers and Stormwater Conveyance Cleaning Plan to Ecology for review and approval by August 1, 2025. The Process Sewers and Stormwater Conveyance Cleaning Plan must state when the Permittee plans to begin and end process sewer cleaning activities, provide a map showing the process sewer segments and stormwater

conveyance system components that will be cleaned, the methods for cleaning the process sewers and stormwater sewers and ditches, the methods the Permittee will use to ensure material from the cleaning activities will be captured, and how the Permittee will manage and dispose of any material and wastewater from the cleaning activities. The Permittee must follow the approved Process Sewers and Stormwater Conveyance Cleaning Plan.

If the Permittee plans to remove any process sewer and stormwater conveyance system segment during demolition activities, those segments do not need to be part of the cleaning. If the Permittee's plan for segments originally planned to be removed is changed to leave the segments in place, the Permittee must modify their Process Sewers and Stormwater Conveyance Cleaning Plan and send the update to Ecology for review and approval at least 30 days prior to cleaning the segments.

S14. Sediment Monitoring

S14.A. Sediment Sampling and Analysis Plan

The Permittee must submit to Ecology for review and approval, a Sediment Sampling and Analysis Plan for sediment monitoring by November 1, 2026, unless Ecology approves a different date. The purpose of the Sediment Sampling and Analysis Plan is to characterize or re-characterize sediment quality (the nature and extent of chemical contamination and biological toxicity, or both) in the vicinity of the Permittee's Outfalls 001 and 002 discharge locations. The Permittee must follow the guidance provided in Appendix A of the Sediment Cleanup User's Manual[17] (or most recent edition), Sampling Guidance for NPDES Permits under the Sediment Management Standards.

S14.B. Sediment Data Report

Following Ecology approval of the Sediment Sampling and Analysis Plan, the Permittee must collect sediments between August 15th and September 30th. The Permittee must submit to Ecology a Sediment Data Report containing the results of the sediment sampling and analysis no later than April 30, 2029, or otherwise approved by Ecology. The Sediment Data Report must conform to the approved Sediment Sampling and Analysis Plan. In addition, the Permittee must follow the guidance provided in the most recent edition of the Sediment Cleanup User's Manual, Appendix A: Sampling Guidance for NPDES Permits under the Sediment Management Standards. The report must document when the data was successfully loaded into EIM as required below.

In addition to the Sediment Data Report, submit the sediment chemical data, biological data, or both, to Ecology's Environmental Information System (EIM)[18]. Data must be

[17] https://apps.ecology.wa.gov/publications/SummaryPages/1209057.html
[18] https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database

submitted to EIM according to the instructions on the EIM website. The EIM website provides information on submitting data, and a link to the EIM Help Center.

In addition to the EIM data submittal, Ecology's MyEIM[19] tools must be used to confirm that the submitted data was accurately entered into EIM. Any differences between the MyEIM analytical results and Sediment Data Report must be identified and explained.

S15. Outfall 001 Evaluation

The Permittee must inspect, in 2027 and once every five years thereafter, the submerged portion of the Outfall 001 outfall line to document its integrity and continued function. If conditions allow for a photographic verification, the Permittee must include such verification in an Outfall 001 Inspection Report. By January 15, 2028 and once every five years thereafter, the Permittee must submit an Outfall 001 Inspection Report to Ecology through the Water Quality Permitting Portal – Permit Submittals application. The Permittee must maintain copies of any video files of the outfall inspection at the facility and make them available upon request to Ecology.

The Outfall 001 inspection must, at a minimum:

1. Assess the physical condition of the outfall pipe, diffuser, and associated couplings.
2. Determine the extent of sediment accumulation in the vicinity of the diffuser.
3. Ensure diffuser ports are free of obstructions and are allowing uniform flow.
4. Confirm physical location (latitude/longitude) and depth (at MLLW) of the diffuser section of the outfall.
5. Assess physical condition of the submarine pipe.
6. Assess physical condition of anchors used to secure the submarine pipe.

The Permittee must include in the Outfall 001 Inspection Report the results of the Outfall 001 inspection which address the items in Special Conditions S15.A.1 through S15.A.6.

S16. Acute Toxicity

S16.A. Outfall 001 Effluent Characterization

The Permittee must:

1. Conduct acute toxicity testing on the Outfall 001 final effluent at Monitoring Point SP-10 twice when discharging treated demolition water, once in June 2025 and once in June 2026. If no discharge occurs during the required month, the Permittee must notify Ecology by the end of the month and conduct sampling on the next representative discharge that occurs in the following month.

[19] https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database/Using-MyEIM

2. Submit written reports to Ecology. The Permittee must submit the first report by September 30, 2025 and the second report by September 30, 2026, or otherwise approved by Ecology. Further instructions on testing conditions and test report content are in Special Condition S16.G.
3. Use a dilution series consisting of a minimum of five concentrations and a control. The five concentrations include the Outfall 001 Acute Critical Effluent Concentration (ACEC) of 4.8% effluent.
4. Conduct the following five Acute Toxicity Tests on each sample:

Table 30 – Acute Toxicity Tests for Outfall 001 Effluent Characterization

Acute Toxicity Tests	Species	Method
Topsmelt 96-Hour Static-Renewal Test	Atherinops affinis	EPA 821-R-02-012
Fathead Minnow 96-Hour Static-Renewal Test	Pimephales Promelas	EPA 821-R-02-012
Daphnid 48-Hour Static Test	Ceriodaphnia Dubia, Daphnia Pulex, or Daphnia Magna	EPA-821-R-02-012
Mysid 48-Hour Static Test	Americamysis bahia	EPA-821-R-02-012
Rainbow Trout 96-Hour Static-Renewal Test	Oncorhynchus Mykiss	EPA-821-R-02-012

5. The Outfall 001 effluent limit for Acute Toxicity listed in Special Condition S16.B.1 applies if after effluent characterization, the median survival of any species in 100 percent effluent is below 80 percent, or any one test of any species exhibits less than 65 percent survival in 100 percent effluent.

If the Outfall 001 limit applies, then the Permittee must immediately follow the instructions in Special Conditions S16.B.1, S16.C, S16.D.1, S16.E, and S16.G. If the Outfall 001 limit does not apply, then the Permittee must follow the instructions in Special Conditions S16.F and S16.G.

S16.B. Effluent Limits for Acute Toxicity

1. The Effluent Limit for Acute Toxicity at Outfall 001 is:

No acute toxicity detected in a test concentration representing the ACEC.

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the Outfall 001 Acute Mixing Zone, defined in Special Condition S1.H.1. The ACEC equals 4.8% effluent.

2. The Effluent Limit for Acute Toxicity at Outfall 002 is:

No acute toxicity detected in a test concentration representing the ACEC.

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the Outfall 002 Acute Mixing Zone, defined in Special Condition S1.H.2. The ACEC equals 5.3% effluent.

S16.C. Compliance with the Effluent Limits for Acute Toxicity

Compliance with the effluent limits for Acute Toxicity means the results of the testing specified in Special Conditions S16.D.1 and S16.D.2 show no statistically significant difference in survival between the control and the ACEC.

If the test results show a statistically significant difference in survival between the control and the ACEC, and Ecology has not determined the test result to be anomalous under Special Condition S16.E, and the test is otherwise valid, the result is a violation of the effluent limit for Acute Toxicity. The Permittee must immediately conduct the additional testing described in Special Conditions S16.E.1 and S16.E.2.

The Permittee must determine the statistical significance by conducting a hypothesis test at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10 percent, the Permittee must conduct the hypothesis test at the 0.01 level of significance.

S16.D. Compliance Testing for Acute Toxicity

1. Outfall 001

The Permittee must:

a. Conduct quarterly Acute Toxicity Testing on the Outfall 001 final effluent at Monitoring Point SP-10 if characterization determines the effluent limit for Acute Toxicity applies. Testing must begin within 60 days after the final characterization report is due. Quarterly means January through March, April through June, July through September, and October through December. If no discharge occurs during the required quarter, the Permittee must notify Ecology by the end of the quarter and conduct sampling on the next representative discharge that occurs in the following quarter.
b. Submit a quarterly written report to Ecology within 45 days of sampling and starting no later than January 30, 2027. Each subsequent report is due on April 30th, July 30th, October 30th, and January 30th of each year. Further instructions on testing conditions and test reports content are in Special Condition S16.G.
c. Perform the Acute Toxicity Tests with 100 percent effluent, the Outfall 001 ACEC, and a control, or with a full dilution series.
d. The Permittee must perform compliance tests on the most sensitive species (based on the effluent characterization in Special Condition S16.A and determined by Ecology) listed below on a rotating basis (Ecology may approve changes to the rotating basis based on availability of species):

Table 31 – Possible Acute Toxicity Tests for Outfall 001 Compliance Testing

Acute Toxicity Tests	Species	Method
Topsmelt 96-Hour Static-Renewal Test	Atherinops affinis	EPA 821-R-02-012
Fathead Minnow 96-Hour Static-Renewal Test	Pimephales Promelas	EPA 821-R-02-012
Daphnid 48-Hour Static Test	Ceriodaphnia Dubia, Daphnia Pulex, or Daphnia Magna	EPA-821-R-02-012
Mysid 48-Hour Static Test	Americamysis bahia	EPA-821-R-02-012
Rainbow Trout 96-Hour Static-Renewal Test	Oncorhynchus Mykiss	EPA-821-R-02-012

2. Outfall 002

The Permittee must:

a. Perform the Acute Toxicity Tests with 100 percent effluent, the Outfall 002 ACEC, and a control, or with a full dilution series.
b. Conduct quarterly Acute Toxicity Testing on the Outfall 002 final effluent at Monitoring Point D-10. Testing must begin in the Fourth Quarter of 2024, starting November 1, 2024. Quarterly means January through March, April through June, July through September, and October through December. If no discharge occurs during the required quarter, the Permittee must notify Ecology by the end of the quarter and conduct sampling on the next representative discharge that occurs in the following quarter. For example, a missed sample in Quarter 1 due to no discharge only needs to be sampled in Quarter 2. If there is again no discharge in Quarter 2, then the Quarter 1 sample requirement is no longer required. Samples must be at least seven calendar days apart.
c. Submit a quarterly written report to Ecology within 45 days of sampling and starting no later than January 30, 2025. Each subsequent report is due on April 30th, July 30th, October 30th, and January 30th of each year. Further instructions on testing conditions and test reports content are in Special Condition S16.G.
d. The Permittee must perform compliance tests using each of the species and protocols listed below on a rotating basis (Ecology may approve changes to the rotating basis based on availability of species):

Table 32 – Acute Toxicity Tests for Outfall 002 Compliance Testing

Acute Toxicity Tests	Species	Method
Topsmelt 96-Hour Static-Renewal Test	Atherinops affinis	EPA 821-R-02-012
Daphnid 48-Hour Static Test	Ceriodaphnia Dubia, Daphnia Pulex, or Daphnia Magna	EPA-821-R-02-012
Mysid 48-Hour Static Test	Americamysis bahia	EPA-821-R-02-012

S16.E. Response to Noncompliance with the Effluent Limit for Acute Toxicity

If a toxicity test conducted under Special Conditions S16.D.1 or S16.D.2 determines a statistically significant difference in response between the ACEC and the control, using the

statistical test described in Special Condition S16.C, the Permittee must begin additional testing within one week from the time of receiving the test results. The Permittee must:

1. For Outfall 001 at Monitoring Point SP-10, conduct one additional test each week for four consecutive weeks, using the same test and species as the failed compliance test.
2. For Outfall 002 at Monitoring Point D-10, test the next four discharge events using the same test and species as the failed compliance test.
3. Test at least five effluent concentrations and as control to determine appropriate point estimates. One of these effluent concentrations must equal the ACEC. The results of the test at the ACEC will determine compliance with the effluent limit for Acute Toxicity as described in Special Condition S16.C.
4. Return to the original monitoring frequency in Special Conditions S16.D.1 or S16.D.2 after completion of the additional compliance monitoring.

Anomalous test results: If a toxicity test conducted under Special Conditions S16.D.1 or S16.D.2 indicates noncompliance with the Acute Toxicity limit and the Permittee believes that the test result is anomalous, the Permittee may notify Ecology that the compliance test result may be anomalous. The Permittee may take one additional sample for toxicity testing and wait for notification from Ecology before completing the additional testing. The Permittee must submit the notification with the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous.

If Ecology determines that the test result was not anomalous, the Permittee must complete all of the additional monitoring required in Special Condition S16.E; or

If the one additional sample fails to comply with the effluent limit for Acute Toxicity, then the Permittee must complete all of the additional monitoring required in Special Condition S16.E; or

If Ecology determines that the test result was anomalous, the one additional test result will replace the anomalous test result for the purpose of determining compliance with the Acute Toxicity limit.

If all of the additional testing in Special Conditions S16.E.1 and S16.E.2 complies with the permit limit, the Permittee must submit a report to Ecology on possible causes and preventive measures for the transient toxicity event, which triggered the additional compliance monitoring. This report must include a search of all pertinent and recent facility recordings, including:

- Operating Records
- Monitoring Results

- Inspection Records
- Spill Reports
- Weather Records
- Production Records
- Raw Material Purchases
- Pretreatment Records, etc.

If additional testing in Special Conditions S16.E.1 or S16.E.2 show another violation of the Acute Toxicity limit, the Permittee must submit a Toxicity Identification/Reduction Evaluation (TI/RE) Plan to Ecology within 60 days after the sample date [WAC 173-205-100(2)[20]].

S16.F. Testing When There is No Permit Limit for Acute Toxicity

The Permittee must:

1. Conduct Acute Toxicity Testing on the Outfall 001 final effluent at Monitoring Point SP-10 once in the last summer and once in the last winter prior to submission of the application for permit renewal.
2. Conduct Acute Toxicity Testing on a series of at least five concentrations of effluent, including 100 percent effluent and a control.
3. The Permittee must perform Acute Toxicity tests on the most sensitive species (based on the effluent characterization in Special Condition S16.A, and if applicable based on the compliance testing in Special Condition S16.D, and determined by Ecology) using the following species and protocols for each Acute Toxicity test:

Table 33 – Acute Toxicity Tests for Outfall 001 Last Summer/Last Winter

Acute Toxicity Tests	Species	Method
Topsmelt 96-Hour Static-Renewal Test	Atherinops affinis	EPA 821-R-02-012
Fathead Minnow 96-Hour Static-Renewal Test	Pimephales Promelas	EPA 821-R-02-012
Daphnid 48-Hour Static Test	Ceriodaphnia Dubia, Daphnia Pulex, or Daphnia Magna	EPA-821-R-02-012
Mysid 48-Hour Static Test	Americamysis bahia	EPA-821-R-02-012
Rainbow Trout 96-Hour Static-Renewal Test	Oncorhynchus Mykiss	EPA-821-R-02-012

4. Submit the results to Ecology by April 30, 2029.

S16.G. Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication 95-80, Laboratory Guidance and Whole

[20] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-205-100

Effluent Toxicity Test Review Criteria[21]. Reports must contain toxicity data, bench sheets, and reference toxicant results for test methods. In addition, the Permittee must submit toxicity test data in electronic format (CETIS export file preferred) for entry into Ecology's database.

2. The Permittee must grab samples for toxicity testing. The Permittee must cool the samples to 0 – 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.
3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology Publication No. WQ-R-95-80, Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria.
4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in Special Condition S16.C and the Ecology Publication No. WQ-R-95-80, Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in Special Condition S16.A or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct Whole Effluent Toxicity tests on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance testing in the order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC. The Outfall 001 ACEC equals 4.8% effluent. The Outfall 002 ACEC equals 5.3% effluent.
8. All Whole Effluent Toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing must comply with the Acute Statistical Power Standard of 29 percent as defined in WAC 173-205-020[22]. If the test does not meet the Power Standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.

S17. Chronic Toxicity

S17.A. Testing When There is No Permit Limit for Chronic Toxicity

1. Outfall 001

[21] https://apps.ecology.wa.gov/publications/SummaryPages/9580.html
[22] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-205-020

The Permittee must:

a. Conduct Chronic Toxicity testing on the Outfall 001 final effluent at Monitoring Point SP-10 once in the last summer and once in the last winter prior to submission of the application for permit renewal.
b. Conduct Chronic Toxicity testing on a series of at least five concentrations of effluent and a control. This series of dilutions must include the Acute Critical Effluent Concentration (ACEC). The Outfall 001 ACEC equals 4.8% effluent. The series of dilutions should also contain the Outfall 001 Chronic Critical Effluent Concentration (CCEC) of 1.9% effluent.
c. Compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.
d. Submit the results to Ecology by April 30, 2029 only if testing is required by Special Condition S17.A.1.a.
e. Perform Chronic Toxicity Tests with all of the following species and the most recent version of the following protocols:

Table 34 – Chronic Toxicity Tests for Outfall 001 Last Summer/Last Winter

Saltwater Chronic Test	Species	Method
Topsmelt Survival and Growth	Atherinops Affinis	EPA/600/R-95/136
Sea Urchin/Sand Dollar Survival and Development	Strongylocentrotus Purpuratus/Dendraster Excentricus	EPA/600/R-95/136
Mysid shrimp survival and growth test	Americamysis bahia	EPA 821-R-02-014

The laboratory must conduct the Sea Urchin and Sand Dollar (Echinoderm) tests in accordance with EPA/600/R-95/136 and the Echinoderm Fertilization test conditions in the most recent version of Ecology Publication No. WQ-R-95-80, Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria. The laboratory must use whichever one of the two species that will give a valid result in each particular test.

S17.B. Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication 95-80, Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria[23]. Reports must contain toxicity data, bench sheets, and reference toxicant results for test methods. In addition, the Permittee must submit toxicity test data in electronic format (CETIS export file preferred) for entry into Ecology's database.
2. The Permittee must grab samples for toxicity testing. The Permittee must cool the samples to 0 – 6 degrees Celsius during collection and send them to the lab

[23] https://apps.ecology.wa.gov/publications/SummaryPages/9580.html

immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.

3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology Publication No. WQ-R-95-80, Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria.
4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods and the Ecology Publication No. WQ-R-95-80, Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct Whole Effluent Toxicity tests on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance testing in the order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the CCEC and the ACEC. The CCEC and the ACEC may either substitute for the effluent concentrations that are closest to them in the dilution series or be extra effluent concentrations. The Outfall 001 ACEC equals 4.8% effluent and the Outfall 001 CCEC equals 1.9% effluent.
8. All Whole Effluent Toxicity tests that involve hypothesis testing must comply with the Chronic Statistical Power Standard of 39 percent as defined in WAC 173-205-020[24]. If the test does not meet the Power Standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.

S18. Certified Operator

This sanitary wastewater treatment plant permitted facility must be operated by an operator certified by the state of Washington for at least a Class I plant. The operator must be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class I plant must be in charge during all regularly scheduled shifts.

[24] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-205-020

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

1. All applications submitted to Ecology must be signed and certified.
   a. In the case of corporations, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

      - 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
      - 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 the 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.

   b. In the case of a partnership, by a general partner.
   c. In the case of sole proprietorship, by the proprietor.
   d. In the case of municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

      Applications for permit for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity shall be submitted by the public entity.

2. All reports required by this permit and other information requested by Ecology must 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:
   a. The authorization is made in writing by a person described above and submitted to Ecology.
   b. 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. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to authorization. If an authorization under paragraph G1.2., above, is no longer accurate because a different individual or position has responsibility for overall operation of the facility, a new authorization satisfying the requirements of paragraph G1.2., above, must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section must 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."

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

1. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
2. To have access to and copy, at reasonable times and a reasonable cost, any records required to be kept under the terms and conditions of this permit.
3. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
4. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon Ecology's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR

Part 122.62[25], 40 CFR Part 122.64[26], or WAC 173-220-150[27] according to the procedures of 40 CFR Part 124.5[28].

1. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
   a. Violation of any permit term or condition.
   b. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
   c. A material change in quantity or type of waste disposal.
   d. Determination that the permitted activity endangers human health or the environment, or contributes to Water Quality Standards violations and can only be regulated to acceptable levels by modification or termination.
   e. A change in any condition requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit.
   f. Nonpayment of fees assessed pursuant to RCW 90.48.465[29].
   g. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090[30].
2. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
   a. A material change in the condition of waters of the State.
   b. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
   c. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
   d. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
   e. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
   f. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statuary deadlines.
   g. Incorporation of an approved local pretreatment program into a municipality's permit.
3. The following are causes for modification or alternatively revocation and reissuance:
   a. The permitted facility being determined to be a new source pursuant to 40 CFR Part 122.29(b)[31].

[25] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122#122.62
[26] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122#122.64
[27] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-220-150
[28] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-124#124.5
[29] https://app.leg.wa.gov/RCW/default.aspx?cite=90.48.465
[30] https://app.leg.wa.gov/RCW/default.aspx?cite=90.48.090
[31] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122#122.29

b. A significant change in the nature or an increase in quantity of pollutants discharged.
c. A significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required Engineering Plans and Reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR Part 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by the permit constitutes a violation.

G4. REPORTING PLANNED CHANGES

The Permittee must, as soon as possible, but no later than 180 days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in:

1. The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).
2. A significant change in the nature or an increase in quantity of pollutants discharged.
3. A significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of new application or supplement to the existing application, along with required Engineering Plans and Reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, a new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an Engineering Report and detailed Plans and Specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC[32]. Engineering Reports, Plans, and Specifications must be submitted at least 180 days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approval plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit excuses the Permittee from compliance with any applicable federal, state, or local statutes ordinances, or regulations.

[32] https://apps.leg.wa.gov/wac/default.aspx?cite=173-240

G7. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee must notify the succeeding owner or controller of the existence of this permit by letter, a copy of which must be forwarded to Ecology.

1. Transfer by Modification

   Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR Part 122.62(b)(2), or a minor modification made under 40 CFR Part 122.63(d)[33], to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

2. Automatic Transfers

   This permit may be automatically transferred to a new Permittee if:

   a. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.
   b. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
   c. Ecology does not notify the existing Permittee and the proposed new Permittee or its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR Part 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G8. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, must control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G9. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must not be re-suspended or reintroduced to the final effluent stream for discharge to state waters.

[33] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122#122.63

G10. DUTY TO PROVIDE INFORMATION

The Permittee must 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 Permittee must also submit to Ecology, upon request, copies of records required to be kept by this permit.

G11. OTHER REQUIREMENTS OF 40 CFR

The other requirements of 40 CFR Part 122.41[34] and 40 CFR Part 122.42[35] are incorporated in this permit by reference.

G12. ADDITIONAL MONITORING

Ecology may establish specific monitoring requirements in addition to those contained in this permit by Administrative Order or permit modification.

G13. PAYMENT OF FEES

The Permittee must submit payment of fees associated with this permit as assessed by Ecology.

G14. PENALTIES FOR VIOLATION OF PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof, shall be punished by a fine up to $10,000 and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit may incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to $10,000 for each such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

G15. UPSET

Definition – "Upset" means an exception incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limits if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

[34] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122#122.41
[35] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122#122.42

1. An upset occurred and that the Permittee can identify the cause(s) of the upset.
2. The permitted facility was being properly operated at the time of the upset.
3. The Permittee submitted notice of the upset as required in Special Condition S3.F.
4. The Permittee complied with any remedial measures required under Special Condition S3.F. of this permit.

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

G16. PROPERTY RIGHTS

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

G17. DUTY TO COMPLY

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

G18. TOXIC POLLUTANTS

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants 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.

G19. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring 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 by imprisonment of not more than four years, or by both.

G20. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGES

The Permittee belonging to the categories of existing manufacturing, commercial, Mining, or silviculture must notify Ecology as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
    a. One hundred micrograms per liter (100 µg/L)
    b. Two hundred micrograms per liter (200 µg/L) for Acrolein and Acrylonitrile; 500 µg/L for 2,4-Dinitrophenol and 2-Methyl-4,6-Dinitrophenol; and 1 mg/L for Antimony.

c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR Part 122.21(g)(7)[36].
d. The level established by the Director in accordance with 40 CFR Part 122.44 (f)[37].

2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"
   a. Five hundred (500) µg/L
   b. One (1) mg/L for Antimony
   c. Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR Part 122.21(g)(7).
   d. The level established by the Director in accordance with 40 CFR Part 122.44(f).

G21. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

[36] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122#122.21
[37] https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122#122.44

APPENDIX A – List Of Pollutants, Analytical Methods, Detection Levels, And Quantitation Levels

The Permittee must use the specified analytical methods, detection levels (DLs) [1] and quantitation levels (QLs) [2] in the following table for permit and application required monitoring unless:

- Another permit condition specifies other methods, detection levels, or quantitation levels.
- The method used produces measurable results in the sample and EPA has listed it as an EPA-approved method in 40 CFR Part 136.

If the Permittee uses an alternative method, not specified in the permit and as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.

If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix-specific detection level (MDL) and a quantitation level (QL) to Ecology with appropriate laboratory documentation when the detection levels are too high to provide results near or below criteria (or applicable permit limits).

The lists below include conventional pollutants (as defined in CWA section 502(6) and 40 CFR Part 122), toxic or priority pollutants as defined in CWA section 307(a)(1) and listed in 40 CFR Part 122 Appendix D, 40 CFR Part 401.15 and 40 CFR Part 423 Appendix A), and nonconventionals. 40 CFR Part 122 Appendix D (Table V) also identifies toxic pollutants and hazardous substances which are required to be reported by dischargers if expected to be present. This permit appendix A list does not include those parameters. The list also includes furan congeners identified using EPA Method 1613.

Appendix A Table 1 – Conventional Pollutants

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection Level (DL) [1] µg/L Unless specified	Quantitation Level (QL) [2] µg/L Unless specified
Biochemical Oxygen Demand		SM5210-B		2 mg/L
Biochemical Oxygen Demand, Soluble		SM5210-B [3]		2 mg/L
Fecal Coliform		SM 9221E, 9221F SM 9222D	N/A	Specified in method sample aliquot dependent

Oil and Grease (HEM) (Hexane Extractable Material)		1664 A or B	1,400	5,000
pH		SM4500-H+ B	N/A	N/A
Total Suspended Solids		SM2540-D		5 mg/L

Appendix A Table 2 - Nonconventional Pollutants

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection Level (DL) [1] µg/L Unless specified	Quantitation Level (QL) [2] µg/L Unless specified
Alkalinity, Total		SM2320-B		5 mg/L as $CaCO_3$
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH3-B and C/D/E/G/H		20
Barium Total	7440-39-3	200.8	0.5	2.0
BTEX (benzene +toluene + ethylbenzene + m,o,p xylenes)		EPA SW 846 8021/8260	1	2
Boron, Total	7440-42-8	200.8	2.0	10.0
Carbonaceous Biochemical Oxygen Demand (5-day)		SM5210-B		2 mg/L
Chemical Oxygen Demand		SM5220-D		10 mg/L
Chloride		SM4500-Cl B/C/D/E and SM4110 B		Sample and limit dependent
Chlorine, Total Residual		SM4500 Cl G		50.0
Cobalt, Total	7440-48-4	200.8	0.05	0.25
Color		SM2120 B/C/E		10 color units
Dissolved Organic Carbon		SM5310-B/C/D		1 mg/L
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L
E.coli		SM 9221B, 9221F, 9223B	N/A	Specified in method; sample aliquot dependent

Enterococci		EPA 1600 SM 9230B, 9230C, 9230D,	N/A	Specified in method; sample aliquot dependent
Flow		Calibrated device		
Fluoride	16984-48-8	SM4500-F E	25	100
Hardness, Total		SM2340B		200 as $CaCO_3$
Iron, Total	7439-89-6	200.7	12.5	50
Magnesium, Total	7439-95-4	200.7	10	50
Manganese, Total	7439-96-5	200.8	0.1	0.5
Molybdenum, Total	7439-98-7	200.8	0.1	0.5
Nitrate Nitrogen (as N)		SM4500-NO3-D		100
Nitrite Nitrogen (as N)		SM4500-NO2- B		
Nitrate + Nitrite Nitrogen (as N)		SM4500-NO_3- E/F/H		100
Nitrogen, Total Kjeldahl (as N)		SM4500-N_{org}B/C and SM4500NH_3-B/C/D/EF/G/H		300
NWTPH Dx [4]		Ecology NWTPH Dx	250	250
NWTPH Gx [5]		Ecology NWTPH Gx	250	250
Particulate Organic Carbon		SM5310-B/C/D		1 mg/L
Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10
Salinity		SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids		SM2540 -F		Sample and limit dependent
Soluble Reactive Phosphorus (as P)		SM4500-P E/F/G	3	10
Sulfate (as mg/L SO_4)		SM4110-B		0.2 mg/L
Sulfide (as mg/L S)		SM4500-S2F/D/G		0.2 mg/L
Sulfite (as mg/L SO_3)		SM4500-SO3B		2 mg/L

Temperature		Analog recorder or micro-recording devices (thermistors)		0.2°C
Tin, Total	7440-31-5	200.8	0.3	1.5
Titanium, Total	7440-32-6	200.8	0.5	2.5
Total Coliform		SM 9221B SM 9222B	N/A	Specified in method; sample aliquot dependent
Total Organic Carbon		SM5310-B/C/D		1 mg/L
Total Dissolved solids		SM2540 C		20 mg/L
Turbidity		EPA 180.1 or Meter or SM 2130 B		0.5 NTU

Appendix A Table 3 - Priority Pollutants: Metals, Chromium (hex), Cyanide & Total Phenols

Priority Pollutants	**PP #**	**CAS Number (if available)**	**Recommended Analytical Protocol**	**Detection Level (DL) [1] µg/L Unless specified**	**Quantitation Level (QL) [2] µg/L Unless specified**
Antimony, Total	114	7440-36-0	200.8	0.3	1.0
Arsenic, Total	115	7440-38-2	200.8	0.1	0.5
Beryllium, Total	117	7440-41-7	200.8	0.1	0.5
Cadmium, Total	118	7440-43-9	200.8	0.05	0.25
Chromium (hex) dissolved	119	18540-29-9	SM3500-Cr C	0.3	1.2
Chromium, Total	119	7440-47-3	200.8	0.2	1.0
Copper, Total	120	7440-50-8	200.8	0.4	2.0
Lead, Total	122	7439-92-1	200.8	0.1	0.5
Mercury, Total	123	7439-97-6	1631E	0.0002	0.0005
Nickel, Total	124	7440-02-0	200.8	0.1	0.5
Selenium, Total	125	7782-49-2	200.8	1.0	1.0
Silver, Total	126	7440-22-4	200.8	0.04	0.2
Thallium, Total	127	7440-28-0	200.8	0.09	0.36

Zinc, Total	128	7440-66-6	200.8	0.5	2.5
Cyanide, Total	121	57-12-5	335.4	5	10
Cyanide, Weak Acid Dissociable	121		SM4500-CN I or OIA 1677	5	10
Cyanide, Free Amenable to Chlorination (Available Cyanide)	121		SM4500-CN G or OIA 1677	5	10
Phenols, Total	65		EPA 420.1		50

Appendix A Table 4 - Priority Pollutants: Acid Compounds

Priority Pollutants	**PP #**	**CAS Number (if available)**	**Recommended Analytical Protocol**	**Detection Level (DL) [1] µg/L Unless specified**	**Quantitation Level (QL) [2] µg/L Unless specified**
2-Chlorophenol	24	95-57-8	625.1	3.3	9.9
2,4-Dichlorophenol	31	120-83-2	625.1	2.7	8.1
2,4-Dimethylphenol	34	105-67-9	625.1	2.7	8.1
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	60	534-52-1	625.1/1625B	24	72
2,4 dinitrophenol	59	51-28-5	625.1	42	126
2-Nitrophenol	57	88-75-5	625.1	3.6	10.8
4-Nitrophenol	58	100-02-7	625.1	2.4	7.2
Parachlorometa cresol (4-chloro-3-methylphenol)	22	59-50-7	625.1	3.0	9.0
Pentachlorophenol	64	87-86-5	625.1	3.6	10.8
Phenol	65	108-95-2	625.1	1.5	4.5
2,4,6-Trichlorophenol	21	88-06-2	625.1	2.7	8.1

Appendix A Table 5 - Priority Pollutants: Volatile Compounds

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection Level (DL) [1] µg/L Unless specified	Quantitation Level (QL) [2] µg/L Unless specified
Acrolein	2	107-02-8	624.1	5	10
Acrylonitrile	3	107-13-1	624.1	1.0	2.0
Benzene	4	71-43-2	624.1	4.4	13.2
Bromoform	47	75-25-2	624.1	4.7	14.1
Carbon tetrachloride	6	56-23-5	624.1/601 or SM6230B	2.8	8.4
Chlorobenzene	7	108-90-7	624.1	6.0	18.0
Chloroethane	16	75-00-3	624/601	1.0	2.0
2-Chloroethylvinyl Ether	19	110-75-8	624.1	1.0	2.0
Chloroform	23	67-66-3	624.1 or SM6210B	1.6	4.8
Dibromochloromethane (chlordibromomethane)	51	124-48-1	624.1	3.1	9.3
Dichlorobromomethane	48	75-27-4	624.1	2.2	6.6
1,1-Dichloroethane	13	75-34-3	624.1	4.7	14.1
1,2-Dichloroethane	10	107-06-2	624.1	2.8	8.4
1,1-Dichloroethylene	29	75-35-4	624.1	2.8	8.4
1,2-Dichloropropane	32	78-87-5	624.1	6.0	18.0
1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene) [6]	33	542-75-6	624.1	5.0	15.0
Ethylbenzene	38	100-41-4	624.1	7.2	21.6
Methyl bromide (Bromomethane)	46	74-83-9	624/601	5.0	10.0
Methyl chloride (Chloromethane)	45	74-87-3	624.1	1.0	2.0
Methylene chloride	44	75-09-2	624.1	2.8	8.4
1,1,2,2-Tetrachloroethane	15	79-34-5	624.1	6.9	20.7
Tetrachloroethylene	85	127-18-4	624.1	4.1	12.3
Toluene	86	108-88-3	624.1	6.0	18.0
1,2-Trans-Dichloroethylene (Ethylene dichloride)	30	156-60-5	624.1	1.6	4.8

1,1,1-Trichloroethane	11	71-55-6	624.1	3.8	11.4
1,1,2-Trichloroethane	14	79-00-5	624.1	5.0	15.0
Trichloroethylene	87	79-01-6	624.1	1.9	5.7
Vinyl chloride	88	75-01-4	624/SM6200B	1.0	2.0

Appendix A Table 6 - Priority Pollutants: Base/Neutral Compounds

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection Level (DL) [1] µg/L Unless specified	Quantitation Level (QL) [2] µg/L Unless specified
Acenaphthene	1	83-32-9	625.1	1.9	5.7
Acenaphthylene	77	208-96-8	625.1	3.5	10.5
Anthracene	78	120-12-7	625.1	1.9	5.7
Benzidine	5	92-87-5	625.1	44	132
Benzyl butyl phthalate	67	85-68-7	625.1	2.5	7.5
Benzo(a)anthracene	72	56-55-3	625.1	7.8	23.4
Benzo(b)fluoranthene (3,4-benzofluoranthene) [7]	74	205-99-2	610/625.1	4.8	14.4
Benzo(k)fluoranthene (11,12-benzofluoranthene) [7]	75	207-08-9	610/625.1	2.5	7.5
Benzo(a)pyrene	73	50-32-8	610/625.1	2.5	7.5
Benzo(ghi)Perylene	79	191-24-2	610/625.1	4.1	12.3
Bis(2-chloroethoxy)methane	43	111-91-1	625.1	5.3	15.9
Bis(2-chloroethyl)ether	18	111-44-4	611/625.1	5.7	17.1
Bis(2-chloro-1-methylethyl)Ether (Bis(2-chloroisopropyl)ether) [8]	42	108-60-1	625.1	5.7	17.1
Bis(2-ethylhexyl)phthalate	66	117-81-7	625.1	2.5	7.5
4-Bromophenyl phenyl ether	41	101-55-3	625.1	1.9	5.7
2-Chloronaphthalene	20	91-58-7	625.1	1.9	5.7
4-Chlorophenyl phenyl ether	40	7005-72-3	625.1	4.2	12.6
Chrysene	76	218-01-9	610/625.1	2.5	7.5

Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	82	53-70-3	625.1	2.5	7.5
1,2-Dichlorobenzene	25	95-50-1	624.1	1.9	7.6
1,3-Dichlorobenzene	26	541-73-1	624.1	1.9	7.6
1,4-Dichlorobenzene	27	106-46-7	624.1	4.4	17.6
3,3-Dichlorobenzidine	28	91-94-1	605/625.1	16.5	49.5
Diethyl phthalate	70	84-66-2	625.1	1.9	5.7
Dimethyl phthalate	71	131-11-3	625.1	1.6	4.8
Di-n-butyl phthalate	68	84-74-2	625.1	2.5	7.5
2,4-dinitrotoluene	35	121-14-2	609/625.1	5.7	17.1
2,6-dinitrotoluene	36	606-20-2	609/625.1	1.9	5.7
Di-n-octyl phthalate	69	117-84-0	625.1	2.5	7.5
1,2-Diphenylhydrazine (as Azobenzene)	37	122-66-7	1625B/625.1	5.0	20
Fluoranthene	39	206-44-0	625.1	2.2	6.6
Fluorene	80	86-73-7	625.1	1.9	5.7
Hexachlorobenzene	9	118-74-1	612/625.1	1.9	5.7
Hexachlorobutadiene	52	87-68-3	625.1	0.9	2.7
Hexachlorocyclopentadiene	53	77-47-4	1625B/625.1	2.0	4.0
Hexachloroethane	12	67-72-1	625.1	1.6	4.8
Indeno(1,2,3-cd)Pyrene	83	193-39-5	610/625.1	3.7	11.1
Isophorone	54	78-59-1	625.1	2.2	6.6
Naphthalene	55	91-20-3	625.1	1.6	4.8
Nitrobenzene	56	98-95-3	625.1	1.9	5.7
N-Nitrosodimethylamine	61	62-75-9	607/625.1	2.0	4.0
N-Nitrosodi-n-propylamine	63	621-64-7	607/625.1	0.5	1.0
N-Nitrosodiphenylamine	62	86-30-6	625.1	1.0	2.0
Phenanthrene	81	85-01-8	625.1	5.4	16.2
Pyrene	84	129-00-0	625.1	1.9	5.7
1,2,4-Trichlorobenzene	8	120-82-1	625.1	1.9	5.7

Appendix A Table 7 - Dioxin

Priority Pollutant	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) [1] µg/L Unless specified	Quantitation Level (QL) [2] µg/L Unless specified
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (2,3,7,8 TCDD)	129	1746-01-6	1613B	1.3 pg/L	5 pg/L

Appendix A Table 8 - Pesticides and PCBs

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) [1] µg/L Unless specified	Quantitation Level (QL) [2] µg/L Unless specified
Aldrin	89	309-00-2	608.3	4.0 ng/L	12 ng/L
alpha-BHC	102	319-84-6	608.3	3.0 ng/L	9.0 ng/L
beta-BHC	103	319-85-7	608.3	6.0 ng/L	18 ng/L
gamma-BHC (Lindane)	104	58-89-9	608.3	4.0 ng/L	12 ng/L
delta-BHC	105	319-86-8	608.3	9.0 ng/L	27 ng/L
Chlordane [9]	91	57-74-9	608.3	14 ng/L	42 ng/L
4,4'-DDT	92	50-29-3	608.3	12 ng/L	36 ng/L
4,4'-DDE	93	72-55-9	608.3	4.0 ng/L	12 ng/L
4,4' DDD	94	72-54-8	608.3	11ng/L	33 ng/L
Dieldrin	90	60-57-1	608.3	2.0 ng/L	6.0 ng/L
alpha-Endosulfan	95	959-98-8	608.3	14 ng/L	42 ng/L
beta-Endosulfan	96	33213-65-9	608.3	4.0 ng/L	12 ng/L
Endosulfan Sulfate	97	1031-07-8	608.3	66 ng/L	198 ng/L
Endrin	98	72-20-8	608.3	6.0 ng/L	18 ng/L
Endrin Aldehyde	99	7421-93-4	608.3	23 ng/L	70 ng/L
Heptachlor	100	76-44-8	608.3	3.0 ng/L	9.0 ng/L
Heptachlor Epoxide	101	1024-57-3	608.3	83 ng/L	249 ng/L
PCB-1242 [10]	106	53469-21-9	608.3	0.065	0.195

PCB-1254	107	11097-69-1	608.3	0.065	0.195
PCB-1221	108	11104-28-2	608.3	0.065	0.195
PCB-1232	109	11141-16-5	608.3	0.065	0.195
PCB-1248	110	12672-29-6	608.3	0.065	0.195
PCB-1260	111	11096-82-5	608.3	0.065	0.195
PCB-1016 [10]	112	12674-11-2	608.3	0.065	0.195
Toxaphene	113	8001-35-2	608.3	240 ng/L	720 ng/L

Footnotes

[1] Detection level (DL) – or method detection limit means the minimum concentration of an analyte (substance) that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results as determined by the procedure given in 40 CFR part 136, Appendix B.

