

ENVIRONMENTAL CHECKLIST
Seattle-Tacoma International Airport (SEA)
Industrial Wastewater Treatment Plant (IWTP) Enhancement
Project

A. BACKGROUND

1. Name of proposed project, if applicable:

Industrial Wastewater Treatment Plant (IWTP) Enhancement Project

2. Name of applicant:

Port of Seattle (Port)

3. Address and phone number of applicant and contact person:

Port of Seattle
P.O. Box 68727
Seattle, WA 98168

Contact: Steve Rybolt, Senior Environmental Program Manager
Telephone/Email: (206) 787-5527, Rybolt.S@portseattle.org

4. Date checklist prepared: June 26, 2025

5. Agency requesting checklist: Port of Seattle – SEPA File Number 2025-04

6. Proposed timing or schedule (including phasing, if applicable):

Construction of the IWTP Enhancement Project (Project) at Seattle-Tacoma International Airport (SEA) is expected to begin in Q2 2026 and be completed by Q2 2030.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

There are no plans for future additions or expansions directly related to the Project at this time. This Project is needed to allow the Port to continue to meet the permit conditions of its Industrial Waste Discharge (IWD) Permit (#7810-05) issued by the King County Industrial Waste Program (KCIW), and the National Pollutant Discharge Elimination System (NPDES) Permit WA0024651 issued by the Washington State Department of Ecology (Ecology). These permit conditions include treatment and detention sizing criteria to meet forecasted operational growth.

SEA Airport (SEA) underwent a major planning effort—The Sustainable Airport Master Plan (SAMP). The SAMP identified a suite of Near-Term Projects (NTP) to address increases in passenger and cargo demands that are currently undergoing an environmental review. Construction of this Project is still needed to comply with permit conditions regardless of construction of the NTPs and does not impact Port of Seattle (Port) choices or decisions regarding whether and what SAMP NTP projects may occur.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- IWTP Geotechnical Survey Report - 2025 (*document in draft*)
- IWTP Tree Inventory and Replacement Report –2025 (*document in draft*)
- IWTP Wetlands Verification Memo –2025 (*document in draft*)

- IWTP Cultural Resources Assessment July 2, 2025
- IWTP Enhancement Project National Environmental Policy Act (NEPA) Categorical Exclusion, May 9, 2025
- Industrial Wastewater System (IWS) Alternatives Analysis Technical Memorandum, March 13, 2024
- IWTP Basis of Design Report, June 23, 2023
- Final IWTP Engineering Report, June 7, 2023
- IWTP/Snow Storage Critical Areas Memo, December 2, 2022

9. Do you know whether applications are pending for governmental approvals or other proposals directly affecting the property covered by your proposal? If yes, explain.

No applications are pending for governmental approvals or other proposals directly affecting the Project site.

10. List any government approvals or permits that will be needed for your proposal, if known.

Environmental Permits and Approvals

Incorporate Project into 2026 renewal cycle for the following permits:

- IWD Permit #7810-05 - KCIW
- NPDES Permit WA0024651 - Ecology

Other Permits and Approvals

- Land Use, Building, Plumbing, Mechanical, Electrical, Fire Suppression and Grading Permits - Port of Seattle
- Right-of-Way Permit - City of SeaTac
- Stormwater Connection Permit – City of SeaTac
- Soil Handling or Disposal Permit - Ecology
- Sanitary Sewer Connection Permit - Midway Sewer District
- Water Supply Connection Permit - Highline Water District
- Natural Gas Supply Connection Permit - Puget Sound Energy
- Dam Safety Program coordination – Washington State Department of Ecology

Give 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.)

SEA operates an Industrial Wastewater System (IWS) that collects stormwater impacted by industrial activities (referred to as wastewater) from airport and airline operations. The IWS encompasses conveyance network, detention, and collection area is approximately 375 acres where industrial activities like maintenance, refueling or deicing occurs. The area is generally comprised of the airport terminal, air cargo facilities, aircraft deicing areas, fuel farms, hangars, and aircraft maintenance areas.

Project Purpose

The Project is primarily proposed to treat water containing aircraft deicing solutions. Aircraft deicing and anti-icing are mandated by the Federal Aviation Authority (FAA) to ensure public safety. The application of aircraft deicers is under the control of the individual airlines. Deicing is essential to safe aircraft operations during cold weather conditions. Airlines spray deicers onto planes in designated deicing areas at SEA where the wastewater can be collected and routed through the IWS for treatment. The presence of deicers in wastewater results in high levels of

Biochemical Oxygen Demand (BOD) which must be reduced to avoid oxygen depletion in receiving water bodies.

The IWTP was designed and constructed in the early 1960s for the purpose of capturing and treating fuel spills. Since original construction, there have been numerous facility improvements expanding detention capacity, operational enhancements, and in the segregation of wastewater. In late 2006, following implementation of the All Known and Reasonable Treatment (AKART) assessment, the IWTP began segregating low and high concentration BOD runoff. With the segregation, SEA can discharge pre-treated wastewater with high BOD to the sanitary sewer for supplemental treatment by the King County Industrial Waste Division (KCIW), per SEA's Industrial Waste Discharge (IWD) Permit #7810-05. Although permitted, the volume of pre-treated wastewater with high BOD that SEA sends to KCIW has affected operations at KCIW's South Treatment Plant. As a result, KCIW has been progressively reducing the of high BOD wastewater daily loads that IWTP can discharges to KCIW South Treatment Plant.

