Transloading, Upland Transportation, Waste Characterization, & Disposal Plan

Revision: 08

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LOWER DUWAMISH WATERWAY

Upper Reach Remedial Action

Contract KC001065

Prepared By:

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1.0 Project Description & Introduction

The purpose of this Plan is to provide proper sequencing, project controls, and best management practices (BMPs) for Transloading, Upland Transportation, Waste Characterization, and Disposal activities during this project. This plan is written in accordance with Contract Specification Section 35 20 23.01, and the following subsequent Specification Sections: 01 13 00, 01 14 00, 01 52 00, 01 41 00, 01 70 00, 01 41 26, and 01 35 43. The Plan also adheres to the Permits attached in Attachment A and Attachment D. All permits will be kept current and any new versions will be submitted once obtained.

2.0 General Approach & Work Sequence

The Site material that will be disposed of through Site operations are dredge material, dredge debris, identified debris, and piling. Site material for disposal are defined in the Contract Specifications as:

- Dredge Material refers to contaminated sediment to be removed under this Contract, in the areas shown on the Drawings, and as identified by the Project Representative for Contingency Re-Dredging activities, located within the SMAs of the Work Site.
- Dredge Debris is defined as any solid waste materials other than sediment or soil excavated as part of the dredging operations (such as pile stubs, logs, wire, cable, steel, anchors, lumber, trash, rocks, and concrete) that will be encountered.
- Identified Debris is defined as solid waste material resulting from removal of Debris targets shown on the Drawings and shall be kept segregated from Dredge Debris at all times.
- Piling is defined as material arising as a result of selective Work Site demolition or structure demolition activities. Piling will include timber (whole pieces or fragments) and timber piles that will not be reinstated or reused.

Recyclable and compostable materials shall be separated after removal from all other waste streams and maintained segregated during upland transportation until disposal. See the Dredging and Excavation Plan (Appendix J of the RAWP) for more details.

2.1 Transloading, Upland Transportation, Waste Characterization, and Disposal

The sequence and timing of the transloading, upland transportation, waste characterization, and disposal activities will be coordinated with other major project elements as shown in the Project Schedule as shown in the RAWP, Section 3.

The Work described in this Section shall not begin until the following have occurred: 1) The Project Representative reserves the right to inspect all Contractor quality control and environmental protection measures to confirm they are in place and working properly prior to initiating any construction activities (including in-water or upland). Construction activities will not begin until all Contractor quality control and environmental protection measures and components are in place and working properly; 2) The Contractor shall notify the Project Representative 10 working days in advance of anticipated Work at the Work Site or the Contractor Transload Facility(ies); 3) Transloading, upland transportation, and disposal activities shall not begin until Project Representative's acceptance of the Transloading, Upland Transportation, Waste Characterization, and Disposal Plan (to be submitted as part of the RAWP); and 4) The Contractor shall submit the following information prior to the In-Water Work Window of each

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Construction Season to support the County's request of approval of the Disposal Facility(ies) from the EPA Region 10 Off-Site Contact: 1) The name of the Disposal Facility(ies) to which the waste will be sent to. 2) The EPA ID number(s) or other unique identifying number(s) of the Disposal Facility(ies) 3) The city and state in which each receiving facility is located 4) The type of waste(s) to be shipped (i.e., Dredge Material, Dredge Debris, Identified Debris, and Piling) 5) The approximate amount for each waste (i.e., Dredge Material, Dredge Debris, Identified Debris, and Piling) to be generated for each Construction Season 6) The schedule for the waste(s) shipment 7) The method of transportation of the waste(s). 8) Contractor to confirm all necessary permits are up to date prior to each in-water work window. 9) The Contractor will obtain a final waste determination from the disposal facility(ies) prior to initiating work per Specification Section 35 20 23.01, Article 1.02.E.

Per Specification Section 35 20 23.01, Article 1.05 B.3. Off-Site Rule Determination, the following information will be submitted prior to the in-water work window of each Construction Season: "a. The Contractor shall submit the following information prior to the In-Water Work Window of each Construction Season to support the County's request of approval of the Disposal Facility(ies) from the EPA Region 10 Off-Site Contact: 1) The name of the Disposal Facility(ies) to which the waste will be sent to, 2) The EPA ID number(s) or other unique identifying number(s) of the Disposal Facility(ies), 3) The city and state in which each receiving facility is located, 4) The type of waste(s) to be shipped (i.e., Dredge Material, Dredge Debris, Identified Debris, and Piling), 5) The approximate amount for each waste (i.e., Dredge Material, Dredge Debris, Identified Debris, and Piling) to be generated for each Construction Season, 6) The schedule for the waste(s) shipment, 7) The method of transportation of the waste(s)".