[2] Quantitation Level (QL) – also known as Minimum Level (ML) – The term ‘‘minimum level’’ refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (DL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the DL in a method, or the DL determined by a laboratory, by a factor of 3. For the purposes of NPDES compliance monitoring, EPA considers the following terms to be synonymous: ‘‘quantitation limit,’’ ‘‘reporting limit,’’ and ‘‘minimum level’’.

[3] Soluble Biochemical Oxygen Demand – method note: First, filter the sample through a Millipore Nylon filter (or equivalent) - pore size of 0.45-0.50 um (prep all filters by filtering 250 ml of laboratory grade deionized water through the filter and discard). Then, analyze sample as per method 5210-B.

[4] Northwest Total Petroleum Hydrocarbons Diesel Extended Range OR NWTPH Dx – Analytical Methods for Petroleum Hydrocarbons https://apps.ecology.wa.gov/publications/documents/97602.pdf

[5] Northwest Total Petroleum Hydrocarbons Gasoline Extended Range OR NWTPH Gx – Analytical Methods for Petroleum Hydrocarbons https://apps.ecology.wa.gov/publications/documents/97602.pdf

[6] 1,3-dichloroproylene (mixed isomers) – You may report this parameter as two separate parameters: cis-1,3-dichlorpropropene (10061-01-5) and trans-1,3-dichloropropene (10061-02-6).

[7] Total Benzofluoranthenes – Because Benzo(b)fluoranthene, Benzo(j)fluoranthene and Benzo(k)fluoranthene co-elute you may report these three isomers as total benzofluoranthenes.

[8] Bis(2-Chloro-1-Methylethyl) Ether – This compound was previously listed as Bis(2-Chloroisopropyl) Ether (39638-32-9)

[9] Chlordane – You may report alpha-chlordane (5103-71-9) and gamma-chlordane (5103-74-2) in place of chlordane (57-74-9). If you report alpha and gamma-chlordane, the DL/PQLs that apply are 14/42 ng/L.

[10] PCB 1016 & PCB 1242 – You may report these two PCB compounds as one parameter called PCB 1016/1242.

APPENDIX B – Construction Stormwater Pollution Prevention Plan Requirements

The Permittee must prepare and properly implement an adequate Construction Stormwater Pollution Prevention Plan (CSWPPP) for construction activity in accordance with the following requirements beginning with initial soil disturbance and until final stabilization.

A. The Permittee's CSWPPP Must Meet the Following Objectives:

1. To implement best management practices (BMPs) to prevent erosion and sedimentation, and to identify, reduce, eliminate or prevent stormwater contamination and water pollution from construction activity.
2. To prevent violations of surface water quality, ground water quality, or sediment management standards.
3. To control peak volumetric flow rates and velocities of stormwater discharges.

B. General Requirements

1. The CSWPPP must include a narrative and drawings. All BMPs must be clearly referenced in the narrative and marked on the drawings. The CSWPPP narrative must include documentation to explain and justify the pollution prevention decisions made for the project. Documentation must include:
   a. Information about existing site conditions (topography, drainage, soils, vegetation, etc.).
   b. Potential erosion problem areas.
   c. The 13 elements of a CSWPPP in Sections D.1-13, including BMPs used to address each element.
   d. Construction phasing/sequence and general BMP implementation schedule.
   e. The actions to be taken if BMP performance goals are not achieved—for example, a contingency plan for additional treatment and/or storage of stormwater that would violate the water quality standards if discharged.
   f. Engineering calculations for ponds, treatment systems, and any other designed structures. When a treatment system requires engineering calculations, these calculations must be included in the CSWPPP. Engineering calculations do not need to be included in the CSWPPP for treatment systems that do not require such calculations.
2. The Permittee must modify the CSWPPP if, during inspections or investigations conducted by the owner/operator, or the applicable local or state regulatory authority, it is determined that the CSWPPP is, or would be, ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. The Permittee must then:

a. Review the CSWPPP for compliance with the requirements of this appendix and make appropriate revisions within 7 days of the inspection or investigation.

b. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than 10 days from the inspection or investigation. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.

c. Document BMP implementation and maintenance in the site log book.

The Permittee must modify the CSWPPP whenever there is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

C. Stormwater Best Management Practices (BMPs)

BMPs must be consistent with Ecology's Stormwater Management Manual for Western Washington[38] (July 2019).

1. Revisions to the Stormwater Management Manual for Western Washington, or other stormwater management guidance documents or manuals which provide an equivalent level of pollution prevention, that are approved by Ecology and incorporated into this permit in accordance with the permit modification requirements of WAC 173-220-190; or
2. Documentation in the CSWPPP that the BMPs selected provide an equivalent level of pollution prevention, compared to the applicable Stormwater Management Manuals, including:
   a. The technical basis for the selection of all stormwater BMPs (scientific, technical studies, and/or modeling) that support the performance claims for the BMPs being selected.
   b. An assessment of how the selected BMP will satisfy AKART requirements and the applicable federal technology-based treatment requirements under 40 CFR part 125.3.

D. CSWPPP – Narrative Contents and Requirements

The Permittee must include each of the 13 elements below in the narrative of the CSWPPP and implement them unless site conditions render the element unnecessary and the exemption from that element is clearly justified in the CSWPPP.

[38] https://fortress.wa.gov/ecy/ezshare/wq/Permits/Flare/2019SWMMWW/2019SWMMWW.htm

1. Preserve Vegetation/Mark Clearing Limits
    a. Before beginning land-disturbing activities, including clearing and grading, clearly mark all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area.
    b. Retain the duff layer, native topsoil, and natural vegetation in an undisturbed state to the maximum degree practicable.
2. Establish Construction Access
    a. Limit construction vehicle access and exit to one route, if possible.
    b. Stabilize access points with a pad of quarry spalls, crushed rock, or other equivalent BMPs, to minimize tracking sediment onto roads.
    c. Locate wheel wash or tire baths on site, if the stabilized construction entrance is not effective in preventing tracking sediment onto roads.
    d. If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (for example, during wet weather). Remove sediment from roads by shoveling, sweeping, or pickup and transport of the sediment to a controlled sediment disposal area.
    e. Conduct street washing only after sediment removal in accordance with Section D.2.d. Control street wash wastewater by pumping back on site or otherwise preventing it from discharging into systems tributary to waters of the State.
3. Control Flow Rates
    a. Protect properties and waterways downstream of development sites from erosion and the associated discharge of turbid waters due to increases in the velocity and peak volumetric flow rate of stormwater runoff from the project site, as required by local plan approval authority.
    b. Where necessary to comply with Section D.3.a, construct stormwater retention or detention facilities as one of the first steps in grading. Assure that detention facilities function properly before constructing site improvements (for example, impervious surfaces).
    c. If permanent infiltration ponds are used for flow control during construction, protect these facilities from siltation during the construction phase.
4. Install Sediment Controls

    The Permittee must design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, the Permittee must design, install, and maintain such controls to:

a. Construct sediment control BMPs (sediment ponds, traps, filters, infiltration facilities, etc.) as one of the first steps in grading. These BMPs must be functional before other land disturbing activities take place.

b. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.

c. Direct stormwater runoff from disturbed areas through a sediment pond or other appropriate sediment removal BMP, before the runoff leaves a construction site or before discharge to an infiltration facility.

   Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must meet the flow control performance standard in Section D.3.a above.

d. Locate BMPs intended to trap sediment on site in a manner to avoid interference with the movement of juvenile salmonids attempting to enter off-channel areas or drainages.

e. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible.

f. Where feasible, design outlet structures that withdraw impounded stormwater from the surface to avoid discharging sediment that is still suspended lower in the water column.

5. Stabilize Soils

   a. The Permittee must stabilize exposed and unworked soils by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to temporary and permanent seeding, sodding, mulching, plastic covering, erosion control fabrics and matting, soil application of polyacrylamide (PAM), the early application of gravel base on areas to be paved, and dust control.

   b. The Permittee must control stormwater volume and velocity within the site to minimize soil erosion.

   c. The Permittee must control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion.

   d. The Permittee must not allow soils to remain exposed and unworked for more than the time periods set forth below to prevent erosion:

During the dry season (May 1 - September 30): 7 days

During the wet season (October 1 - April 30): 2 days

e. The Permittee must stabilize soils at the end of the shift before a holiday or weekend if needed based on the weather forecast.

f. The Permittee must stabilize soil stockpiles from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.

g. The Permittee must minimize the amount of soil exposed during construction activity.

h. The Permittee must minimize the disturbance of steep slopes.

i. The Permittee must minimize soil compaction and, unless infeasible, preserve topsoil.

6. Protect Slopes

a. The Permittee must design and construct cut-and-fill slopes in a manner to minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (for example, track walking).

b. The Permittee must divert off-site stormwater (run-on) or ground water away from slopes and disturbed areas with interceptor dikes, pipes, and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.

c. At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion. Temporary pipe slope drains must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as "landscaped area."

d. Place excavated material on the uphill side of trenches, consistent with safety and space considerations.

e. Place check dams at regular intervals within constructed channels that are cut down a slope.

7. Protect Drain Inlets

    a. Protect all storm drain inlets made operable during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment.

    b. Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).

8. Stabilize Channels and Outlets

    a. Design, construct, and stabilize all on-site conveyance channels to prevent erosion from the following expected peak flows.

    Channels must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate indicated by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits.

    For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the WWHM to predict flows, bare soil areas should be modeled as "landscaped area."

    b. Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the outlets of all conveyance systems.

9. Control Pollutants

    Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. The Permittee must:

    a. Handle and dispose of all pollutants, including waste materials and demolition debris that occur on site in a manner that does not cause contamination of stormwater.

    b. Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. On-site fueling tanks must include secondary containment. Secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume contained in the largest tank within the containment structure. Double walled tanks do not require additional secondary containment.

c. Conduct maintenance, fueling, and repair of heavy equipment and vehicles using spill prevention and control measures. Clean contaminated surfaces immediately following any spill incident.

d. Discharge wheel wash or tire bath wastewater to a separate on-site treatment system that prevents discharge to surface water, such as closed-loop recirculation or upland land application, or to the sanitary sewer with local sewer district approval.

e. Apply fertilizers and pesticides in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Follow manufacturers' label requirements for application rates and procedures.

f. Use BMPs to prevent contamination of stormwater runoff by pH-modifying sources.

   The sources for this contamination include, but are not limited to bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, recycled concrete stockpiles, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete pumping and mixer washout waters, or other concrete wastewater.

g. Adjust the pH of stormwater or authorized non-stormwater if necessary to prevent an exceedance of groundwater and/or surface water quality standards.

h. Assure that washout of concrete trucks is performed off-site or in designated concrete washout areas only.

   Do not wash out concrete truck drums or concrete handling equipment onto the ground, or into storm drains, open ditches, streets, or streams. Washout of concrete handling equipment may be disposed of in a designated concrete washout area or in a formed area awaiting concrete where it will not contaminate surface or ground water. Do not dump excess concrete on site, except in designated concrete washout areas. Concrete spillage or concrete discharge directly to groundwater or surface waters of the State is prohibited. Do not wash out to formed areas awaiting LID facilities.

i. Obtain written approval from Ecology before using any chemical treatment, with the exception of CO2 or dry ice used to adjust pH.

j. Uncontaminated water from water-only based shaft drilling for construction of building, road, and bridge foundations may be infiltrated provided the wastewater is managed in a way that prohibits discharge to surface waters. Prior to infiltration, water from water-only based shaft drilling that comes into contact with curing concrete must be neutralized until pH is in the range of 6.5 to 8.5 standard unit.

10. Control Dewatering

    a. Permittees must discharge foundation, vault, and trench dewatering water, which have characteristics similar to stormwater runoff at the site, into a controlled conveyance system before discharge to a sediment trap or sediment pond.

    b. Permittees may discharge clean, non-turbid dewatering water, such as wellpoint ground water, to systems tributary to, or directly into surface waters of the State, as specified in Section D.8, provided the dewatering flow does not cause erosion or flooding of receiving waters. Do not route clean dewatering water through stormwater sediment ponds. Note that "surface waters of the State" may exist on a construction site as well as off site; for example, a creek running through a site.

    c. Other dewatering treatment or disposal options may include:

        i. Infiltration.

        ii. Transport off site in a vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters.

        iii. Ecology-approved on-site chemical treatment or other suitable treatment technologies (see Section D.9.i. regarding chemical treatment written approval).

        iv. Sanitary or combined sewer discharge with local sewer district approval if there is no other option.

        v. Use of a sedimentation bag with discharge to a ditch or swale for small volumes of localized dewatering.

    d. Permittees must handle highly turbid or contaminated dewatering water separately from stormwater.

11. Maintain BMPs

    a. Permittees must maintain and repair all temporary and permanent erosion and sediment control BMPs as needed to assure continued performance of their intended function in accordance with BMP specifications.

    b. Permittees must remove all temporary erosion and sediment control BMPs within 30 days after achieving final site stabilization or after the temporary BMPs are no longer needed.

12. Manage the Project

    a. Phase development projects to the maximum degree practicable and take into account seasonal work limitations.

b. Inspection and monitoring – Inspect, maintain, and repair all BMPs as needed to assure continued performance of their intended function. Conduct site inspections and monitoring in accordance with Special Condition S19.

c. Maintaining an updated CSWPPP – Maintain, update, and implement the CSWPPP in accordance with Special Condition S19.

13. Protect Low Impact Development (LID) BMPs

The primary purpose of LID BMPs/On-site LID Stormwater Management BMPs is to reduce the disruption of the natural site hydrology. LID BMPs are permanent facilities.

a. Permittees must protect all Bioretention and Rain Garden facilities from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the Bioretention and/or Rain Garden facilities. Restore the facilities to their fully functioning condition if they accumulate sediment during construction.

Restoring the facility must include removal of sediment and any sediment-laden Bioretention/Rain Garden soils, and replacing the removed soils with soils meeting the design specification.

b. Permittees must maintain the infiltration capabilities of Bioretention and Rain Garden facilities by protecting against compaction by construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment.

c. Permittees must control erosion and avoid introducing sediment from surrounding land uses onto permeable pavements. Do not allow muddy construction equipment on the base material or pavement. Do not allow sediment-laden runoff onto permeable pavements.

d. Permittees must clean permeable pavements fouled with sediments or no longer passing an initial infiltration test using local stormwater manual methodology or the manufacturer's procedures.

e. Permittees must keep all heavy equipment off existing soils under LID facilities that have been excavated to final grade to retain the infiltration rate of the soils.

E. CSWPPP – Map Contents and Requirements

The Permittee's CSWPPP must also include a vicinity map or general location map (for example, a USGS quadrangle map, a portion of a county or city map, or other appropriate map) with enough detail to identify the location of the construction site and receiving waters within one mile of the site.

The CSWPPP must also include a legible site map (or maps) showing the entire construction site. The following features must be identified, unless not applicable due to site conditions:

1. The direction of north, property lines, and existing structures and roads.
2. Cut and fill slopes indicating the top and bottom of slope catch lines.
3. Approximate slopes, contours, and direction of stormwater flow before and after major grading activities.
4. Areas of soil disturbance and areas that will not be disturbed.
5. Locations of structural and nonstructural controls (BMPs) identified in the CSWPPP.
6. Locations of off-site material, stockpiles, waste storage, borrow areas, and vehicle/equipment storage areas.
7. Locations of all surface water bodies, including wetlands.
8. Locations where stormwater or non-stormwater discharges off-site and/or to a surface waterbody, including wetlands.
9. Location of water quality sampling station(s) if sampling is required by state or local permitting authority.
10. Areas where final stabilization has been accomplished and no further construction phase permit requirements apply.
11. Location or proposed location of LID facilities.

Planning & Development Services
5280 Northwest Drive
Bellingham, WA 98226
PDS@co.whatcom.wa.us
360-778-5900

SEPA Distribution List
Revised SEPA2024-00038
Date of Issuance: March 19, 2025

Please review this determination. If you have further comments or questions, phone the responsible official at (360) 778-5900. Please submit your response by the comment date noted on the attached notice of determination.

WA State Department of Archaeology and Historic Preservation via email
Stephanie Jolivette, stephanie.jolivette@dahp.wa.gov
SEPA@dahp.wa.gov

SEPA Unit, WA State Department of Ecology, Olympia via online portal

WA State Department of Fish and Wildlife
Alex Richard via email - R4Nplanning@dfw.wa.gov

WA State Department of Natural Resources via email
Rochelle Goss, sepacenter@dnr.wa.gov
Brenda Werden, Brenda.werden@dnr.wa.gov

SEPA Unit, WA State Department of Transportation, Burlington via email
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Lummi Nation Natural Resources
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Skagit River System Cooperative
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Northwest Clean Air Agency
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Whatcom County Fire District #7
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Larry Hoffman via email – lhoffman@wcfd7.org

Whatcom County Health and Community Services
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Cascade Natural Gas
Robert Randolph via email - Robert.Randolph@cngc.com

BP Pipeline (Salem Land Services)
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Chase Wakefield via email - chase.wakefield@bp.com

Applicant
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Syd Gebers via email - sydg@gretteassociates.com

Public Comments

RE Sources
Kirsten McDade via email - kirstenm@re-sources.org

Friends of San Juans
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Marlene Finley (Evergreen Island) via email - marlenefinley17@gmail.com
Ander Russell (Re Sources) via email - anderr@re-sources.org

Kim Clarkin via email - kimlu55@gmail.com

WHATCOM COUNTY
WASHINGTON

Planning & Development Services
5280 Northwest Drive
Bellingham, WA 98226
PDS@co.whatcom.wa.us
360-778-5900

Revised SEPA Mitigated Determination of Nonsignificance (MDNS)[1]

File: SEP2024-00038

Project Description: The Intalco Site Wide Demolition Project will be implemented in two discrete Work Areas. Work Area 1 encompasses the main plant and is approximately 145 acres in size. This area includes the six potrooms, rectifiers and ancillary structures, anode production facilities, ingot casting facilities, support warehouses and repair shops. Work Area 2 encompasses an additional 67 acres outside of the main plant, including the alumina storage area located along the shoreline, sanitary treatment facility, administration buildings, parking areas and miscellaneous support buildings.

Activities to be completed within each of the two work areas will be similar and will occur in three phases. First, the buildings will be cleared out and asbestos will be remediated, the buildings will then be demolished, and finally, disturbed areas will be backfilled and compacted.

Building demolition will begin after asbestos remediation and involve removing facility equipment, buildings, and structures; removal of above grade concrete and asphalt paving; and removal of below grade concrete structures, foundations and footers to a depth of 3 feet below grade (except those identified to remain on the Demolition Plan). Any structure or slab more than 3 feet below grade will be permeated (broken up) by hydraulic hammer on 10-foot centers prior to backfilling.

After building demolition, disturbed areas will be restored by grading the site to match existing contours. Grading of the main plant will largely form a self-contained area that is sloped towards existing ditches. Foundation voids, basement structures and other depressions left following demolition will be backfilled and compacted so that no ponding would occur. The source of fill material in the main plant (Work Area 1) and the majority of Work Area 2 will be primarily onsite soils graded from within the demolition area so the excavation and fill are balanced on-site.

A limited amount of clean backfill (~5,000 cy) will be imported to fill the foundation voids of the three silos removed from the shoreline zone (Work Area 2D) and to fill the tank associated with closure of the on-site septic system in Work Area 2C. Clean backfill imported to the site will be sourced from a local quarry, meet Washington State Department of Ecology's (Ecology) requirements and delivered to the site by truck.

Approximately 260,000 cubic yards of material will be exported from the site, including concrete for disposal and recycling, demolition debris, industrial waste, and recyclable materials and metals. Demolition debris and other materials removed from the site will be transported using either truck or rail (both are available at the site), however and given the likely facilities are Ferndale, Bellingham, Tacoma, East Wenatchee, WA, or Arlington, OR, it is anticipated that trucks will be used to haul the majority of the waste and demolition debris. If concrete is crushed on site prior to offsite transport, crushing operations will comply with permits and approvals from Ecology and Northwest Clean Air Agency.

[1] Pursuant to WAC 197-11-350(5), Whatcom County has revised and/or clarified the proposed mitigation conditions for this project based on the public comments that were received during the 14-day comment period.

Proponent: Intalco Aluminum, LLC – Kristin Gaines; Director, Transformation – Western US

Address and Parcel #: 4050 Mountain View Road, Ferndale, WA / APN's: 3901281514050000, 3901203100700000, 3901293852650000, 3901281004800000 & 3901294404010000

Lead Agency: Whatcom County Planning & Development Services (PDS)

Zoning: Heavy Impact Industrial (HII) **Comp Plan:** Major/Port Industrial UGA – Cherry Point **Shoreline Jurisdiction:** Cherry Point Management Unit

Consultation: Whatcom County PDS requested SEPA pre-threshold consultation prior to making this SEPA determination. The intent of the consultation was to assist Whatcom County PDS in determining appropriate mitigation, whether any additional information and/or studies are needed, and when an environmental impact statement is or is not needed for a proposal. The following agencies were consulted prior to making this determination:

- Washington State Department of Archaeology and Historic Preservation
- Washington State Department of Ecology
- Washington State Department of Transportation
- Washington State Department of Fish and Wildlife
- Washington State Department of Natural Resources
- Northwest Clean Air Agency
- Nooksack Indian Tribe
- Lummi Nation
- City of Ferndale
- Whatcom County Fire District #7
- Whatcom County Health and Community Services Department

Environmental Documents Reviewed: The following environmental documents were reviewed prior to making this SEPA determination:

- Asbestos and Lead Paint Survey Report. Prepared by TRC. January 2023.
- Hazardous Materials Survey Report. Prepared by TRC. Revised June 2023.
- Geological Hazardous Area Site Assessment. Prepared by GeoEngineers. May 2024
    - Geological Hazardous Area Site Assessment. Revised Letter Report. Prepared by GeoEngineers. November 13, 2024
- Site Stormwater Plan. Prepared by Anchor QEA. November 2024.
- Cultural Resources Management Plan (CRMP) including Inadvertent Discovery Plan. Prepared by AECOM. June 2024.
- Intalco Aluminum – Ferndale - Critical Areas Assessment Report. Prepared by Grette Associates. May 2024.
- Whatcom County Preliminary Traffic Concurrency Information Form and Hauling Operations Questionnaire. Prepared by Intalco Aluminum, LLC. October 2024.
- Washington State Department of Ecology, National Pollutant Discharge Elimination System Waste Discharge Permit WA0002950, Issued October 15, 2024.

The lead agency for this proposal has determined that with proper mitigation, no significant adverse environmental impacts are likely. This proposal will also be reviewed for compliance with all applicable Whatcom County Codes (WCC) which regulates development activities, including but not limited to: WCC 15 – Buildings and Construction, WCC 16.16 – Critical Areas, WCC 17 – Flood Damage Prevention, WCC 20 – Zoning, WCC 21 - Land Division Regulations, WCC 23 – Shoreline Management Program, the Whatcom County Development Standards and/or the Washington State Stormwater Manual. Mitigation may also be a requirement of Whatcom County Code. Pursuant to RCW 43.21C.030(2)(c), an environmental impact statement (EIS) is not required. This decision was made following review of a completed SEPA environmental checklist and other information on file with the lead agency. This information is available to the public on request.

X There is no further comment period on the MDNS.

Responsible Official: Mark Personius, mpersoni@whatcomcounty.us

Title: Director **Telephone:** 360-778-5900

Address: 5280 Northwest Drive
Bellingham, WA 98226

Date of Issuance: March 19, 2025 **Signature:** _____

An aggrieved agency or person may appeal this determination to the Whatcom County Hearing Examiner. Application for appeal must be filed on a form provided by and submitted to the Whatcom County Current Planning Division located at 5280 Northwest Drive, Bellingham, WA 98226, during the ten days following the comment period, concluding March 31, 2025.

You should be prepared to make a specific factual objection. Contact Whatcom County Current Planning Division for information about the procedures for SEPA appeals.

Planning & Development Services
5280 Northwest Drive
Bellingham, WA 98226
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SEPA2024-00038

Revised Mitigated Determination of Non-significance (MDNS)

Mitigating Conditions:

Adverse Impacts by the proposed development can be caused at the commencement of construction. Therefore, the Whatcom County SEPA Official finds that, pursuant to Substantive Authority, as allowed by WCC 16.08, the following SEPA mitigating conditions shall be required as a condition of the underlying permits:

Archaeological Cultural Resources

1. Intalco Aluminum and/or the site contractors shall follow the approved Cultural Resources Management and Inadvertent Discovery Plan (CRMP) for the project. ~~that was prepared by AECOM, dated June, 2024.~~ The CRMP that was prepared by AECOM, dated October 2024 shall be amended to include the following:

    a. A Monitoring and Inadvertent Discovery Plan (MIDP) stating archeological monitoring shall occur during any site ground disturbing activities within "Work Area 2D" and the project archeologists shall conduct "spot check monitoring" in all other Work Areas where native sediments could be encountered and;

    b. The project crew conducting the ground disturbing work will receive an Inadvertent Discovery Plan (IDP) training from the project archeologists prior to ground disturbing activities.

    A revised CRMP including MIDP must be submitted to PDS, the Department of Archeology and Historic Preservation (DAHP) and the affected tribes for review prior to ground disturbing activities.

2. The Lummi Nation Tribal Historic Preservation Office (LNTHPO) shall be consulted with regarding the final disposition of the story pole.

Transportation

3. Hauling of construction waste materials shall follow the haul routes that were identified in the Whatcom County Hauling operations questionnaire dated October 4, 2024, unless otherwise approved by Whatcom County Public Works – Engineering Services. In addition, the applicant shall enter into a Haul Route Agreement with Whatcom County Public Works as authorized by the Whatcom County Development Standards Chapter 5 paragraph 511.G.4 prior to the start of hauling operations.

4. Hauling of construction debris and fill shall not occur on or through Main Street in downtown Ferndale, WA.

Fill Material and Soils Testing

5. Following building removal, disturbed areas shall be restored and/or filled by grading the site as per the Whatcom County Planning and Development Services (WCPDS) approved grading plans.

6. The site is covered by the Model Toxics Control Act (MTCA) site-wide process managed by Washington Department of Ecology (Ecology), Cleanup Site ID 2280 and Facility/Site ID 16. The applicant shall develop a plan in accordance with MTCA for testing soils to be reused onsite. The plan shall be approved by Ecology. The applicant shall ensure coordination with Whatcom County Health and Community Services (WCHCS). Contaminated soils shall be disposed of at permitted solid waste handling facilities. In no event shall excavated soils (below the threshold of MTCA) be exported to a surface mine reclamation site for use as backfill.

7. All exposed soils within the project work areas shall be permanently stabilized with grass surfacing or other acceptable materials in conformance with Washington State Department of Ecology (Ecology) 2024 Stormwater Management Manual for Western Washington BMP C120: Temporary and Permanent Seeding, Volume II – Chapter 3.

Solid Waste and Testing

8. The applicant shall complete an addendum to their Asbestos Survey for Demolition for concrete and asphalt on site (floors, footings and foundations, etc.). The applicant shall use a professional asbestos firm and Asbestos Hazard Emergency Response Act (AHERA) inspector(s) to complete this work in accordance with Northwest Clean Air Agency (NWCAA) and Environmental Protection Agency (EPA) guidelines. The addendum shall be submitted to NWCAA and a copy provided to WCPDS and WCHCS.

9. Concrete and asphalt that contains asbestos, is painted, stained, coated and/or otherwise suspected to be contaminated shall be designated as either solid waste or hazardous waste and shall be disposed of at permitted and approved waste disposal sites that accept such waste materials.

10. All clean inert waste concrete and asphalt shall be hauled off site and be delivered to solid waste handling facilities that accept recycled materials as approved by Ecology and/or WCHCS. Solid waste handling facilities that recycle these wastes must comply with WAC 173-350-320 *Piles used for storage or treatment, and WAC 173-350-210 Recycling and material recovery facilities.* Receiving sites shall also comply with all conditions of the applicable industrial stormwater general permit for the facility (such as a Sand and Gravel General Permit). No concrete or asphalt shall be buried at the approved solid waste handling facility sites.

11. The applicant shall follow the Ecology approved Solid Waste Control Plan as per the NPDES permit (WA0002950-2024). A copy of the Ecology approved Solid Waste Control Plan and any subsequent changes or revisions shall be provided to WCHCS.

12. All wastes (dangerous wastes, industrial wastes, asbestos-containing materials, demolition debris, universal wastes, solid wastes, etc.) and recyclables generated during the demolition project shall be removed from the project site and disposed of or recycled in properly permitted facilities. The applicant shall provide to WCPDS and WCHCS a monthly summary of materials removed from the site during demolition. The summary shall include the waste designation (as appropriate), facility receiving the recyclables or wastes, and quantity. This summary will be updated monthly during the demolition project.

Asbestos Removal

13. The applicant must adhere to the work plan, schedule, and alternate means of compliance plan as submitted to and approved by the NWCAA during the course of the demolition

project. Any deviation from the plan must receive prior written approval by the NWCAA. The applicant shall provide WCPDS with a copy of the approved plan and any subsequent NWCAA approved revisions.

Whatcom County Fire Marshal

14. An emergency response safety plan shall be submitted and approved by Whatcom County Fire District 7 (WCFD7) and the Whatcom County Fire Marshal's Office (WCFMO) prior to commencement of demolition. The Plan must contain details on project time line, start and finish dates, fire water mains/hydrants to be removed and to remain operational, buildings to be removed and to remain, hazardous materials onsite to be removed and to remain, and existing roads and driving lanes to be removed and be retained. Intalco Aluminum and/or the site contractors must also coordinate and schedule a pre-demolition meeting with WCFD7 and WCFMO to discuss the approved emergency response plan prior to any site demolition work.

Water Quality/Stormwater

15. Stormwater from the demolition area shall be collected and managed to ensure that no contaminated stormwater is illicitly discharged from the site. The applicant shall follow the Whatcom County approved Construction (Demolition) Stormwater Pollution Prevention Plan (CSWPPP). The applicant shall follow the Stormwater Pollution Prevention Plan, Construction Stormwater Pollution Prevention Plan, and Demolition Wastewater Plan in accordance with the Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) permit for the facility. ~~in accordance with the Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) permit for the facility.~~ The existing, onsite stormwater conveyance and treatment system shall remain operational throughout site demolition and after completion of the demolition work.

16. Existing stormwater drainage patterns and flow rates shall be maintained for work areas that do not drain into existing stormwater facilities. A qualified professional shall review the final Civil Plans for Work Areas 2C and 2E and provide mitigating recommendations, if determined necessary, to ensure slope stability is maintained.

Dust Control

17. Dust control Best Management Practices (BMP's) shall be implemented during site demolition work. Such measures include, but are not limited to, use of water trucks and equipment with water sprayers, sweeping paved areas and vehicle track out prevention. Building cleaning must be performed to remove loose materials prior to demolition.

Wetlands

18. Adjacent wetland boundaries and previously undisturbed wetland buffers shall be protected during site demolition work with the placement of construction fencing. No dirt spoils or heavy equipment shall be placed within undisturbed critical areas or buffers. Areas associated with removed buildings or other impervious surfaces within existing wetland buffers shall be hydroseeded with a Native Meadow Seed Mix in conformance with Washington State Department of Ecology (Ecology) 2024 Stormwater Management Manual for Western Washington BMP C120: Temporary and Permanent Seeding, Volume II – Chapter 3 after demolition has occurred.

Geological

19. All recommendations presented in the professional report prepared by GeoEngineers, titled *Revised Letter Report – Geological Hazardous Areas Site Assessment*, dated November 13, 2024, shall be followed in their entirety.

20. A qualified professional shall monitor site grading and fill placement and compaction to ensure that native fill soils, and any required import fill soils, are sufficiently fine-grained and compacted to function as low-permeability fill with limited infiltration potential.

21. A qualified professional shall monitor excavation of the foundation and subgrade soils supporting the alumina storage silos to ensure that slope retention systems depicted on the approved plan set are suitable for temporary lateral slope support until structural backfill has been placed to re-establish site grades. The qualified professional shall also provide a recommendation for clean, structural backfill suitable for Work Area 2. If the existing slope retention system encountered during excavation is interpreted to be insufficient for temporary lateral support, the qualified professional shall provide recommendations for temporary shoring.

22. Construction inspections shall be conducted and reported to Whatcom County PDS at significant junctures in the construction schedule as deemed necessary by the project geotechnical engineer to certify construction. Within one month of project completion, an as-built report prepared by the project geotechnical engineer certifying that all proposed geotechnical project elements have been installed in accordance with their design objectives shall be submitted to Whatcom County PDS for inclusion in the permit file.

Demolition Noise

23. All demolition activities shall comply with the noise requirements of Washington State Administrative Code (WAC) 173-60.

Progress Inspections

24. The project shall have an environmental compliance officer on-site when demolition is occurring. After permit issuance, the applicant shall request bi-monthly (every 60 days) progress inspections and submit written updates to Whatcom County PDS regarding compliance with permit conditions.

Sewage System

25. The applicant shall submit a closure plan and obtain an approval from the Washington State Department of Ecology prior to decommissioning and removing the sanitary lagoon as noted in Work Area 2E.

26. Any on-site septic system that is proposed to be abandoned shall be abandoned in accordance with Whatcom County Code 24.05.190. A Tank Abandonment form shall be submitted to with WCHCS upon completion.

REVISED

Whatcom County Planning and Development Services
Received
Received by: nsmith
October 4, 2024

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. **You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown.** You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to **all parts of your proposal,** even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the Supplemental Sheet for Nonproject Actions (Part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in "Part B: Environmental Elements" that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. Name of proposed project, if applicable:

Intalco Site Wide Demolition Project

2. Name of applicant:

Intalco Aluminum LLC, c/o Kristin Gaines

3. Address and phone number of applicant and contact person:

Applicant

Intalco Aluminum LLC
Kristin Gaines; Director, Transformation – Western US
4050 Mountain View Rd.
Ferndale, WA 98248
Kristin.gaines@alcoa.com
(360) 425-2800

Authorized Agent/Contact Person

Grette Associates LLC
Sydney Gebers; Biologist
151 S. Worthen St., Suite 101
Wenatchee, WA 98801
sydg@gretteassociates.com
(509) 640-3291

4. Date checklist prepared:

October 4, 2024

5. Agency requesting checklist:

Whatcom County

6. Proposed timing or schedule (including phasing, if applicable):

The Intalco Site Wide Demolition Project (the 'Project') involves demolishing buildings, structures, equipment, storage tanks and utilities at the Intalco Aluminum Smelter. The work will be completed in two separate work areas as illustrated on Figure 1. Work Area 1 encompasses the main plant. Work Area 2 is located around the exterior of the main fenced plant area and includes structures in proximity to the Strait of Georgia. Work Area 2 will be permitted separately, and on a slightly different schedule, from the main plant demolition due to the longer permitting timeline associated with processing permits with a shoreline component. Both phases of construction are addressed in this checklist. See response to item 11 below.

Work will begin with a clearing phase (removal of all asbestos, etc.), followed by demolition. Demolition is planned forearly 2025, pending selection of a demolition contractor and receipt of permit approvals. Project duration (both work areas) is expected to be approximately 24 months.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

The purpose of the Project is to remove buildings and structures related to the permanently closed aluminum smelter. AltaGas and Intalco have entered into an agreement for AltaGas to acquire the rights to own and develop approximately 1,600 acres at the Intalco site, including transportation and utility infrastructure. AltaGas is currently exploring potential development opportunities, but Intalco has no future plans for development.

Intalco is working in coordination with the Department of Ecology's (Ecology) Industrial Section under the

Model Toxics Control Act regarding known or potential contamination identified during demolition.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Asbestos and Lead Paint Survey Report. Prepared by TRC. January 2023.

Hazardous Materials Survey Report. Prepared by TRC. January 2023.

Critical Areas Assessment Report. Prepared by Grette Associates. September 2024.

Geologic Hazard Area Site Assessment. Prepared by GeoEngineers. May 2024.

Cultural Resource Management Plan (CRMP) (including Inadvertent Discovery Plan). Prepared by AECOM. October 2024.

Intalco Aluminum Plant Historic Resources Inventory and Evaluation. Prepared by AECOM. June 2024. Available on DAHP's WISAARD 2024-05-03621.

Former Kynell Property Historic Resources Inventory and Evaluation. Prepared by AECOM. June 2024. Available on DAHP's WISAARD 2024-06-04132.

Whatcom County Preliminary Traffic Concurrency Information Form. Prepared by Grette Associates. October 2024.

Whatcom County Hauling Operations Questionnaire. Prepared by Intalco Aluminum, LLC. October 2024.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

AltaGas (formerly Petrogas Ferndale) has two pending applications with Whatcom County for improvements to the pier and trestle located on the adjacent property (parcel # 188769); the Petrogas Ferndale Wharf Subsurface Reclamation Project – Dredging Activities (SHR2020-0006) and the Petrogas Ferndale Wharf Marine Loading Arm Project (SHR2020-0002; approved December 18, 2020). The AltaGas owned pier and trestle is accessed through the Project Area.

10. List any government approvals or permits that will be needed for your proposal, if known.

- Demolition permit; Whatcom County
- Land Fill and Grade permit; Whatcom County
- SEPA determination; Whatcom County
- Shoreline substantial development permit; Whatcom County (Work Area 2D only, including any grade or fill within the shoreline area)
- Critical Areas Review; Whatcom County
- Air quality registration; Northwest Clean Air Agency
- Asbestos notification; Northwest Clean Air Agency
- NPDES discharge permit for waste and storm waters; Ecology (Intalco has a stormwater discharge permit from Ecology and is working with Ecology on a renewal that will also address the demolition activities. See item B.3.c.4 below for additional information.)

Separate Fill and Grade Permits have been submitted for each proposed work area. NAS

NAS 02/18/2025

- Stormwater Pollution Prevention Plan (SWPPP); Ecology (see B.3.c.4 below)

All concrete that is demolished will be exported from the site. If concrete is to be crushed on site prior to being exported, the following permits/approvals would be required:

- Mobile Source Registration/Permitting; Northwest Clean Air Agency

11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The Project will be implemented in two discrete Work Areas (Figure 1). Work Area 1 encompasses the main plant and is approximately 145 acres in size. This area includes the six potrooms, rectifiers and ancillary structures, anode production facilities, ingot casting facilities, support warehouses and repair shops (Figure 2). Work Area 2 encompasses an additional 67 acres outside of the main plant, including the alumina storage area located along the shoreline, sanitary treatment facility, administration buildings, parking areas and miscellaneous support buildings.

Activities to be completed within each of the two work areas will be similar. Prior to demolition, the contractor would clear out all buildings and remediate asbestos. Building demolition would follow and involve removing facility equipment, buildings, and structures; removal of above grade concrete and asphalt paving; and removal of below grade concrete structures, foundations and footers to a depth of 3 feet below grade (except those identified to remain on the attached *Demolition Plan*; Figure 3). The floor of below grade structures deeper than 3 feet will be permeated (broken up) by hydraulic hammer on 10-foot centers prior to backfilling.

Following building removal, disturbed areas will be restored by grading the site to match existing contours. Foundation voids, basement structures and other depressions left following demolition will be backfilled and compacted so that no ponding would occur. Intalco is preparing a fill and grade permit application that will provide details. The source of fill material in the main plant (Work Area 1) and the majority of Work Area 2 will be primarily onsite soils graded from within the demolition area so the excavation and fill are balanced on-site.

A limited amount of clean backfill (less than 5,000 cy) will be imported to fill the foundation voids of the three silos removed from the shoreline zone (Work Area 2D) and to fill the tank associated with closure of the on-site septic system in Work Area 2C. Clean backfill imported to the site will be sourced from a local quarry, meet Ecology's requirements and delivered to the Site by truck.

Approximately 260,000 cubic yards of material will be exported from the site, including concrete for disposal and recycling, demolition debris, industrial waste, and recyclables materials and metals. Demolition debris and other materials removed from the site will be transported using either truck or rail (both are available at the site), however given the likely facilities are Ferndale, Bellingham, Tacoma, East Wenatchee, WA, or Arlington, OR, it is anticipated that trucks will be used to haul the majority of the waste and demolition debris. If concrete is crushed on site prior to offsite transport, crushing operations will comply with permits and approvals from the Department of Ecology and Northwest Clean Air Agency.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The Project is to occur at the Intalco Aluminum Facility in Ferndale, Washington (Figure 1).

Street Address: 4050 Mountain View Road, Ferndale, WA

Parcel #s: 186684, 186663, 186709, 186714, 186715

Section, Township and Range: Sections 20, 21, 28 and 29, Township 39 N, Range 01 E.