Since 2006, King County has the limited the amount (measured in pounds) of BOD that can be sent to KCIW for treatment per day. Initially the permitted discharge amount was 60,000 pounds BOD per day. With an upcoming permit renewal in July 2026, the allowable amount is anticipated to be reduced to 12,000 pounds of BOD per day. This reduction in the amount of BOD that can be sent to KCIW's treatment facility, compounded by forecasted growth that will increase the amount of deicer in use, requires the Port to upgrade and supplement the existing IWTP so that SEA can treat for high BOD onsite. After reviewing alternative treatment methods for managing high BOD wastewater, an aerated gravel bed (AGB) treatment system was selected given site constraints, permit conditions, and operating requirements.

Project Description

The Project includes upgrades within the existing IWTP facility, a new high-BOD treatment facility that will tie into the existing facility, and associated piping and utilities to accommodate the system enhancements (Figure 1). The IWTP's three storage lagoons will retain their purpose and overall configuration, although some utility and pipe upgrades will be necessary.

IWTP Site: The existing IWTP located approximately 2,000 feet southwest of Runway 34C will be upgraded. The six (6) aging Dissolved Air Flotation (DAF) units housed in the IWTP that remove solids, metals, and fuel from wastewater will be replaced. The new units will increase the handling capacity and enhance the ability to treat the wastewater. In addition, the existing tanks used for solids settling will be replaced with a 460 square foot gravity thickener unit, similar to a clarifier, and a new 12-foot by 14-foot solids storage tank. Associated piping and flow control devices will be upgraded to accommodate flows through the enhanced IWTP. To accommodate the enhanced system, approximately 200 cubic yards of fill will need to be excavated, and approximately 3,000 square yards of grading will be necessary. Since South 188th Street bisects the IWTP Site from the other two sites, some trenchless construction beneath this right-of-way will be required to upgrade piping and utilities and connect to the AGB Site.

AGB Site: The AGB system will be located south of the IWTP Site on vacant Port-owned property. The site is 10.6 acres on the corner of Des Moines Memorial Drive and S 188th Street. This new facility will include six (6) 24,000 square foot aerated gravel beds, an AGB Tank, an AGB Control Building and an access road loop (Figure 2). The new AGB facility will operate four (4) 250-horsepower blowers to aerate (add oxygen to) the gravel beds, promoting biological decomposition of organic matter, in this case glycol or other deicing solutions. The system is comprised of multiple pumps and drain lines to accommodate the re-circulations systems, aeration systems, and a nutrient dosing system. Table 1 provides a description of the new facility components.

Table 1. AGB System Components

Component	Purpose	Description	Approximate Dimensions^a
Aerated Gravel Beds (AGB)	High BOD treatment	<ul style="list-style-type: none"> Biological wastewater treatment system Six (6) lined cells filled with gravel. Peak flow capacity: 5.5 MGD 	<ul style="list-style-type: none"> Total area: 144,000 ft² Area per cell: 24,000 ft²
AGB Tank	Storage for high BOD wastewater	<ul style="list-style-type: none"> Buried prestressed wirewound concrete storage tank Capacity: 5 mGal 	<ul style="list-style-type: none"> Diameter: 200ft Depth: 22.5 ft (wet storage depth)
AGB Control Building	Building for AGB system control	<ul style="list-style-type: none"> The building will house blowers, nutrient storage and feed system, electrical and control equipment, and operator facilities (i.e., restroom and storage) 	<ul style="list-style-type: none"> 4,650 square feet Per FAA requirements, the building will be designed to the shortest height that can accommodate the necessary equipment
AGB Access Roads	Access to AGB	<ul style="list-style-type: none"> Facility access roads will encircle the AGB Site with entrance gates and driveways on S. 188th Street and Des Moines Memorial Drive. 	<ul style="list-style-type: none"> 59,400 square feet of new asphalt/pavement
Flow Control/Routing Modifications	Convey flows, and integrate new and existing infrastructure	<ul style="list-style-type: none"> Piping and flow control devices will be upgraded to accommodate design flows through the IWTP 	<ul style="list-style-type: none"> Any new utility corridors will be defined during project design

a. These dimension are rough estimates developed for the Basis of Design. The final dimensions will be refined during design.

Acronyms:

MGD: Million gallon per day

MGal: Million gallons

GPM: Gallons per minute

Lagoon 3 Site: Lagoon 3 may be used to store high BOD industrial wastewater when Lagoons 1 and 2 and other storage options are at capacity. High BOD industrial wastewater stored within Lagoon 3 would be routed for treatment through the DAF system to remove fuel, metals, and solids and through the AGB system to lower the BOD levels. Some utility work will be required to connect Lagoon 3 to the AGB Site. The utility routing and sizing will be refined during the design stage.