Assessor Tax Parcels: 390128151405, 390120310070, 390129385265, 390129440401 & 390128100480

B. Environmental Elements

1. Earth

a. General description of the site:

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

b. What is the steepest slope on the site (approximate percent slope)?

Slopes in the Project area vary from 0 to 15%, typically 1 to 5% in and around the developed portions of the facility. Ditches, culverts and paved areas are typically sloped at between 0.4 and 1%. There are steep slopes located to the south and west of the site.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Silty clay, sand, gravel, silty and sandy silt (Bellingham-Kulshan Glaciomarine Drift, Esperance Sand, Cherry Point Formation).

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

There are no surface indicators of unstable soils in the developed portion of the site. The Washington Geologic Survey (WSG) and Whatcom County-Wide Critical Area Odinance Maps (2016) have identified the steep bluff located immediately west of the plant as having potentially unstable slopes. Project demolition and how it might impact bluff stability is the focus of the Geological Hazardous Area Site Assessment prepared for the Project (GeoEngineers 2024[1]). In summary, site evaluation suggested a weak correlation between local surface water and groundwater flow and shallow instability along the steep bluff. Based on this, the report concludes that demolition of the Intalco facility is feasible with no adverse effects on geohazards or adjacent properties.

[1] GeoEngineers. 2024. Geological Hazardous Area Site Assessment Intalco Site Demolition Project. Revised Letter Report. May 20, 2024.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Following building removal, disturbed areas will be restored by grading the site to match existing contours. Foundation voids, basement structures and other depressions left following demolition will be backfilled and compacted so that no ponding would occur. Intalco is preparing a fill and grade permit application that will provide details. The source of fill material in the main plant (Work Area 1) and the majority of Work Area 2 will be onsite soils graded from within the demolition area so the excavation and fill are balanced on-site.

A limited amount of clean backfill (less than 5,000 cubic yards) will be imported to fill the foundation voids of the three silos removed from the shoreline zone (Work Area 2D) and to fill the tank associated with closure of the on-site septic system in Work Area 2C. Fill in the shoreline zone will be limited to that needed to backfill the foundation voids of the three silos, which cover a combined area of approximately 34,000 sq.ft. Clean backfill imported to the Site will be sourced from a local quarry, meet Ecology's requirements for the Site and be delivered by truck.

f. Could erosion occur because of clearing, construction, or use? If so, generally describe.

No, demolition is not anticipated to cause erosion. See the response to item B.1.d. above.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The site is currently comprised of mostly impervious surfaces (approx. 75% of the area within Work Areas 1 and 2, combined). Post demolition, the amount of impervious surface areas will decrease (approx. 10% of site will be covered by impervious surfaces after demolition is complete).

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

- Best Management Practices (BMPs) will be utilized during demolition to control erosion.
- Below grade structures to remain in place will be penetrated to prevent ponding.
- Fill material will be placed in lifts of 8 to 12 inches thick and mechanically compacted.
- The majority of the existing stormwater collection system, including ditches internal to the smelter site and around the perimeter will be maintained.
- A Geological Hazardous Area Site Assessment was conducted to evaluate whether demolition would adversely affect geohazards or adjacent properties (GeoEngineers 2024).

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Emissions will be minor and localized to the work site. During demolition, emissions from trucks, machinery, generators, and cutting torches will be present; amounts of emissions are not known, however they are anticipated to be minor due to the short duration of the proposed work and limited work to be performed. Localized dust is also likely to be produced during demolition and site restoration activities. Intalco will continue to coordinate with NWCAA as details for this project evolve from the contractor, including any approvals for crushing concrete if Intalco proposes to do so.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any.

Dust control Best Management Practices (BMP's) will be implemented as needed and will include use of water trucks and equipment with water sprayers, sweeping paved areas and vehicle track out prevention. Building cleaning will be performed to remove loose materials prior to demolition.

3. Water

a. Surface Water:

1. **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

No work is proposed in wetlands or water bodies. Water resources in the vicinity of the site (within 300 feet) include the following:

- The Strait of Georgia is immediately west of the facility.
- There are six wetlands adjacent to the facility[2] (Figure 2), including the following;
    - Wetland A is a 1.45 acre category III depressional wetland located northwest of the site,
    - Wetland B is a 29.75 acre category III depressional wetland located northeast of the site,
    - Wetland C is a 0.11 acre category III depressional wetland located west of the site,
    - Wetland D is a 0.11 acre category III depressional wetland located west of the site,
    - Wetland E is a 6.10 acre category III depressional wetland located northeast of the site,
    - Wetland F is an 18.16 acre category III depressional wetland located south of the site.
- The plant's stormwater pond is located southwest of the main plant demolition work area. This pond is part of the facility's stormwater collection system.
- The plant's sanitary sewer lagoon is located south of the main plant demolition work area. The lagoon is part of the facility's sewage treatment system.

2. **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

There are no water resources in or adjacent to Work Area 1. The following water resources are in the vicinity of Work Area 2:

- Strait of Georgia: Work Area 2 is located adjacent to the Strait of Georgia. The nearest structures slated for demolition (the alumina bucket elevator pits) are within approximately 80 feet of the shoreline. No in- or over-water work is proposed.
- Wetland A: The cathode crusher is a steel framed lean-to style shed founded on a concrete slab and is located approximately 74 feet south of Wetland A. Removing this structure will involve temporary ground disturbance within the wetland buffer (Figure 3) where the building is removed. There will be a long-term benefit associated with removing structures and impervious

[2] Grette Associates. 2024. Intalco Aluminum – Ferndale Critical Areas Assessment Report. Prepared for Intalco Aluminum LLC. September 2024.

surfaces from the wetland buffer. No ground disturbance in the wetland is proposed.

- Wetland B: A portion of the east parking lot (asphalt and gravel) and two of the administration buildings (concrete block construction) are to be removed from the buffer of Wetland B (Figure 3). Short term impacts will be associated with construction and ground disturbance. There will be a long-term functional benefit associated with removing structures and impervious surfaces from within the wetland buffer. No direct ground disturbance in the wetland is proposed.
- Wetland C: A barn and material storage pad will be removed from the buffer of Wetland C (Figure 3). Construction impacts will be temporary and associated with ground disturbance. Removing structures and impervious surfaces from the wetland buffer will have a long-term benefit on wetland functions. No work is proposed with the wetland.
- Wetland D: The fire training building is located approximately 110 feet South of Wetland D (Figure 3). Removing this building will involve temporarily disturbing ground in the buffer of wetland D. There will be a long-term benefit associated with removing the building from the wetland buffer. No work in the wetland or vegetated portion of the buffer is proposed.
- Wetland F: Removing the sanitary lagoon will involve temporarily disturbing ground in the buffer of Wetland F. Disturbed areas will be restored. The lagoon is hydrologically isolated from the wetland and removing it will reestablish a hydrologic connection between Wetland F and part of its buffer. Habitat functions within the buffer will also be improved. No ground disturbance within the wetland is proposed.
- Sanitary Sewer Lagoon: This system will be removed under an Ecology approved closure plan.

3. **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

None. No fill or dredged material will be placed in or removed from surface water or wetlands.

4. **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**

No surface water withdrawals or diversions are proposed.

5. **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

No. The site is constructed on historical fill and lies above/outside of the 100-year floodplain (FEMA Flood Insurance Rate Map #53073C1155F).

6. **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

No.

b. Ground Water:

1. **Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.**

No.

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals…; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

Not applicable. No waste material discharge is proposed.

The sanitary treatment lagoon will be removed as part of the project. Ecology's Industrial Section manages the site's water quality which includes the sanitary lagoon. Per WAC 173-240 and Ecology Publication 98-37, April 2023, Lagoon and Liner Design Guidelines, Intalco will submit a closure plan prior to decommissioning and removing the sanitary lagoon for Ecology approval.

c. Water Runoff (including stormwater):

1. **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Runoff may occur from storm water. Stormwater and wastewater are currently collected on site, treated and discharged to the Strait of Georgia in accordance with the facility's existing National Pollution Discharge Elimination System (NPDES) permit and Stormwater Pollution Prevention Plan (SWPPP).

The majority of the ditches and stormwater collection systems will remain in place and will continue to drain to the existing outfall. All of the existing ditches around the perimeter of the site will be retained. During demolition, stormwater from the demolition area will be isolated, collected and managed to ensure that no contaminated stormwater is discharged to the Strait. Any stormwater or process water generated during demolition activities will be managed according to the NPDES permit.

2. **Could waste materials enter ground or surface waters? If so, generally describe.**

No, waste materials are not anticipated to enter ground or surface waters as a result of the Project. Under the Ecology approved SWPPP, BMPs will be in place to control wastewaters generated from demolition and avoid stormwater coming into contact with demolition materials.

3. **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

No. A grade and fill plan is being prepared for the Project. The majority of the stormwater collection system will remain in place. Generally, the finished surface will slope gently to the south west, matching current contours.

4. **Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any.**

Stormwater from the demolition area will be isolated, collected and managed to ensure that no contaminated stormwater is discharged to the Strait. Any stormwater or process water generated during demolition activities will be managed according to the NPDES permit. A Demolition SWPPP has been prepared in accordance with the NPDES permit for the facility and submitted to Ecology. A Construction SWPPP will be prepared in accordance with the NPDES permit for the facility and submitted to Ecology. The SWPPP updates include narratives and drawings demonstrating consistency with the 2024 Stormwater Management Manual for Western Washington[3], including best

[3] Ecology 2024. Stormwater Management Manual for Western Washington. Prepared by the Washington State Department of Ecology Water Quality Program. Publication Number 24-10-013. July 2024.

management practices for stormwater management to be implemented during demolition and site restoration activities.

A Stormwater Site Plan (SSP) and associated civil plans prepared by a Washington State licensed engineer will be prepared and submitted with the Land Fill and Grade permit applications for Work Areas 1 and 2. For work within the shoreline zone (Work Area 2D), the Shoreline Substantial Development Permit application will include a Preliminary Stormwater Proposal addressing all applicable Department of Ecology stormwater minimum requirements based on the WCC 20.80.630 (1)(c) modified threshold.

Existing wells will be protected to avoid damage and contamination during demolition in accordance with the Department of Ecology's regulations.

Delineated wetland boundaries have been marked with construction flagging. No construction equipment, material storage or other disturbance will be allowed within the wetland boundaries. Disturbance within wetland buffers will be limited to the minimum necessary to remove the buildings / structures slated for demolition.

Process water generated during demolition will be captured in Baker Tanks. Ecology's Industrial Section manages water quality for the site. Intalco will handle the process water from demolition in accordance with Ecology and the site's NPDES permit.

4. Plants

a. Check the types of vegetation found on the site:

- ☒ **deciduous tree: alder, maple, aspen, other**
- ☐ **evergreen tree: fir, cedar, pine, other**
- ☒ **shrubs**
- ☒ **grass**
- ☐ **pasture**
- ☐ **crop or grain**
- ☐ **orchards, vineyards, or other permanent crops.**
- ☒ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**
- ☐ **water plants: water lily, eelgrass, milfoil, other**
- ☐ **other types of vegetation**

The main plant (Work Area 1) is largely devoid of vegetation. There are several landscape strips in the parking areas and between the main facility and rail lines to the west that include some deciduous trees, shrubs, grass and weeds. There are also isolated patches of weeds and grass growing between each potroom structures.

Much of the area around the periphery of the site, including the area between the main plant and shoreline, is vegetated with native and non-native trees, shrubs and grasses. The vegetation in these areas will not be disturbed by the Project.

There are several wetlands located around the periphery of the site. Dominant plants in the wetlands

include creeping spike rush, common horsetail, soft rush, reed canarygrass, Douglas spirea, red alder and Sitka alder (Grette Associated 2024).

b. What kind and amount of vegetation will be removed or altered?

No vegetation is proposed for removal or alteration.

c. List threatened and endangered species known to be on or near the site.

The project site is situated within an industrially area with a fully developed industrial footprint. No known threatened or endangered vegetative species are known to exist at the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.

There is no landscaping proposed. No measures to preserve or enhance existing vegetation on site is necessary.

e. List all noxious weeds and invasive species known to be on or near the site.

There are no known noxious weeds or invasive species on or near the site.

5. Animals

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site.

No natural habitats are present within the area planned for demolition. Some of the following animals have been observed within the vicinity of the demolition area or nearby wetlands or the Strait of Georgia.

Examples include:

- **Birds: hawk, heron, eagle, songbirds, other: osprey, other birds of prey, waterfowl**
- **Mammals: deer, bear, elk, beaver, other: marine mammals (orca, harbor seal, sea lion), small mammals (mice, voles, moles, etc.)**
- **Fish: bass, salmon, trout, herring, shellfish, other:**

b. List any threatened and endangered species known to be on or near the site.

Based on the USFWS IPaC online mapping tool and information received from NOAA Fisheries for other recent projects, the following threatened and endangered species may be present in the vicinity of the project:

- Bocaccio rockfish (*Sebastes paucispinis*) – Endangered
- Coastal Puget Sound Bull Trout (*Salvelinus confluentus*) – Threatened
- Dolly Varden (*Salvelinus malma*) – PSAT
- Humpback whale (Megaptera novaeangliae) – 2 DPS's one Endangered, one Threatened
- Leatherback sea turtle (*Dermochelys coriacea*) – Endangered
- Marbled Murrelet (*Brachyramphus marmoratus*) – Threatened
- North American Wolverine (*Gulo gulo luscus*) – Proposed Threatened
- Puget Sound Chinook salmon (*Oncorhynchus tshawytscha*) – Threatened
- Puget Sound steelhead trout (*Oncorhynchus mykiss*) - Threatened
- Southern Resident killer whale (*Orcinus orca*) – Endangered

- Yellow-billed Cuckoo (*Coccyzus americanus*) – Threatened
- Yelloweye rockfish (*Sebastes ruberrimus*) – Threatened

None of the above-listed species have been observed at the site and suitable habitat is not present. However, some of the above listed species may be present in the Strait of Georgia or general project vicinity.

c. Is the site part of a migration route? If so, explain.

The site is within the Pacific Flyway bird migration route, which encompasses most of western Washington.

d. Proposed measures to preserve or enhance wildlife, if any.

No measures to preserve or enhance wildlife are proposed. The proposed project would have no negative impact on water quality, water supply, recreation, or aesthetics of the surrounding area. Extreme care would be taken to prevent any petroleum products, chemicals, or other toxic or deleterious materials from leaving the site and entering any of the nearby waterbodies. If a spill were to occur, work would be stopped immediately, steps would be taken to contain the material, and appropriate agencies would be notified.

e. List any invasive animal species known to be on or near the site.

There are no known invasive animal species on or near the site.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electricity, oil, gas, diesel, natural gas, and propane will be used for the proposed demolition via the demolition equipment and vehicles needed to complete the project. The completed demolition project will decrease energy usage on the property.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No. There are no known adjacent properties with existing solar uses and the project will not affect the potential for adjacent properties to use solar energy in the future.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

No energy conservation features have been identified as needed, and none are proposed.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.

A demolition Asbestos and Lead Paint Survey Report (TRC, January 2023) and Hazardous Materials Survey Report (TRC, January 2023) have been prepared for structures within the project area. The surveys identify the materials by specific structure. Potential wastes that may be present include asbestos, lead-paint, residual smelter materials, mercury/sodium vapor, polychlorinated biphenyls

(PCBs) and elemental mercury (liquid).

1. **Describe any known or possible contamination at the site from present or past uses.**

There are three closed landfills in the northern plant area and one to the west of the facility. These facilities were closed in accordance with a consent decree with the State of Washington. The landfills are located outside of the Project Area and will not be reopened, modified or otherwise disturbed as part of the Project. The existing leachate containment systems will not be disturbed. Leachate from the existing landfills is currently captured and treated onsite. Intalco is working with Ecology on a revision to the Closure/Post Closure Plan for alternative post demolition leachate management.

Intalco is working with Ecology's Industrial Section under MTCA and will coordinate directly with Ecology regarding any known or potential contamination relating to or identified during demolition.

2. **Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.**

See the response to 7.a (above).

Both underground and above ground natural gas piping is present throughout Work Area 1. A natural gas utility demolition drawing has been submitted with the demolition permit application and is available upon request.

3. **Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.**

See the response to 7.a (above).

4. **Describe special emergency services that might be required.**

No special emergency services will be needed.

5. **Proposed measures to reduce or control environmental health hazards, if any.**

- All identified or assumed asbestos-containing materials (ACMs) will be removed by a licensed asbestos abatement contractor[4] in accordance with all applicable federal, state, and local regulations prior to the demolition of structures.
- All asbestos abatement will be performed in accordance with applicable regulations, standards and generally accepted environmental and safety practices including Federal OSHA (29 CFR1910.1001), WISHA Chapter 296-65, EPA NESHAPS (40 CFR Part 61), and TSCA Title II AHERA/ASHARA (40 CFR Part 763) Asbestos Regulations and are consistent with accepted principles and practice established and prescribed with the EPA Approved AHERA Project Designer's Certification. Abatement of the identified ACMs must be performed prior to initiating any demolition activities on that structure.
- Asbestos containing material, solid wastes and hazardous waste will be disposed of offsite at permitted disposal facilities.

[4] While multiple asbestos subcontractors may be used, it is more typical to use a nationwide asbestos abatement contractor for this type of work. It is anticipated that there will only be one asbestos abatement permit for the site. The asbestos work will be managed by the overall demolition contractor. The asbestos abatement permit would be obtained from NWCAA (or Ecology depending on timing), whereas the demolition permit would be obtained from Whatcom County.

- Any materials uncovered during demolition activities that are not addressed in the TRC survey will be sampled by an accredited asbestos inspector prior to disturbance, or they will be treated as asbestos-containing.
- Painted surfaces are assumed to contain lead-based or lead-containing paint and therefore will be handled and managed in accordance with all applicable federal, state, and local regulations during demolition activities.
- Prior to demolition all building utilities (electrical, natural gas, propane, water, plant air) will be isolated so that a zero-energy state exists within each building.
- Buildings and structures will be cleaned of equipment, materials, dust and wastes prior to demolition activities. Prior to demolition activities, process materials, universal and electronic wastes, freon containing equipment, regulated waste materials, ACMs, residual products, oil and grease, loose debris, baghouse/dust collector filter bags and dust from the interior of the building structures (particularly the Paste Plant, Cast House and Potrooms) will be removed and properly managed at offsite facilities. The methods used will minimize the use of water and the generation of additional waste streams.
- Residual process materials and dust will be removed from buildings and structures to a level defined as "Broom Cleaned".
- Concrete that is stained or otherwise contaminated will be removed from the site for offsite disposal in a permitted facility.
- All regulated and unregulated materials will be handled in accordance with applicable state and federal guidelines and comply with environmental regulations pertaining to waste handling, characterization, manifesting, tracking, transportation (proper loading, tarping etc.) and disposal (proper segregation of wastes etc.). This includes any permits or notifications required for abatement of ACM.
- Building materials and electrical equipment containing PCBs will be managed and disposed of according to EPA TSCA and Washington WAC regulations.
- In the event of a release of hazardous substances that may be a threat to human health or the environment is discovered during demolition work, Ecology will be notified in accordance with WAC 173-340-300.
- Work will not encroach into the limits of any of the closed landfills located around the perimeter of the site.

b. Noise

1. **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

None.

2. **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?**

Noise levels will increase during construction from machinery and equipment being operated during

normal work hours. There will be no long-term changes to noise.

3. Proposed measures to reduce or control noise impacts, if any.

The Project will be performed in accordance with County requirements for noise.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The Intalco property is located within a Major/Port Industrial UGA designation and is zoned for Heavy Impact Industrial uses. Industrial use and operations of the facility were curtailed in 2020, and the facility was officially closed in March 2023 and is no longer operating.

The adjacent properties to the north are mostly mowed and maintained grass upland, with wetland areas interspersed. There is a BPA transmission line that extends to the north from the BPA substation, with its associated cleared transmission easement.

The adjacent properties to the east are mostly undeveloped with several large wetland areas.

The adjacent properties to the south are mostly undeveloped with several large wetland areas. Located further south are the Conoco Phillips and AltaGas industrial properties.

AltaGas owns the trestle and wharf located immediately west of the property.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

The site has been in industrial use since the 1960s. The smelter was constructed between 1966 and 1969 and all three potlines were fully operational by 1974. Prior to the 1960s it is unknown if the site was used for agricultural purposes.

There will be no agricultural or forest land of long-term commercial significance converted to other uses with this proposal.

1. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?

No, the demolition proposal will not affect or be affected by surrounding working farm or forest land operations.

c. Describe any structures on the site.

Facility buildings and structures generally include the three Potlines (A, B and C), anode production facility, Ingot casting complexes, and bulk material loading/unloading facilities. The demolition drawings illustrate the layout of buildings and structures on the site.

d. Will any structures be demolished? If so, what?

Most of the buildings and structures will be demolished. There are approximately 110 buildings, tanks, structures and equipment slated for demolition as part of the Project (approximately 90 in Work Area 1

and 20 in Work Area 2). Figure 3 presents an illustration of the facility structures, buildings and equipment to be removed. Buildings to remain are highlighted in yellow.

e. What is the current zoning classification of the site?

Whatcom County Title 20 Zoning – Heavy Impact Industrial (HII)

f. What is the current comprehensive plan designation of the site?

Whatcom County Comprehensive Plan Designation – Major/Port Industrial UGA

g. If applicable, what is the current shoreline master program designation of the site?

Whatcom County Shoreline Master Program Designation – Cherry Point Management Area

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Yes, the Strait of Georgia is classified as a critical area by Whatcom County. It is a protected shoreline, mapped geologically hazardous area, and mapped base flood elevation area by FEMA.

Whatcom County's Article VI – Wetland map[5] and the National Wetland Inventory online mapping tool[6] also recognize several freshwater wetlands surrounding the project area.

i. Approximately how many people would reside or work in the completed project?

No residences are proposed.

A peak of approximately 50 workers would be on site during the most active phases of the demolition activities.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any.

There are no displacement impacts and no measure are needed.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

The Project is compatible with both the zoning and Comprehensive Plan Designation of the site. No change in land use or projected land use plans are required. Any future uses or development at the property would be subject to a separate SEPA review process.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any.

There are no known agricultural or forest lands of long-term commercial significance within the project area and no impact avoidance measures are proposed.

[5] Whatcom County. 2016. Article VI – Wetlands [map]. Whatcom County Critical Areas Ordinance Maps, Whatcom County GIS. URL: https://www.whatcomcounty.us/DocumentCenter/View/1838/Wetlands-PDF?bidId=.

[6] U.S. Fish and Wildlife Service (USFWS). 2023. Wetland Mapper [map online]. National Wetlands Inventory. Queried April 21, 2023. URL: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any.

None proposed.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

There are no new structures proposed.

b. What views in the immediate vicinity would be altered or obstructed?

Views in the immediate vicinity would be altered by removing buildings and structures.

c. Proposed measures to reduce or control aesthetic impacts, if any.

None needed.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any.

None needed.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Lake Terrel and the associated Whatcom Wildlife Area are located approximately 1 mile north east of the facility and are used for hunting, fishing and animal watching. Recreational fishing also occurs in the Strait of Georgia.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.

None needed.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

The facility was constructed between 1966 and 1969 and the majority of the buildings are over 45 years old. Two historic building inventories were prepared (one for the aluminum smelter and one for the former Kynell property) and submitted to the Washington Information System for Architectural and Archeological Records Data (available on DAHP's WISAARD #2024-06-04132 and 2024-05-03621, respectively). The inventories included evaluating all buildings for eligibility for listing in the register for historic places on Historic Property Inventory Forms.

AECOM evaluated historic-age buildings, structures, sites, and districts for potential historical significance using the Criteria for Evaluation from the National Register of Historic Places (NRHP).

The Kynell family purchased the property in 1946 and constructed a house, two barns, and associated agricultural facilities. The Kynells sold the property in 1963, and Intalco LLC purchased the property to construct an aluminum plant in 1964. The survey identified seven resources constructed during the period of significance (1946-1963) and one resource constructed in the early 2000s. Of the seven historic resources, only two are extant, the gambrel barn and monitor barn. Most of the resources associated with the Kynell property have been demolished; these significant alterations diminished the property's integrity. Based on a comparative analysis of barns in Whatcom County, the gambrel barn and monitor barn are not an unusual plan, related to innovations in agricultural practices, nor associated with an important event or eminent.

The aluminum plant was originally constructed in 1966, with an additional potline constructed in 1968 to expand capacity. Additional alterations were made in the 1970s through the 1990s to address pollution reduction. The SEPA process requires an evaluation of properties over 45 years old for eligibility in the NRHP. The Intalco Aluminum Plant is eligible as a historic district for the NRHP under Criteria A and C with a period of significance of 1966 to 1968. The survey identified 19 contributing and 14 non-contributing resources. The eligible district is significant under Criterion A in the area of Industry. The facility's buildings collectively and cohesively convey their association with aluminum processing and production that occurred through the 1960s. The district is significant under Criterion C in the area of Engineering. As an example of a mid-century aluminum reduction plant and aluminum product manufacturing facility, the property illustrates the development of the aluminum industry in the Pacific Northwest following World War II (WWII). Prior to demolition, the Intalco Aluminum Plant retains sufficient integrity of location, setting, design, workmanship, feeling, and association to convey its significant association with the mid-twentieth-century development and growth of the aluminum industry in the Pacific Northwest.

Facility buildings, structures and equipment are presented on Figure 2.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None known. Archaeological sites are not expected within the vertical limits of the Project because excavation is not proposed to extend beyond the limits of the existing building foundations. Building foundations and other concrete structures present below a depth of three (3) feet below grade will be left in place.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

- Review of project plans and as-built drawings of structures to be removed.
- Web search of the National Register of Historic Places (NPS 2023), and Washington Department of Archaeology and Historic Preservation WISAARD map (DAHP 2023).
- Historic building inventories have been prepared and submitted to WISAARD. The inventories included evaluating all buildings for eligibility for listing in the register for historic places on Historic Property Inventory Forms.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

- Ground disturbance beyond a depth of 3 feet and within the immediate vicinity of existing building foundations (i.e., soils within a few inches of the foundations) is not proposed.
- The floors of below grade structures deeper than 3 feet will be permeated and left in place.
- Demolition of the majority of the aluminum plant's historic resources will adversely impact the historic district. To mitigate for the impact, the applicant has completed historic building inventories for the site and the former Kynell property and submitted the recordation of the aluminum plant to DAHP and the Whatcom Museum (WISAARD #2024-06-04132 and 2024-05-03621, respectively).
- The Project includes a Cultural Resource Management Plan (including an Inadvertent Discovery Plan; AECOM 2024[7]) that describes materials that may be protected by law and protocol for how cultural material and human remains will be handled. Contractors and workers will be informed to immediately stop work and secure the location if artifacts of historical or cultural importance are found. If any are found, the DAHP and the project's Tribal Liaisons will be consulted for guidance.
- Intalco and the demolition contractor will have environmental compliance staff on site overseeing excavations for the Project.
- The totem at Intalco Aluminum Plant entrance will be donated to the Whatcom Museum.

[7] AECOM. 2024. Cultural Resource Management Plan: Intalco Aluminum Plant Whatcom County, Washington. Prepared for Intalco Aluminum LLC. October 2024.

NAS 02/18/2025

- Historical items will be offered to the Whatcom Museum.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The facility is accessible via Mountain View Road.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Whatcom Transportation Authority provides transit service to Ferndale (Route 27). The nearest transit stop is located approximately 4 miles east of the site on Mountain View Road and Meadow View Court.

c. How many parking spaces would the completed project have? How many would the project eliminated?

All existing parking areas will be removed as part of the completed project. Overall, the Project will eliminate approximately 750 parking spaces.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

A series of Burlington Northern Rail Road spur tracks run through the facility to the west and south of the Project area. Decommissioning of the aluminum storage area, including three existing silos, will occur landward of and adjacent to the AltaGas wharf. No waste material hauling or other marine vessel transport is proposed as part of the Project.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

Approximately 260,000 cubic yards of material will be exported from the site, including all concrete, demolition debris, recyclables and industrial waste. Materials to be moved off site will be transported using either truck or rail (both are available at the site), however given the likely facilities (Ferndale, Bellingham, Tacoma, East Wenatchee, WA or Arlington, OR), it is anticipated that truck hauling would be preferential. Up to 5,000 cubic yards of clean backfill will be imported to fill the voids left after demolition of the three silos located within the shoreline area and closure of an on-site septic system. The clean local backfill source has not yet been identified and will meet by the Department of Ecology requirements.

A *Whatcom County Preliminary Traffic and Concurrency Information Form* (October 2024) and *Whatcom County Hauling Operations Questionnaire* (October 2024) have been prepared addressing traffic impacts during demolition and site cleanup, including an estimate of the number of trucks

entering and leaving the site, routes to be used to and from the disposal sites and duration of the haul activities. Overall, total vehicle trips and truck traffic during demolition is anticipated to be less than truck traffic levels during plant operation.

A small maintenance and security crew will remain on site once the demolition work is complete and prior to property transfer to Alta Gas.

g. Proposed measures to reduce or control transportation impacts, if any.

Truck traffic generated during demolition activities will be instructed to avoid Main Street, in Ferndale. Trucks and other traffic accessing I-5 will be directed to use Slater Road.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

None expected. The existing site fire suppression and response system will be kept in place around the perimeter of the demolition area. Fire water will be maintained. Contractors will have water trucks on-site during demolition for fire response and dust abatement. The contractors will have minor first aid response capabilities but will continue to rely on Whatcom County Fire District 7 (WCFD 7) and Whatcom Medic 1 should the need for EMT, paramedics or major fire response be needed. Prior to the initiation of work, a meeting will be held with WCFD 7 personnel to familiarize them with the project, the proposed activities, phasing and timing. An Intalco general site supervisor will be on-site at all times who will be aware of what and where activities are occurring and would be able to direct emergency personnel.

The majority of the demolition work will be performed mechanically and using cranes, however there will be some “hot work” (work requiring torch cutting). No pyrotechnics will be used as part of demolition.

Although the wharf is owned by AltaGas, an access route to the shoreline areas will be maintained and fire water will be made available within the shoreline area. The wharf is not rated for WCFD 7 equipment.

The facility currently has 24-hour site security and this security would be maintained throughout the demolition activities and up to the time of property transfer to AltaGas.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Proposed measures to avoid or minimize need for public services include the following:

- All provisions of the UFC and WCFMO standards for demolition of an industrial site will be followed.
- Fire hydrants that remain on site will be maintained, repaired, and tested annually per NFPA 25.
- Contractors will have water trucks on-site during demolition for incident response.
- Fuel tank systems will be inspected and tested annually or removed under fire permit if the systems are not used in one year.
- Applicable protocols for “hot work” will be followed.
- Access routes for emergency medical and fire will be identified and maintained throughout demolition. This includes identified emergency response routes to the wharf and Totem Terrace.

- Prior to the initiation of work, coordination will continue with Fire District 7 personnel, Intalco and the demolition contractor regarding the emergency response plan, site access, and project schedule.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No new utilities are proposed. Prior to demolition of equipment, structures or buildings, the existing utilities will be isolated. Termination points will be verified to ensure they are isolated at a point outside the building footprint and will not be disturbed during demolition.

Electrical: The existing electrical substation will be demolished. The site currently is disconnected from the BPA substation.

Sewage Disposal: The main plant is served by a sanitary sewer system and sanitary lagoon. This system will be removed under an Ecology approved closure plan. Portable restroom facilities will be provided by the Contractor for their project work. Parcel #186709 (Work Area 2) has an onsite sewer system that serves an office and storage room. This sewer system will be abandoned in accordance with Whatcom County Code (24.05.190) and WAC Chapter 246-272A-0300.

Water Supply: The site is served by the Intalco Aluminum Corporation Public Water System ID # 35800E which is supplied by PUD #1. There are 2 existing wells in the demolition area, well #3 and well #5. Well #5 provides 500 gpm and is used as a back-up to the PUD water system. The water system will be preserved for future use and neither well is proposed to be impacted by the project. The treatment for potable water will be removed during demolition. Potable water will be provided by the contractor for their employees. Intalco will provide potable water for their employees.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

x _____

Type name of signee: Kristin Gaines

Position and agency/organization: Director, Transformation – Western US

Date submitted: 10/4/2024

NAG 02/18/2025

INTALCO SITE WIDE DEMOLITION PROJECT - VICINITY AND PARCEL MAP -

WORK AREA 1 - 145.24 ACRES
PARCEL # 186715 - 145.24 ACRES

WORK AREA 2 - 67.36 ACRES
PARCEL # 186663 - 14.47 ACRES
PARCEL # 186684 - 23.45 ACRES
PARCEL # 186709 - 143.75 ACRES
PARCEL # 186714 - 56.56 ACRES

ADJACENT PROPERTY OWNERS:
1. ALUMET / INTALCO
2. BNSF
3. BONNEVILLE PWR ADM
4. PETROGAS WEST
5. PILLIPS 66 CO.

500 0 1,000
SCALE IN FEET

NORTH

Not to Scale

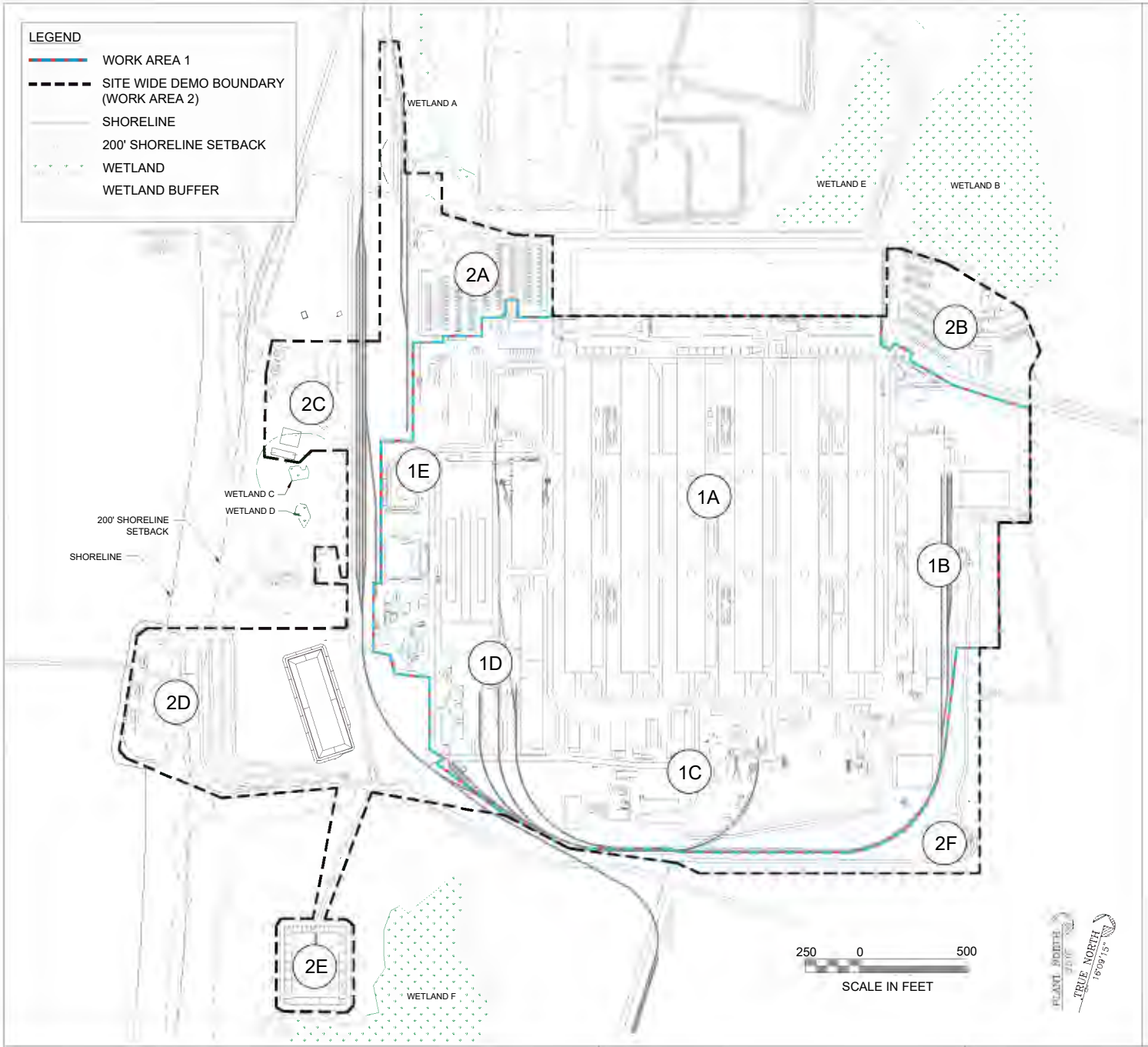
PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT: INTALCO ALUMINUM, LLC
SITE ADDRESS: 4050 MOUNTAIN VIEW ROAD
CITY: FERNDALE
STATE: WA
COUNTY: WHATCOM
S.T.R.: T39N, R1E, S20, S21, S28, S29

INTALCO SITE WIDE DEMOLITION PROJECT - VICINITY AND PARCEL MAP -

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS
151 South Worthen, Suite 101
Wenatchee, WA 98801
(509) 663-6300 | www.gretteassociates.com

FIGURE: 1
DATE: 10.4.24
REV: 2
CREATED BY: S.G.



Facility Buildings, Structures and Equipments

1A **Potlines and associated structures**
- Potlines
- Substations
- Emission control equipment

1B **Metal Casting and associated strucutres**
- Cast houses
- Guard house
- Medical buildings
- Storage builidngs
- Laboratory
- Associated structures and equipment

1C **Maintenance, warehouses, water treatment**
- Maintenance and engineering buildings
- Warehouses
- Water treatment facilities
- Compressor buildings

1D **Carbon plant and associated structures**
- Carbon bakes
- Greenmill
- Coke storage
- Pitch storage
- Rod mill
- Associated structures and equipment

1E **Water treatment, emission control and storage**
- Secondary water treatment
- Emission control systems
- Propane storage
- Associated structures and equipment

2A **Alumina storage and handling**
- Alumina silo
- Unloading building
- Associated structures and equipment

2B **Administration**
- Administration building
- Storage building
- Associated structures and equipment

2C **Outer buildings**
- Barns
- Temporary offices
- Fire training
- Associated structures and equipment

2D **Alumina storage**
- Alumina silos
- Allumina handling equipment
- Associated structures equipment

2E **Sanitary treatment area**
- Sanitary sewer lagoon
- Associated structures and equipment

2F **Water treatment**
- Water treatment building
- Water treatment tanks
- Associated structures and equipment

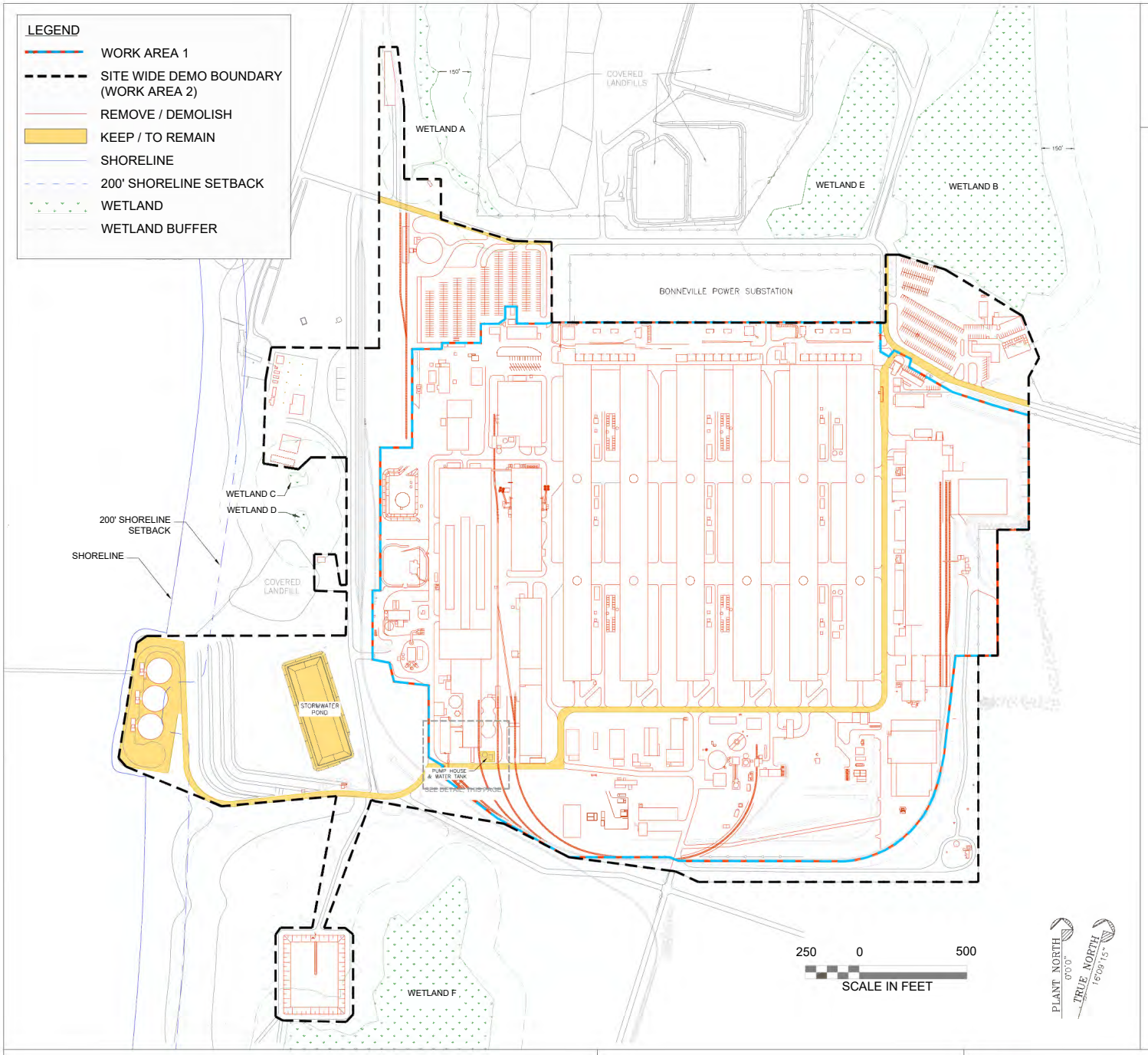
PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO SITE WIDE DEMOLITION PROJECT
- SITE PLAN -

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS
151 South Worthen, Suite 101
Wenatchee, WA 98801
(509) 663-6300 | www.gretteassociates.com

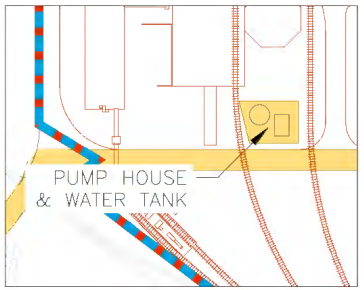
FIGURE: 2
DATE: 10.4.24
REV: 2
CREATED BY: S.G.