Figure 1. Project Sites

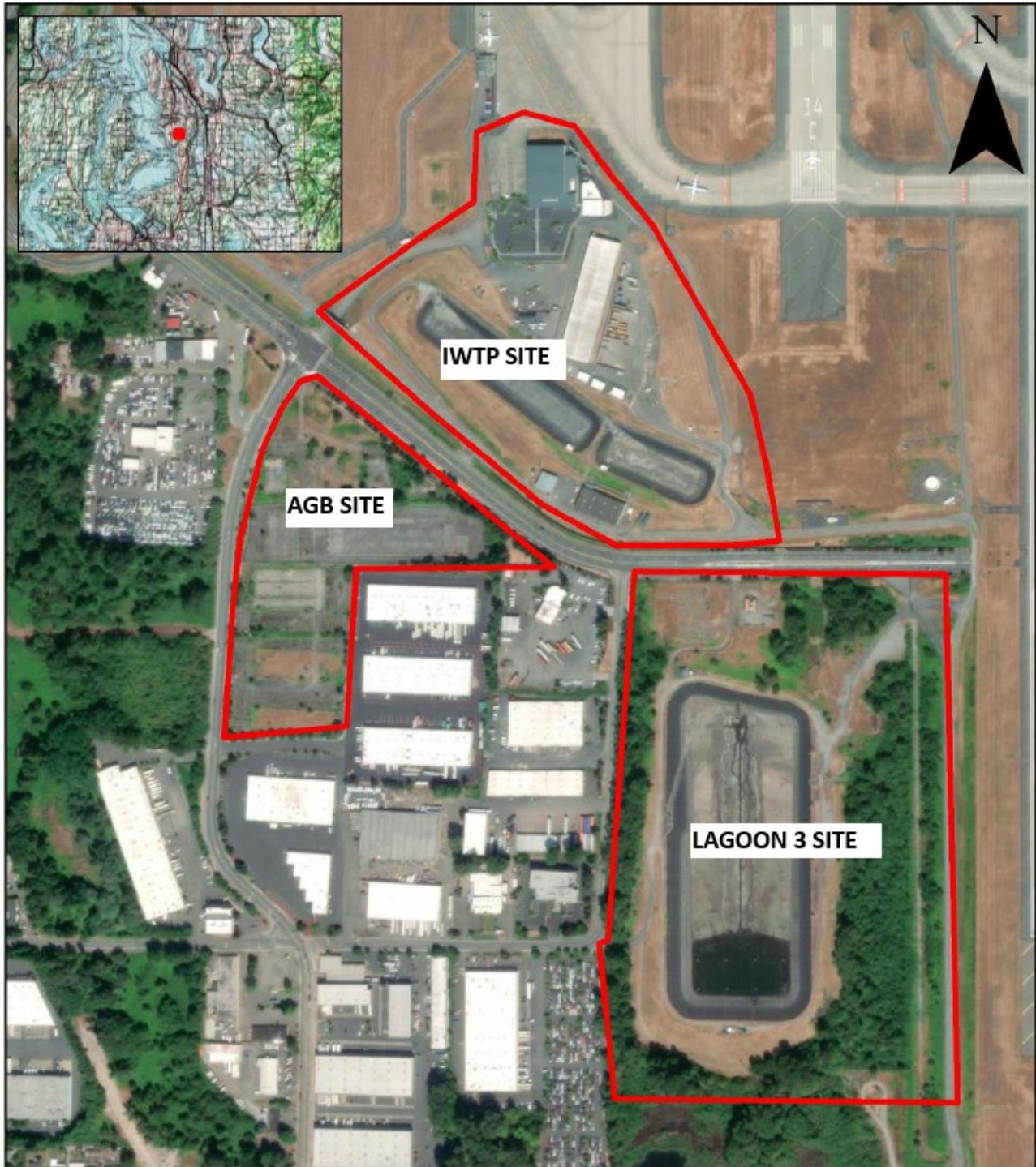
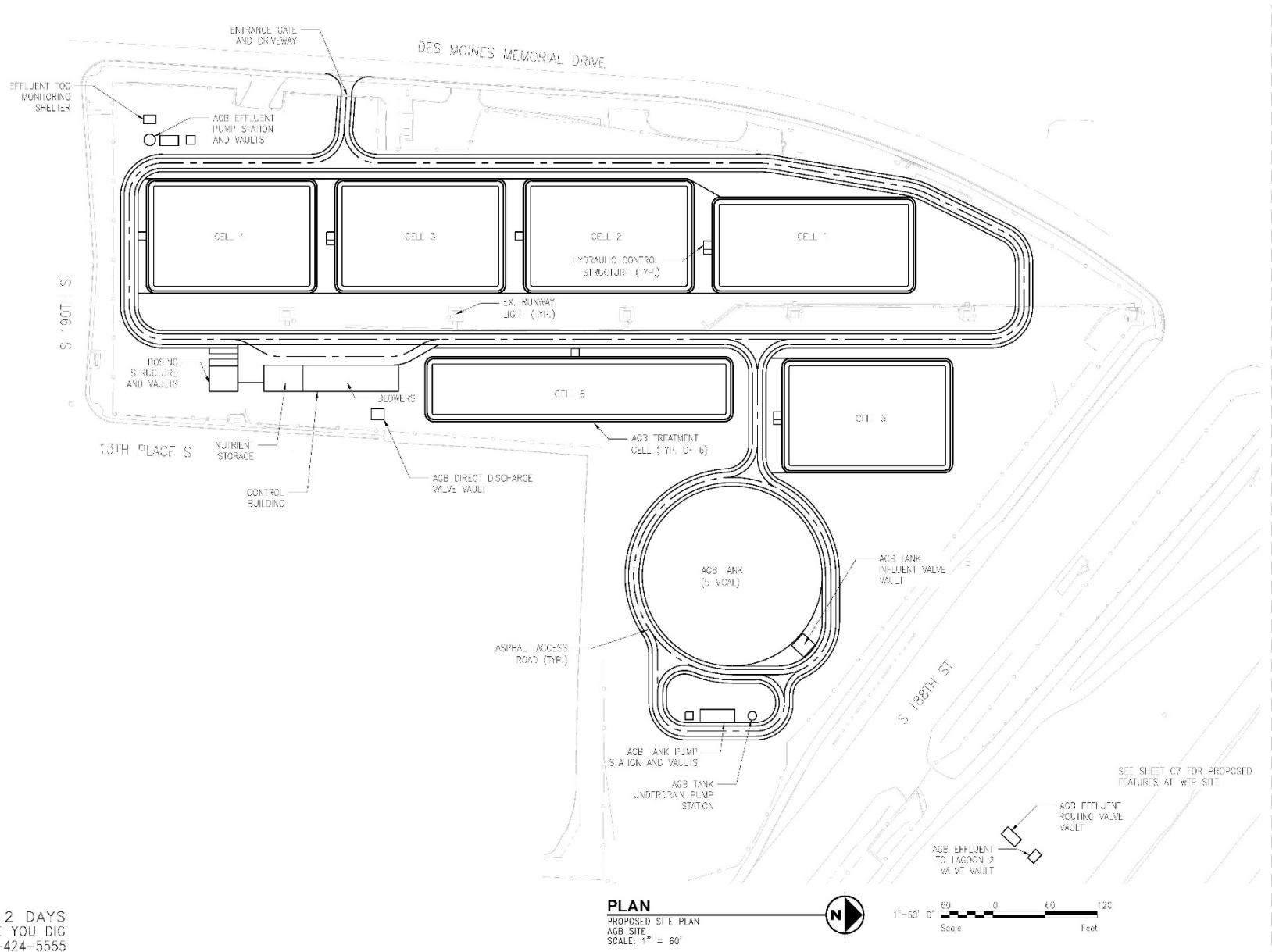


Figure 2. Future AGB Site Layout



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- 11. 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.**

SEA is located at:

17801 International Boulevard
Sea Tac, Washington 98158

The Project is on Port-owned property at the south end of SEA, to the north and south of South 188th Street and east of Des Moines Memorial Drive (Figure 1).

The Project is located within Section 4, Township 22 North, Range 04E, and within Sections 32/33, Township 23 North, Range 04E.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (circle one):** ☒ Flat, ☐ rolling, hilly, steep slopes, mountainous, other

The topography of the Project area is generally flat overall, and contains open, previously developed areas. The northern edge of the site slopes steeply to the south from 188th and then flattens out until meeting Lagoon 3 which contains steeply sloped banks.

- b. What is the steepest slope on the site (approximate percent slope)?**

The areas of disturbance do not contain steep slopes. The steepest slopes are the Lagoon 3 banks.

- 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.**

Underlying soil consists of pre-existing glacial till (i.e., Vashon till) and associated outwash sediments or imported sand, gravel, and pre-existing fill that was graded and compacted during original site use.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

There are no surface indications or history of unstable soils in the immediate vicinity. Lagoon 3 is classified as a dam and must adhere to all Ecology dam safety requirements.

- 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.**

Construction of the IWTP Site enhancements and the AGB system (6 gravel beds and 1 AGB tank) will require excavation of native soil, which is anticipated to be stored and reused. Estimated quantities which will be refined during the design phase are provided below:

- IWTP Site: approximately 200 cubic yards of excavation and approximately 3,000 square yards of grading

- AGB Site: approximately 50,000 cubic yards of excavation and approximately 30,000 square yards of grading

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion could potentially occur during construction; however, erosion and sediment control best management practices (BMPs) will be implemented to minimize that potential, per the Project's stormwater pollution prevention and temporary erosion and sediment control plans.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

- The IWTP Site is completely covered with impervious surfaces.
- The AGB Site covers approximately 10.6 acres (461,300 square feet), mostly consisting of concrete building foundations and asphalt pavement.
 - Existing impervious surfaces cover approximately 70% of the AGB Site, or approximately 323,000 square feet.
 - After construction, impervious surface is estimated to be reduced to approximately 60% or approximately 272,000 square feet.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

During construction, a temporary erosion and sediment control plan will be in place to prevent erosion at the site; this is a requirement of the Port's Master Specifications.

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.

During construction, emissions will be generated from construction vehicles, equipment, and workers traveling to and from the Project area. Construction activities will also result in short-term, construction-related air emissions such as dust and vehicle exhaust. These short-term impacts will be minimized to the best extent practicable (e.g., water trucks to suppress dust, use of new equipment).

Wastewater treatment can create odors. The AGB system will be designed to include odor control and venting in the situation that nuisance odors are identified. The Port will follow all state and local regulations applicable to nuisance odors.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions that will affect the Project.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

All work during construction of the Project will be conducted per Port Master Specifications, including maintaining and repairing all equipment in a manner that meets state regulations and reasonably minimizes emissions.

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.**

There are three wetlands within the immediate vicinity of the site: Wetland IWSa, Wetland IWSb, and Wetland 28 which surround Lagoon 3.

Wetland IWSb is 0.54 acre and slopes downhill to the south from South 188th Street on the north to a level area at its base and continues slightly uphill to its southern edge. Wetland IWSb is a palustrine, forested (PFO), depressional hydrogeomorphic [HGM]), Category III wetland located north of IWTP Lagoon 3. In May 2024, the U.S. Army Corps of Engineers (USACE) provided an Approved Jurisdictional Determination that confirmed Wetlands IWSa and Wetland IWSb are not waters of the U.S (USACE 2024).

Wetland 28 is 29.7-acre palustrine, scrub/shrub (PSS) and is a “high performing” Category I wetland which is not proposed to be disturbed. However, due to the size of its regulated buffer (165 feet), there may be temporary buffer impacts during construction of utility corridor(s) to Lagoon 3. Wetland 28 has a direct surface water connection to Des Moines Creek which ultimately flows into the Puget Sound.

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.

The Project is anticipated to require additional underground utilities from the IWTP and/or AGB Sites to Lagoon 3. The construction may occur within the a wetland or regulated wetland buffers. Any work in or adjacent to surface waters would minimize disturbance to the greatest extent possible and be conducted in accordance with required Clean Water Act permits and other approvals. Permanent impacts would be mitigated per required permit conditions, any temporarily impacted areas will be restored to existing conditions.

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.