INTALCO SITE WIDE DEMOLITION PROJECT - DEMOLITION PLAN -

NOTE

- Within each of the two work areas:
  - Demolish most facility equipment, buildings and ancillary structures.
  - Remove most at or above grade concrete and asphalt paving.
  - Remove most below grade concrete structures foundations and footers to a depth of 3 feet below grade.
- The Project is demolition only and does not involve new development.
- Roads and structures identified to remain are highlighted in yellow.



N.T.S.

PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO SITE WIDE DEMOLITION PROJECT - DEMOLITION PLAN -

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS
151 South Worthen, Suite 101
Wenatchee, WA 98801
(509) 663-6300 | www.gretteassociates.com

FIGURE: 3
DATE: 10.4.24
REV: 2
CREATED BY: S.G.

northwest Clean Air agency
1600 South Second Street
Mount Vernon, WA 98273-5202
ph 360-428-1617
fax 360-428-1620
info@nwcleanairwa.gov
www.nwcleanairwa.gov

Asbestos / Demolition Notification Approval and Permit to Work

Whatcom County Planning and Development Services
Received
Received by: nsmith
May 8, 2025

Notification #	25-167
Received Date	03/24/2025
Approval Date	03/26/2025
Fee Amount	$ 2,295.00
Receipt #	665039

Project Site

Intalco
4050 Mountain Veiw Road
Ferndale, WA 98248
Onsite Supervisor Tracy McDaniel
Supervisor Phone (406) 490-6372

Project Details

Project Type Asbestos removal with demolition
Building Type Other Industrial
☐ **Emergency**
Asbestos Project **from** 05/01/2025 **to** 02/01/2026 **Work Schedule** M-F 6:00am-4:30pm
Estimated Demolition Date 05/01/2024
☑ **Survey**
Survey Link [Survey on file with NWCAA]
☐ **Owner Occupied Abatement**
Asbestos Locations Galbestos roofing on structures in area 1,2,3,5,&6 Work Plan to be sent with notification.
☐ **Class I** ☐ **Class II** ☐ **Vermiculite** ☐ **Non-friable Fee Exempt Material**
Type of Material Scheduled for Removal
Other: Galbestos roofing
Control Methods Other: approved alternate methods plan

Owner

Site Owner Alcoa
Owner Phone (360) 384-7532

Contractor

Envirocon Inc
101 International Drive
Missoula, MT 59808

Notification Contact Email tmcdaniel@envirocon.com

This notification must be posted at the work site.

You must file an amendment if there are any changes to the project scope or schedule.
<http://nwcleanairwa.gov/forms/asbestos-project-amendment/>
Information on asbestos and demolition can be found on the agency website.
<http://nwcleanairwa.gov/permits-and-services/asbestos-and-demolition/>
Asbestos disposal information
<http://nwcleanairwa.gov/download/disposal-information/>
NWCAA asbestos regulations can be found in Section 570 Asbestos Control Standards.
<http://nwcleanairwa.gov/regulation/section-550-590/section-570/>

Whatcom County
Planning and Development Services
5280 Northwest Drive
Bellingham, WA 98226
Phone 360-778-5900
Inspection 360-778-5902
epermits@co.whatcom.wa.us

Permit

Permit Number: **COM2024-00068**
Permit Type: **Building (Commercial)**
Commercial Permit
Work Classification: ***Alteration-TI***
Permit Status: **Issued**
Issue Date: **07/29/2025**

Location Address	Parcel Number
4050 MOUNTAIN VIEW RD 181562-, Ferndale, WA 98248	**3901294404010000**

Contacts

Mark Stiffler **Owner** (412)553-1658 mark.stiffler@alcoa.com	Intalco Aluminum LLC **Applicant** 4050 MOUNTAIN VIEW RD 181562-, Ferndale, WA 98248 (360)384-7532 kristin.gaines@alcoa.com
ENVIROCON INC **Contractor** PO BOX 16655, MISSOULA, MT 59808 ENVIRI*097J2 02/28/2026	

Construction Permit Details

Proposed Work: Intalco Main Plant Demolition - "Work Area 1". The Intalco Main Plant Demolition, designated as "Work Area 1" in the May 20, 2025 reviewed project narrative and in the approved site/grading plans, involves the removal of various structures and utilities within the Intalco Aluminum Smelter's main plant area. The scope of work includes the demolition of six potrooms, rectifiers, ancillary structures, anode production facilities, ingot casting facilities, support warehouses, and repair shops. Associated fill and grading activities are covered under the Whatcom County Land Fill and Grade Permit: LFG2024-00108.

Bldg. SQ. FT.

Original SF	0	Total Sq. Footage	0

Building Info

Number of Units	0

Set Back

Setback Front Ft.	100	Setback Rear Ft.	30
Setback Side1 Ft.	30	Setback Side2 Ft.	30

Site or Approval Info

Comp Plan Designation	MAJ/PORT-IND-UGA	Fire District	WHATCOM COUNTY FIRE DISTRICT #7
New Well Constructed after 1/19/2018	No	School District	FERNDALE SCHOOL DISTRICT #502
Shoreline	No	Urban Growth Area	COUNTY
Zoning	HII		

Pursuant to WCC 15.04, this permit will expire by limitation and become null and void if the work authorized under this permit is not completed in accordance with the permitted requirements within two (2) years of the date of issuance of this permit. A single, one (1) year extension may be granted to complete the authorized work under this permit if a written request is submitted to the Building Official prior to the original expiration date. An extension will only be granted if the permit holder has documented circumstances beyond their control have prevented the authorized work from being completed. A new permit

POST THIS PERMIT ONSITE WITH THE APPROVED PLANS
COMPLIANCE WITH ALL INSPECTIONS AND CONDITIONS REQUIRED PRIOR TO OCCUPANCY

ALL INSPECTIONS SHOULD BE SCHEDULED A MIMIMUM OF 1 BUSINESS DAY IN ADVANCE
Please schedule Inspections on the County's Permitting Portal

https://www.whatcomcounty.us/4547/Customer-Service-Portal

Whatcom County
Planning and Development Services
5280 Northwest Drive
Bellingham, WA 98226
Phone 360-778-5900
Inspection 360-778-5902
epermits@co.whatcom.wa.us

Permit

Permit Number: **COM2024-00068**

Permit Type: **Building (Commercial)**

Commercial Permit

Work Classification: ***Alteration-TI***

Permit Status: **Issued**

Issue Date: **07/29/2025**

Inspections

Inspection Type	Inspection Card (call inspections in the order they appear below)
Standard Inspections	***Contractors, please call or schedule your inspection in this ord***
Pre-Construction (Com)	
Stemwall	
Final Health - OSS	
Final Health - Water	
Final Development (PW)	
Final Flood	
Final Planning/Zoning	
Final Natural Resources	
Fire Final Inspection	
Final Building	

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COMPLIANCE WITH ALL INSPECTIONS AND CONDITIONS REQUIRED PRIOR TO OCCUPANCY

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https://www.whatcomcounty.us/4547/Customer-Service-Portal

Whatcom County
Planning and Development Services
5280 Northwest Drive
Bellingham, WA 98226
Phone 360-778-5900
Inspection 360-778-5902
epermits@co.whatcom.wa.us

Permit

Permit Number: **COM2024-00068**

Permit Type: **Building (Commercial)**

Commercial Permit

Work Classification: ***Alteration-TI***

Permit Status: **Issued**

Issue Date: **07/29/2025**

Condition Name	
1	**PW-Dev Custom** A pre-construction conference (pre-con) with County public works staff must occur preceding any construction/land clearing activities. The pre-con must include the contractor, Consulting Engineer, CESCL and other parties affected. Plan approvals and permits must be in hand prior to scheduling. The developer is responsible for coordinating and shall come prepared to address all applicable items specified per WCDS Ch.2 sec 205-B.3. The applicant should be prepared to provide documentation of coverage under the Department of Ecology (DOE) Construction Stormwater General Permit (CSWG) as applicable at the pre-con.
2	**Temporary Barricade Pipeline Protection Condition** Pipeline corridors shall be identified and protected during construction by placement of a temporary barricade and on-site notices.
3	**SEPA Mitigating Condition - Solid Waste and Testing - Concrete and Asphalt** Concrete and asphalt that contains asbestos, is painted, stained, coated and/or otherwise suspected to be contaminated shall be designated as either solid waste or hazardous waste and shall be disposed of at permitted and approved waste disposal sites that accept such waste materials.
4	**WET HCA Wetland** This site contains REGULATED WETLANDS AND BUFFER AREAS. The width of the protective buffer has been determined based on the category of wetland, wildlife habitat function score, intensity of land use, and the existing condition of the protective buffer. No disturbance or alteration of vegetation or soils is permitted within the wetland or buffer except as indicated in an approved Mitigation Plan on file with Whatcom County Planning and Development Services.
5	**BP Pipelines Protection Condition** The requirements identified in the July 10th, 2025 BP Pipelines letter shall be followed. A copy of the BP letter must be onsite at all times and all construction workers and equipment operators must be made aware of the requirements of said letter. A copy of the letter is uploaded to the Whatcom County's Customer Service portal under this permit record.
6	**Fire hydrants** Fire hydrants shall be maintained and accessible at all times during site demolition.
7	**SEPA Mitigating Condition - Fill Material and Soils Testing - Soil Stablization** All exposed soils within the project work areas shall be permanently stabilized with grass surfacing or other acceptable materials in conformance with Washington State Department of Ecology (Ecology) 2024 Stormwater Management Manual for Western Washington BMP C120: Temporary and Permanent Seeding, Volume II – Chapter 3.
8	**SEPA Mitigating Condition - Fill Material and Soils Testing - MTCA** The site is covered by the Model Toxics Control Act (MTCA) site-wide process managed by Washington Department of Ecology (Ecology), Cleanup Site ID 2280 and Facility/Site ID 16. The applicant shall develop a plan in accordance with MTCA for testing soils to be reused onsite. The plan shall be approved by Ecology. The applicant shall ensure coordination with Whatcom County Health and Community Services (WCHCS). Contaminated soils shall be disposed of at permitted solid waste handling facilities. In no event shall excavated soils (below the threshold of MTCA) be exported to a surface mine reclamation site for use as backfill.
9	**BS - IRC/IBC PLANS & INSP RECORD** Approved plans shall be kept on the building or work site at all times during which the work authorized thereby is in progress. Work requiring a permit shall not be commenced until the Inspection Record Card is posted or otherwise made available in a convenient location. (IRC Sections R105.7 & R106.3.1 / IBC Sections 105.7 & 107.3.1)
10	**SEPA Mitigating Condition - Progress Inspections** The project shall have an environmental compliance officer on-site when demolition is occurring. After permit issuance, the applicant shall request bi-monthly (every 60 days) progress inspections and submit written updates to Whatcom County PDS regarding compliance with permit conditions.
11	**SEPA Mitigating Condition - Sewage System - Tank Abandonment** Any on-site septic system that is proposed to be abandoned shall be abandoned in accordance with Whatcom County Code 24.05.190. A Tank Abandonment form shall be submitted to with WCHCS upon completion.
12	**Geologic Hazard Mitigation** 1. All recommendations presented in the professional report prepared by GeoEngineers, titled Revised Letter Report – Geological Hazardous Areas Site Assessment, dated November 13, 2024, shall be followed in their entirety. 2. A qualified professional shall monitor site grading and fill placement and compaction to ensure that native fill soils, and any required import fill soils, are sufficiently fine-grained and compacted to function as low-permeability fill with limited infiltration potential.
13	**SEPA Mitigating Condition Wetlands** Adjacent wetland boundaries and previously undisturbed wetland buffers shall be protected during site demolition work with the placement of construction fencing. No dirt spoils or heavy equipment shall be placed within undisturbed critical areas or buffers. Areas associated with removed buildings or other impervious surfaces within existing wetland buffers shall be hydroseeded with a Native Meadow Seed Mix in conformance with Washington State Department of Ecology (Ecology) 2024 Stormwater Management Manual for Western Washington BMP C120: Temporary and Permanent Seeding, Volume II – Chapter 3 after demolition has occurred.
14	**PW-Dev Custom** All completed improvements shall require acceptance via final site inspection performed by County Public Works prior to receiving any final inspection, temporary or final Building Certificate of Occupancy.

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Permit

Permit Number: **COM2024-00068**

Permit Type: **Building (Commercial)**

Commercial Permit

Work Classification: ***Alteration-TI***

Permit Status: **Issued**

Issue Date: **07/29/2025**

15 **Work Area 1 - Project Scope Condition** The scope of this project is for "Work Area 1" only as identified in the approved plans and reviewed project narrative. The Work Area 1 scope includes the Whatcom County Fill and Grade Permit: LFG2024-00108. Additional permits are required for any proposed demolition or grading outside of Work Area 1.

16 **SEPA Mitigating Condition - Geolotechnical Engineer Certification** Construction inspections shall be conducted and reported to Whatcom County PDS at significant junctures in the construction schedule as deemed necessary by the project geotechnical engineer to certify construction. Within one month of project completion, an as-built report prepared by the project geotechnical engineer certifying that all proposed geotechnical project elements have been installed in accordance with their design objectives shall be submitted to Whatcom County PDS for inclusion in the permit file.

17 **WET_HCA_Disposal of Waste** All debris from construction and operations shall be disposed of at an approved terrestrial disposal facility, outside of regulated areas.

18 **PW-Dev Custom** All development shall be in conformance with Whatcom County Development Standards (WCDS).

19 **SEPA Mitigating Condition - Haul Route** Hauling of construction waste materials shall follow the haul routes that were identified and approved in the Whatcom County Public Works - Engineering Services Haul Route agreement.

20 **SEPA Mitigating Condition - Solid Waste and Testing - NPDES Solid Waste Control Plan** The applicant shall follow the Ecology approved Solid Waste Control Plan as per the NPDES permit (WA0002950-2024). A copy of the Ecology approved Solid Waste Control Plan and any subsequent changes or revisions shall be provided to WCHCS.

21 **SEPA Mitigating Condition - Water Quality/Stormwater** Stormwater from the demolition area shall be collected and managed to ensure that no contaminated stormwater is illicitly discharged from the site. The applicant shall follow the Whatcom County approved Construction (Demolition) Stormwater Pollution Prevention Plan (CSWPPP). The applicant shall follow the Stormwater Pollution Prevention Plan, Construction Stormwater Pollution Prevention Plan, and Demolition Wastewater Plan in accordance with the Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) permit for the facility. The existing, onsite stormwater conveyance and treatment system shall remain operational throughout site demolition and after completion of the demolition work.

22 **SEPA Mitigating Condition - Solid Waste and Testing - Monthly Summary Report** All wastes (dangerous wastes, industrial wastes, asbestos-containing materials, demolition debris, universal wastes, solid wastes, etc.) and recyclables generated during the demolition project shall be removed from the project site and disposed of or recycled in properly permitted facilities. The applicant shall provide to WCPDS and WCHCS a monthly summary of materials removed from the site during demolition. The summary shall include the waste designation (as appropriate), facility receiving the recyclables or wastes, and quantity. This summary will be updated monthly during the demolition project.

23 **SEPA Mitigating Condition - Fire Marshal** Intalco Aluminum and/or the site contractors shall follow the Whatcom County Fire Marshal's approved Emergency Response Action Plan (ERAP) dated March 2025 for the duration of the project.

24 **SEPA Mitigation Condition - Solid Waste and Testing - Asbestos Survey Addendum** The applicant shall complete an addendum to their Asbestos Survey for Demolition for concrete and asphalt on site (floors, footings and foundations, etc.). The applicant shall use a professional asbestos firm and Asbestos Hazard Emergency Response Act (AHERA) inspector(s) to complete this work in accordance with Northwest Clean Air Agency (NWCAA) and Environmental Protection Agency (EPA) guidelines. The addendum shall be submitted to NWCAA and a copy provided to WCPDS and WCHCS.

25 **SEPA Mitigating Condition - Water Quality/Stormwater - Drainage Patterns** Existing stormwater drainage patterns and flow rates shall be maintained for areas that do not drain into existing stormwater facilities.

26 **SEPA Mitigating Condition - Archaeological Cultural Resources** Intalco Aluminum and/or its site contractors shall comply with the Cultural Resources Management Plan (CRMP), titled Cultural Resources Management Plan: Intalco Aluminum Plant, prepared by AECOM and updated in May 2025, and the Inadvertent Discovery Plan (IDP), titled Archaeological Inadvertent Discovery Plan – Intalco Site-Wide Decommission and Demolition Project, prepared by AECOM dated May 22, 2024. Compliance with both plans shall be maintained for the duration of the project. All management actions and recommendations contained in these reports shall be fully implemented.

27 **SEPA Mitigation Condition - Asbestos Removal** The applicant must adhere to the work plan, schedule, and alternate means of compliance plan as submitted to and approved by the NWCAA during the course of the demolition project. Any deviation from the plan must receive prior written approval by the NWCAA. The applicant shall provide WCPDS with a copy of the approved plan and any subsequent NWCAA approved revisions.

28 **PW-Dev Custom** Certified Record Drawings (as-builts) for the project completion shall be provided and approved by PW staff upon construction completion and prior to any Certificate of Occupancy or final inspection.

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Permit

Permit Number: **COM2024-00068**
Permit Type: **Building (Commercial)**
Commercial Permit
Work Classification: ***Alteration-TI***
Permit Status: **Issued**
Issue Date: **07/29/2025**

29 **WET_HCA_Temporary Impacts** All temporary disturbances within regulated areas depicted on site plan will be restored to natural conditions or better ecologically in a timely manner upon completion of construction. This restoration shall be accomplished with plants native to the Pacific Northwest. An as-built inspection shall occur for mitigation and all disturbed areas. All open space shall be restored prior to temporary occupancy.

30 **SEPA Mitigating Condition - Dust Control** Dust control Best Management Practices (BMP's) shall be implemented during site demolition work. Such measures include, but are not limited to, use of water trucks and equipment with water sprayers, sweeping paved areas and vehicle track out prevention. Building cleaning must be performed to remove loose materials prior to demolition.

31 **SEPA Mitigating Condition - Transportation - Haul Route Ferndale** Hauling of construction debris and fill shall not occur on or through Main Street in downtown Ferndale, WA

32 **Pipeline Protection Condition** No land disturbance is allowed within defined rights-of-way or easements of transmission pipeline corridors without the express written consent of the pipeline operator.

33 **WET_HCA_BMP** Applicable protective measures and Best Management Practices (BMP) shall be implemented prior to the beginning of work, and through completion of the construction, in order to minimize potential for adverse impacts to the natural environment.

34 **WET_HCA_Translocation of Debris** Best management practices shall be employed to minimize the tracking of sediment, debris, and chemical products into adjacent critical area habitats.

35 **SEPA Mitigation Condition - Demolition Noise** All demolition activities shall comply with the noise requirements of Washington State Administrative Code (WAC) 173-60.

36 **SEPA Solid Waste and Testing - Addendum Condition** The applicant shall complete an addendum to their Asbestos Survey for Demolition for concrete and asphalt on site (floors, footings and foundations, etc.). The applicant shall use a professional asbestos firm and Asbestos Hazard Emergency Response Act (AHERA) inspector(s) to complete this work in accordance with Northwest Clean Air Agency (NWCAA) and Environmental Protection Agency (EPA) guidelines. The addendum shall be submitted to NWCAA and a copy provided to WCPDS and WCHCS.

37 **SEPA Mitigating Condition - Solid Waste and Testing - Inert Waste Disposal** All clean inert waste concrete and asphalt shall be hauled off site and be delivered to solid waste handling facilities that accept recycled materials as approved by Ecology and/or WCHCS. Solid waste handling facilities that recycle these wastes must comply with WAC 173-350-320 Piles used for storage or treatment, and WAC 173-350-210 Recycling and material recovery facilities. Receiving sites shall also comply with all conditions of the applicable industrial stormwater general permit for the facility (such as a Sand and Gravel General Permit). No concrete or asphalt shall be buried at the approved solid waste handling facility sites.

38 **SEPA Mitigating Condition - Fill Material and Soils Testing - Fill and Grade Plans** Following building removal, disturbed areas shall be restored and/or filled by grading the site as per the Whatcom County Planning and Development Services (WCPDS) approved grading plans. Refer to Whatcom County Permit: LFG2024-00108.

39 **WET_HCA_Water Quality** No petroleum products or other deleterious materials shall enter surface waters.

40 **PW-Dev Custom** All work performed shall conform to the final approved Engineered Civil set and Stormwater report and shall be maintained per the approved Construction Stormwater Pollution Prevention Plan (CSWPPP) and Temporary Erosion and Sediment Control (TESC) Plan as applicable for the life of the project. Any revisions to the approved plans shall be submitted and administered as per WCDS Ch. 5 Sec 511-A.5 & WCDS Ch. 2 Sec 205-B.4.

41 **SEPA Mitigating Condition - Archaeological Cultural Resources - Totem Pole** The Lummi Nation Tribal Historic Preservation Office (LNTHPO) shall be consulted with regarding the final disposition of the story pole.

42 **BS - NWCAA - DEBRIS REMOVAL** Upon completion of demolition, the site must be left free of all debris and hazards.

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Whatcom County
Report Text Library:
Permit_Municipality_Address

Permit

Permit NO.: **LFG2024-00108** *Permit IVR Number:* **134138**
Permit Type: **Land Fill & Grade**
Work Classification: **Permit**
Permit Status: **Issued**

Issue Date: 07/29/2025

Expiration: 07/29/2027

Location Address	Parcel Number
4050 MOUNTAIN VIEW RD 181562-, Ferndale, WA 98248	**3901294404010000**

Contacts

Mark Stiffler **Owner**
(412)553-1658 mark.stiffler@alcoa.com

Intalco Aluminum LLC **Applicant**
4050 MOUNTAIN VIEW RD 181562-, Ferndale, WA 98248
(360)384-7532 kristin.gaines@alcoa.com

ENVIROCON INC **Contractor - GC**
PO BOX 16655, MISSOULA, MT 59808
(406)523-1150

Description: Intalco Main Plant Demolition - Fill and Grade Activities: "Work Area 1". This project involves fill and grade activities to be conducted following the demolition of buildings and structures within "Work Area 1" as identified on the approved grading plans at the Intalco Aluminum Smelter . Upon completion of demolition, former building foundations will be backfilled with on-site soils to reestablish a uniform ground surface. Demolition of structures within "Work Area 1" is authorized under Whatcom County Demolition Permit COM2024-00068.

Valuation: **$0.00**

Total Sq Feet: **0.00**

Inspection Requests:
Inspection_Phone

Fees	Amount
3% Technology Fee (P/P/C/L)	$12.60
5% Technology Fee (P/P/C/L) (2843)	$210.00
Grading Permit Application (8268) F / B / M	$420.00
Grading Permit Application (8268) F / B / M	$2,640.00
NR Technical Report Review (8247)	$420.00
NR Technical Report Review (8247)	$420.00
Stormwater Review/ENG Design Report (7167) C/M/B	$2,520.00
Traffic Analysis Review (7173) C / B / M	$700.00
Type I-Resub./Revision (2887)	$140.00
Total:	**$7,482.60**

Payments	Amt Paid
Total Fees	**$7,482.60**
CR Manual	$4,410.00
CR Manual	$3,072.60
Amount Due:	**$0.00**

Insert a permit notice prefix in the report text bank, entry: Permit_Notice_Prefix

Issued By: Nick Smith — July 29, 2025 Date

Permit_Signature_1 — Date

Permit_Signature_2 — Date

	Condition Name	Condition Requirement
1	**PW-Dev Custom**	All development shall be in conformance with Whatcom County Development Standards (WCDS).
2	**LU_Erosion Control**	Proper Erosion Control measures shall be installed prior to any land alteration and maintained throughout the entire land disturbance / construction process. Any evidence of sedimentation shall be controlled and kept on site.
3	**Fire Hydrants Condition**	Fire hydrants shall be maintained and accessible at all times during site demolition.
4	**LU_Designated Staging Area**	No dirt spoils or heavy equipment shall be placed or used within the regulated critical area or buffer / conservation easement without prior approval. Mitigation may be required for any inadvertent disturbance.
5	**SEPA Mitigating Condition - Water Quality/Stormwater**	Stormwater from the demolition area shall be collected and managed to ensure that no contaminated stormwater is illicitly discharged from the site. The applicant shall follow the Whatcom County approved Construction (Demolition) Stormwater Pollution Prevention Plan (CSWPPP). The applicant shall follow the Stormwater Pollution Prevention Plan, Construction Stormwater Pollution Prevention Plan, and Demolition Wastewater Plan in accordance with the Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) permit for the facility. The existing, onsite stormwater conveyance and treatment system shall remain operational throughout site demolition and after completion of the demolition work.
6	**LU_Mulching**	During the off-season (October 1 to May 31) all exposed soils shall be mulched per Whatcom County Standards and maintained through the off-season or until seeding or other stabilization methods are effective. In Water Resource Special Management Areas exposed soils shall be mulched through out the year.
7	**WET_HCA_Translocation of Debris**	Best management practices shall be employed to minimize the tracking of sediment, debris, and chemical products into adjacent critical area habitats.
8	**BS - NWCAA - DEBRIS REMOVAL**	Upon completion of demolition, the site must be left free of all debris and hazards.
9	**LU_Reseeding**	Reseeding of the area affected by the work detailed in this permit is required. Erosion and sediment shall be controlled and contained within the work area through best management practices until stabilization through revegetation can occur. Within regulated Critical Areas the seed source shall be native to the Pacific Northwest.
10	**SEPA Mitigating Condition - Haul Route**	Hauling of construction waste materials shall follow the haul routes that were identified and approved in the Whatcom County Public Works - Engineering Services Haul Route agreement.
11	**Geologic Hazard Mitigation**	1. All recommendations presented in the professional report prepared by GeoEngineers, titled Revised Letter Report – Geological Hazardous Areas Site Assessment, dated November 13, 2024, shall be followed in their entirety. 2. A qualified professional shall monitor site grading and fill placement and compaction to ensure that native fill soils, and any required import fill soils, are sufficiently fine-grained and compacted to function as low-permeability fill with limited infiltration potential.
12	**Temporary Barricade Pipeline Protection Condition**	Pipeline corridors shall be identified and protected during construction by placement of a temporary barricade and on-site notices.
13	**SEPA Mitigation Condition - Demolition Noise**	All demolition activities shall comply with the noise requirements of Washington State Administrative Code (WAC) 173-60.
14	**SEPA Mitigation Condition - Solid Waste and Testing - Asbestos Survey Addendum**	The applicant shall complete an addendum to their Asbestos Survey for Demolition for concrete and asphalt on site (floors, footings and foundations, etc.). The applicant shall use a professional asbestos firm and Asbestos Hazard Emergency Response Act (AHERA) inspector(s) to complete this work in accordance with Northwest Clean Air Agency (NWCAA) and Environmental Protection Agency (EPA) guidelines. The addendum shall be submitted to NWCAA and a copy provided to WCPDS and WCHCS.
15	**SEPA Mitigating Condition - Archaeological Cultural Resources - Totem Pole**	The Lummi Nation Tribal Historic Preservation Office (LNTHPO) shall be consulted with regarding the final disposition of the story pole.
16	**SEPA Mitigating Condition - Fire Marshal**	Intalco Aluminum and/or the site contractors shall follow the Whatcom County Fire Marshal's approved Emergency Response Action Plan (ERAP) dated March 2025 for the duration of the project.
17	**SEPA Mitigating Condition - Solid Waste and Testing - NPDES Solid Waste Control Plan**	The applicant shall follow the Ecology approved Solid Waste Control Plan as per the NPDES permit (WA0002950-2024). A copy of the Ecology approved Solid Waste Control Plan and any subsequent changes or revisions shall be provided to Whatcom County Health and Community Services (WCHCS).
18	**SEPA Mitigating Condition - Transportation - Haul Route Ferndale**	Hauling of construction debris and fill shall not occur on or through Main Street in downtown Ferndale, WA
19	**PW-Dev Custom**	All work performed shall conform to the final approved Engineered Civil set and Stormwater report and shall be maintained per the approved Construction Stormwater Pollution Prevention Plan (CSWPPP) and Temporary Erosion and Sediment Control (TESC) Plan as applicable for the life of the project. Any revisions to the approved plans shall be submitted and administered as per WCDS Ch. 5 Sec 511-A.5 & WCDS Ch. 2 Sec 205-B.4.
20	**Work Area 1 - Project Scope Condition**	The scope of this project is for "Work Area 1" only as identified in the approved plans and reviewed project narrative. The scope of this project is for "Work Area 1" only as identified in the approved plans and reviewed project narrative. The Work Area 1 scope includes the Whatcom County Demolition Permit: COM2024.00068. Additional permits are required for any proposed demolition or grading outside of Work Area 1.
21	**SEPA Mitigating Condition - Solid Waste and Testing - Monthly Summary Report**	All wastes (dangerous wastes, industrial wastes, asbestos-containing materials, demolition debris, universal wastes, solid wastes, etc.) and recyclables generated during the demolition project shall be removed from the project site and disposed of or recycled in properly permitted facilities. The applicant shall provide to WCPDS and WCHCS a monthly summary of materials removed from the site during demolition. The summary shall include the waste designation (as appropriate), facility receiving the recyclables or wastes, and quantity. This summary will be updated monthly during the demolition project.
22	**BP Pipelines Protection Condition**	The requirements identified in the July 10th, 2025 BP Pipelines letter shall be followed. A copy of the BP letter must be onsite at all times and all construction workers and equipment operators must be made aware of the requirements of said letter. A copy of the letter is uploaded to the Whatcom County's Customer Service portal under this permit record.
23	**SEPA Mitigating Condition - Fill Material and Soils Testing - Soil Stabilization**	All exposed soils within the project work areas shall be permanently stabilized with grass surfacing or other acceptable materials in conformance with Washington State Department of Ecology (Ecology) 2024 Stormwater Management Manual for Western Washington BMP C120: Temporary and Permanent Seeding, Volume II – Chapter 3.
24	**SEPA Mitigating Condition - Sewage System - Tank Abandonment**	Any on-site septic system that is proposed to be abandoned shall be abandoned in accordance with Whatcom County Code 24.05.190. A Tank Abandonment form shall be submitted to with WCHCS upon completion.
25	**LU_Temporary Fencing**	Prior to the onset of any earthwork, a high visibility/exclusionary construction fence or silt fence shall be placed at the outer edge of the regulated critical area buffer line to ensure that all work is contained in the approved work area.
26	**SEPA Mitigating Condition - Dust Control**	Dust control Best Management Practices (BMP's) shall be implemented during site demolition work. Such measures include, but are not limited to, use of water trucks and equipment with water sprayers, sweeping paved areas and vehicle track out prevention. Building cleaning must be performed to remove loose materials prior to demolition.
27	**WET_HCA_Disposal of Waste**	All debris from construction and operations shall be disposed of at an approved terrestrial disposal facility, outside of regulated areas.

28 **PW-Dev Custom** All completed improvements shall require acceptance via final site inspection performed by County Public Works prior to receiving any final inspection, temporary or final Building Certificate of Occupancy.

29 **PW-Dev Custom** A pre-construction conference (pre-con) with County public works staff must occur preceding any construction/land clearing activities. The pre-con must include the contractor, Consulting Engineer, CESCL and other parties affected. Plan approvals and permits must be in hand prior to scheduling. The developer is responsible for coordinating and shall come prepared to address all applicable items specified per WCDS Ch.2 sec 205-B.3. The applicant should be prepared to provide documentation of coverage under the Department of Ecology (DOE) Construction Stormwater General Permit (CSWG) as applicable at the pre-con.

30 **SEPA Mitigating Condition - Archaeological Cultural Resources** Intalco Aluminum and/or its site contractors shall comply with the Cultural Resources Management Plan (CRMP), titled Cultural Resources Management Plan: Intalco Aluminum Plant, prepared by AECOM and updated in May 2025, and the Inadvertent Discovery Plan (IDP), titled Archaeological Inadvertent Discovery Plan – Intalco Site-Wide Decommission and Demolition Project, prepared by AECOM dated May 22, 2024. Compliance with both plans shall be maintained for the duration of the project. All management actions and recommendations contained in these reports shall be fully implemented.

31 **WET_HCA_BMP** Applicable protective measures and Best Management Practices (BMP) shall be implemented prior to the beginning of work, and through completion of the construction, in order to minimize potential for adverse impacts to the natural environment.

32 **PW-Dev Custom** Certified Record Drawings (as-builts) for the completed project shall be provided and approved by PW staff upon construction completion and prior to any Certificate of Occupancy or final inspection.

33 **LU_ Excavation Waste** Any excess excavation waste or waste volume of any origin exported off site must be exported to a site with an ACTIVE LAND FILL AND GRADE PERMIT for the approved fill volume or a site with a current Washington State approved Reclamation Plan. Whatcom County Planning and Development Services will require documentation regarding the site location and current approval status.

34 **SEPA Mitigating Condition - Fill Material and Soils Testing - MTCA** The site is covered by the Model Toxics Control Act (MTCA) site-wide process managed by Washington Department of Ecology (Ecology), Cleanup Site ID 2280 and Facility/Site ID 16. The applicant shall develop a plan in accordance with MTCA for testing soils to be reused onsite. The plan shall be approved by Ecology. The applicant shall ensure coordination with Whatcom County Health and Community Services (WCHCS). Contaminated soils shall be disposed of at permitted solid waste handling facilities. In no event shall excavated soils (below the threshold of MTCA) be exported to a surface mine reclamation site for use as backfill.

35 **WET_HCA_Temporary Impacts** All temporary disturbances within regulated areas depicted on site plan will be restored to natural conditions or better ecologically in a timely manner upon completion of construction. This restoration shall be accomplished with plants native to the Pacific Northwest. An as-built inspection shall occur for mitigation and all disturbed areas. All open space shall be restored prior to temporary occupancy.

36 **SEPA Mitigating Condition - Water Quality/Stormwater - Drainage Patterns** Existing stormwater drainage patterns and flow rates shall be maintained for areas that do not drain into existing stormwater facilities.

37 **SEPA Mitigating Condition Wetlands** Adjacent wetland boundaries and previously undisturbed wetland buffers shall be protected during site demolition work with the placement of construction fencing. No dirt spoils or heavy equipment shall be placed within undisturbed critical areas or buffers. Areas associated with removed buildings or other impervious surfaces within existing wetland buffers shall be hydroseeded with a Native Meadow Seed Mix in conformance with Washington State Department of Ecology (Ecology) 2024 Stormwater Management Manual for Western Washington BMP C120: Temporary and Permanent Seeding, Volume II – Chapter 3 after demolition has occurred.

38 **SEPA Mitigating Condition - Progress Inspections** The project shall have an environmental compliance officer on-site when demolition is occurring. After permit issuance, the applicant shall request bi-monthly (every 60 days) progress inspections and submit written updates to Whatcom County PDS regarding compliance with permit conditions.

39 **SEPA Mitigating Condition - Geolotechnical Engineer Certification** Construction inspections shall be conducted and reported to Whatcom County PDS at significant junctures in the construction schedule as deemed necessary by the project geotechnical engineer to certify construction. Within one month of project completion, an as-built report prepared by the project geotechnical engineer certifying that all proposed geotechnical project elements have been installed in accordance with their design objectives shall be submitted to Whatcom County PDS for inclusion in the permit file.

40 **WET_HCA_Wetland** This site contains REGULATED WETLANDS AND BUFFER AREAS. The width of the protective buffer has been determined based on the category of wetland, wildlife habitat function score, intensity of land use, and the existing condition of the protective buffer. No disturbance or alteration of vegetation or soils is permitted within the wetland or buffer except as indicated in an approved Mitigation Plan on file with Whatcom County Planning and Development Services.

41 **LU_Notify of add fill/grade** Notify Whatcom County Planning and Development Services, Natural Resources Division - Inspector at (360) 778-5900 of any additional Fill and / or Grading to be included.

42 **SEPA Mitigating Condition - Asbestos Removal** The applicant must adhere to the work plan, schedule, and alternate means of compliance plan as submitted to and approved by the NWCAA during the course of the demolition project. Any deviation from the plan must receive prior written approval by the NWCAA. The applicant shall provide WCPDS with a copy of the approved plan and any subsequent NWCAA approved revisions.

43 **LU_Conformance with site plan** All activity on site shall be done in accordance with the site plan approved by the Whatcom County Planning and Development Natural Resources Division. Any alterations from the approved site plan will require further review by Planning and Development Services.

44 **SEPA Mitigating Condition - Solid Waste and Testing - Inert Waste Disposal** All clean inert waste concrete and asphalt shall be hauled off site and be delivered to solid waste handling facilities that accept recycled materials as approved by Ecology and/or WCHCS. Solid waste handling facilities that recycle these wastes must comply with WAC 173-350-320 Piles used for storage or treatment, and WAC 173-350-210 Recycling and material recovery facilities. Receiving sites shall also comply with all conditions of the applicable industrial stormwater general permit for the facility (such as a Sand and Gravel General Permit). No concrete or asphalt shall be buried at the approved solid waste handling facility sites.

45 **SEPA Mitigating Condition - Solid Waste and Testing - Concrete and Asphalt** Concrete and asphalt that contains asbestos, is painted, stained, coated and/or otherwise suspected to be contaminated shall be designated as either solid waste or hazardous waste and shall be disposed of at permitted and approved waste disposal sites that accept such waste materials.

46 **LU_Natural Drainage Patterns** Natural drainage patterns shall be maintained and discharges from the site shall occur at the natural location, unless it can be shown that relocation will have no significant adverse impact to either built or natural systems as a result of the relocation.

47 **Pipeline Protection Condition** No land disturbance is allowed within defined rights-of-way or easements of transmission pipeline corridors without the express written consent of the pipeline operator.

48 **LU_Clearing Limits** Project clearing limits shall be marked at the edge of the regulated critical area buffer to ensure that no impacts occur within regulated areas.

49 **LU_Other Agency Condition** Obtaining a County permit does not supersede other local, state or federal statutes and regulations that may apply to this permit.

50 **LU_BPA Easement** Portions of property include Bonneville Power Association Easements. Contact the Bonneville Power Association at 888-611-1746 BEFORE PROCEEDING.

51 **LU Disclosure Condition** Unless otherwise specified the construction of any improvements (e.g. accesses, roads, driveways, storm water facilities, etc.) approved by this permit are for the purpose of facilitating the clearing and or grading activities identified in the scope of this permit only. Approval of such construction activities shall not be construed as approval of improvements that may be associated with other future and or pending land use permits and or authorizations (e.g. short plats, long plats, binding site plans, conditional use permits, shoreline permits, variances, building permits, etc.). All work performed by applicant in advance of application approval and or issuance of other associated land use permits and or authorization (e.g. short plats, long plats, binding site plans, conditional use permits, shoreline permits, variances, building permits, etc.) are undertaken at the sole risk of the underlying property owner(s) and may be subject to modification.