No fill or dredge material are anticipated to be placed in or removed from surface water or wetlands. The need for fill and dredge within wetlands would be minimized to the greatest extent possible and be conducted in accordance with required Clean Water Act permits and other approvals. Permanent impacts would be mitigated per required permit conditions, any temporarily impacted areas will be restored to existing conditions

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No, the Project will not require surface water withdrawals or diversions.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

The Project area does not lie within a 100-year floodplain.

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.

Yes, treated low BOD industrial wastewater complying with NPDES permit limitations may be discharged to Puget Sound. Discharges from Outfall 001 to Puget Sound are regulated under the NPDES and Washington State Waste Discharge Permit No. WA0024651 (effective September 1, 2021) issued by the Department of Ecology (Ecology).

The maximum flow rate that can be discharged to Puget Sound at Outfall 001 (3,200 gpm) is based on an agreement with Midway Sewer District. For the purposes of developing a design basis for the Project, the following conditions and constraints in the current NPDES Permit for discharges to Outfall 001 are assumed to remain applicable in future NPDES permit renewals issued to the Port:

- BOD₅ Monthly Ave. Concentration: 45 mg/L¹ (Nov – Mar), 25 mg/L (Apr – Oct)
- Total Suspended Solids (TSS) Maximum: 21 mg/L (monthly average), 33 mg/L (daily max)
- Oil and Grease Max Concentration: 8 mg/L (monthly average), 15 mg/L (daily max).

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 general description, purpose, and approximate quantities if known.**

Groundwater will not be withdrawn, nor will water be discharged to groundwater for this Project.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: 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.**

Waste materials will not be discharged into the ground from a septic system or other source.

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.**

The overall Project site consists of three work area sites as shown in Figure 2. Surface runoff from the AGB Site (except for the aerated gravel beds) will drain to City of SeaTac-owned stormwater conveyance pipes to the Northwest Ponds, in compliance with the city's Phase II Municipal Stormwater Permit. The aerated gravel beds, the IWTP Site and the majority of the Lagoon 3 Site will drain to the Port-managed IWS or the airport's storm drainage infrastructure.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.**

Project design and construction management will prevent discharge of waste materials to ground or surface waters through existing and upgraded stormwater BMPs as required by SEA's Individual NPDES permit that covers construction activities as well as operations. The Aviation Environmental spill plan will be updated to include the improvements at this location.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

No, the Project will not alter or otherwise affect drainage patterns in the vicinity of the site.

d. Proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impacts, if any:

During construction stormwater BMPs will be implemented to control impacts to surface water, groundwater, runoff water, and drainage patterns.

4. Plants

¹ mg/L = milligram per liter

a. Check the types of vegetation found on the site:

- ☒ deciduous tree: alder, maple, aspen, other: poplar, willow
- ☒ evergreen tree: fir, cedar, pine, other
- ☒ shrubs: Himalayan blackberry
- ☒ grass
- ☐ pasture
- ☐ crop or grain
- ☐ orchards, vineyards, or other permanent crops
- ☐ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other: sedge
- ☐ water plants: water lily, eelgrass, milfoil, other
- ☐ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

The Project will require removal of vegetation and trees within the AGB Site footprint. The dominant tree species is black cottonwood (*Populus balsamifera*) and the dominant understory species is Himalayan blackberry (*Rubus armeniacus*).

Vegetation, including trees, will be impacted at the AGB Site. The number of trees to be removed will be determined during the design stage of the Project.

c. List threatened, and endangered species known to be on or near the site.

No threatened or endangered plant species are known to be on or near the Project site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The Project is located within a defined area called the Airport Activity Area (AAA; per Interlocal Agreement between the Port and City of SeaTac), where the Port applies its Land Stewardship Plan and Tree Replacement Standards to compensate for tree removal.. The tree replacement plan will be developed during the design phase of the Project.

All tree replacement plantings and any required frontage improvements will also meet the City of SeaTac/SEA Interlocal Agreement Review and Applicability, SEA Landscape Design Standards, and other jurisdictional requirements as applicable.

e. List all noxious weeds and invasive species known to be on or near the site.

Invasive species such as white poplar (*Populus alba*) and Himalayan blackberry (*Rubus armeniacus*), are present in areas on and adjacent to the Project site.

5. Animals

a. List any birds and animals which have been observed on or near the site or are known to be on or near the site. Examples include:

Birds: hawk, heron, eagle, songbirds, other: starlings, crows, gulls, pigeons

Mammals: deer, bear, elk, beaver other: rodents, small mammals

Fish: bass, salmon, trout, herring, shellfish, other: steelhead

b. List any threatened and endangered species known to be on or near the site.

No threatened or endangered animal species are known to occur on or near the Project site.

c. Is the site part of a migration route? If so, explain.

SEA property and lands are not part of any known migration routes.

d. Proposed measures to preserve or enhance wildlife, if any:

No wildlife preservation or enhancement measures are proposed. The Project is not expected to attract wildlife.

e. List any invasive animal species known to be on or near the site.

Rock pigeons (*Columba livia*) and European starlings (*Sturnus vulgaris*) are the only invasive animal species known to exist near the Project 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.

The AGB Site will likely be powered by electricity sourced from Puget Sound Energy (PSE). A new electrical connection and high electrical demand is anticipated at the AGB Site for the operation of Project equipment (primarily blowers) and instruments. The power requirement for the blowers and pumps is preliminarily estimated to be 2,000kVA and electrical infrastructure will be required to support the power demands.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The Project is not expected to affect the potential use of solar energy by adjacent properties.

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:

The Project will be evaluated during design for energy conservation opportunities using SEA's Sustainability Evaluation Framework. The Port may pursue third-party certification under the Institute for Sustainable Infrastructure's Envision for the Project.