Appendix B
Grette Associates Demolition Drawings

INTALCO MAIN PLANT DEMOLITION PROJECT - VICINITY AND PARCEL MAP -

MAIN PLANT (WORK AREA 1) - - - - -

PARCEL # 186715 - 145.24 ACRES

ADJACENT PROPERTY OWNERS:

1. ALUMET / INTALCO
2. BNSF
3. BONNEVILLE PWR ADM
4. PETROGAS WEST
5. PILLIPS 66 CO.

NORTH

500 0 1,000

SCALE IN FEET

Not to Scale

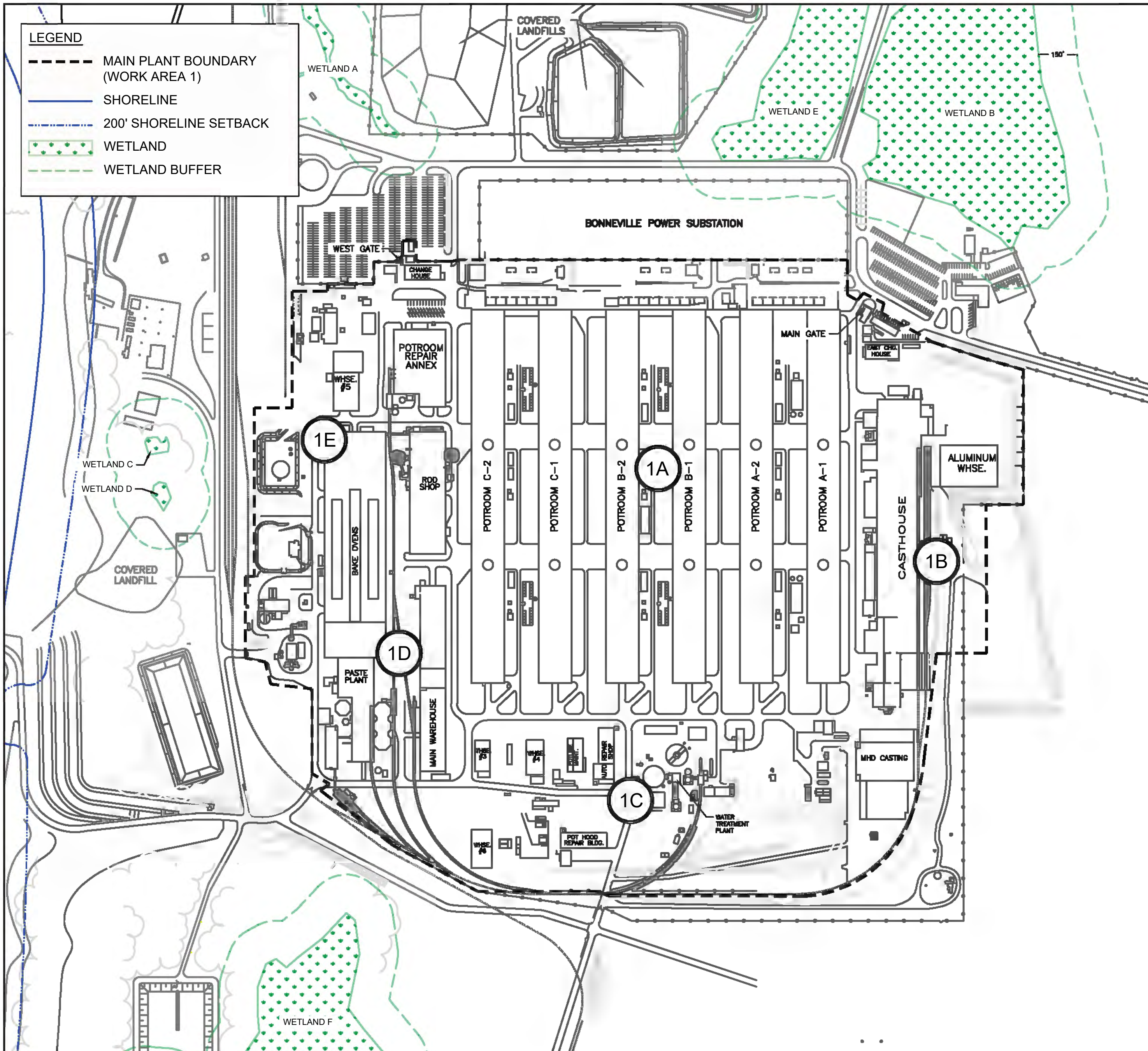
PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO MAIN PLANT DEMOLITION PROJECT - VICINITY AND PARCEL MAP -

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS
151 South Wenatchee, Suite 101
Wenatchee, WA 98801
(509) 663-6300 | www.gretteassociates.com

SHEET: 1 OF 7
DATE: 1.10.25
REV: 1
CREATED BY: S.G.



INTALCO MAIN PLANT DEMOLITION PROJECT - SITE PLAN -

Main Plant Buildings, Structures and Equipments

1A **Potlines and associated structures**
- Potlines
- Substations
- Emission control equipment

1B **Metal Casting and associated strucutres**
- Cast houses
- Guard house
- Medical buildings
- Storage builidngs
- Laboratory
- Associated structures and equipment

1C **Maintenance, warehouses, water treatment**
- Maintenance and engineering buildings
- Warehouses
- Water treatment facilities
- Compressor buildings

1D **Carbon plant and associated structures**
- Carbon bakes
- Greenmill
- Coke storage
- Pitch storage
- Rod mill
- Associated structures and equipment

1E **Water treatment, emission control and storage**
- Secondary water treatment
- Emission control systems
- Propane storage
- Associated structures and equipment

PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO MAIN PLANT DEMOLITION PROJECT - SITE PLAN -

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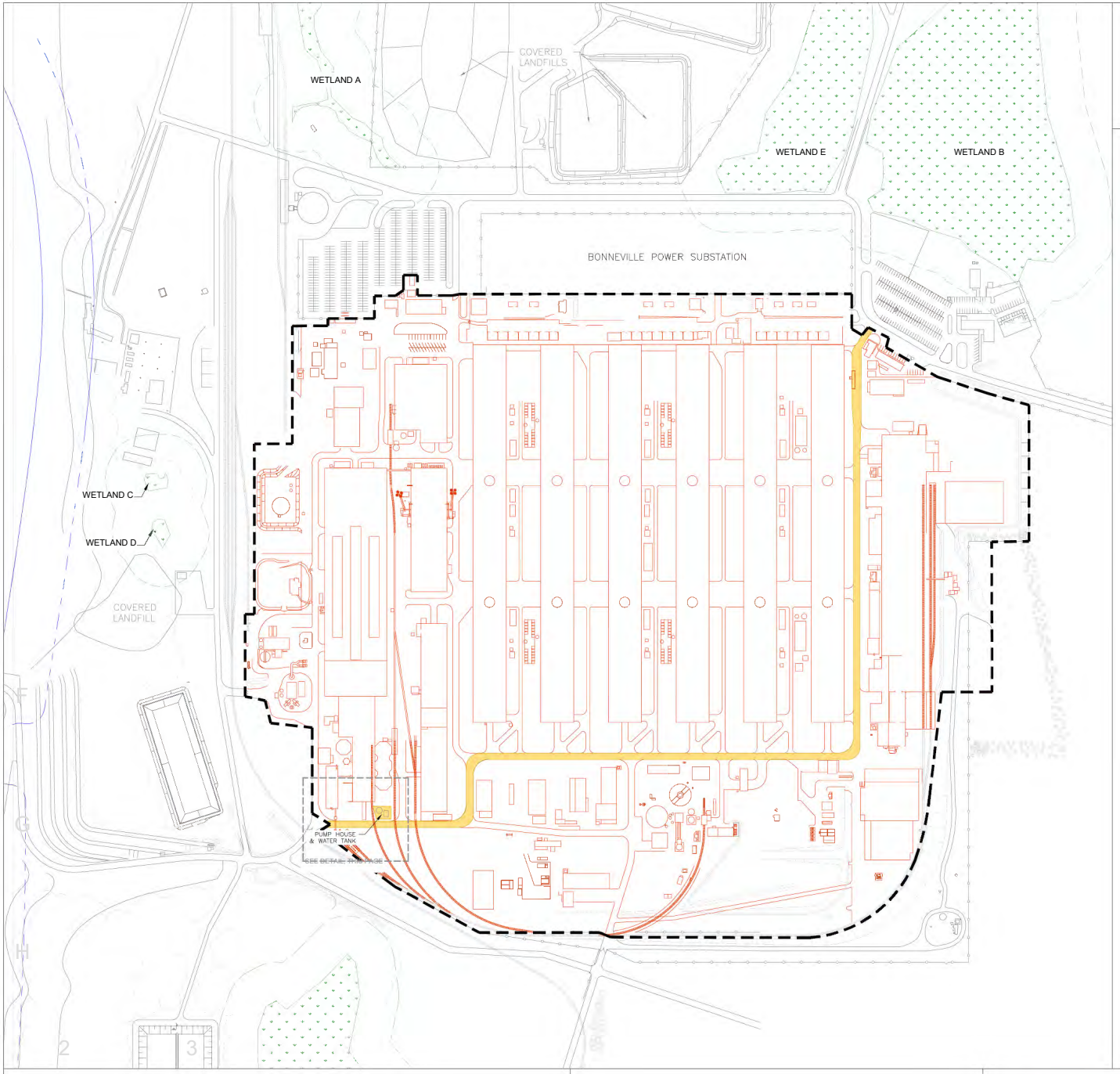
SHEET: 2 OF 7
DATE: 1.10.25
REV: 1
CREATED BY: S.G.



INTALCO MAIN PLANT DEMOLITION PROJECT - DEMOLITION PLAN -

LEGEND

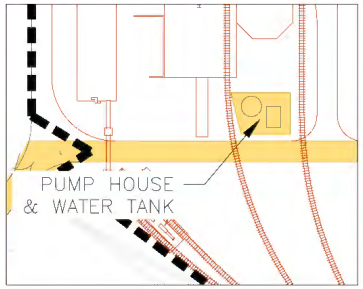
- MAIN PLANT WORK AREA 1
- REMOVE
- KEEP
- SHORELINE
- 200' SHORELINE SETBACK
- WETLAND
- WETLAND BUFFER

250 0 500
SCALE IN FEET

PLANT NORTH 0°0'0"
TRUE NORTH 16°09'15"

NOTE

- The Project involves demolishing facility equipment, buildings and ancillary structures, removal of most at or above grade concrete and asphalt paving and removal of most below grade concrete structures foundations and footers to a depth of 3 feet below grade.
- The Project is demolition only and does not involve new development.
- Structures identified to remain are highlighted in yellow.



N.T.S.

PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO MAIN PLANT DEMOLITION PROJECT - DEMOLITION PLAN -

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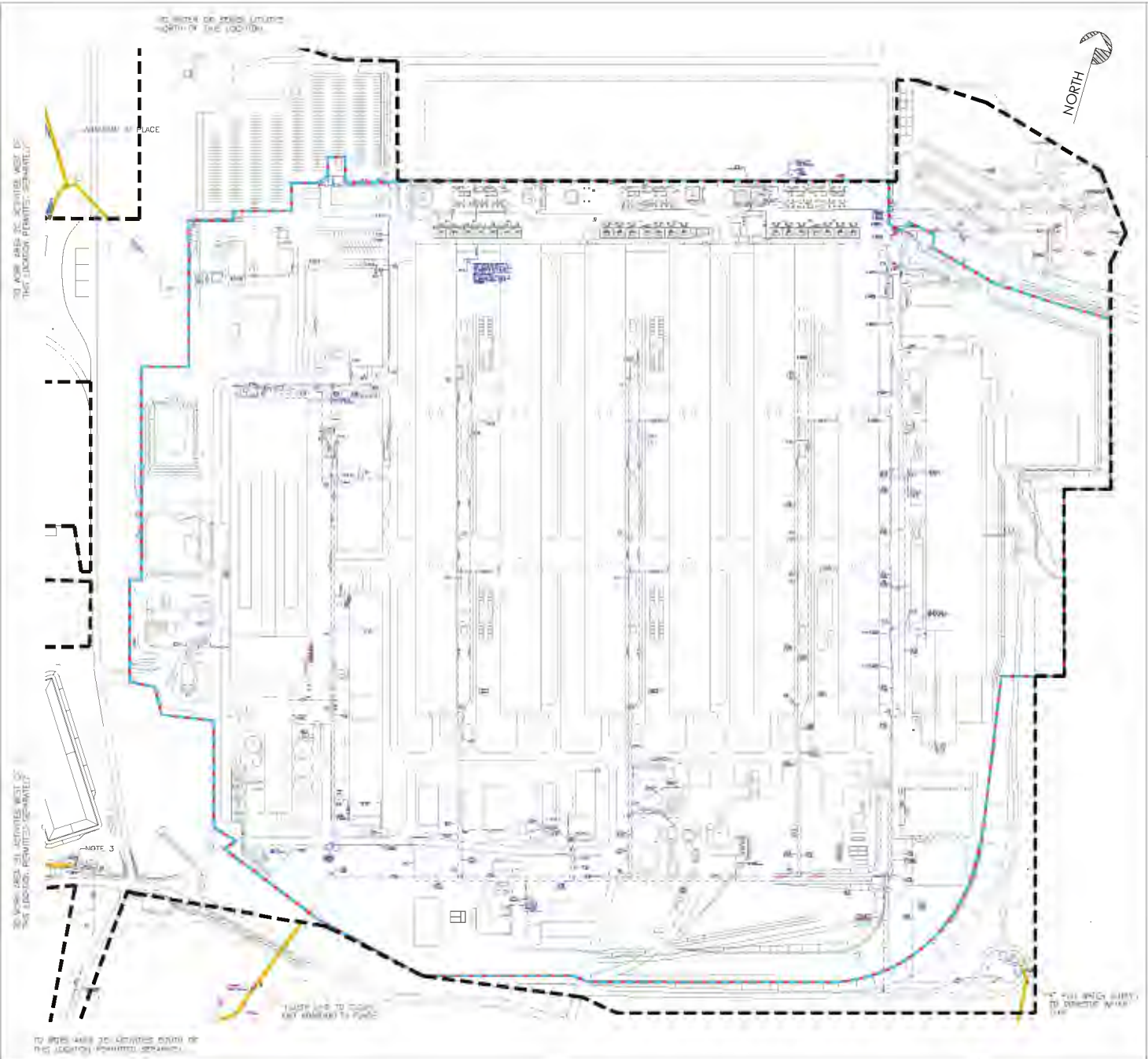
SHEET: 3 OF 7
DATE: 1.10.25
REV: 1
CREATED BY: S.G.



INTALCO MAIN PLANT DEMOLITION PROJECT - DOMESTIC WATER AND SANITARY SEWER DEMOLITION PLAN -

LEGEND

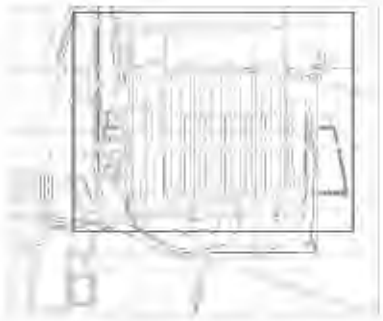
- MAIN PLANT (WORK AREA 1)
- WORK AREA 2 (FOR REFERENCE ONLY)
- SANITARY SEWER TO REMOVE
- SANITARY SEWER TO REMAIN
- DOMESTIC WATER (UNDERGRND) TO REMOVE
- DOMESTIC WATER TO REMAIN

NOTES

1. DEMOLISH ALL PLANT SEWER AND POTABLE WATER LINES TO 3 FEET BELOW GRADE. REMAINING LINES ABANDON IN PLACE.
2. ALL PLANT SEWER AND POTABLE WATER OUTSIDE OF WORK AREA 2 SHALL BE ABANDONED IN PLACE.
3. ABOVE GRADE PIPELINE WEST OF MANHOLE 220 TO REMAIN FOR STORMWATER CONVEYANCE TO OUTFALL 001.
4. DOMESTIC WATER SHUT OFF TO BE COMPLETED BY THE UTILITY PROVIDER AT THE METER.

250 0 500

SCALE IN FEET



PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO MAIN PLANT DEMOLITION PROJECT - DOMESTIC WATER AND SANITARY SEWER DEMOLITION PLAN -

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SHEET: 4 OF 7
DATE: 1.10.25
REV: 1
CREATED BY: S.G.

INTALCO MAIN PLANT DEMOLITION PROJECT - PROCESS AND FIRE WATER DEMOLITION PLAN -

LEGEND

- MAIN PLANT (WORK AREA 1)
- WORK AREA 2 (FOR REFERENCE ONLY)
- PROCESS AND FIRE WATER (UNDRGRND) TO REMOVE
- PROCESS AND FIRE WATER TO REMAIN
- ABANDONED (LINES VARY)
- CUT AND CAP LOCATIONS
- VALVES
- 2-NOZZLE HYDRANT
- HYDRANT W. PUMPER NOZZLE
- PIPE SLEEVE
- HYDRANTS TO BE REMOVED
- HYDRANTS TO BE RETAINED
  HYDRANTS ARE ALL IN AREAS OF <0.5' FILL. FIELD FIT GRADING TO RETAIN.
- HYDRANTS TO REMOVE AFTER DEMO
  HYDRANTS ARE IN AREAS OF DEEP PROPOSED GRADING. RETAIN HYDRANTS THROUGH DEMO. ONCE COMBUSTIBLES ARE GONE, REMOVE THESE HYDRANTS TO FACILITATE SITE GRADING AND RESTORATION.
- ROADS TO REMAIN FOR FIRE ACCESS

250 0 500

SCALE IN FEET

PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO MAIN PLANT DEMOLITION PROJECT - PROCESS AND FIRE WATER DEMOLITION PLAN -

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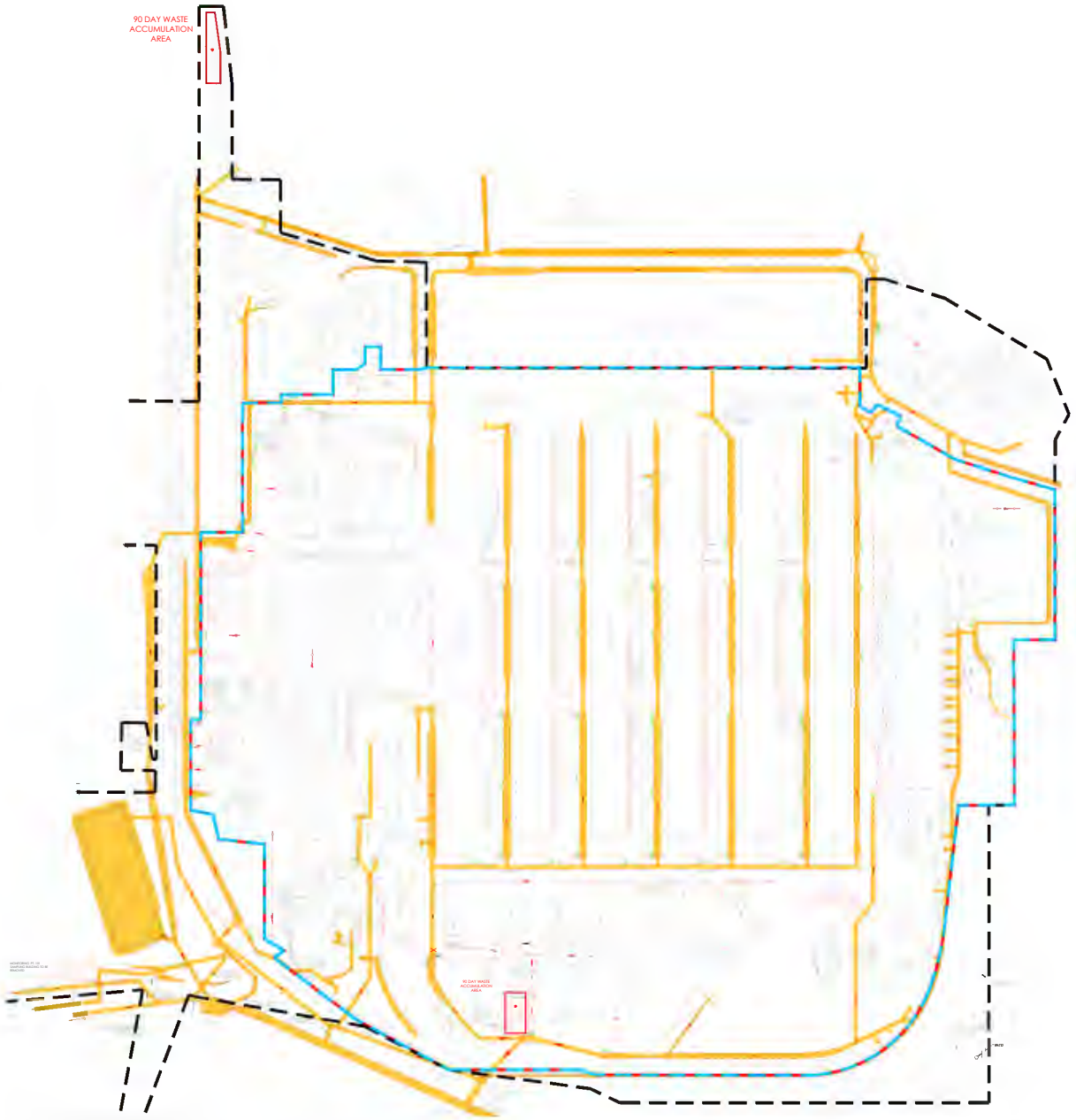
SHEET: 5 OF 7
DATE: 4.29.25
REV: 2
CREATED BY: S.G.



INTALCO MAIN PLANT DEMOLITION PROJECT - STORMWATER DRAINAGE TO REMAIN -

LEGEND

- MAIN PLANT (WORK AREA 1)
- WORK AREA 2 (FOR REFERENCE ONLY)
- DRAINAGE DITCHES
- UNDERGROUND STORM DRAIN
- DRAINAGE GRATES
- DRAINAGE TO REMAIN
- CUT AND CAP LOCATIONS

NORTH

250 0 500

SCALE IN FEET

PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO MAIN PLANT DEMOLITION PROJECT - STORMWATER DRAINAGE TO REMAIN -

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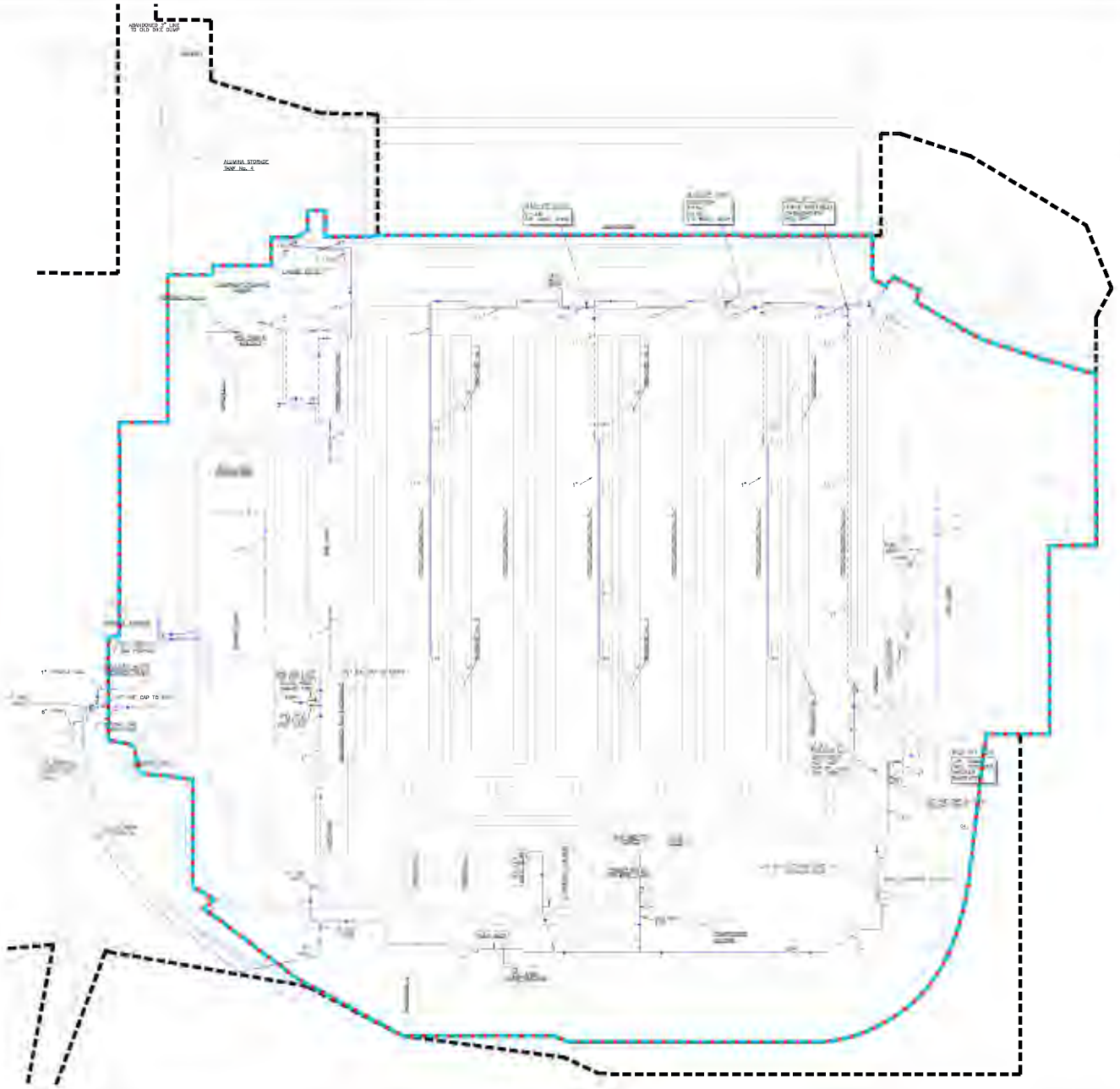
SHEET: 6 OF 7
DATE: 1.10.25
REV: 1
CREATED BY: S.G.



INTALCO MAIN PLANT
DEMOLITION PROJECT
- NATURAL GAS DEMOLITION PLAN -

LEGEND

- MAIN PLANT (WORK AREA 1)
- WORK AREA 2 (FOR REFERENCE ONLY)
- GAS PIPING, ABOVE GROUND, OUTDOORS
- GAS PIPING, UNDERGROUND
- GAS PIPING, ABOVE GROUND, INDOORS

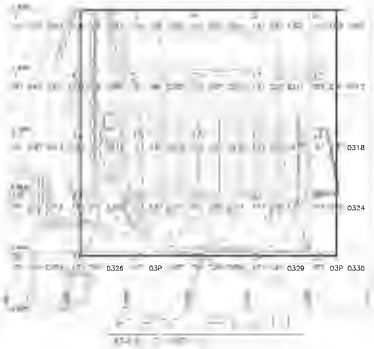
NOTE

DEMOLISH ALL PLANT NATURAL GAS LINES.
SHUT OFF TO BE COMPLETED BY THE UTILITY PROVIDER AT THE METER.

NORTH

250 0 500

SCALE IN FEET



PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO MAIN PLANT
DEMOLITION PROJECT
- NATURAL GAS DEMOLITION PLAN -

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SHEET: 7 OF 7
DATE: 1.10.25
REV: 1
CREATED BY: S.G.

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - VICINITY AND PARCEL MAP -

WORK AREA 1 (EXCLUDED)
PARCEL # 186715 - 145.24 ACRES

WORK AREA 2 - 67.36 ACRES
PARCEL # 186663 - 14.47 ACRES
PARCEL # 186684 - 23.45 ACRES
PARCEL # 186709 - 143.75 ACRES
PARCEL # 186714 - 56.56 ACRES

ADJACENT PROPERTY OWNERS:
1. ALUMET / INTALCO
2. BNSF
3. BONNEVILLE PWR ADM
4. PETROGAS WEST
5. PILLIPS 66 CO.

500 0 1,000
SCALE IN FEET

NORTH

Not to Scale

PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT: INTALCO ALUMINUM, LLC
SITE ADDRESS: 4050 MOUNTAIN VIEW ROAD
CITY: FERNDALE
STATE: WA
COUNTY: WHATCOM
S.T.R.: T39N, R1E, S20, S21, S28, S29

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - VICINITY AND PARCEL MAP -

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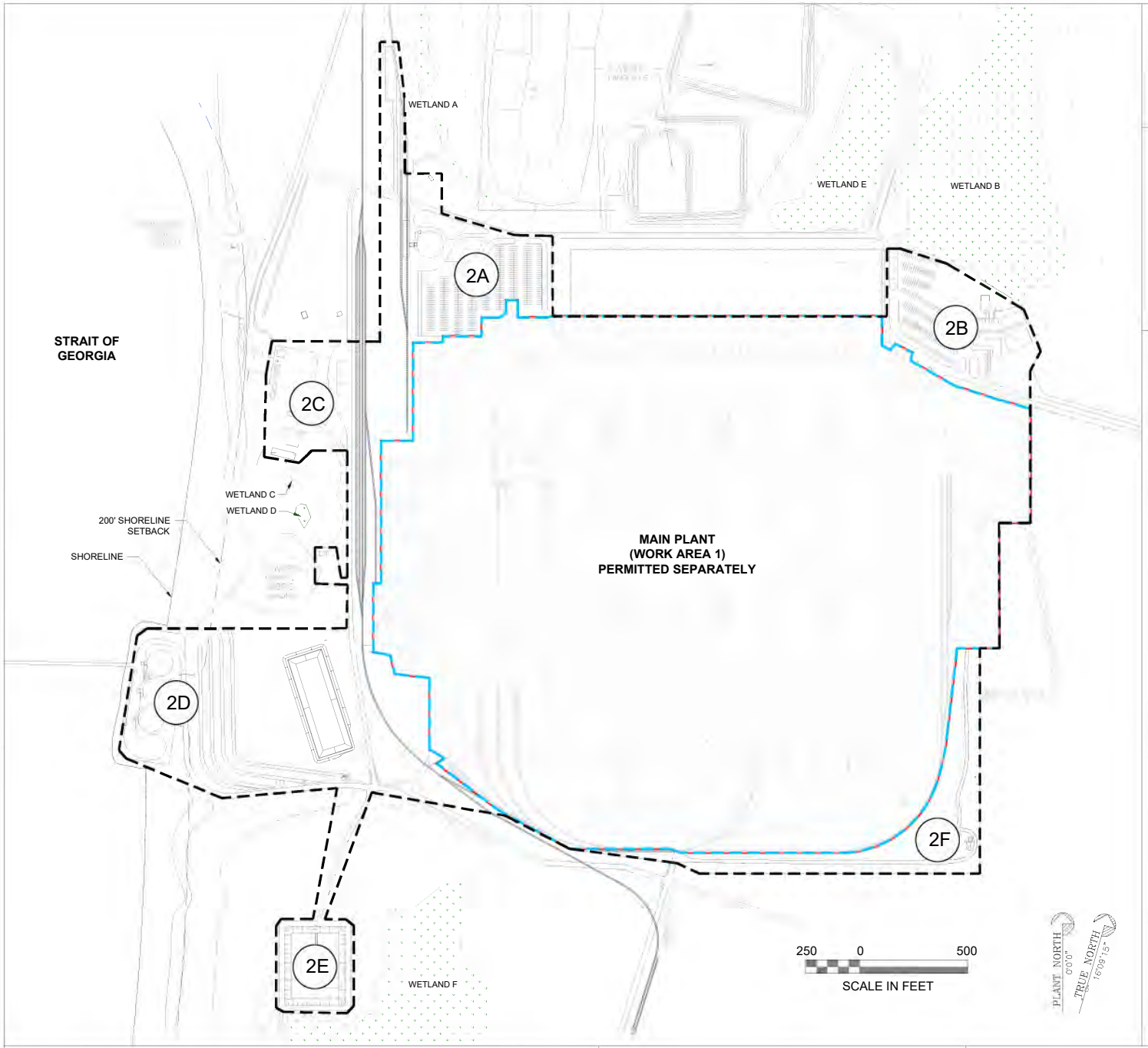
FIGURE: 1 OF 10
DATE: 10.18.24
REV: -
CREATED BY: S.G.

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - SITE PLAN -



LEGEND

- WORK AREA 1 (EXCLUDED)
- SITE WIDE DEMO BOUNDARY (WORK AREA 2)
- SHORELINE
- 200' SHORELINE SETBACK
- WETLAND
- WETLAND BUFFER

WORK AREA 2 FACILITY BUILDINGS, STRUCTURES AND EQUIPMENT

2A Alumina storage and handling
- Alumina silo
- Unloading building
- Associated structures and equipment
- West parking lot

2B Administration
- Administration building
- Storage building
- Associated structures and equipment
- East parking lot

2C Outer buildings
- Barns
- Temporary offices
- Fire training
- Associated structures and equipment

2D Alumina storage
- Alumina silos
- Allumina handling equipment
- Associated structures equipment

2E Sanitary treatment area
- Sanitary sewer lagoon
- Associated structures and equipment

2F Water treatment
- Water treatment building
- Water treatment tanks
- Associated structures and equipment

PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - SITE PLAN -

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS
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FIGURE: 2 OF 10
DATE: 6.19.25
REV: -
CREATED BY: S.G.

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - DEMOLITION PLAN -

LEGEND

- WORK AREA 1 (EXCLUDED)
- WORK AREA 2 BOUNDARY
- REMOVE / DEMOLISH
- KEEP / TO REMAIN
- SHORELINE
- 200' SHORELINE SETBACK
- WETLAND
- WETLAND BUFFER

NOTE

- PHASE II SCOPE OF WORK (WORK AREA 2 ONLY):
  - DEMOLISH MOST FACILITY EQUIPMENT, BUILDINGS AND ANCILLARY STRUCTURES.
  - REMOVE MOST AT OR ABOVE GRADE CONCRETE AND ASPHALT PAVING.
  - REMOVE MOST BELOW GRADE CONCRETE STRUCTURES FOUNDATIONS AND FOOTERS TO A DEPTH OF 3 FEET BELOW GRADE.
  - REMOVE BUILDINGS AND STRUCTURES IN WORK AREA 2C (I.E. FIRE TRAINING BLDG, BARNS AND OFFICE). CONCRETE SLABS AND FOUNDATIONS TO REMAIN.
- THE PROJECT IS DEMOLITION ONLY AND DOES NOT INVOLVE NEW DEVELOPMENT.
- ROADS AND STRUCTURES IDENTIFIED TO REMAIN ARE HIGHLIGHTED IN YELLOW.

250 0 500
SCALE IN FEET

PLANT NORTH 0°0'0" TRUE NORTH 18°09'15"

PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - DEMOLITION PLAN -

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FIGURE: 3 OF 10
DATE: 6.19.25
REV: 1
CREATED BY: S.G.

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - DOMESTIC WATER AND SANITARY SEWER DEMOLITION PLAN -

LEGEND

- WORK AREA 1 (EXCLUDED)
- WORK AREA 2 BOUNDARY
- SANITARY SEWER TO REMOVE
- SANITARY SEWER TO REMAIN
- DOMESTIC WATER (UNDERGRND) TO REMOVE
- DOMESTIC WATER TO REMAIN

NOTES

1 DEMOLISH ALL PLANT SEWER AND POTABLE WATER LINES TO 3 FEET BELOW GRADE. REMAINING LINES ABANDON IN PLACE.

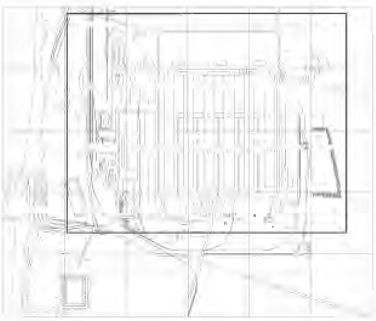
2 ALL PLANT SEWER AND POTABLE WATER OUTSIDE OF WORK AREA 2 SHALL BE ABANDONED IN PLACE.

3 ABOVE GRADE PIPELINE WEST OF MANHOLE 220 TO REMAIN FOR STORMWATER CONVEYANCE TO OUTFALL 001.

4 DOMESTIC WATER SHUT OFF TO BE COMPLETED BY THE UTILITY PROVIDER AT THE METER.

250 0 500

SCALE IN FEET



PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - DOMESTIC WATER AND SANITARY SEWER DEMOLITION PLAN -

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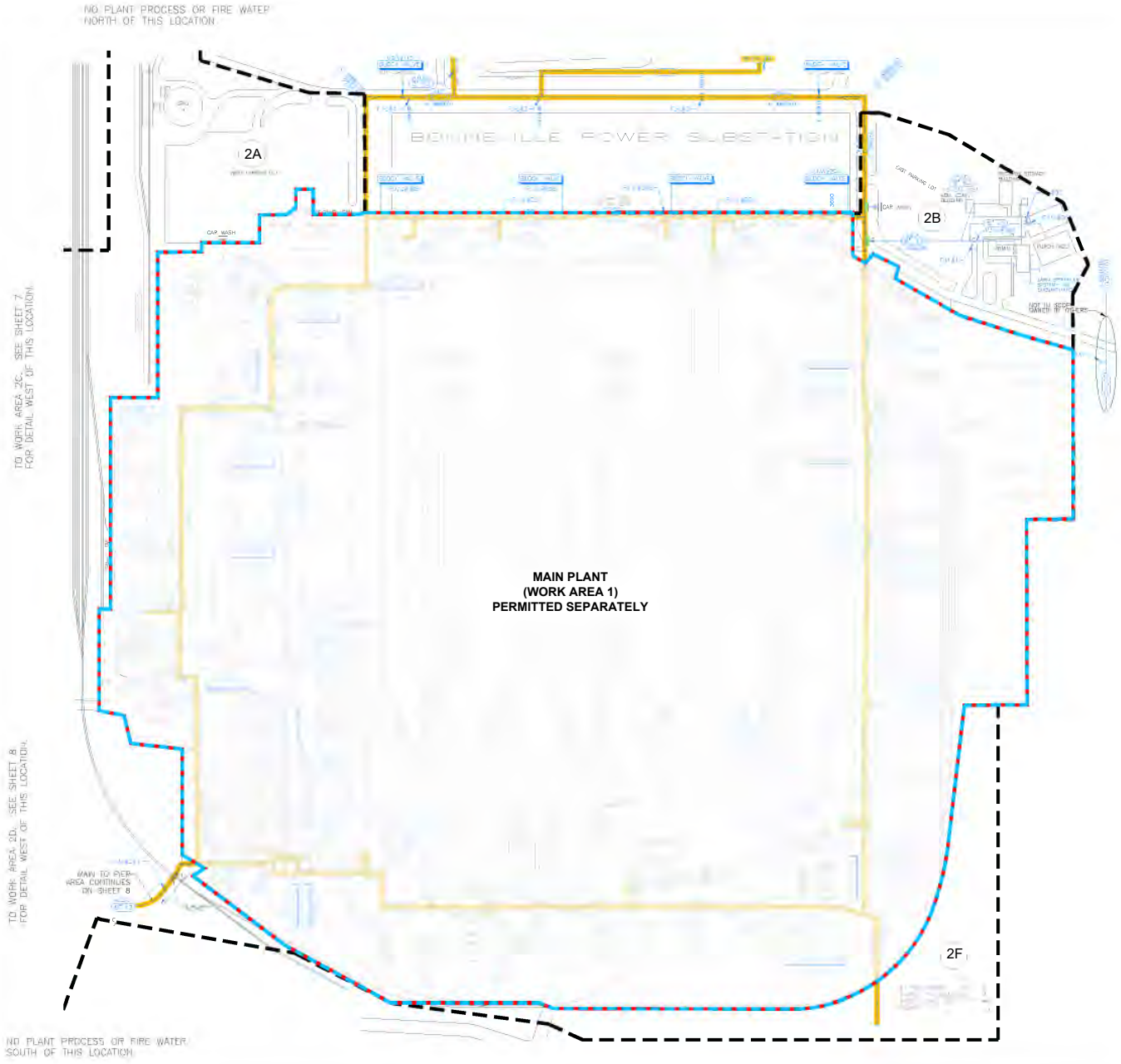
FIGURE: 4 OF 10
DATE: 10.18.24
REV: -
CREATED BY: S.G.



INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - PROCESS AND FIRE WATER DEMOLITION PLAN -

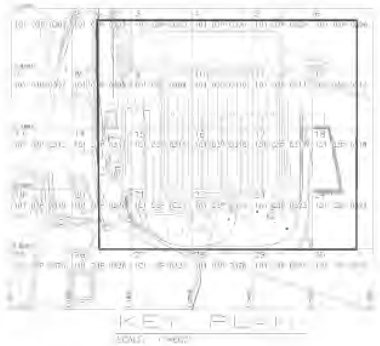
LEGEND

- WORK AREA 1 (EXCLUDED)
- WORK AREA 2 BOUNDARY
- PROCESS AND FIRE WATER (UNDRGRND) TO REMOVE
- PROCESS AND FIRE WATER TO REMAIN
- ABANDONED (LINES VARY)
- CUT AND CAP LOCATIONS
- VALVES
- 2-NOZZLE HYDRANT
- HYDRANT W. PUMPER NOZZLE
- PIPE SLEEVE

NORTH

250 0 500

SCALE IN FEET



PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - PROCESS AND FIRE WATER DEMOLITION PLAN -

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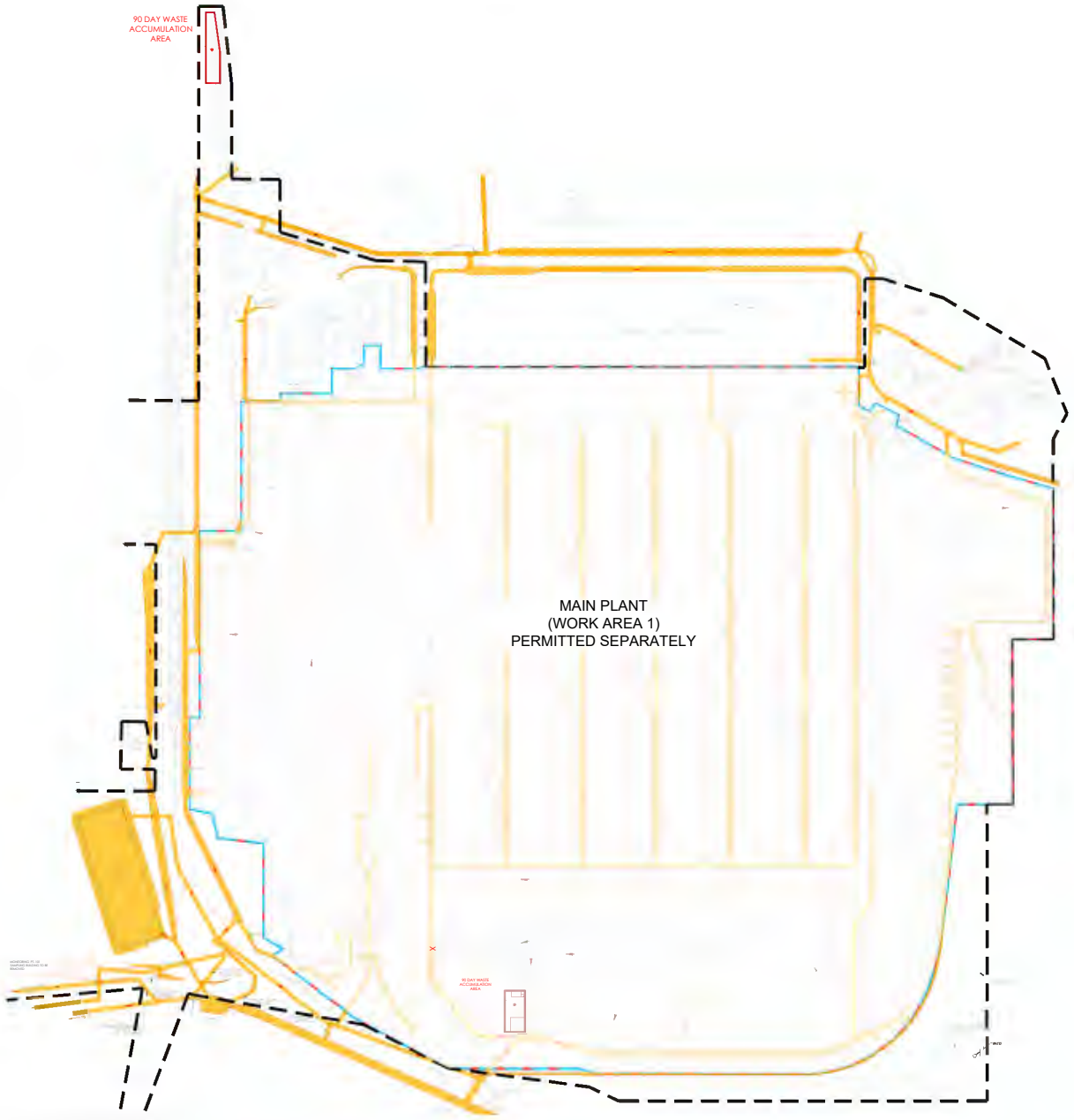
FIGURE: 5 OF 10
DATE: 10.18.24
REV: -
CREATED BY: S.G.

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - STORMWATER DRAINAGE TO REMAIN -



LEGEND

- WORK AREA 1 (EXCLUDED)
- WORK AREA 2 BOUNDARY
- DRAINAGE DITCHES
- UNDERGROUND STORM DRAIN
- DRAINAGE GRATES
- DRAINAGE TO REMAIN
- CUT AND CAP LOCATIONS

NORTH

250 0 500

SCALE IN FEET

PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - STORMWATER DRAINAGE TO REMAIN -

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Wenatchee, WA 98801
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FIGURE: 6 OF 10
DATE: 5.27.25
REV: 1
CREATED BY: S.G.

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - UTILITY DEMOLITION PLAN WORK AREA 2C DETAIL -

LEGEND

- WORK AREA 2 BOUNDARY
- NATURAL GAS (UNDERGROUND)
- NATURAL GAS TO REMAIN
- SANITARY SEWER TO REMOVE
- SANITARY SEWER TO REMAIN
- PROCESS AND FIRE WATER (UNDERGROUND) TO REMOVE
- PROCESS AND FIRE WATER TO REMAIN
- DOMESTIC WATER (UNDERGRND)
- DOMESTIC WATER TO REMAIN

NOTES

1 DEMOLISH PLANT UTILITIES TO 3 FEET BELOW GRADE. UTILITIES TO REMAINING (YELLOW) SHALL BE ABANDON IN PLACE.

2 ALL PLANT UTILITIES OUTSIDE OF WORK AREA 2 SHALL BE ABANDONED IN PLACE.

PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - UTILITY DEMOLITION PLAN WORK AREA 2C DETAIL -

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FIGURE: 7 OF 10
DATE: 10.18.24
REV: -
CREATED BY: S.G.

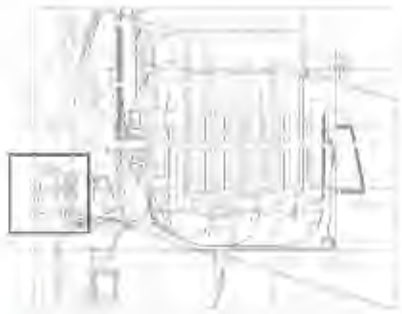
INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - UTILITY DEMOLITION PLAN WORK AREA 2D DETAIL -

LEGEND

- WORK AREA 2 BOUNDARY
- SHORELINE
- 200' SHORELINE SETBACK
- STORMWATER DRAINAGE TO REMOVE
- STORMWATER DRAINAGE TO REMAIN
- PROCESS AND FIRE WATER (UNDERGROUND)
- PROCESS AND FIRE WATER TO REMAIN

NOTES

1. ALL FIRE WATER AND STORM UTILITIES IN WORK AREA 2D SHALL REMAIN.
2. THE APPROACH TRESTLE AND UTILITIES LOCATED WEST OF WORK AREA 2D ARE ONWED BY OTHERS. NO WORK SHALL OCCUR ON THE TRESTLE OR OTHER LOCATIONS OUTSIDE THE WORK AREA 2D BOUNDARY.



PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - UTILITY DEMOLITION PLAN WORK AREA 2D DETAIL -

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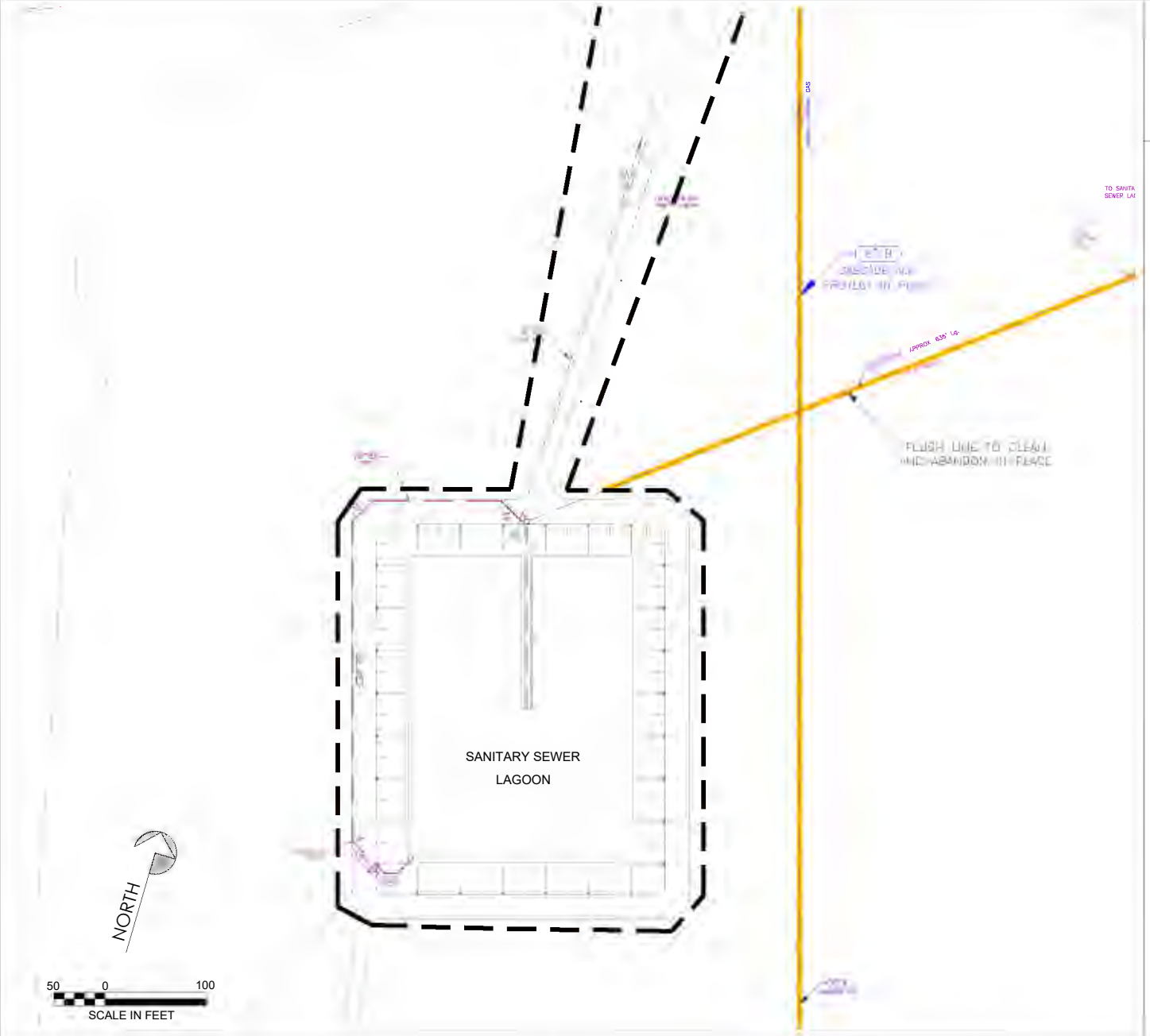
FIGURE: 8 OF 10
DATE: 6.19.25
REV: -
CREATED BY: S.G.

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - UTILITY DEMOLITION PLAN WORK AREA 2E DETAIL -



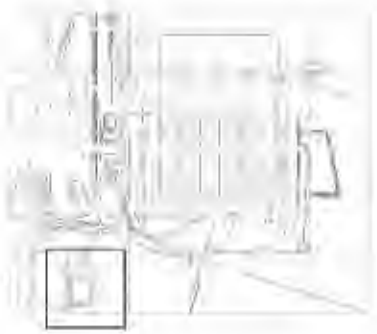
LEGEND

- WORK AREA 2 BOUNDARY
- NATURAL GAS (UNDERGROUND)
- NATURAL GAS TO REMAIN
- SANITARY SEWER TO REMOVE
- SANITARY SEWER TO REMAIN

NOTES

1 DEMOLISH ALL PLANT SEWER LINES TO 3 FEET BELOW GRADE. REMAINING LINES ABANDON IN PLACE.

2 ALL UTILITIES OUTSIDE OF WORK AREA 2 SHALL REMAIN OR BE ABANDONED IN PLACE.



PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - UTILITY DEMOLITION PLAN WORK AREA 2E DETAIL -

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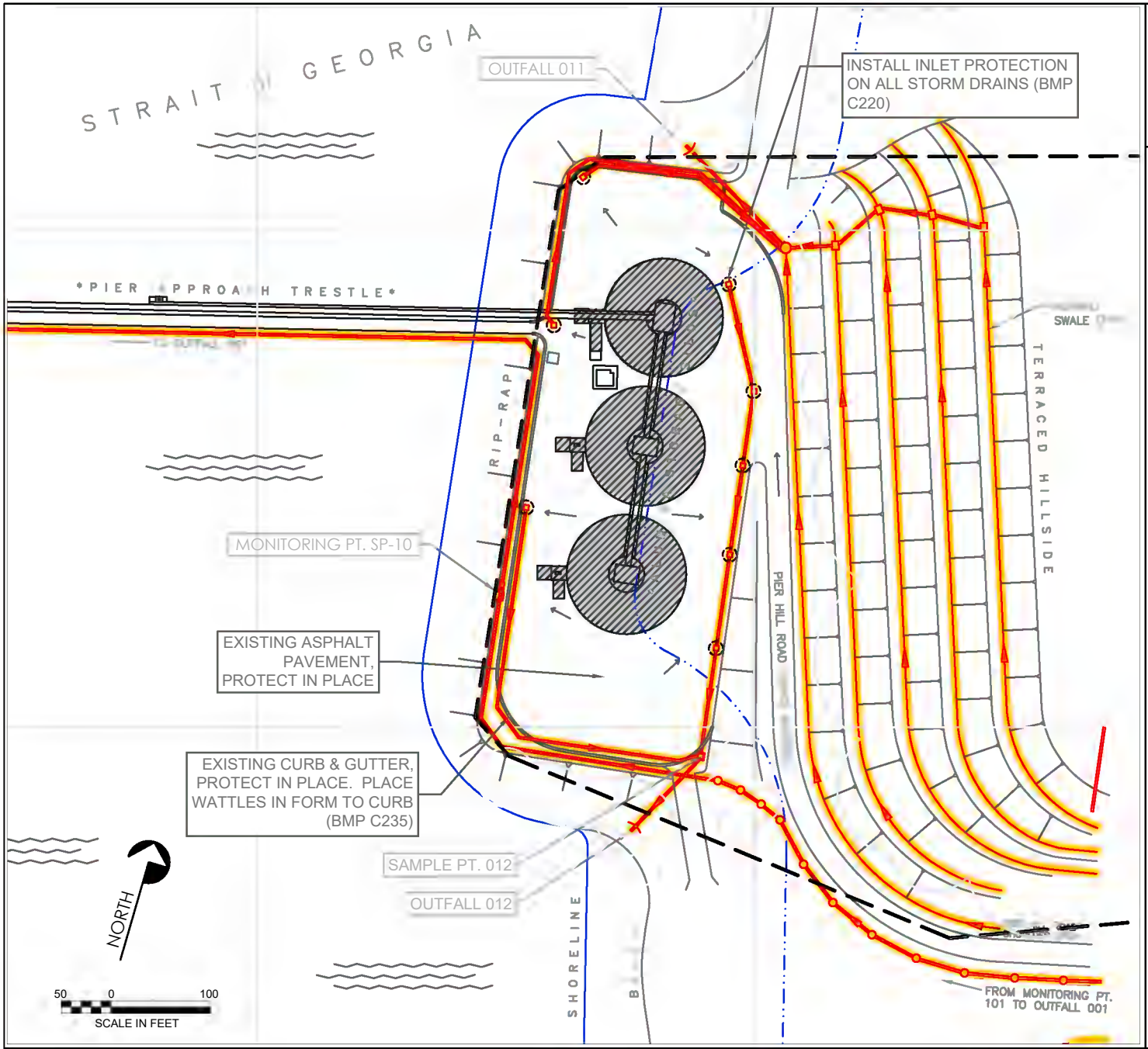
FIGURE: 9 OF 10
DATE: 10.18.24
REV: -
CREATED BY: S.G.

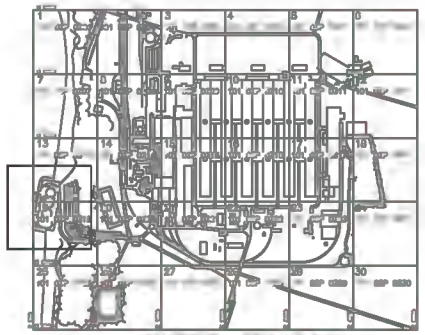


INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - STORMWATER DRAINAGE TO REMAIN WORK AREA 2D DETAIL -

LEGEND

- UNERGROUND STORM DRAIN
- DRAINAGE DITCHES
- DRAINAGE GRATES
- DITCHES AND DRAINS TO REMAIN
- FLOW DIRECTION
- SHORELINE
- 200' SHORELINE SETBACK
- WORK AREA 2 BOUNDARY
- EXISTING TREES / VEG. COVER
- BLDGS/STRUCTURES TO REMOVE
- INLET DRAIN PROTECTION (TYP.)
- CURB AND GUTTER (EX.)

NOTES:
1. RETAIN ALL EXISTING STORMWATER DRAINAGE INFRASTRUCTURE IN THIS AREA.
2. THE ALUMINA SILO PAD AND PIER HILL ROAD ARE PAVED.



PURPOSE: DEMOLISH ALUMINUM SMELTER

APPLICANT:	INTALCO ALUMINUM, LLC	COUNTY:	WHATCOM
SITE ADDRESS:	4050 MOUNTAIN VIEW ROAD	S.T.R.:	T39N, R1E, S20, S21, S28, S29
CITY:	FERNDALE		
STATE:	WA		

INTALCO PHASE II (WORK AREA 2) DEMOLITION PROJECT - STORMWATER DRAINAGE TO REMAIN WORK AREA 2D DETAIL -

Grette Associates LLC
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FIGURE: 10 OF 10
DATE: 6.19.25
REV: 1
CREATED BY: S.G.

Appendix C
Demolition Spill Prevention Control and Countermeasure Plan 2025

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN

INTALCO ALUMINUM LLC
4050 MOUNTAIN VIEW ROAD
FERNDALE, WASHINGTON 98248

Prepared For:
Intalco Aluminum LLC

Prepared By:
Ramboll US Corporation

Date
October 2020 (Amended October 2025)

Project Number
1690017924

RAMBOLL

ENVIRONMENT
& HEALTH

CONTENTS

FIGURES

APPENDICES

1. INTRODUCTION

1.1 Purpose

This Spill Prevention Control and Countermeasure (SPCC) Plan (the "Plan") describes measures implemented to prevent oil discharges from occurring at the Intalco Aluminum LLC (Intalco) facility located at 4050 Mountain View Road in Ferndale, Washington (the "site" or "facility"), and to prepare Intalco to respond in a safe, effective, and timely manner to mitigate the impacts of a discharge. This SPCC Plan has been prepared in accordance with the requirements set forth in Title 40, Part 112 of the Code of Federal Regulations (40 CFR 112).

1.2 Applicability (40 CFR 112.1)

Federal regulations require facilities which store any form of oil in excess of the 1,320 gallons aboveground and/or 42,000 gallons underground and which are located such that the facility could reasonably be anticipated to release oil in quantities that may be harmful into navigable waters to prepare and maintain SPCC Plans. For purposes of this Plan, oil is defined in 40 CFR 112.2 to include petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil, as well as vegetable oils and other forms of oil. Discharges of oil that "may be harmful" are defined in 40 CFR 110.3 as those that "(a) violate applicable water quality standards, or (b) cause a film or sheen upon or discoloration of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines."

The combined capacity of aboveground storage tanks and containers used for storing oils at the Intalco facility is approximately 264,404 gallons. The facility is located adjacent to the Strait of Georgia. Given the facility's oil storage capacity and the potential for a discharge of oil to the Strait of Georgia, a navigable water of the United States, the Intalco facility is subject to the requirement to prepare and maintain an SPCC Plan.

2. PLAN ADMINISTRATION

2.1 Management Approval and Designated Person

Intalco is committed to preventing discharges of oil to the environment, and to maintaining high standards for spill prevention control and countermeasures through the implementation and regular review and amendment to the Plan. This SPCC Plan has the full approval of Intalco management. Intalco has committed the necessary resources to implement the measures described in this Plan.

The Site Manager is the Designated Person Accountable for Oil Spill Prevention at the facility and has the authority to commit the necessary resources to implement this Plan.

T Dudph
Site Manager

8/31/21
Date

Tia Dudph
Name (printed)

2.2 Professional Engineer Certification (40 CFR 112.3(d))

The undersigned Registered Professional Engineer is familiar with the requirements of 40 CFR 112 and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR 112; that procedures for required inspections and testing have been established; and that this plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR 112. This plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this plan.

Renee van de Grind
Signature

August 30, 2021
Date

RENEE VAN DE GRIEND
STATE OF WASHINGTON
43969
REGISTERED
PROFESSIONAL ENGINEER

EXPIRES 4-6-2022

2.3 Plan Location (40 CFR 112.3(e))

An electronic version of this Plan is available to employees via the Intalco Intranet system. A complete hardcopy of this Plan is located at the Main Gate and is available at all times to both facility personnel and outside emergency responders.

The Plan will be made available at the facility to the Regional Administrator of the United States Environmental Protection Agency (USEPA), Region 10 upon presentation of proper credentials.

The Environmental Manager is responsible for maintaining and updating this SPCC Plan.

2.4 Plan Amendment by Regional Administrator (40 CFR 112.4)

For the purposes of this Plan, Regional Administrator is defined as USEPA Region 10. The Regional Administrator is responsible for enforcing federal SPCC requirements in Washington. The facility will submit a report to the Regional Administrator and within 60 days of either of the following:

- The facility discharges more than 1,000 gallons of oil to navigable waters in a single spill; or
- The facility discharges more than 42 gallons of oil in each of two discharges within any 12-month period.

A discussion of the procedures for reporting such releases to the Regional Administrator is presented in Section 3.3. Upon receipt of the report, the Regional Administrator may require amendment of this Plan. If so requested, the facility must amend the Plan or submit a written response to the Regional Administrator within 30 days. The amended Plan must be implemented as soon as possible but no later than six months from the date of the amendment.

2.5 Plan Review and Update (40 CFR 112.5)

2.5.1 Changes in Facility Configuration

In accordance with 40 CFR 112.5(a), Intalco periodically reviews and evaluates this SPCC Plan for any change in the facility design, construction, operation, or maintenance that materially affects the facility's potential for an oil discharge, including, but not limited to:

- Commissioning or decommissioning of containers;
- Replacement, reconstruction, or movement of containers;
- Reconstruction, replacement, or installation of piping systems;
- Construction or demolition that might alter secondary containment structures;
- Changes of product or service;
- Revisions to standard operation or maintenance procedures;
- Modification of testing/inspection procedures; or
- Use of new or modified industry standards.

Amendments to the Plan made to address changes of this nature are referred to as technical amendments and must be certified by a professional engineer using the form presented in Appendix A. Non-technical amendments can be completed by the facility owner and/or operator and must be documented in this Plan. Non-technical amendments include the following:

- Change in the name or contact information (i.e., telephone numbers) of individuals responsible for the implementation of this Plan; or
- Change in the name or contact information of spill response or cleanup contractors.

Intalco must make the needed revisions to the SPCC Plan as soon as possible, but no later than six months after the change occurs. The Plan must be implemented as soon as possible following any technical amendment, but no later than six months from the date of the amendment. The Environmental Manager is responsible for initiating and coordinating revisions to the SPCC Plan.

2.5.2 Scheduled Plan Reviews (40 CFR 112.5(b))

In accordance with 40 CFR 112.5(b), Intalco reviews this SPCC Plan at least once every 5 years. Revisions to the Plan, if needed, are made within six months of the 5-year review. A registered Professional Engineer certifies any technical amendment to the Plan, as described above, in accordance with 40 CFR 112.3(d). This Plan is dated October 29, 2020. The next Plan review is therefore scheduled to take place on or prior to October 29, 2025.

2.5.3 Record of Plan Reviews

Scheduled reviews and Plan amendments are recorded in the Plan Review Log (Table 1). This log must be completed even if no amendment is made to the Plan as a result of the review. Unless a technical or administrative change prompts an earlier review of the Plan, reviews must be completed every 5 years.

Table 1 - SPCC Plan Review Log			
Date	**Description of Amendment**	**PE Certification Required?**	**Contact Name**
10/29/2020	New Stand-Alone SPCC Plan	Yes	Kathryn Mitchell, Environmental Manager
07/31/2021	Amendment to respond to USEPA comments and to reflect facility permanent closure of three coal tar pitch tanks CP-T1, CP-T2, and CPT-3 and Therminol tank CP-T4; removal of tanks P-T1 and P-T2; removal of drum storage areas SA-07, SA-09, and SA-10; addition of tank CH-T13; and update of alternate site contact.	Yes	Kathryn Mitchell, Environmental Manager
1/25/2023	Amendment to adjust the location of SS-T1; revise description of CT-T6; remove SA-05; update inspection forms; update Figure 2; and update site contacts.	Yes	Tia Daulph, Site Manager
6/6/2025	Amendment to add temporary generators during demolition activities.	Yes	Ryan Harried, Environmental Manager
10/29/2025	Amendment to permanently close tanks and addition of temporary contractor tank.	Yes	Ryan Harried, Environmental Manager

2.6 Cross-Reference with SPCC Provisions (40 CFR 112.7)

This SPCC Plan follows the order presented in 40 CFR 112. Section headings identify, where appropriate, the relevant section(s) of the SPCC rule.

2.7 Conformance with Applicable Requirements (40 CFR 112.7(a)(1))

The facility is in conformance with applicable SPCC requirements, as detailed herein.

2.8 Equivalent Environmental Protection (40 CFR 112.7(a)(2))

An SPCC Plan for an on-shore facility (excluding production facilities) may deviate from the requirements set forth in 40 CFR 112.8, except secondary containment requirements, if equivalent environmental protection is provided by some other means of spill prevention, control, or countermeasure. Intalco's SPCC Plan conforms to the requirements in SPCC regulations. As such, no alternate methods for achieving equivalent environmental protection are used in this Plan.

3. GENERAL FACILITY INFORMATION

Facility Name:	Intalco Aluminum LLC
Facility Address:	4050 Mountain View Road Ferndale, WA 98248 Whatcom County
Facility Phone:	(360) 384-7301
Type of Facility:	Aluminum smelting and casting
Owner:	Intalco Aluminum LLC Ferndale, WA 98248 Whatcom County

Site Contacts:	Primary Tia Daulph Site Manager		Alternate Ryan Harried Environmental Lab Lead	
	Business hours:	(360) 384-7532	Business Hours:	(360) 384-7337
	After Hours:	(360) 296-4938	After Hours:	(360) 927-7287

3.1 Facility Description (40 CFR 112.7(a)(3))

Alcoa's Intalco Works is an aluminum smelting and casting facility that began operations in 1966. The Intalco Works site is located south of Cherry Point on rolling land 5 miles west of Ferndale, Washington and 200 feet above the shoreline of the Strait of Georgia (see Figure 1).

The entire plant site consists of approximately 1,500 acres. A total of 500 acres are developed, including 200 acres of a heavily developed industrial facility. The facility consists of an anode production plant (Carbon Plant); three pre-bake aluminum reduction potlines (Potlines), each containing 240 reduction cells; a casting facility (Casthouse); several machine shops (Maintenance); and various offices and utility buildings. In addition, alumina silos, a storm water pond, a sanitary wastewater pond, and closed landfills are located within the 500 developed acres. The remainder of the plant property is undeveloped. The facility layout is indicated on Figure 2.

The facility announced permanent shutdown in March 2023 and is not conducting manufacturing operations at this time. Demolition of the facility anode production plant, pre-bake aluminum reduction potlines, casting facility, and ancillary structures is planned. Some office and support buildings are planned to remain.

3.2 SPCC Plan Overview (40 CFR 112.7(a)(3))

3.2.1 Facility Oil Storage (40 CFR 112.7(a)(3)(i))

Petroleum products and oils stored at the facility include: Therminol used as a heat exchanger fluid; gasoline and diesel used for fueling onsite vehicles; various hydraulic oils and lubricating oils used in process equipment; solvents used in maintenance operations; used oils and solvents; and transformer oils in electrical transformers. Bulk oil storage units with capacities of 55 gallons or more are summarized in Table 2 and oil-filled equipment units are summarized on Table 3. The locations of these oil storage units are shown on the Facility Diagram presented on Figure 2. The locations of temporary generators and fuel cubes described in Table 2 are based on locations observed during the

site visit on April 17, 2025. However, temporary generators and fuel cubes are portable and may be moved throughout the facility based on energy needs during demolition activities.

The facility is currently in demolition with limited operations and is not using coal tar pitch and Therminol in the Anode Storage area. The facility has permanently closed the tanks used to store these materials in the Anode Storage area in accordance with 40 CFR 112.2. Documentation of the permanent closure of these tanks is on file at the facility.

Table 2 – Bulk Oil Storage Units

Intalco ID	Location	Contents	Maximum Storage Capacity (gal)	Description
Bulk Storage: Aboveground Storage Tanks (ASTs)				
CT-T6	Casthouse Cooling Tower Oil Skimmer	Oil /Water	1,000	Vertical shop-built polyethylene tank
CH-T13	Warehouse #4	Hydraulic Oil	330	Portable vertical shop-built steel tank
E-T1	Outfall Pond	Oil /Water	175	Horizontal shop-built steel tank
F1	Vehicle Fuel Station	Diesel	12,000	Horizontal shop-built double-walled steel tank
F2	Vehicle Fuel Station	Gasoline	6,000	Horizontal shop-built double-walled steel tank
SS-T2	Intalco Substation	Electrical Insulation Oil	10,000	Horizontal shop-built steel tank
P-T3	Potline Maintenance	Diesel	100	Portable vertical shop-built double-walled steel tank
C-T1	Auto Maintenance Shop	Diesel	1,000	horizontal, shop-built steel tank
Bulk Storage: Portable Containers (Drums and Totes)				
SA-01	Auto Maintenance Shop	Lubricants, used oil	13x55	Shop-built metal or plastic drum or tote
SA-03	Warehouse #4	Lubricants	33x55	Shop-built metal or plastic drum
SA-06	90-Day Drum/Tote Yard	Used Oil	20x55 or 10x300	Shop-built metal or plastic drum or tote
Bulk Storage: Portable Containers (Temporary Generators)				
G-1	Admin Building	Diesel	55.5	Diesel-powered AC generator
G-2	Admin Building	Diesel	55.5	Diesel-powered AC generator
G-3	Main Gate	Diesel	169	Diesel-powered AC generator
G-4	Warehouse #3	Diesel	79	Diesel-powered AC generator
G-5	SWTP	Diesel	169	Diesel-powered AC generator
G-6	Anode building	Diesel	169	Diesel-powered AC generator
G-7	Monitoring point 101	Diesel	79.3	Diesel-powered AC generator
G-8	PWT	Diesel	169	Diesel-powered AC generator
G-9	Water tower	Diesel	79.3	Diesel-powered AC generator

Table 2 – Bulk Oil Storage Units

Intalco ID	Location	Contents	Maximum Storage Capacity (gal)	Description
Bulk Storage: Portable Containers (Temporary Fuel Cubes)				
FC-1	Admin Building	Diesel	528	Western Global fuel cube
FC-2	Main Gate	Diesel	528	Western Global fuel cube
FC-3	MHD Casting Facility	Diesel	528	Western Global fuel cube
FC-4	Warehouse #3	Diesel	243	Western Global fuel cube
FC-5	Anode Building	Diesel	528	Western Global fuel cube
FC-6	Outfall Pond	Diesel	252	Western Global fuel cube
FC-7	Monitoring Point 101	Diesel	243	Western Global fuel cube
FC-8	Alumina Storage Area	Diesel	252	Western Global fuel cube
FC-9	Water Tower	Diesel	243	Western Global fuel cube
Bulk Storage: Portable Containers (Mobile Refueler Tanks)				
MT-1	Mobile	Diesel	100	Horizontal single-wall steel tank mounted in portable work vehicle
MT-2	Mobile	Diesel	100	Horizontal single-wall steel tank mounted in portable work vehicle
MT-3	Mobile	Diesel	100	Horizontal single-wall steel tank mounted in portable work vehicle
MT-4	Mobile	Diesel	100	Horizontal single-wall steel tank mounted in portable work vehicle
MT-5	Mobile	Gasoline	100	Horizontal single-wall steel tank mounted in portable work vehicle

Table 3 – Oil-Filled Operational Equipment

Intalco ID	Location	Contents	Maximum Storage Capacity (gal)
Hydraulic Reservoirs			
CH-T01	Casthouse: Pit 1	Water/Oil	1,000
CH-T02	Casthouse: Pit 2	Water/Oil	1,000
CH-T03	Casthouse: Pit 3	Hydraulic Oil	150
CH-T04	Casthouse: Pit 4	Hydraulic Oil	250
CH-T05	Casthouse: Pit 5	Hydraulic Oil	250
CH-T06	Casthouse: Loma #2	Hydraulic oil	200
CH-T07	Casthouse: Loma #2 Briquetter	Hydraulic oil	100
CH-T08	Casthouse: C Furnace	Hydraulic oil	500
CH-T09	Casthouse: Hunter #1	Hydraulic oil	100
CH-T10	Casthouse: Hunter #2	Hydraulic oil	100
CH-T11	Casthouse: Loma #1	Hydraulic oil	100
CH-T12	Casthouse: Loma #1 Briquetter	Hydraulic oil	100

Table 3 – Oil-Filled Operational Equipment			
Intalco ID	**Location**	**Contents**	**Maximum Storage Capacity (gal)**
CP-T6	Bake Ovens: Phase-A conveyors	Hydraulic Oil	250
CP-T7	Bake Ovens: Phase-B conveyors	Hydraulic Oil	250
CP-T8	Carbon Plant: Phase-A Anode Press	Hydraulic Oil	3,600
CP-T9	Carbon Plant: Phase-B Anode Press	Hydraulic Oil	3,600
Pier-CC1	Crane Top Fl/ Pier Case Crank	Lube Oil	120
R-T1	Annex: Almeq Spout Cleaner	Hydraulic oil	60
R-T2	Annex: Bailey Ladle Cleaner	Hydraulic oil	55
R-T3	Annex: Elkem Ladle Cleaner	Hydraulic oil	600
R-T4	Annex east Paste Mixer	Hydraulic oil	20
R-T5	Annex west Paste Mixer	Hydraulic oil	20
R-T6	Annex Induction Furnace	Hydraulic Oil	30
RS-T1	Rod Shop: #1 Press	Hydraulic Oil	220
RS-T2	Rod Shop: #2 Press	Hydraulic Oil	220
RS-T3	Rod Shop: #3 Press	Hydraulic Oil	220
RS-T4	Rod Shop: #4 Press	Hydraulic Oil	220
RS-T5	Rod Shop: Phase-A ECL	Hydraulic Oil	100
RS-T6	Rod Shop: Phase-B ECL	Hydraulic Oil	100
SS-T5	Intalco Substation	Empty	200
SS-T6	Intalco Substation	Empty	200
Transformers and Other Electrical Equipment			
1A	Main Gate Transformer	Electrical Insulation Oil	150
1D	Admin Building Transformer	Electrical Insulation Oil	285
2A	Casthouse Transformer	Electrical Insulation Oil	281
2B	Casthouse Transformer	Electrical Insulation Oil	465
2D	Casthouse Transformer	Electrical Insulation Oil	404
2E	Casthouse Transformer	Electrical Insulation Oil	265
2F	Casthouse Transformer	Electrical Insulation Oil	404
2G	Cooling Towers Transformer	Electrical Insulation Oil	267
2H	Cooling Towers Transformer	Electrical Insulation Oil	267
2J	MHD Building Transformer	Electrical Insulation Oil	293
3A	A-North Transformer	Electrical Insulation Oil	390
3B	A-Center Transformer	Electrical Insulation Oil	465
3C	A-South Transformer	Electrical Insulation Oil	465
3D	A-North Scrubber Transformer	Electrical Insulation Oil	350
3E	A-South Scrubber Transformer	Electrical Insulation Oil	350
4A	B-North Transformer	Electrical Insulation Oil	450
4B	B-Center Transformer	Electrical Insulation Oil	465
4C	B-South Transformer	Electrical Insulation Oil	465
4D	B-North Scrubber Transformer	Electrical Insulation Oil	465
4G	Auto Shop Transformer	Electrical Insulation Oil	140
4H	Hood Shop Transformer	Electrical Insulation Oil	155
5A	C-North Transformer	Electrical Insulation Oil	465

Table 3 – Oil-Filled Operational Equipment			
Intalco ID	**Location**	**Contents**	**Maximum Storage Capacity (gal)**
5B	C-Center Transformer	Electrical Insulation Oil	465
5C	C-South Transformer	Electrical Insulation Oil	465
5D	C-North Scrubber Transformer	Electrical Insulation Oil	465
5E	C-South Scrubber Transformer	Electrical Insulation Oil	350
6A	Annex Southside Transformer	Electrical Insulation Oil	400
6B	Annex Induction Furnace Transformer	Electrical Insulation Oil	200
6C	Annex Crusher Transformer	Electrical Insulation Oil	340
7A	Rod Shop W Transformer	Electrical Insulation Oil	203
7B	Rod Shop N Transformer	Electrical Insulation Oil	200
7C	Rod Shop N Transformer	Electrical Insulation Oil	280
7D	Bake Oven E Transformer	Electrical Insulation Oil	280
7E	Bake Oven W Transformer	Electrical Insulation Oil	330
7F	Bake Oven Scrubbers Transformer	Electrical Insulation Oil	465
7G	Rod Shop N Transformer	Electrical Insulation Oil	242
7H	Rod Shop N Transformer	Electrical Insulation Oil	242
8A	Carbon Plant Vault Transformer	Electrical Insulation Oil	400
8B	Carbon Plant Vault Transformer	Electrical Insulation Oil	400
8C	Carbon Plant Vault Transformer	Electrical Insulation Oil	330
8D	Carbon Plant Vault Transformer	Electrical Insulation Oil	400
8E	Carbon Plant Vault Transformer	Electrical Insulation Oil	400
8F	S Carbon Plant Transformer	Electrical Insulation Oil	121
8G	Liquid Pitch Transformer	Electrical Insulation Oil	450
10-Silo	Silo 1, 2, 3 Transformer	Electrical Insulation Oil	285
23A	Compressor Transformer	Electrical Insulation Oil	260
23B	Compressor Transformer	Electrical Insulation Oil	260
23C	Compressor Transformer	Electrical Insulation Oil	291
74A1	Primary WT Transformer	Electrical Insulation Oil	400
Coredel	North B-line Rectifier	Electrical Insulation Oil	400
R101	SS Yard A Rectifier	Electrical Insulation Oil	4,306
R102	SS Yard A Rectifier	Electrical Insulation Oil	4,306
R103	SS Yard A Rectifier	Electrical Insulation Oil	4,306
R104	SS Yard A Rectifier	Electrical Insulation Oil	4,306
R104	SS Yard A Rectifier	Electrical Insulation Oil	2,790
R105	SS Yard A Rectifier	Electrical Insulation Oil	4,306
R106	SS Yard A Rectifier	Electrical Insulation Oil	4,306
R108	SS Yard B Rectifier	Electrical Insulation Oil	5,490
R109	SS Yard B Rectifier	Electrical Insulation Oil	5,490
R110	SS Yard B Rectifier	Electrical Insulation Oil	5,490
R111	SS Yard B Rectifier	Electrical Insulation Oil	3,120
R112	SS Yard B Rectifier	Electrical Insulation Oil	5,490
R113	SS Yard B Rectifier	Electrical Insulation Oil	5,490
R114	SS Yard B Rectifier	Electrical Insulation Oil	5,500

Table 3 – Oil-Filled Operational Equipment			
Intalco ID	**Location**	**Contents**	**Maximum Storage Capacity (gal)**
R115	SS Yard C Rectifier	Electrical Insulation Oil	3,120
R116	SS Yard C Rectifier	Electrical Insulation Oil	3,120
R117	SS Yard C Rectifier	Electrical Insulation Oil	3,120
R118	SS Yard C Rectifier	Electrical Insulation Oil	3,120
R119	SS Yard C Rectifier	Electrical Insulation Oil	3,120
R120	SS Yard C Rectifier	Electrical Insulation Oil	3,120
R121	SS Yard C Rectifier	Electrical Insulation Oil	3,120
Silo 4	Silo 4 Transformer	Electrical Insulation Oil	200
Spare-01	MHD Building Transformer	Electrical Insulation Oil	5,490
Spare-02	MHD Building Transformer	Electrical Insulation Oil	200
Spare-03	MHD Building Transformer	Electrical Insulation Oil	465
Spare-04	MHD Building Transformer	Electrical Insulation Oil	421
Spare-05	MHD Building Transformer	Electrical Insulation Oil	290
Spare-06	W.H. 6 Transformer	Electrical Insulation Oil	200
Spare-07	W.H. 6 Transformer	Electrical Insulation Oil	340
Spare-08	W.H. 6 Transformer	Electrical Insulation Oil	465
Spare-09	W.H. 6 Transformer	Electrical Insulation Oil	421
X-114	SS Yard A Transformer	Electrical Insulation Oil	7,550
X-114c	SS Yard A Contactor	Electrical Insulation Oil	625
X-114ocb	SS Yard A Circuit Breaker	Electrical Insulation Oil	273
X-114tap	SS Yard A Tap Selector	Electrical Insulation Oil	360
X-115	SS Yard A Transformer	Electrical Insulation Oil	7,550
X-115c	SS Yard A Contactor	Electrical Insulation Oil	625
X-115ocb	SS Yard A Circuit Breaker	Electrical Insulation Oil	273
X-115tap	SS Yard A Tap Selector	Electrical Insulation Oil	360
X-116	SS Yard A Transformer	Electrical Insulation Oil	7,550
X-116c	SS Yard A Contactor	Electrical Insulation Oil	625
X-116ocb	SS Yard A Circuit Breaker	Electrical Insulation Oil	273
X-116tap	SS Yard A Tap Selector	Electrical Insulation Oil	360
X-117	SS Yard A Transformer	Electrical Insulation Oil	236
X-118	SS Yard A Transformer	Electrical Insulation Oil	236
X-119	SS Yard B Transformer	Electrical Insulation Oil	7,550
X-119c	SS Yard B Contactor	Electrical Insulation Oil	625
X-119ocb	SS Yard B Circuit Breaker	Electrical Insulation Oil	273
X-119tap	SS Yard B Tap Selector	Electrical Insulation Oil	360
X-120	SS Yard B Transformer	Electrical Insulation Oil	7,550
X-120c	SS Yard B Contactor	Electrical Insulation Oil	625
X-120ocb	SS Yard B Circuit Breaker	Electrical Insulation Oil	273
X-120tap	SS Yard B Tap Selector	Electrical Insulation Oil	360
X-121	SS Yard B Transformer	Electrical Insulation Oil	228
X-129	SS Yard C Transformer	Electrical Insulation Oil	7,550
X-129c	SS Yard C Contactor	Electrical Insulation Oil	625

Table 3 – Oil-Filled Operational Equipment			
Intalco ID	**Location**	**Contents**	**Maximum Storage Capacity (gal)**
X-129ocb	SS Yard C Circuit Breaker	Electrical Insulation Oil	273
X-129tap	SS Yard C Tap Selector	Electrical Insulation Oil	360
X-130	SS Yard C Transformer	Electrical Insulation Oil	7,550
X-130c	SS Yard C Contactor	Electrical Insulation Oil	625
X-130ocb	SS Yard C Circuit breaker	Electrical Insulation Oil	273
X-130tap	SS Yard C Tap Selector	Electrical Insulation Oil	360
X-131	SS Yard C Transformer	Electrical Insulation Oil	236
X-34	Contractor Area Transformer	Electrical Insulation Oil	123

3.2.2 Discharge Prevention Measures and Controls (40 CFR 12.7(a)(3)(ii)-(iii))

Discharge prevention measures include facility procedures for unloading oil products (Section 4.7), facility transfers (Section 5.13), and drainage of containment structures (Section 5.5).

Discharge and drainage control include secondary containment for all bulk storage containers (Sections 4.2 and 5.4) and a facility drainage system that captures and treats all runoff, as described in Section 4.2.2 and 5.1.

3.2.3 Countermeasures for Discharge Discovery, Response, and Cleanup (40 CFR 112.7(a)(3)(iv)-(vi))

Spill countermeasures and methods for disposal of recovered material are described in Section 3.4. Reporting procedures, including a contact list for reporting spills, are in presented in Section 3.3.

3.3 Reporting Information and Procedures (40 CFR 112.7(a)(4))

An employee who discovers a release must immediately notify the Environmental Manager. Any size discharge (i.e., one that creates a sheen, emulsion, or sludge) that affects or threatens to affect navigable waters or adjoining shorelines must be reported immediately to the National Response Center. The Environmental Manager or designee is responsible for reporting a discharge and will report the following information:

- The exact address or location and phone number of the facility;
- The date and time of the discharge,
- The type of material discharged;
- Estimates of the total quantity discharged;
- Estimates of the quantity discharged as described in §112.1(b);
- The source of the discharge;
- A description of all affected media;
- The cause of the discharge;
- Any damages or injuries caused by the discharge;
- Actions being used to stop, remove, and mitigate the effects of the discharge;

- Whether an evacuation may be needed; and,
- The names of individuals and/or organizations who have also been contacted.

Contact information for reporting a discharge to the appropriate authorities is listed on Table 4.

In addition to the above reporting, 40 CFR 112.4 requires that information be submitted to the Regional Administrator and the appropriate state agency in charge of oil pollution control activities whenever the facility discharges (as defined in 40 CFR 112.1(b)) more than 1,000 gallons of oil in a single event, or discharges (as defined in 40 CFR 112.1(b)) more than 42 gallons of oil in each of two discharge incidents within a 12-month period. The following information must be submitted to the Regional Administrator and to Washington Department of Ecology within 60 days:

- Name of the facility;
- Name of the owner/operator;
- Location of the facility;
- Maximum storage or handling capacity and normal daily throughput;
- Corrective action and countermeasures taken, including a description of equipment repairs and replacements;
- Description of facility, including maps, flow diagrams, and topographical maps;
- Cause of the discharge(s) to navigable waters and adjoining shorelines, including a failure analysis of the system and subsystem in which the failure occurred;
- Additional preventive measures taken or contemplated to minimize possibility of recurrence; and
- Other pertinent information requested by the Regional Administrator.

Table 4 – Release Reporting Requirements

Organization	Telephone	Circumstances	When to Notify
National Response Center	(800) 424-8802	Any discharge reaching navigable waters	Immediately (verbal)
Washington Emergency Management Division	(800) 258-5990	Any discharge reaching navigable waters	Immediately (verbal)
Fire Department	911	Any release that poses emergency conditions	Immediately (verbal)
USEPA Region 10 Regional Administrator	(206) 553-1200	Discharge 1,000 gallons or more; or second discharge of 42 gallons or more over a 12-month period.	Written notification within 60 days
Washington State Northwest Regional Office	(425) 649-7000	Discharge 1,000 gallons or more; or second discharge of 42 gallons or more over a 12-month period.	Written notification within 60 days

3.4 Response Actions (40 CFR 112.7(a)(5))

In the event of a release of oil products, facility personnel will implement immediate emergency response actions to prevent the pollutant from migrating off-site. Spill response actions will be implemented by trained personnel who are aware of the hazards present at the scene of the release. Personnel will not initiate containment activities if emergency response actions have the potential to injure an employee. Trained personnel will implement the following spill control procedures in the event of an oil product or fuel release:

- **Notification**. Immediately notify an on-site supervisor and the Environmental Manager of the spill, who will then notify agencies, as applicable.
- **Isolation**. Isolate the spill by closing appropriate valves, securing pumps, deploying drain covers, and plugging and patching damaged tanks, piping, and valves.
- **Containment**. Contain the released material using absorbent materials, available in onsite spill kits, or other relatively impervious material that would prevent the movement of material. Block any additional storm drain inlets that may be affected by the spill.

The specific emergency procedures that will be followed in the event of a release will depend on whether the release is a major release or a minor release.

3.4.1 Response Procedures for a Minor Release

A minor discharge is a small volume leak from tanks, pipes, or other equipment that is discovered during routine inspections. A minor release meets all of the following:

- The release is less than 42 gallons;
- There are no injuries or fires associated with the release;
- The release does not impact surface waters; and
- The release does not enter the storm water drainage system.

In the event of a minor release, the employee who identifies the release will notify the supervisor in the area of the release. The supervisor will confirm that the release is a minor release and assign one or more employees to clean up the release. The release will be cleaned up using materials in the spill kits, as needed, and/or other materials used as part of standard operations. Any waste materials generated during cleanup of a minor spill will be placed in closed containers for off-site disposal. The release will be recorded using the oil release notification form presented in Appendix B.

3.4.2 Response Procedures for a Major Release

A “major” discharge is defined as one that cannot be safely controlled or cleaned up by facility personnel, such as when:

- The discharge is large enough to spread beyond the immediate discharge area;
- The discharged material enters water;
- The discharge requires special equipment or training to clean up;
- The discharged material poses a hazard to human health or safety; or
- There is a danger of fire or explosion.

In the event of a release that may potentially be a major release, the Environmental Manager will be notified immediately, and the Environmental Manager will designate a facility response coordinator. The facility response coordinator will assess the source, amount, and areal extent of the release. Visual observations, facility records, employee knowledge, and/or chemical analysis will be used to identify and quantify the release. The facility response coordinator will also evaluate the potential for the release to reach surface water or otherwise adversely impact human health or the environment.

If the facility response coordinator confirms that the release is a major release, the facility response coordinator will assess whether evacuation is necessary and will use appropriate internal communication systems to notify employees of the need to evacuate. The Environmental Manager or the facility response coordinator will then report the release to emergency response agencies, as described above. In addition, if warranted, the facility response coordinator will notify and request the assistance of the facility's spill response contractor.

The facility's local spill response contractor is:

Clean Harbors
24-Hr Phone Number: 800.645.8265

The facility response coordinator will direct actions to prevent additional releases of oil from occurring or spreading to other areas of the facility, if such actions can be done safely. These actions might include: stopping processes and operations, placing absorbent materials in the area of the release, digging temporary containment pits or berms, or placing absorbent materials in storm drain systems.

4. GENERAL REQUIREMENTS (40 CFR 112.7)

4.1 Evaluation of Discharge Potential (40 CFR 112.7(b))

The types of equipment failures or accidents in which oils/petroleum products could be discharged at the facility, based on past experience and existing plant operations, are discussed in the following sections and presented in Table 5, which includes the anticipated spill pathway, maximum spill volume, and rate of flow for each potential release scenario.

Table 5 – Evaluation of Spill Potential

Potential Event	Maximum Volume Released (gallons)	Maximum Discharge Rate	Direction of Flow	Secondary Containment
Casthouse – Cooling Tower Skimmer (CT-T6)				
Pipe leak or failure	60	1 gpm	SSW to Strait of Georgia	Drain line from tank goes to sump; sump liquids pumped into floc tank
Warehouse #4 (CH-T13)				
Failure of aboveground tank (collapse or puncture below product level)	330	Gradual to instantaneous	SSW to Strait of Georgia	Spill pallet inside building
Tank overfill	55	Instantaneous	SSW to Strait of Georgia	Spill pallet inside building
Outfall Pond – Skimmer Tank (E-T1)				
Failure of aboveground tank (collapse or puncture below oil/water level)	175	Gradual to instantaneous	SSW to Strait of Georgia	Concrete berm
Pipe leak or failure	60	1 gpm	SSW to Strait of Georgia	Plant drainage/retention system
Vehicle Fuel Station – Diesel and Gasoline Tanks (F1, F2)				
Failure of aboveground tank (collapse or puncture below product level)	12,000	Gradual to instantaneous	SSW to Strait of Georgia	Double-walled tanks
Transfer hose leak or failure during tank filling	150	1 to 30 gal/min	SSW to Strait of Georgia	Graded fueling pad draining to a concrete sump; plant drainage system/retention system
Hose leak during vehicle fueling	300	1 to 60 gal/min	SSW to Strait of Georgia	Graded fueling pad draining to a concrete sump; plant drainage system/retention system
Unloading tanker truck leak or failure	2,000	Gradual to instantaneous	SSW to Strait of Georgia	Graded fueling pad draining to a concrete sump; plant drainage system/retention system
Potline Maintenance – Hydraulic Oil (P-T3)				

Table 5 – Evaluation of Spill Potential				
Potential Event	**Maximum Volume Released (gallons)**	**Maximum Discharge Rate**	**Direction of Flow**	**Secondary Containment**
Failure of aboveground tank (collapse or puncture below product level)	100	Gradual to instantaneous	SW to Strait of Georgia	Double-walled tank
Unloading tanker truck failure	500	Gradual to instantaneous	SW to Strait of Georgia	Plant drainage system/retention system
Tank overfill	300	6 gpm	SW to Strait of Georgia	Plant drainage system/retention system
Hose leak during transfer	300	6 gpm	SW to Strait of Georgia	Plant drainage system/retention system
Intalco Substation – Electrical Insulation Oil (SS-2, and Operational Equipment)				
Failure of fixed or portable aboveground tank (collapse or puncture below product level)	10,000	Gradual to instantaneous	SW to Strait of Georgia	Substation containment basin
Tank overfill	120	60 gpm	SW to Strait of Georgia	Substation containment basin
Transformer or other operational equipment failure or explosion	7,550	Gradual to instantaneous	SW to Strait of Georgia	Cobble-filled sump, substation containment basin
Reservoir overfill during service	100	1 to 30 gpm	SW to Strait of Georgia	Plant drainage system/retention system
Valve leak on operational equipment	30	1 gal per hour	SW to Strait of Georgia	Cobble-filled sump, substation containment basin
Drum or Tote Storage Areas				
Leak or drum failure at SA-01	55	Gradual to instantaneous	SW to Strait of Georgia	Containment sump, indoor location or shed roof; spill kit
Leak or drum failure at SA-03	55	Gradual to instantaneous	SW to Strait of Georgia	Spill pallets, indoor location; spill kit
Leak or drum failure at SA-06	55	Gradual to instantaneous	SW to Strait of Georgia	Sloped containment berm with shed roof; spill kit
Fuel Cube Storage Areas (FC-1 to FC-9)				
Leak or tank failure	528	Gradual to instantaneous	SW to Strait of Georgia	Double-walled tanks
Tank overfill	30	1 to 30 gpm	SW to Strait of Georgia	Spill kits
Transfer hose leak or failure	50	1 to 5 gpm	SW to Strait of Georgia	Spill kits
Generator Storage Areas (G-1 to G-9)				
Fuel tank leak or failure	169	Gradual to instantaneous	SW to Strait of Georgia	Containment pond; spill kit

Table 5 – Evaluation of Spill Potential				
Potential Event	**Maximum Volume Released (gallons)**	**Maximum Discharge Rate**	**Direction of Flow**	**Secondary Containment**
Tank overfill	30	1 to 30 gpm	SW to Strait of Georgia	Containment pond; spill kit
Mobile Refueler Tanks (MT-1 to MT-5)				
Failure of aboveground tank (collapse or puncture below product level)	100	Gradual to instantaneous	SW to Strait of Georgia	Containment; spill kit
Transfer hose leak or failure during tank filling	5	1 to 5 gpm	SW to Strait of Georgia	Containment; drip pan; spill kit
Hose leak during vehicle fueling	5	1 gpm	SW to Strait of Georgia	Containment; drip pan; spill kit
Tank overfill	5	1 to 30 gpm	SW to Strait of Georgia	Containment; spill kit
Oil-Filled Operational Equipment in Production Areas				
Hydraulic reservoir leak, rupture, or failure	3,600	Gradual to instantaneous	SSW to Strait of Georgia	Plant drainage system/retention system
Hydraulic reservoir overfill during service	100	1 to 30 gpm	SSW to Strait of Georgia	Plant drainage system/retention system
Failure of a plant transformer (explosion or puncture below product level)	466	Gradual to instantaneous	SSW to Strait of Georgia	Plant drainage system/retention system
Transformer leak	100	1 gpm	SSW to Strait of Georgia	Plant drainage system/retention system
Transformers and Other Electrical Equipment Reservoirs				
Reservoir leak, rupture, or failure	7,550	Gradual to instantaneous	SW to Strait of Georgia	Plant drainage system/retention system
Reservoir overfill during service	100	1 to 30 gpm	SW to Strait of Georgia	Plant drainage system/retention system

4.2 Secondary Containment and Diversionary Structures (40 CFR 112.7(c))

Secondary containment systems and diversionary structures used at the facility to prevent releases of oil from reaching navigable waters and adjoining shorelines are described below.

4.2.1 Bulk Storage Units

Secondary containment systems for bulk storage containers at the facility (described in further detail in Section 5.4) include the following:

- **Concrete Berms and Sumps.** The majority of the aboveground storage tanks and some of the drum storage areas are surrounded by containment berms or sumps. The containment structure capacities are designed to hold the volume of the largest bulk storage unit within the containment structure, plus sufficient freeboard to contain precipitation. Containment structures are sufficiently impervious to contain discharged oil.

- **Double-Walled Tanks.** Vehicle fueling station tanks and several other smaller tanks at the site have double-wall construction. The USEPA has issued guidance indicating that shop-fabricated, double-walled ASTs generally satisfy SPCC secondary containment requirements for sized containment.[1]
- **Spill Pallets.** Spill pallets are used to provide containment for some of the indoor drum storage areas. Most of the spill pallets used at the facility have containment capacity of 60 to 90 gallon.
- **Active Containment Measures.** For discharges that occur during observed activities, such as transfers, active spill containment is an appropriate measure. Employees are trained on spill response measures such that absorbent materials can be constructed and deployed in a timely manner to contain the discharge of oil in case of a spill.

4.2.2 Site-Wide Facility Drainage

The facility drainage is depicted on Figure 3. The facility has multiple defenses (catch basins, detention ponds, and booms) to contain a spill if it reached the stormwater drainage system. The plant drainage system collects stormwater from throughout the plant and conveys to it a settling pond at the southwest section of the plant. Spills that enter the stormwater ditches can typically be contained prior to reaching the stormwater settling pond by closing knife gates or deploying booms located in spill kits. Materials that are spilled outside containment areas and cannot be cleaned up at the spill source would enter the site-wide facility drainage system. The drainage system includes multiple points at which spilled materials can be captured, beginning with storm water catch basins located throughout the plant. Materials that are not captured at catch basins are directed via storm water drains to an onsite flow-through settling pond located in the southwestern portion of the site. The settling pond is 420 feet long, 105 feet wide, and has a depth of approximately 5 feet, providing approximately 1,650,000 gallons of storage capacity. The settling pond is equipped with floating booms to contain spills of oils and other petroleum products that reach the basin. Absorbents will be deployed if spills are detected at the basin. Inspection of the basin is performed during the onsite laboratory technician's daily routine. The settling pond is dredged periodically to remove solids.

The settling pond discharges into a diversion pond, where further treatment to remove oil and floating materials is accomplished using a continuous mechanical oil skimmer. The effluent from the diversion pond weir enters an over-under weir box. Finally, a shear gate with oil absorbent racks is positioned downstream of the diversion pond weir and can be dropped into the flow to treat any oil that somehow escapes the three upstream oil removal systems (i.e., the settling pond oil booms, the diversion pond oil skimmer, and the over-under weir). The likelihood that oil would escape the diversion pond and require activation of the shear gate is extremely low.

4.2.3 Spill Kits.

Spill cleanup kits that contain absorbent material, booms, and other portable barriers are located near all drum oil storage area and other areas where oil and petroleum products are stored or handled. The spill kits are located within close proximity of the oil product storage and handling areas for rapid deployment in the event of a spill. The spill kit inventory listed in Appendix C is checked annually to ensure that spill cleanup supplies are maintained in the kits and replenished following use.

[1] Office of Solid Waste and Emergency Response Directive 9360.8-38.

4.3 Contingency Planning (40 CFR 112.7(d))

The structures, equipment, and procedures required to prevent a discharge of oil to navigable waters have been implemented at the facility, and the facility is not subject to Oil Spill Contingency Plan requirements.

4.4 Inspections, Tests, and Records (40 CFR 112.7(e))

4.4.1 Inspection and Testing

Facility personnel conduct monthly inspections covering the following key elements:

- Observing the exterior of ASTs for signs of deterioration, leaks, corrosion, and thinning.
- Observing the exterior of portable containers (≥55 gallons) for signs of deterioration or leaks.
- Observing tank and equipment foundations and supports for signs of instability or excessive settlement.
- Observing tank and equipment fill and discharge/drainpipes and connections for signs of poor connection that could cause a discharge, and tank vents for obstructions and proper operation.
- Observing aboveground piping, valves, flanges, joints, and supports for signs of leaks.
- Verifying the proper functioning of overfill prevention systems.

Inspection forms for the monthly inspections are presented in Appendix E.

The facility conducts routine checks and annual inspections of the spill kits distributed across the plant and restocks as needed.

All problems regarding tanks, piping, containment, or response equipment are immediately reported to shift supervisors, who coordinate corrective actions with management. Written monthly inspection records are signed by the Environmental Manager or designee and maintained with this SPCC Plan for a period of 3 years.

Information pertaining to inspections conducted to assess tank integrity is presented in Section 5.7.

4.4.2 Records

All records required by this SPCC Plan will be maintained for a minimum of 3 years by the Environmental Manager. The records will include:

- Release documentation (example form in Appendix B)
- SPCC Plan training records and spill briefings (described in Appendix D)
- Monthly inspection forms, which incorporate annual inspection requirements (example forms in Appendix E)
- Tank Integrity Inspection Records
- Records of Formal External Tank Inspection by Certified API or STI Inspector

4.5 Employee Training and Discharge Prevention Procedures (40 CFR 112.7(f))

4.5.1 Training Programs (40 CFR 112.7(f)(1))

All oil-handling personnel at the Intalco facility receive instruction annually to ensure adequate understanding in the proper operation and maintenance of equipment and spill prevention. The

training includes discussion regarding applicable pollution control laws, rules, and regulations. The training also includes familiarization with the SPCC Plan, emphasizing the SPCC Plan as a resource in helping trainees maintain competency in these skill areas. This training is considered required job-related training. Whenever such training occurs, attendance of participants is recorded, and the training records are maintained by the Environmental Manager. Training records are kept in the facilities training recordkeeping database, which is currently "Workbrain."

4.5.2 Designated Responsible Persons (40 CFR 112.7(f)(2))

The Site Manager is responsible for providing the necessary resources for implementation of this Plan. The Environmental Manager has been designated responsibility for day-to-day maintenance and implementation of the SPCC Plan.

4.5.3 Spill Prevention Briefings (40 CFR 112.7(f)(3))

Spill Prevention Briefings are held annually and are integrated into the SPCC training as described in section 4.5.1. These briefings are to assure adequate understanding of the SPCC Plan and highlight and describe known discharges as described in 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.

4.6 Security (40 CFR 112.7(g))

Security measures are an integral part of the facility site safety and the pollution prevention program. This facility's security system is designed to prevent entry into the plant that could result in a release incident due to vandalism, theft, or sabotage. Security features such as a 24/7 onsite security guard, facility lighting, and cameras are used.

4.6.1 Facility Fencing

The facility's security measures include, but are not limited to:

- A 6-foot cyclone fence enclosing the industrial footprint (500 acres);
- Locked fencing surrounding the substation and 90-day waste yard to limit access to authorized personnel;
- At least one employee on shift 24 hours per day and 7 days per week tasked with plant security; and
- Security cameras at the site perimeter.

4.6.2 Securing of Drain Valves

Drain valves which permit direct outward flow of oil from tanks and reservoirs are capped or locked when in non-operating or non-standby status.

A drain valve is present on the containment structure for the oil/water tank (E-T1) used to collect skimmed oil at the detention pond. The drain valve is maintained in a closed and locked position and is only opened by authorized personnel.

4.6.3 Locking of Oil Pump Starter Controls

The only tanks that are equipped with starter controls are the gasoline and diesel tanks at the vehicle fueling station. The starter controls are kept in the off position when not in use. Access is limited to authorized personnel by controlling access to the facility with a security office staffed 24 hours per day, seven days per week, and securing of Loading/Unloading Connections.

4.6.4 Facility Lighting

Area lights or flashlights are located throughout the facility to provide illumination everywhere, including the oil storage areas. Lighting is adequate to detect discharges during hours of darkness, and, coupled with security measures, prevent discharges through acts of vandalism.

4.7 Loading/Unloading Rack (40 CFR 112.7(h)(1)-(3))

The facility does not have a loading/unloading rack equipped with an articulating arm and the specific requirements for loading/unloading racks are not applicable.[2] Descriptions of drainage and containment for unloading areas and the loading/unloading procedures for these areas are described below.

4.7.1 Drainage and Containment in Unloading Areas

The coal tar pitch delivery system is permanently closed. Documentation of the permanent closure of is on file at the facility.

Gasoline and diesel fuel are delivered by tanker truck. The fueling station includes covered fueling lanes, and a graded fueling pad draining to a blind sump to capture any spilled fuel which minimize the potential for stormwater impacts. A spill kit is also available to the personal using the fuel station. Minor spills are captured on concrete pad. A spill that exceeds the capacity of the blind sump and that cannot be promptly contained using spill kit materials would be captured in the facility drainage system, described in Section 5.1.

Diesel is delivered to temporary generators from tanker truck and mobile refuelers (MT-1 to MT-5), which operate within the confines of the facility. Employees are trained on transfer procedures. A mobile spill kit is available in case of a spill or leak, and a drip pan is used during fuel transfers.

All other oils are delivered by tanker truck or cargo truck (e.g., in drums or totes). Spill kits are available throughout the plant near areas where bulk oil is unloaded, and any spills that occur during unloading that cannot be promptly contained would be captured in the facility drainage system, described in Section 5.1.

4.7.2 Unloading Procedures

All oil deliveries are unloaded by trained personnel. Contractors, with an Intalco escort, conduct most of the bulk unloading onsite.

Railcar Unloading Procedures

The coal tar pitch railcar delivery system is currently permanently closed. The facility does not currently unload any oil or petroleum products from railcars.

Truck Unloading Procedures

The unloading/loading process for all oil products at Intalco includes the following spill prevention measures:

- Loading and unloading areas are properly lit to readily identify problems when they occur.
- Phones and/or two-way radios are readily available at transfer stations to call the Main Gate in an emergency.
- The driver sets brake or chocks the truck tires and turns off the truck engine

[2] USEPA SPCC Field Inspection and Plan Review checklist for the facility dated April 10, 2019.

- The driver uses a grounding strap if an engine/pump is used during transfer and places a spill collection bucket under the discharge valve while unloading.
- The driver has spill response materials available.
- The fuel delivery driver is within 25 feet of the unloading operation always.
- The driver monitors delivery/loading/unloading until complete.
- The driver ensures valves are secured before hoses are disconnected and hoses are disconnected before delivery vehicle departs.

A contracted vendor provides and unloads gasoline and diesel fuels. The contracted vendor is notified of fuel storage tank levels through an electronic monitoring system that generates fuel refilling requests. All of the vendor employees tasked with fuel delivery have current Department of Transportation (DOT) HAZMAT training per 49 CFR Part 172. Upon arrival at Intalco, the fuel delivery driver checks in at the Main Gate. The fuel delivery driver proceeds to the fueling station to unload the product into the designated tank.

Mobile Refueler Unloading Procedures

Trained employees transfer gasoline and diesel fuel to on-site vehicles and temporary generators. Fuel tanks are refilled on site at the vehicle fuel station (Tanks F1 and F2). Transfer operations include the following spill prevention measures:

- Loading and unloading areas are properly lit to readily identify problems when they occur.
- Phones and/or two-way radios are readily available at transfer stations to call the Main Gate in an emergency.
- The employee turns off the vehicle.
- The employee uses a drip pan or equivalent to prevent spills during transfer operations.
- The employee monitors transfer until complete.
- Mobile spill kits are available in case of a spill or leak during transfer operations.
- The employee ensures valves are secured before hoses are disconnected and hoses are disconnected before the vehicle departs.

4.8 Brittle Fracture Evaluation (40 CFR 112.7(i))

There are no field-constructed bulk storage containers at the facility that are subject to SPCC regulation.

4.9 Conformance with State Requirements (40 CFR 112.7(j))

The State of Washington does not have any regulations imposing additional requirements or other effective discharge prevention and containment procedures pertaining to oil storage and release prevention or mitigation that are applicable to the facility. The State of Washington has Facility Oil Handling Standards (Washington Administrative Code 173-180), although the Intalco facility does not fall within any of the four classes of facilities subject to these regulations and hence these regulations are not applicable to the Intalco facility.

4.10 Qualified Oil-Filled Operational Equipment (40 CFR 112.7(k))

The oil-filled hydraulic reservoirs and oil-filled electrical equipment at the facility meet the qualification criteria at 40 CFR 112.7(k)(1). However, the facility provides passive and active secondary containment for all oil-filled operational equipment in the form of containment structures, the facility drainage system, and spill kits in compliance with the requirements at 40 CFR 112.7(c), and has elected not to implement alternative requirements to general secondary containment.

5. DISCHARGE PREVENTION MEASURES (40 CFR 112.8)

5.1 Facility Drainage (40 CFR 112.8(b))

A topographic ridge running generally north south divides the facility. The eastern third of the property, mostly natural forest or open fields, drains northeast to Lake Terrell, or southeast towards Bellingham Bay. The western portion of the site includes natural forest, open fields, and the developed areas. Drainage tends southwest towards a 180-foot high western bluff, down natural ravines to the saltwater of Georgia Strait. The majority runoff from the developed areas is captured in a controlled conveyance system, and routed to a single-point controlled stormwater discharge. Site drainage is shown on Figure 2.

Surface soils in the drainage study area tend to have relatively low permeability or consist of shallow granular soils overlying low permeability layers. SCS soil classifications tend to be mostly silty loams and silty clayey loams (Kickerville, McKenna, Cagey, Labounty and Norma). Soils are classified as having medium high to very high runoff. Based on site soil characterization, surface soils in the developed plant area may be considered essentially impermeable with minor ponding, infiltration or retention.

Surface drainage from the industrial area is controlled with impervious catchment areas and conveyance ditches and culverts that are mostly lined. Surface drainage from the outlying areas, outside the developed area, generally follows natural drainage routes toward the western bluff.

5.1.1 Drainage from Diked Storage Areas [40 CFR 112.8(b)(1-2)]

All containment structures are either blinded (i.e., have no outflow) or have drainage valves that are normally maintained closed and must be manually activated to allow discharge. There are no flapper valves on any containment structures. Following a storm event, water that has accumulated in exposed secondary containment structures is inspected by someone adequately trained on the requirements of this SPCC Plan and the facility's stormwater plan. If a sheen or other contamination is noted, the water will be pumped from the containment structure into a storage container for plant reuse, onsite treatment or offsite disposal. Accumulated storm water in containment structures that does not exhibit evidence of oil release is either allowed to evaporate or discharged for entry into the facility drainage system. Containment structures that do not have drainage valves are emptied using manually activated pumps, if removal of accumulated liquids is necessary.

5.1.2 Drainage from Undiked Areas with a Potential for Discharge [40 CFR 112.8(b)(3-4)]

Spills outside of containment structures that enter the stormwater ditches can typically be contained prior to reaching the stormwater settling pond by closing knife gates or deploying booms located in spill kits. Spills outside containment areas that cannot be cleaned up at the spill source would enter the site-wide facility drainage system.

The drainage system includes multiple points at which spilled materials can be captured, beginning with storm water catch basins located throughout the plant. Materials that are not captured at catch basins are directed via storm water drains to an onsite flow-through settling pond located in the southwestern portion of the site. The settling pond is 420 feet long, 105 feet wide, and has a depth of approximately 5 feet, providing approximately 1,650,000 gallons of storage capacity. The settling pond is equipped with floating booms to contain spills of oils and other petroleum products that reach the basin. Absorbents will be deployed if spills are detected at the basin. Inspection of the basin is

performed during the onsite laboratory technician's daily routine. The settling pond is dredged periodically to remove solids.

The settling pond discharges into a diversion pond, where further treatment to remove oil and floating materials is accomplished using a continuous mechanical oil skimmer. The effluent from the diversion pond weir enters an over-under weir box. Finally, a shear gate with oil absorbent racks is positioned downstream of the diversion pond weir and can be dropped into the flow to treat any oil that somehow escapes the three upstream oil removal systems (i.e., the settling pond oil booms, the diversion pond oil skimmer, and the over-under weir).

5.1.3 Drainage Water Treatment Units [40 CFR 112.8(b)(5)]

As described in Section 5.1.3, the facility drainage system is equipped with four oil removal systems: a settling pond with oil booms, a diversion pond with an oil skimmer, an over-under weir, and a shear gate with oil absorbent racks.

5.2 Bulk Storage Containers (40 CFR 112.8(c))

Bulk storage units at the Intalco facility consist of ASTs, totes, 55-gallon drums, generators, and fuel cubes. A list of all storage units is presented on Table 2. The locations of the units are presented on Figure 2. In designing petroleum storage units and containment systems, the facility identifies and takes into consideration adverse weather conditions and natural phenomena that are common or likely to occur in the specific geographic location of the facility, including, but not limited to, intense rainfall, high wind or water, and seismic activity.

5.3 Materials of Construction (40 CFR 112.8(c)(1))

All bulk storage units used for petroleum storage are constructed of steel or plastic that is compatible with petroleum products and in compliance with current construction standards. All tanks are appropriate for use under the actual use conditions, which include: (1) ambient temperatures and pressures within the full range normally occurring in the Ferndale area; and (2) exposure to rain and extended periods of sunlight.

5.4 Secondary Containment (40 CFR 112.8(c)(2))

Secondary containment structures for each AST, tote, 55-gallon drum, generator, and fuel cube are described below and summarized on Table 6.

5.4.1 Containment Berms, Sumps, and Vaults

Most of the bulk storage tanks at the facility are located within containment berms, sumps, and vaults. All containment structures are sized to contain the largest bulk storage unit within the containment, plus sufficient freeboard for precipitation. The containment structures are as follows:

- The skimmer aboveground storage tank (E-T1) at the outfall (diversion) pond is located outdoors within a concrete containment berm that is 5 feet by 9 feet 4 inches and 8 inches high. The skimmer tank normally contains water from a surface skimmer on the outfall pond that is a component of the plant drainage system and would contain oil only in the event that a major release that enters the upstream storm water retention pond and is large enough to reach the outfall pond. The capacity of the containment structure is 233 gallons, which is more than 110 percent of the capacity of the tank. This is considered an acceptable allowance for precipitation, especially given that the skimmer tank normally contains water and would be checked for evidence of oil multiple times per day in the event of a major oil release to the facility drainage system.

- One transformer oil aboveground storage tank (SS-T2) is located within Yard B of the onsite substation. Containment is provided by a curbed concrete catchment with a drain leading to a rock-lined clay containment impoundment with holding capacity of 12,586 gallons. The capacity of the impoundment is more than 110 percent of the bulk storage tank, which is considered an acceptable allowance for precipitation, particularly in light of the fact that the facility has an onsite vacuum truck that can be deployed to transfer storm water out of the containment impoundment or to remove oil from the containment impoundment
- Nine diesel-powered AC generators (G-1 to G-9) are located at the facility to provide power during demolition activities. Generators are located in plastic secondary containment ponds. The majority of generators are located indoors or under cover so that no stormwater enters the containment. The capacity of the containment ponds are approximately 260 to 1,080 gallons.

5.4.2 Double-Walled Tanks

The facility operates the following double-walled tanks:

- Two steel horizontal cylindrical tanks (F-1 and F-2) used for storage of gasoline and diesel in the Vehicle Fuel Station
- A vertical translucent high-density polyethylene tank (CT-T6) used to store oil/water collected in the Casthouse Cooling Tower Oil Skimmer
- Western Global fuel cube tanks (FC-1 to FC-9) used to store diesel fuel and power temporary generators around the facility during demolition activities
- Envirocon has a temporary steel tank (C-T1) on-site used for storage of diesel and refueling.

5.4.3 Portable Tanks

The facility has several vehicle-mounted portable tanks:

- A vertical steel portable tank (P-T3) used for transfer of diesel to points of use in the Potline Maintenance areas. The tank is double-walled.
- Four horizontal vehicle-mounted steel portable tanks (MT-1 through MT-4) used for transfer of diesel or gasoline to on-site generators. The tanks are single-walled located in steel containment with mobile spill kits available.

5.4.4 Drum Storage

The facility maintains drums of oil or petroleum products in the following locations:

- The Auto Maintenance Shop (SA-01), where up to eleven 55-gallon drums of lubricants are stored inside a storage building with an integral containment vault with capacity of 14,000 gallons
- Warehouse #4 (SA-03), where up to thirty-three 55-gallon drums of lubricants are stored indoors on containment pallets
- The 90-Day Drum/Tote Yard (SA-06), where up to twenty 55-gallon drums or up to ten 300-gallon totes of oil/petroleum wastes are stored in a sloped containment berm with capacity of approximately 1,100 gallons and covered by a shed roof to prevent accumulation of storm water

5.4.5 Oil-Filled Hydraulic Equipment

As defined in 40 CFR 112.2, oil-filled operational equipment (OFOE) includes hydraulic equipment, and OFOE is not subject to SPCC requirements for sized passive secondary containment. Hydraulic equipment with oil reservoir capacities at least 55 gallons are described below.

- The Casthouse has equipment that contains between 55 to 1,000 gallons of hydraulic oil, located on concrete floors. In the event of a rupture, the buildings would contain the hydraulic oil until countermeasures (including use of absorbent materials or other available spill response equipment) could be put into effect. If a spill of hydraulic oil escapes the buildings, it would enter the facility drainage system, described in 4.2.1, which includes a combination of passive and active containment systems.

- The Carbon Plant has equipment that contains between 55 to 1,000 gallons of hydraulic oil. The Carbon Plant also contains two anode presses with a hydraulic oil capacity of 3,600 gallons each. There are two bake oven conveyors each containing 250 gallons of hydraulic oil located at the north end of the bake ovens. The hydraulic systems are located within buildings that have concrete floors. In the event of a rupture, the buildings would contain the hydraulic oil until countermeasures (including use of absorbent materials or other available spill response equipment) could be put into effect. If a spill of hydraulic oil escapes the buildings, it would enter the facility drainage system, described in 4.2.1, which includes a combination of passive and active containment systems.

- The Potroom Annex contains two ladle cleaners and a spout cleaner with hydraulic oil capacities of 55 to 600 gallons. The hydraulic systems are located within buildings that have concrete floors. In the event of a rupture, the buildings would contain the hydraulic oil until countermeasures (including use of absorbent materials or other available spill response equipment) could be put into effect. If a spill of hydraulic oil escapes the buildings, it would enter the facility drainage system, described in 4.2.1, which includes a combination of passive and active containment systems.

- The facility unloads alumina from ships using a clam shell unloader at the facility pier located over the Strait of Georgia. On the crane, there are two gear boxes, each with a 55 gallon capacity. Each gear box is completely closed with a fill port on the top with an overfill detection port. In the event of a release from the gear boxes, the oil would spill onto the floor of the structure housing the gear boxes. The oil could drip through opening in the floor and into the alumina holding bin. The alumina would readily sorb and contain the oil preventing further release. In the event of a discharge from these hydraulic oil reservoirs, the spill can be contained inside the building using active containment measures, such as absorbent materials or other available spill response equipment, upon discovery. Furthermore, any significant leaks from the systems are likely to be noted quickly, as the equipment would cease to function properly if substantial amounts of oil were lost.

5.4.6 Substation Area

As defined in 40 CFR 112.2, oil-filled operational equipment (OFOE) includes electrical equipment, such as oil-cooled electrical transformers. The facility's substation has three yards (A, B, C) that supply power to the three potlines with the same notation. Yard A, has 21 OFOE units, and Yards B and C each have 16 OFOE units. Each yard has a bank of large rectifiers (7) and transformers (2-3), each with their own cobble-filled sump. Each of the large transformers have a tap collector and a

contactor which sits over the sump. Three oil-filled circuit breakers service the large transformer. Each Yard also has at least one smaller service station transformer.

The Substation sumps are constructed of gravel and cobble fill on top of the native strata, a clay-rich, glacial marine drift that forms a sufficiently impervious barrier to oil penetration. If a spill or release were to occur from a large capacity OFOE unit, oil from be collected in the sump. The Substation area is graded such that oil released outside the sumps would drain over the compacted and sufficiently impervious gravel fill surface to the lowest points in the yard, consisting of three rock-lined containment impoundments with storage capacities ranging from 10,000 gallons to 31,000 gallons. Each Yard (A, B, and C) within the substation has its own containment impoundment, which were excavated within the clay-rich strata and lined with rip-rap to prevent erosion of the clay. Each containment impoundment has a grated sump at the bottom of the sump and a pipe that discharges into the facility drainage system. The discharge valves are maintained in the closed position. The three containment impoundments are monitored daily by substation employees for the presence of oil. As needed, accumulated stormwater is discharged to the facility drainage system stormwater system after the operator confirms the absence of oil and manually opens the discharge valve. The operator is prompted by his inspection checklist to write down the time the valve is opened and closed, and any observations of oil during the inspection would result in activation of emergency spill response procedures.