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 as a result of this proposal? If so, describe.

The operation of the AGB requires a nutrient dosing system, or fertilizers, to promote bacterial breakdown of the deicers. The nutrient dosing system will include chemical storage in the Control Building for these liquid fertilizers in a 5,500 gallon storage tank. Storage of nutrients will be conducted per building requirements administered by the Port's Fire Department.

1) Describe any known or possible contamination at the site from present or past uses.

2) The proposed Project is located in an area that may have been contaminated with heavy metals due to the air emissions originating from the old Asarco smelter in north Tacoma. Ecology (2025) records show a northern portion of the AGB Site has known soil and suspected groundwater contamination and was subject to a 1995 Agreed Order (Facility Site ID:2428; Cleanup Site ID: 2904). If contaminated chemicals/conditions are encountered that might

affect the Project, plans will be in place to handle hazardous chemicals/conditions when and if they are encountered in accordance with relevant local, state, and federal regulations.

3) 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.

The proposed Project is located in an area that may have been contaminated with heavy metals due to the air emissions originating from the old Asarco smelter in north Tacoma. Ecology (2025) records show a northern portion of the AGB Site has known soil and suspected groundwater contamination and was subject to a 1995 Agreed Order (Facility Site ID:2428; Cleanup Site ID: 2904). If contaminated chemicals/conditions are encountered that might affect the Project, plans will be in place to handle hazardous chemicals/conditions when and if they are encountered in accordance with relevant local, state, and federal regulations.

4) 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.

The nutrient dosing system will require use and storage of liquid fertilizer in the Control Building. Storage will be conducted per building requirements administered by the Port's Fire Department.

5) Describe special emergency services that might be required.

No special emergency services are expected as a result of implementing the Project. The Port maintains its own police force and firefighting and rescue units as well as a trained response team available to respond at all times in case of an emergency.

6) Proposed measures to reduce or control environmental health hazards, if any:

A geotechnical investigation will be conducted to characterize soils and groundwater at the AGB Site. Soil testing and analyses will be done to provide guidance on soil suitability for backfill, offsite hauling and disposal requirements. If encountered, local, state, and federal regulations regarding safety and handling of hazardous materials will be followed and enforced.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

In general, the dominant source of noise in the airport vicinity is generated by aircraft, followed by noise generated by vehicles using adjacent roadways.

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.

Short-term noise is anticipated from the use of equipment during construction activities associated with removal of existing hard surface and old building foundations. Construction is anticipated to occur during daytime hours and adhere to the City of SeaTac Municipal Code requirements. Long-term noise is not anticipated as a result of the Project.

3) Proposed measures to reduce or control noise impacts, if any:

Mitigation from short-term noise from construction activities is not anticipated because work will be completed in accordance with local noise standards. No long-term noise mitigation measures are proposed.

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 Project site is largely within the Runway Protection Zone (RPZ) for Runway 34L, and is within the Airport Activity Area. The Federal Aviation Administration (FAA) has reviewed the proposed Project takes no objection to the proposed land use within the RPZ.

- 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 as a result 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 Project site is already developed and no working farmland or working forest land will be converted.

- 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:**

There are no surrounding working farms or forestlands near the Project site.

- c. **Describe any structures on the site.**

The following structures are present onsite:

- IWTP Site: Pump house, operations building, Lagoon 1 and Lagoon 2.
- AGB Site: Asphalt, building foundations, runway light structure²
- Lagoon 3: Wastewater storage lagoon

- d. **Will any structures be demolished? If so, what?**

No structure will be demolished. The foundations of previously demolished structures at the AGB Site will be removed.

- e. **What is the current zoning classification of the site?**

The current zoning classification of the Project site is designated by the City of SeaTac as Aviation Operations (AVO). The land use designation will not change as a result of the Project, and there is no expected impact to nearby or adjacent land uses and properties.

- f. **What is the current comprehensive plan designation of the site?**

The current comprehensive plan designation of the site by the City of SeaTac is Airport, within “Subdistrict 4: Port of Seattle Properties.”

- g. **If applicable, what is the current shoreline master program designation of the site?**

The Project site is not within a designated shoreline area.

- h. **Has any part of the site been classified as a critical area by the city or county? If so, specify.**

Portions of the Lagoon 3 Site include wetland buffers for Wetland 28, Wetland IWSa, and Wetland IWSb.

- i. **Approximately how many people would reside or work in the completed project?**

² Runway light structure is FAA’s MALSR light, or Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights.

Operation of the AGB is anticipated to require two (2) new FTEs in addition to existing roles associated with operation of the IWTP.

j. Approximately how many people would the completed project displace?

The completed Project will not displace any people.

k. Proposed measures to avoid or reduce displacement impacts, if any:

There will be no displacement impacts as a result of the Project; therefore, no measures are proposed.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

No measures are proposed because there will be no changes to existing or projected land use as a result of the Project.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

There are no nearby agricultural or forestlands; therefore, no measures are proposed.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low- income housing.

The Project does not include the construction of any housing.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low- income housing.

The Project does not include the elimination of any housing.

c. Proposed measures to reduce or control housing impacts, if any:

There will be no housing impacts as a result of the Project; therefore, no measures to reduce or control housing impacts are 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?

The tallest height of any proposed structures is the AGB Control Building. The Control Building must comply with FAA siting restrictions (e.g., Part 77 airspace surfaces). The Port has gained acceptance from FAA for this building to be constructed within the RPZ with the understanding it will be designed to the shortest height that can accommodate the necessary equipment. The building will likely be under 20 feet tall.

b. What views in the immediate vicinity would be altered or obstructed?