5.4.7 Production Area Transformers

Outside of the Substation, there are approximately 80 oil filled transformers. Sixty of these transformers are SPCC regulated, and contain between 123 and 5,490 gallons of oil. Ten of these are spares, stored indoors and within a temporary secondary containment berm. Six operational transformers are located within buildings. The remaining 54 transformers are located outside within fenced enclosures on gravel beds surrounded by raised concrete berms. Some of these transformers are located adjacent to storm drainage ditches and in the event of a rupture could spill oil outside of the gravel bed area into the drainage system. Such a spill would be detected and countermeasures would be put into effect before the spill could leave the plant. Spills that reach the plant drainage system would be captured in the settling pond.

Table 6 – Bulk Oil Storage Units Containment and Release Prevention

Intalco ID	Contents	Maximum Storage Capacity (gal)	Secondary Containment	Release Prevention
Bulk Storage: Aboveground Storage Tanks (ASTs)				
CT-T6	Oil/Water	1,000	Drain line from tank goes to sump; sump liquids pumped into floc tank	Translucent white tank allows visual monitoring of level
CH-T13	Hydraulic Oil	330	Spill pallet	Direct observation during manual transfer from drum
E-T1	Oil/Water	175	Concrete berm	Normally contains water collected from oil skimmer. Only contains oil if oil spill reaches detention pond, in which case it is monitored by direct observation. Drainage valve is locked.
F1	Diesel	12,000	Double-walled tank	High level alarm, automatic overfill prevention valve, leak detection alarm

Table 6 – Bulk Oil Storage Units Containment and Release Prevention				
Intalco ID	**Contents**	**Maximum Storage Capacity (gal)**	**Secondary Containment**	**Release Prevention**
F2	Gasoline	6,000	Double-walled tank	High level alarm, automatic overfill prevention valve, leak detection alarm
SS-T2	Electrical Insulation Oil (new)	10,000	Drains to substation containment basin	Level gauge with electronic readout adjacent to tank
C-T1	Diesel	1,000	Double-walled tank	Fuel gauge with float
Bulk Storage: Portable Vehicle-Mounted Tanks				
P-T3	Diesel	100	Double-walled tank	Direct observation during manual transfer
MT-1	Diesel	100	Active	Direct observation during manual transfer
MT-2	Diesel	100	Active	Direct observation during manual transfer
MT-3	Diesel	100	Active	Direct observation during manual transfer
MT-4	Diesel	100	Active	Direct observation during manual transfer
MT-5	Gasoline	100	Active	Direct observation during manual transfer
Bulk Storage: Portable Containers (Drums and Totes)				
SA-01	Lubricants	11x55	Containment vault	NA
SA-03	Lubricants	33x55	Spill pallets	NA
SA-06	Oil/Petroleum Waste	20x55 or 10x300	Shed with sloped containment floor to sump	NA
Bulk Storage: Portable Containers (Temporary Generators)				
G-1	Diesel	55.5	Containment pond	Fuel gauge, fuel leak alarm
G-2	Diesel	55.5	Containment pond	Fuel gauge, fuel leak alarm
G-3	Diesel	169	Containment pond	Fuel gauge, fuel leak alarm
G-4	Diesel	79	Containment pond	Fuel gauge, fuel leak alarm
G-5	Diesel	169	Containment pond	Fuel gauge, fuel leak alarm
G-6	Diesel	169	Containment pond	Fuel gauge, fuel leak alarm
G-7	Diesel	79.3	Containment pond	Fuel gauge, fuel leak alarm
G-8	Diesel	169	Containment pond	Fuel gauge, fuel leak alarm
G-9	Diesel	79.3	Containment pond	Fuel gauge, fuel leak alarm
Bulk Storage: Portable Containers (Temporary Fuel Cubes)				
FC-1	Diesel	528	Double-walled tank	Fuel level gauge
FC-2	Diesel	528	Double-walled tank	Fuel level gauge
FC-3	Diesel	528	Double-walled tank	Fuel level gauge
FC-4	Diesel	243	Double-walled tank	Fuel level gauge
FC-5	Diesel	528	Double-walled tank	Fuel level gauge
FC-6	Diesel	252	Double-walled tank	Fuel level gauge
FC-7	Diesel	243	Double-walled tank	Fuel level gauge
FC-8	Diesel	252	Double-walled tank	Fuel level gauge
FC-9	Diesel	243	Double-walled tank	Fuel level gauge

5.5 Drainage of Rainwater from Containment Areas (40 CFR 112.8(c)(3))

As described in Section 5.1.1, outdoor containment structures are either blinded (i.e., no outflow) design or have drainage valves that normally maintained closed and must be manually activated. Whenever feasible, Intalco does not remove storm water from containment areas and instead allows it to evaporate, provided the volume of accumulated storm water does not reduce the secondary containment capacity below the requirements of 40 CFR 112.8(c)(2). Following a storm event that results in significant storm water accumulation in secondary containment structures, the accumulated storm water is inspected for the presence of oil or other contaminants by or under the supervision of someone adequately trained on the requirements of the facility's SPCC Plan and stormwater management plan. Uncontaminated storm water is discharged by opening the containment valve to the plant drainage system. If a sheen or other contamination (e.g., color, odor) is noted, the water is pumped from the containment structure into a storage container for reuse or disposal. Containment structures are emptied using manually activated pumps and drainage valves, where present.

5.6 Underground Storage Tanks (40 CFR 112.8(c)(4)-(5))

There are no underground storage tanks (USTs) or partially buried storage tanks at the Intalco facility.

5.7 Aboveground Storage Tank Integrity Testing (40 CFR 112.8(c)(6))

5.7.1 Shop-Fabricated Bulk Storage Containers

The facility's bulk storage containers are all classified as either shop-fabricated aboveground tanks or portable containers with capacities ≥ 55 gallons. The Steel Tank Institute (STI) Standard for the Inspection of Aboveground Storage Tanks, SP001, 6th edition (2018) is an appropriate industry standard for inspection and evaluation criteria required to determine the suitability for continued service of shop-fabricated aboveground storage tanks and portable containers.

Category 1 ASTs are defined in the SP001 standard as having both spill control and continuous release detection method (CRDM). The facility's shop-fabricate bulk storage containers are categorized as Category 1. Periodic inspections of the facility's bulk storage containers following the requirements of the SP001 standard are considered appropriate for the regular integrity inspections required by 40 CFR 112.8(c)(6).

In accordance with STI SP001, inspections are conducted as follows:

- For shop-built tanks with capacity from 5,000 gallons to 30,000 gallons (applicable to the diesel tank F-1, gasoline tank F-2, and the substation tank SS-T2), inspections include monthly and annual inspections by facility personnel and a formal external inspection by a certified inspector (STI or American Petroleum Institute [API]) every 20 years. Intalco's schedule for conducting 20-year inspections of shop-built tanks by a certified API or STI inspector is presented below on Table 7. The qualifications for facility personnel performing the periodic inspections include being knowledgeable about storage facility operations, the type of AST and its associated components, the spill control system for the facility, and characteristics of the liquid stored. Facility personnel inspectors must also be familiar with pumping, piping, and valve operations of the AST system. The scope of inspections should be consistent with *STI SP001 Monthly Inspection Checklist* and *STI SP001 Annual Inspection Checklist* (or equivalent); Intalco's monthly inspection forms (presented in Appendix E) incorporate the pertinent inspection items from both the monthly and annual SP001 checklists, such that separate annual inspections forms are not needed. The inspection of the double-walled diesel

tank must include assessment of any signs of leakage in the interstitial space. If signs of leakage or deterioration from any tank are observed by facility personnel, the tank is to be inspected by an appropriately certified or licensed contractor tank to assess its suitability for continued service. The physical configuration of these tanks, combined with monthly inspections, ensures that any small leak that could develop in the tank shell will be detected before it can become significant, escape secondary containment, and reach the environment.

- For shop-built tanks with capacity less than 5,000 gallons (applicable to the remaining tanks), inspections include monthly and annual inspections by facility personnel knowledgeable about storage facility operations, the type of AST and its associated components, the spill control system for the facility, and characteristics of the liquid stored. Facility personnel inspectors must also be familiar with pumping, piping, and valve operations of the AST system. The scope of inspections should be consistent with *STI SP001 Monthly Inspection Checklist* and *STI SP001 Annual Inspection Checklist* (or equivalent). Intalco's monthly inspection forms (presented in Appendix E) incorporate the pertinent inspection items from both the monthly and annual SP001 checklists, such that separate annual inspections forms are not needed.

- For ≥55 gallon containers, the trained facility personnel inspectors must complete the *STI SP001 Portable Container Monthly Inspection Checklist* or equivalent each month. Plastic drums must be replaced every 7 years and steel drums must be replaced every 12 years.

Table 7 – Schedule for 20-Year for Formal External Tank Inspection by API/STI Inspector

Tank	Contents	Last Formal External Inspection	Next Scheduled Formal External Inspection
F1	Diesel	2020	2040
F2	Gasoline	2020	2040
SS-T2	Electrical Insulation Oil	2017	2037

5.7.2 Field-Erected Aboveground Tanks

The facility does not currently have any field-erected tanks that contain oil or petroleum products.

5.7.3 Inspection Records

The inspection records must be retained to allow comparison of the condition of the tanks over time. The inspection records must address the condition of both the tanks and the supports and foundations, including signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices satisfy the recordkeeping requirements of this paragraph.

5.8 Internal Heating Coils (40 CFR 112.8(c)(7))

The facility does not have any tanks that have internal heating coils.

5.9 Engineering Controls (40 CFR 112.8(c)(8))

Bulk storage containers are equipped with high liquid level alarms, high liquid level pump cutoff devices, and float or sight gauges for monitoring liquid level, as summarized on Table 6. Alarms and gauges are tested at least annually for proper function. For tanks which do not have sight gauges, a manual gauging method is used to determine the quantity of fuel or oil to be added. In all cases where

tank filling may occur, facility personnel supervise delivery personnel in such a way that direct audible or code signal communication between facility personnel (the tank gauger) and delivery personnel (the pumping station) is possible. Further, any release from overfill would be contained either inside secondary containment berms or by the facility's drainage system. Thus there are no reasonable release scenarios that would impact navigable waters.

5.10 Treatment System Effluents (40 CFR 112.8(c)(9))

The facility discharges storm and process water under a National Pollutant Discharge Elimination System (NPDES) Permit that specifies regular inspection and monitoring of the effluent frequently enough to detect possible system upsets that could cause a discharge.

5.11 Visible Oil Leaks (40 CFR 112.8(c)(10))

Visible oil leaks that are sufficient to cause an accumulation of oil in containment structures are identified during inspections, as described in Section 4.4, and promptly corrected.

5.12 Mobile and Portable Oil Storage (40 CFR 112.8(c)(11))

The facility maintains a number of portable oil storage containers, including various 55-gallon drums, all of which have adequate secondary containment. Additional containment is provided by the facility's drainage system, which diverts material entering catch basin to the settling pond and diversion pond.

5.13 Facility Transfer Operations (40 CFR 112.8(d))

5.13.1 Underground Piping (40 CFR 112.8(d)(1))

The only SPCC-regulated buried piping at the facility consists of double-walled fiberglass piping between the gasoline and diesel aboveground storage tanks and the pump island. Because the piping is constructed of fiberglass and will not corrode, cathodic protection is not applicable. If a section of buried line is exposed for any reason, it will be inspected for evidence of deterioration, and additional examination and corrective action will be conducted as indicated by the magnitude of the damage

5.13.2 Out of Service Piping (40 CFR 112.8(d)(2))

Any terminal connection that is not in service or is in standby service for an extended time will be capped or blank-flanged and marked to indicate its origin.

5.13.3 Pipe Supports (40 CFR 112.8(d)(3))

Aboveground piping used for transfer of oil at the facility is integral to operational equipment or specific containers and are presumably designed by the equipment manufacturers to minimize abrasion and corrosion and allow for expansion and contraction The facility does not currently have any pipe bridges that support piping used to transfer oil or petroleum products.

5.13.4 Pipe Inspections (40 CFR 112.8(d)(4))

Aboveground valves, piping, and appurtenances are inspected during the monthly container inspections to assess the condition of items, such as joints, valves, catch pans, pipeline supports, and metal surfaces. The only buried piping at the facility consists of double-walled fiberglass piping between the gasoline and diesel aboveground storage tanks and the pump island. The buried piping will be subjected to integrity and leak testing if modified, relocated, or replaced.

5.13.5 Vehicle Warnings (40 CFR 112.8(d)(5))

The facility does not currently have any overhead piping used to transfer oil or petroleum products. All vehicles entering the facility are provided with instructions at the guard shack to remain on

established roads at all times. Security personnel warn all vehicles to follow mobile equipment safety procedures which are intended for pedestrian and equipment protection and which ensures no vehicle will endanger any oil transfer operations.

5.14 Facility Response Plan (40 CFR 112.20)

The facility is not required to submit a facility response plan based on the responses in the Certification of the Applicability of the Substantial Harm Criteria, as provided in Section 6.

6. CERTIFICATION OF NO SUBSTANTIAL HARM (40 CFR 112.20(e))

Facility Name: Intalco Aluminum LLC

Facility Address: 4050 Mountain View Road, Ferndale, Washington 98248

1. Does the facility transfer petroleum over water to or from vessels and does the facility have a total petroleum storage capacity greater than or equal to 42,000 gallons?

   YES _____ NO __X__

2. Does the facility have a total petroleum storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground petroleum storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?

   YES _____ NO __X__

3. Does the facility have a total petroleum storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that discharge from the facility could cause injury to fish and wildlife and sensitive environments?

   YES _____ NO __X__

4. Does the facility have a total petroleum storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that discharge from the facility would shut down a public drinking water intake?

   YES _____ NO __X__

5. Does the facility have a total petroleum storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable petroleum spill in an amount greater than or equal to 10,000 gallons within the last five years?

   YES _____ NO __X__

Certification

I certify under penalty of law that I have personally examined and am familiar with the information that is presented on this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the information contained herein is accurate and complete.

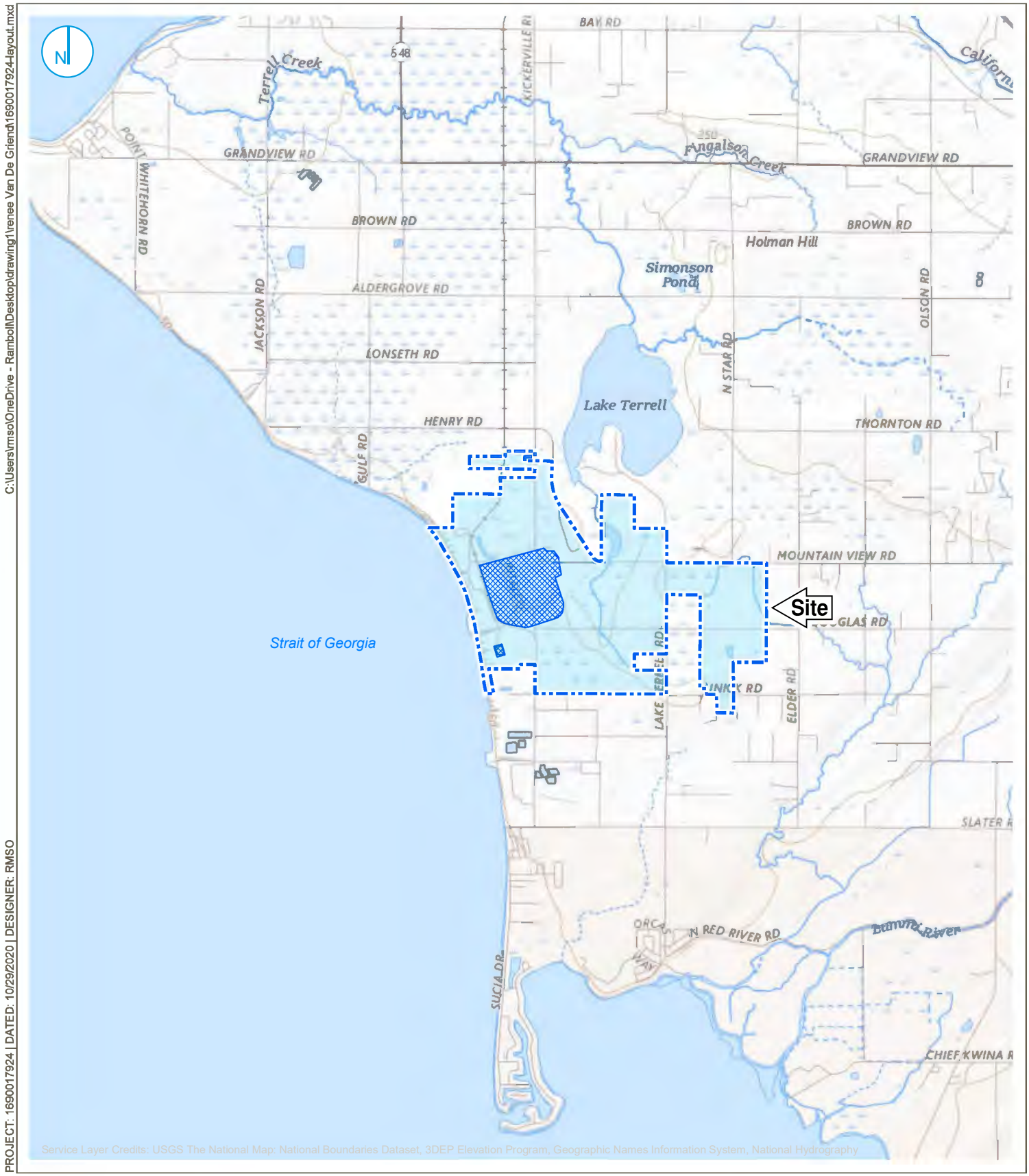
Signature

8/31/21
Date

Tia Daulph
Name (printed)

Site Manager Intalco
Title

FIGURES



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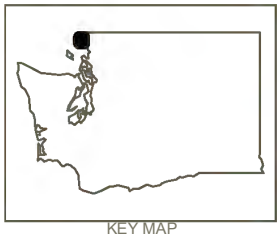
PROJECT: 1690017924 | DATED: 10/29/2020 | DESIGNER: RMSO



KEY MAP

LEGEND

Approximate Site Boundary

Developed Area

Map Scale: 1:1:96,000;
Map Center: 122°42'24"W 48°50'44"N

0 4,000 8,000 Feet

SITE LOCATION MAP

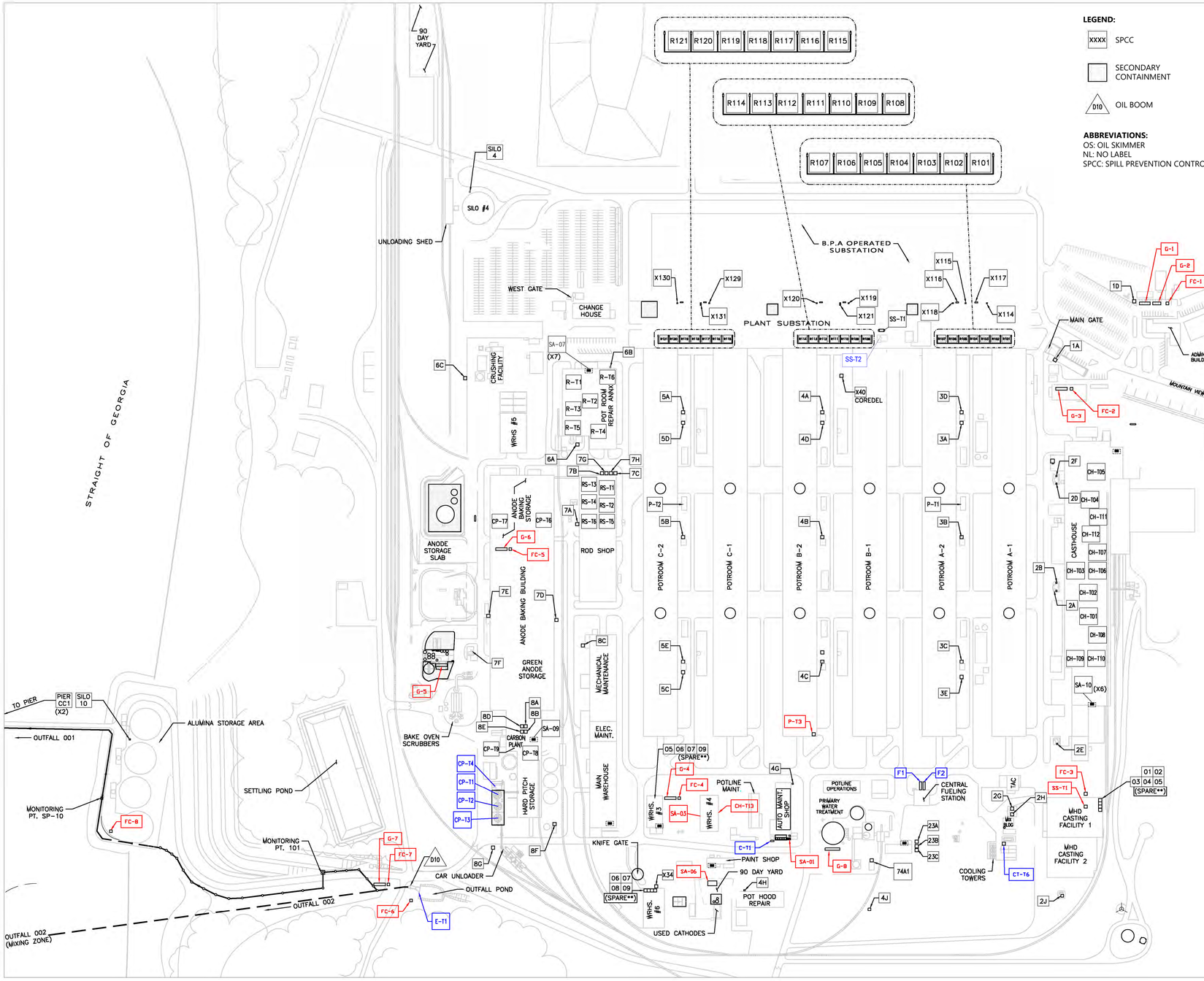
Intalco Aluminum LLC

4040 Mountain View Road
Ferndale, Washington

FIGURE 01

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL



EQUIPMENT LIST

INTALCO ID	CONTENTS	CAPACITY (GALLONS)
10-SILO	TRANS OIL	285
1A	TRANS OIL	150
1D	TRANS OIL	285
23A	TRANS OIL	260
23B	TRANS OIL	260
23C	TRANS OIL	291
2A	TRANS OIL	281
2B	TRANS OIL	465
2D	TRANS OIL	404
2E	TRANS OIL	265
2F	TRANS OIL	404
2G	TRANS OIL	267
2H	TRANS OIL	267
2J	TRANS OIL	293
3A	TRANS OIL	390
3B	TRANS OIL	465
3C	TRANS OIL	465
3D	TRANS OIL	350
3E	TRANS OIL	350
4A	TRANS OIL	450
4B	TRANS OIL	465
4C	TRANS OIL	465
4D	TRANS OIL	465
4G	TRANS OIL	140
4H	TRANS OIL	155
5A	TRANS OIL	465
5B	TRANS OIL	465
5C	TRANS OIL	465
5D	TRANS OIL	465
5E	TRANS OIL	350
6A	TRANS OIL	400
6B	TRANS OIL	200
6C	TRANS OIL	340
74A1	TRANS OIL	400
7A	TRANS OIL	203
7B	TRANS OIL	200
7C	TRANS OIL	280
7D	TRANS OIL	280
7E	TRANS OIL	330
7F	TRANS OIL	465
7G	TRANS OIL	242
7H	TRANS OIL	242
8A	TRANS OIL	400
8B	TRANS OIL	400
8C	TRANS OIL	330
8D	TRANS OIL	400
8E	TRANS OIL	400
8F	TRANS OIL	121
8G	TRANS OIL	450
CH-T01	WATER SOLUBLE OIL MIXTURE (ML580 + WATER)	1,000
CH-T02	WATER SOLUBLE OIL MIXTURE (ML580 + WATER)	1,000
CH-T03	USED OIL	150
CH-T04	PERMANENTLY CLOSED	-
CH-T05	PERMANENTLY CLOSED	-
CH-T06	HYDRAULIC OIL	200
CH-T07	HYDRAULIC OIL	100
CH-T08	HYDRAULIC OIL	500
CH-T09	HYDRAULIC OIL	100
CH-T10	HYDRAULIC OIL	100
CH-T11	HYDRAULIC OIL	100
CH-T12	HYDRAULIC OIL	100
COREDEL	TRANS OIL	400
CP-T6	HYDRAULIC OIL	250
CP-T7	HYDRAULIC OIL	250
CP-T8	HYDRAULIC OIL	3,600
CP-T9	HYDRAULIC OIL	3,600
C-T1	DIESEL	1,000
E-T1	USED OIL	175
F1	DIESEL	12,000
F2	GASOLINE	6,000
PIER-CC1	LUBRICATING OIL	60
P-T3	DIESEL	100
R101	TRANS OIL	4,306
R102	TRANS OIL	4,306
R103	TRANS OIL	4,306
R104	TRANS OIL	2,790
R105	TRANS OIL	4,306
R106	TRANS OIL	4,306

EQUIPMENT LIST CONT.

INTALCO ID	CONTENTS	CAPACITY (GALLONS)
R107	TRANS OIL	4,306
R108	TRANS OIL	5,490
R109	TRANS OIL	5,490
R110	TRANS OIL	5,490
R111	TRANS OIL	3,120
R112	TRANS OIL	5,490
R113	TRANS OIL	5,490
R114	TRANS OIL	5,500
R115	TRANS OIL	3,120
R116	TRANS OIL	3,120
R117	TRANS OIL	3,120
R118	TRANS OIL	3,120
R119	TRANS OIL	3,120
R120	TRANS OIL	3,120
R121	TRANS OIL	3,120
RS-T1	HYDRAULIC OIL	220
RS-T2	HYDRAULIC OIL	220
RS-T3	HYDRAULIC OIL	220
RS-T4	HYDRAULIC OIL	220
RS-T5	HYDRAULIC OIL	100
RS-T6	HYDRAULIC OIL	100
R-T1	HYDRAULIC OIL	60
R-T2	HYDRAULIC OIL	55
R-T3	HYDRAULIC OIL	600
R-T4	HYDRAULIC OIL	20
R-T5	HYDRAULIC OIL	20
R-T6	HYDRAULIC OIL	30
SA-01	LUBRICANTS	13 X 55
SA-03	LUBRICANTS	33 X 55
SA-06	USED OIL	20 X 55
SILO 4	TRANS OIL	200
SPARE-01	TRANS OIL	5,490
SPARE-02	TRANS OIL	200
SPARE-03	TRANS OIL	340
SPARE-04	TRANS OIL	465
SPARE-05	TRANS OIL	200
SPARE-06	TRANS OIL	465
SPARE-07	TRANS OIL	421
SPARE-08	TRANS OIL	421
SPARE-09	TRANS OIL	290
SS-T2	NEW ELECTRICAL INSULATING OIL	10,000
SS-T5	EMPTY	-
SS-T6	EMPTY	-
X114	TRANS OIL	7,550
X115	TRANS OIL	7,550
X116	TRANS OIL	7,550
X117	TRANS OIL	236
X118	TRANS OIL	236
X119	TRANS OIL	7,550
X120	TRANS OIL	7,550
X121	TRANS OIL	228
X129	TRANS OIL	7,550
X130	TRANS OIL	7,550
X131	TRANS OIL	236
X34	TRANS OIL	123
G-1	DIESEL	55.5
G-2	DIESEL	55.5
G-3	DIESEL	169
G-4	DIESEL	79
G-5	DIESEL	169
G-6	DIESEL	169
G-7	DIESEL	79.3
G-8	DIESEL	169
G-9	DIESEL	79.3
FC-1	DIESEL	528
FC-2	DIESEL	528
FC-3	DIESEL	528
FC-4	DIESEL	243
FC-5	DIESEL	528
FC-6	DIESEL	252
FC-7	DIESEL	243
FC-8	DIESEL	252
FC-9	DIESEL	243
MT-1	DIESEL	100
MT-2	DIESEL	100
MT-3	DIESEL	100
MT-4	DIESEL	100
MT-5	GASOLINE	100

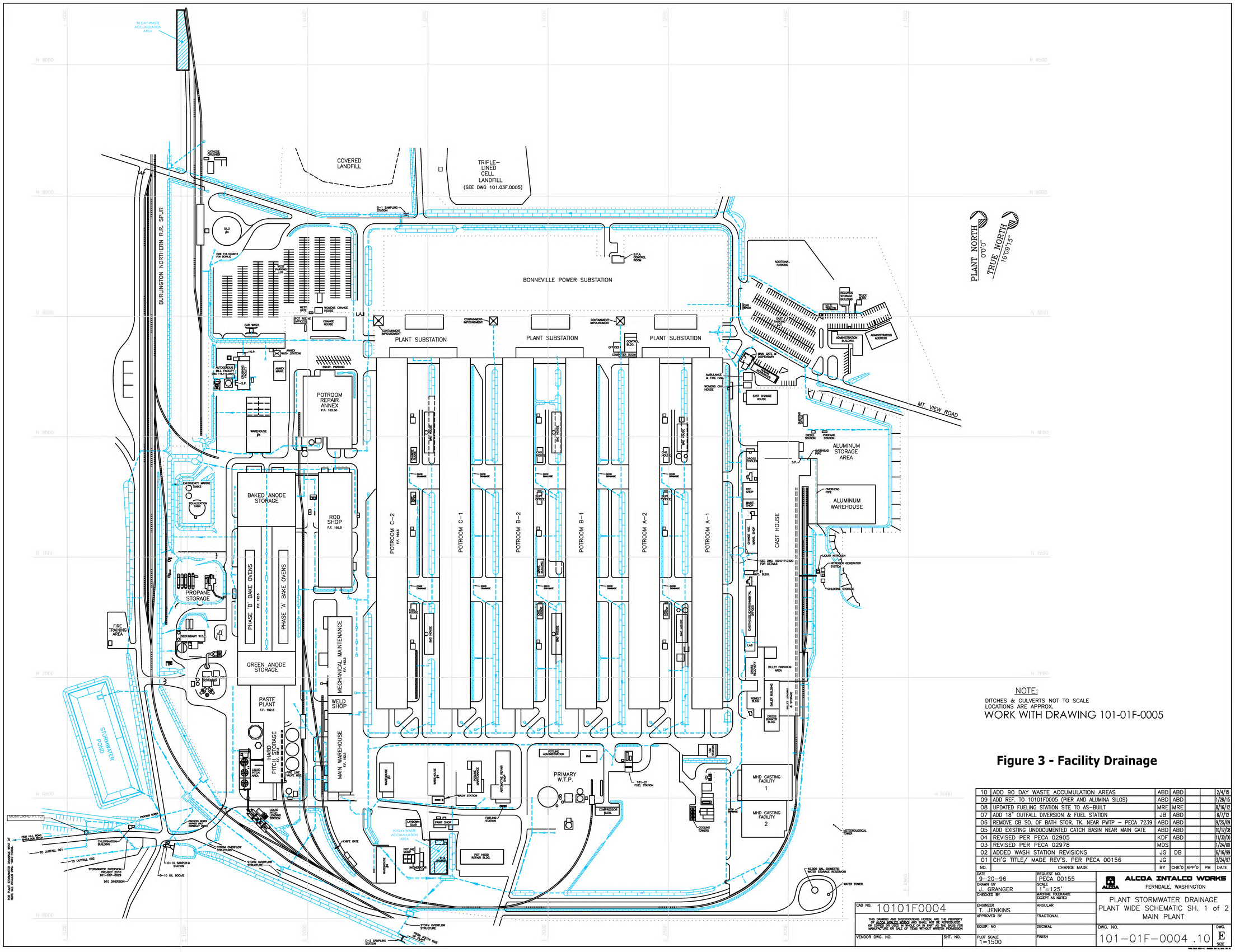
NOTES:
1. SECONDARY CONTAINMENT CAPACITIES ARE DESCRIBED IN THE SPCC PLAN.
2. THE MAIN GATE IS THE MAJOR EMERGENCY COMMUNICATION CENTER.
3. FIRE EXTINGUISHER LOCATION LIST AT THE MAIN GATE.
4. ** = SPARE TIER TRANS OIL LOCATIONS
5. G-9 AND FC-9 LOCATED AT THE WATER TOWER.
6. MOBILE REFUELERS MT-1 THROUGH MT-5 OPERATE THROUGHOUT THE FACILITY.
7. DRAWING PREPARED FROM CAD FILE "10101G0014.DWG" PROVIDED BY ALCOA.
8. DRAWING IS IN LOCAL PLANT DATUM.

Publish Date: 2025/10/29 11:36 AM | User: hmerrick
Filepath: K:\Projects\0002-Alcoa Inc\Alcoa-Intalco Aluminum\SPCC Plan\0002-RP-001 (Oil Storage Locs).dwg | Figure 2

ANCHOR QEA

Figure 2
Oil Storage Locations

Spill Prevention, Control, and Countermeasures Plan
Intalco Aluminum, LLC



NOTE:
DITCHES & CULVERTS NOT TO SCALE
LOCATIONS ARE APPROX.
WORK WITH DRAWING 101-01F-0005

Figure 3 - Facility Drainage

NO.	CHANGE MADE	BY	CHK'D	APP'D	PM	DATE
10	ADD 90 DAY WASTE ACCUMULATION AREAS	ABD	ABD			2/4/15
09	ADD REF. TO 10101F0005 (PIER AND ALUMINA SILOS)	ABD	ABD			1/28/15
08	UPDATED FUELING STATION SITE TO AS-BUILT	MRE	MRE			8/16/12
07	ADD 18" OUTFALL DIVERSION & FUEL STATION	JB	ABD			8/7/12
06	REMOVE CB SO. OF BATH STOR. TK. NEAR PWTP – PECA 7239	ABD	ABD			9/25/09
05	ADD EXISTING UNDOCUMENTED CATCH BASIN NEAR MAIN GATE	ABD	ABD			10/17/08
04	REVISED PER PECA 02905	KDF	ABD			11/30/00
03	REVISED PER PECA 02978	MDS				1/24/00
02	ADDED WASH STATION REVISIONS	JG	DB			6/16/99
01	CH'G TITLE/ MADE REV'S. PER PECA 00156	JG				3/24/97

DATE 9-20-96	REQUEST NO. PECA 00155	ALCOA INTALCO WORKS FERNDALE, WASHINGTON
DRAWN BY J. GRANGER	SCALE 1"=125'	
CHECKED BY	MACHINE TOLERANCE EXCEPT AS NOTED	PLANT STORMWATER DRAINAGE PLANT WIDE SCHEMATIC SH. 1 of 2 MAIN PLANT
ENGINEER T. JENKINS	ANGULAR	
APPROVED BY	FRACTIONAL	
EQUIP. NO	DECIMAL	DWG. NO. 101-01F-0004 .10
PLOT SCALE 1=1500	FINISH	DWG. SIZE E

CAD NO. 10101F0004

THIS DRAWING AND SPECIFICATIONS HEREIN, ARE THE PROPERTY OF ALCOA INTALCO WORKS AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION

VENDOR DWG. NO.

SHT. NO.

APPENDIX A
AMENDMENT CERTIFICATION FORM

SPCC Amendment Number 1

Description of amendment:

- Permanent closure of coal tar pitch tanks CP-T1, CP-T2, and CP-T3 and Therminol tank CP-T4;
- Removal of tanks P-T1 and P-T2 and drum storage areas SA-07, SA-09, and SA-10;
- Addition of tank CH-T13 at Casthouse Warehouse
- Revision of inspection forms;
- Addition of spill kit locations to facility diagram;
- Update of secondary site contact; and
- Correction of minor text inconsistency errors.

Management Approval

This amendment to the SPCC Plan has the full approval of Intalco management. Intalco has committed the necessary resources to implement the measures described in this amendment.

_____	_____	_____
Signature	Title	Date

Professional Engineer Certification (40 CFR 112.3(d))

The undersigned Registered Professional Engineer is familiar with the requirements of 40 CFR 112 and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan, as amended, has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR 112; that procedures for required inspections and testing have been established; and that this Plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR 112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

Previously signed/stamped on August 30, 2021

_____	_____	
Signature	Date	P.E. Seal

SPCC Amendment Number 2

Description of amendment:

- Adjustments to locations of SS-T1 and P-T3;
- Revision of inspection forms;
- Removal of drum storage area SA-05;
- Update of site contacts;
- Updates to Figure 2; and
- Correction of minor text inconsistency errors.

Management Approval

This amendment to the SPCC Plan has the full approval of Intalco management. Intalco has committed the necessary resources to implement the measures described in this amendment.

_____	_____	_____
Signature	Title	Date

Professional Engineer Certification (40 CFR 112.3(d))

The undersigned Registered Professional Engineer is familiar with the requirements of 40 CFR 112 and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan, as amended, has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR 112; that procedures for required inspections and testing have been established; and that this Plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR 112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

Previously signed/stamped on January 25, 2023

_____	_____	
Signature	Date	P.E. Seal

SPCC Amendment Number 3

Description of amendment:

- Addition of temporary generators (G-1 through G-9) and temporary fuel cubes (FC-1 through FC-9), and mobile refuelers (MT-1 through MT-5);
- Revision of inspection forms;
- Removal of drum storage area SA-02, SA-04, and SA-08;
- Relocation of CH-T13 to Warehouse #4;
- Updates to Figure 2; and
- Correction of minor text inconsistency errors.

Management Approval

This amendment to the SPCC Plan has the full approval of Intalco management. Intalco has committed the necessary resources to implement the measures described in this amendment.

_____	_____	_____
Signature	Title	Date

Professional Engineer Certification (40 CFR 112.3(d))

The undersigned Registered Professional Engineer is familiar with the requirements of 40 CFR 112 and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan, as amended, has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR 112; that procedures for required inspections and testing have been established; and that this Plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR 112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

Previously signed/stamped on June 6, 2025

_____	_____
Signature	Date

SPCC Amendment Number 4

Description of amendment:

- Addition of temporary road diesel tank (C-T1)
- Permanent closure of ASTs CP-T5, CP-T19, MR-T1, MR-T2, MR-T3, MR-T4, MR-T5, MR-T6, SS-T1, SS-T3, and SS-T4
- Revision of inspection forms;
- Updates to Figure 2

Management Approval

This amendment to the SPCC Plan has the full approval of Intalco management. Intalco has committed the necessary resources to implement the measures described in this amendment.

Signature	Title	Date

Professional Engineer Certification (40 CFR 112.3(d))

The undersigned Registered Professional Engineer is familiar with the requirements of 40 CFR 112 and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan, as amended, has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR 112; that procedures for required inspections and testing have been established; and that this Plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR 112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

Kendra Skellenger

Signature

10/29/2025

Date

SPCC Amendment Number _____

Description of amendment:_____
_____
_____
_____

Management Approval

This amendment to the SPCC Plan has the full approval of Intalco management. Intalco has committed the necessary resources to implement the measures described in this amendment.

_____	_____	_____
Signature	Title	Date

Professional Engineer Certification (40 CFR 112.3(d))

The undersigned Registered Professional Engineer is familiar with the requirements of 40 CFR 112 and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan, as amended, has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR 112; that procedures for required inspections and testing have been established; and that this Plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR 112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

_____	_____	
Signature	Date	P.E. Seal

APPENDIX B
OIL SPILL DOCUMENTATION FORM

OIL SPILL DOCUMENTATION FORM
Intalco Aluminum LLC

Date of spill _____ Time of spill _____a.m./p.m.

Name of person reporting spill: _____

Phone number: _____

Spill Information:

Location _____

Spill source _____

Type and quantity of material spilled _____

Cause _____

_____

Spill path: Storm drain _____Soil_____Pavement _____

Other _____

Description of physical damages, if any:_____

_____

_____

Description of physical injuries, if any:_____

_____

_____

Cleanup/containment measures:_____

_____

_____

Amount of product recovered: _____gallons / pounds

Action taken to prevent recurrence: _____

_____

_____

Local agencies on the scene or notified: _____

_____

_____

Report completed by _____Date _____

FORWARD COMPLETED FORM TO THE ENVIRONMENTAL MANAGER

APPENDIX C
SPILL KIT INVENTORY