The Project will not alter or obstruct any views in the vicinity of the Project.

c. Proposed measures to reduce or control aesthetic impacts, if any:

No measures are proposed because no aesthetic impacts are expected from the Project.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The Project would provide lighting for the AGB Site for worker safety and site security. These light

poles would be on all times of day and night.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

This project will adhere to the City of SeaTac/Port of Seattle Interlocal Agreement pertaining to light and glare. Light and glare are not expected to be a safety hazard or interfere with views.

c. What existing off-site sources of light or glare may affect your proposal?

There are no known existing off-site sources of light or glare that may affect the Project proposal.

d. Proposed measures to reduce or control light and glare impacts, if any:

No measures are proposed because no light or glare impacts are expected from the Project.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Approximately 715 feet of King County's Lake to Sound Trail runs adjacent to the AGB Site, on the opposite side of Des Memorial Drive South.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The Project will not displace any existing recreational uses.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No impacts to recreation, including recreation opportunities, are anticipated.

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 located on or near the site? If so, specifically describe.

There are no buildings, structures, or sites, located on the Project sites that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site.

Within one mile of the Project sites, two archaeological sites, ten cultural surveys, one cemeteries, no historic register properties, and 1,055 historic buildings are documented. According to Washington State Department of Archaeology and Historic Preservation (DAHP) Archaeological Risk Model, the Project sites are within a moderate to high risk area.

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.

The Project site was part of an analysis of archaeological potential that concluded that there is low potential for precontact or historic archaeological materials (Iverson et al. 2005). The Project site has been heavily modified and filled, and the excavation for the AGB system will occur within the footprint of existing infrastructure. No structures older than 45 years will be modified or demolished. Therefore, no impacts to cultural resources are expected.

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.

The Project site was reviewed by a qualified professional archaeologist. Sources consulted included previous research, historic and modern maps and photographs, and DAHP's WISAARD, or Washington Information System for Architectural and Archaeological Records Data.

- 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.**

A Monitoring and Inadvertent Discovery Plan will be prepared to identify the steps that would be taken if archaeological materials are inadvertently encountered during construction. An archaeological monitor will be on-site. Geotechnical borings to characterize existing soil and groundwater properties of the site will also be utilized to determine if there are any buried resources.

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 IWTP Site is located on the airfield and is not accessible from public streets or highways. The AGB Site and Lagoon 3 Site are served by South 188th Street, Des Moines Memorial Drive South, South 192nd Street, and 16th Avenue South. Access to the AGB Site will be provided from an entrance off of Des Moines Memorial Drive South.

- 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?**

The Project site is not specifically served by public transportation, but SEA is served by public transportation. The nearest public transportation site is located near North Airport Expressway (i.e., Sound Transit Link light rail and King County Metro) a quarter mile east of the Main Terminal adjacent to the SEA parking garage. Sound Transit's Angle Lake Light Rail Station is also about 2 miles southeast of the Project site.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?**

An estimated three (3) parking spaces will be created for access to the AGB control building. No parking spaces will be eliminated. The parking layout will be determined during the design phase, based on emergency vehicle and maintenance access requirements, as well as operator staffing and fleet vehicle requirements.

- 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).**

A facility access road will be provided for the AGB Site with an entrance gate on Des Moines Memorial Drive. Parking will be located at the Control Building for operations staff. The onsite Control Building roads will be asphalt and designed with turn radii for chemical delivery and pump maintenance trucks. The roads will encircle the site to accommodate bidirectional traffic.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The Project will not require the use of water, rail, or air transportation. The Project will occur in the vicinity of air transportation for SEA.

- 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 non-passenger vehicles). What data or transportation models were used to make these estimates?

The number of vehicular trips generated by the Project would vary based on the amount of deicer used at the airport requiring operation of the AGB system for treatment. It is anticipated that two (2) FTEs will be required to operate the AGB system, so it is anticipated there will be an average of four (4) passenger vehicle trips per day. Truck deliveries for chemicals required for the nutrient dosing system are anticipated to occur in the winter months when colder weather occurs. The number of non-passenger vehicle truck trips is anticipated to be less than five (5) percent of the overall trips generated by operation of the Project. In general, the Project is not anticipated to lead to an increase in vehicular trips.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

The Project will not interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area.

h. Proposed measures to reduce or control transportation impacts, if any:

Preliminary estimates of truck trips generated during construction of the AGB Site are 10 trucks per day over a year of construction. This would likely occur mid-2027 to mid-2028. The Port will coordinate with the Washington State Department of Transportation (WSDOT) to avoid any traffic impacts associated with WSDOT's construction of the SR 509 Extension project. In addition, a Traffic Control Plan will be in place to manage vehicle traffic during any construction activities that impact public roadways.

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.

The Project will not require a need for public services beyond what is currently available at SEA.

b. Proposed measures to reduce or control direct impacts on public services, if any.

There are no measures proposed to reduce or control direct impacts on public services.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other: stormwater, industrial water system, communication.

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.

New utility connections and service lines are required for a variety of other utility types at the AGB Site, including the following:

- Sanitary: A sanitary connection is required to support a single restroom and laboratory sink at the Control Building to support operations staff. It may also be extended to the Effluent Pump Station to provide an emergency overflow connection.
- Water and fire water: A potable water connection is required to support a single restroom and laboratory sink at the Control Building to support operations staff. A fire water connection, water main loop, and fire hydrants will also be required to meet building code

requirements as well as requirements for emergency response in the RPZ by the Airport Fire Department.

- Natural gas: A natural gas connection could be used for heating the Control Building, but electric heating could be used if preferable.
- Stormwater: A storm sewer connection will be necessary for flow routing of site runoff downstream of required stormwater controls. This connection will not be used for any runoff associated with IWS areas, including runoff from designated industrial activity areas on-site or off-site.

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.

Signature: Steven Rybolt

Name of signee: Steven Rybolt

Position /Organization Senior Environmental Program Manager, Port of Seattle

Date Submitted: August 6, 2025

References

- Ecology (Washington State Department of Ecology), 2025. *Cleanup and Tank Search: Safco Environmental Safco Corp.* Facility Site ID: 2428; Cleanup Site ID: 2904. Available online at: [Safco Environmental Safco Corp - \(2904\)](#)
- Ecology (Washington State Department of Ecology), 2019. *Stormwater Management Manual for Western Washington*. Washington State Department of Ecology, Water Quality Program. Publication Number 19-10-021. July 2019.
- Iverson, David, Leonard A. Forsman, Dennis E. Lewarch, and Lynn L. Larson, 2005. *Port of Seattle, Seattle-Tacoma International Airport Master Plan, Proposed third Runway Archaeological Resources and Traditional Cultural Places Assessment*. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- USACE (U.S. Army Corps of Engineers), 2024. *NWS-2023-122-WRD Snow Storage Expansion Project (AJD)*. U.S. Army Corps of Engineers, Seattle District Regulatory Branch. Available online at: <https://www.nws.usace.army.mil/Missions/Civil-Works/Regulatory/Jurisdictional-Determinations>.

APPENDIX A

Greenhouse Gas Emissions Worksheet Supplemental Information for SEPA Environmental Checklist

GHG Emission Sources (CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆) ¹	What sources are likely from the proposal? <i>List specific type of activities and duration of emissions</i>	What is the quantitative or qualitative assessment of those emissions?	What available mitigation will avoid or reduce those emissions?
On-Road Mobile Sources	Trucks delivering treatment materials to the AGB Site.	Emissions will vary by year depending on amount of BOD requiring treatment. No net increase in emissions is expected to result from the Project since the number of truck deliveries will be minimal and seasonal; therefore, no mitigation is proposed.	Emissions will vary by year depending on amount of BOD requiring treatment. No net increase in emissions is expected to result from the Project since the number of truck deliveries will be minimal and seasonal; therefore, no mitigation is proposed.
Non-Road Mobile Sources	Not applicable	Not applicable	
Stationary Combustion	Not applicable	Not applicable	
Industrial Processes	Not applicable	Not applicable	
Fugitive Emissions	Not applicable	Not applicable	
Agricultural Emissions	Not applicable	Not applicable	
Land Disturbance	Limited temporary impacts to vegetated areas where excavation and backfill will occur.	<ul style="list-style-type: none"> IWTP Site: excavation 200 cubic yards/ grading 3,000 square yards AGB Site: 50,000 cubic yards/ grading 30,000 square yards 	<p>Trees removed for site development will be replaced at a functional 4:1 ratio per SEA's Land Stewardship Plan and Tree Replacement Standards</p> <p>Landscaping and frontage improvements will be conducted per SEA's Landscape Design Standards.</p>
Purchased Electricity and Steam	Purchased electricity for operations of blowers and pumps.	Preliminarily estimated to be 2,000kVA to operate the AGB system	Project will be evaluated during design for energy conservation opportunities using SEA's Sustainability Evaluation Framework. The Port may pursue third-party certification under Envision for the Project

GHG Emission Sources (CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆) ¹	What sources are likely from the proposal? <i>List specific type of activities and duration of emissions</i>	What is the quantitative or qualitative assessment of those emissions?	What available mitigation will avoid or reduce those emissions?
Construction	Construction vehicles and equipment.	Temporary and short-term use associated with construction-related emissions are not expected to be significant.	Contractor performing construction will be required to maintain and repair all equipment in a manner that reasonably minimizes emissions.
Extraction of Purchased Materials	Not applicable	Not applicable	
Processing of Purchased Materials	Not applicable	Not applicable	
Transportation of Purchased Materials	Concrete, gravel, asphalt, and piping are the primary components of the Project. The Port will work with the contractor to source these components locally, to the extent practicable	Temporary and short-term use associated with construction-related emissions is not expected to be significant.	Contractor transporting equipment will be required to maintain and repair all vehicles in a manner that reasonably minimizes emissions.
New Facility Operations	The AGB Control Room to operate the new system is estimated to be 4,650 square feet.	In total, the estimated lifespan GHG emission (embodied, transportation, and energy) is 7,320 MTCO ₂ e.	No mitigation is proposed.
Other Mobile Emissions	Not applicable	Not applicable	
Water Use and Wastewater Disposal	Not applicable	Not applicable	
Waste Management	Not applicable	Not applicable	
Product Use – New Pavement	The basis of design calculates 59,368 square feet of new pavement is required (however there will be a net decrease in the amount of impervious surfaces)	In total, the estimated lifespan GHG emission (embodied, transportation, and energy) is 2,968 MTCO ₂ e.	No mitigation is proposed.

**Calculated via City of Seattle Department of Planning and Development SEPA GHG Emissions Worksheet.*

CH₄	Methane	Landfills, production and distribution of natural gas and petroleum, fermentation from the digestive system of livestock, rice cultivation, fossil fuel combustion, etc.
N₂O	Nitrous Oxide	Fossil fuel combustion, fertilizers, nylon production, manure, etc.

HFCs	Hydrofluorocarbons	Refrigeration gases, aluminum smelting, semiconductor manufacturing, etc.
PFCs	Perfluorocarbons	Aluminum production, semiconductor industry, etc.
SF ₆	Sulfur Hexafluoride	Electrical transmissions and distribution systems, circuit breakers, magnesium production, etc.






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Final Audit Report

2025-08-06

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