2.2 Waste Management Transload Facility Workflow

MATERIAL ARRIVAL AT FACILITY AND CONTAINMENT BMPS

The general workflow is as follows: Dredging shall occur within each Sediment Management Area (SMA) in the sequence shown in the Draft Project Schedule (refer to RAWP Section 3). Each time a barge is loaded with material using an environmental bucket and spill containment per the Dredging and Excavation Plan, it will be transported via tugboat to the Inner Berth (referred to as Slip 2 and Slip 3 in Attachment A 8th Ave Plan of Operations) at the Waste Management Duwamish Reload Facility (DRF). The Inner Berth will be used for all Site material barged to the DRF, the Outer Berth (Slip 1 in Attachment A) will not be utilized on this project. Please refer to Figure 1 for clarification on Slip/Berth locations. All transloading for the project will occur at Slip 2. Slip 4 refers to the 6.4-acre navigational slip on the east side of the Duwamish Waterway. Slip 4 has been and has continued to be a berthing area for vessels and for various industrial activities.

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Figure 1- DRF Slip Locations

Once at DRF, the barge will be setup with proper containment in accordance with the Erosion Control Plan and the SWPPP and then offloaded with an excavator to the Operations Containment Area (OCA) and processed and disposed of accordingly. The facility will maintain separate piles for upland soils received not associated with the LDW cleanup through the use of ecology blocks and other structural controls.

Soil excavated during work performed at SMA 5 will be transported to the DRF via haul trucks and managed in the upland soil side of the OCA. All environmental controls for the soil and sediment side of the OCA are identical. No offloading can begin at the DRF until the spill prevention measures have been reviewed and accepted by the Project Representative and determined to be in place and working according to Specification Section 35 20 23.01 (TRANSLOADING, UPLAND TRANSPORTATION, Waste Characterization, AND DISPOSAL).

Attachment A, Section 3.2.3 describes the Best Management Practices (BMPs) in place for receiving the material within the OCA. “The Facility will use the following BMPs to contain stormwater and contaminated materials within the OCA:

1) A minimum 6-inch-height curb is installed around the OCA to contain decant water and contaminated stormwater.

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2) A sediment processing area, used to contain and/or process sediment, is constructed over the asphalt pavement.
3) A wheel wash located inside the OCA is used for trucks leaving the OCA.
    a. Wash water from the wheel is contained within the OCA and will be treated via a wastewater pre-treatment system prior to discharge to the sanitary sewer.
4) A spill containment zone is located between the barge berthing area and the sediment processing area, where the barge offloading bucket moves back and forth when offloading barges. This area is asphalt-lined with an asphalt berm that is sloped away from the water to a small basin to allow accumulated water to be pumped to the wastewater treatment system. This provides containment for liquids and minimizes the risk for spillage into the LDW. During active unloading operations, the barge unloading containment area will be cleaned daily, at a minimum, or more frequently as site conditions warrant.
5) All asphalt paving in the OCA and the spill containment zone is sealed to prevent leakage of contaminated water. OCA integrity is inspected monthly during the Facility inspection. In the event that issues are identified, corrective actions are taken (i.e. resealing or replacing asphalt, etc.).
6) All contaminated sediment barges will be dewatered at each SMA before being transported to DRF. Bulk material barge unloading activities will occur at the Inner Berth in a fashion to minimize splash of material from the environmental bucket. A sloped spill plate is placed in the spill containment zone between the barges and the barge offloader so that any material spillage will go back into the barges (see Appendix A for spill plate photo). During these activities, the barge offloader is fitted with an environmental bucket that is constructed to minimize leakage during materials handling. Additionally, a permanently fixed spill apron will be placed at the edge of the dock. This spill apron is fitted with a poly tarp type bib that will extend into the barge prior to beginning the unloading process. Therefore, any drippings or spillage of material landing on the apron will be conveyed by the bib back into the barge.
7) Dockside sediment control (e.g., sweeper truck, shoveling, sweeping, wash down) is performed weekly, at a minimum, or more frequently as site conditions warrant, to avoid the tracking of sediment by vehicles and personnel and to generally maintain a clean site. This includes the dock, transload area, and the haul routes.

Once the barge is secured at DRF, the following are general procedures used at the DRF per Attachment A, Section 3.2.5:

Inner Berth Operations

Barges moored at the Inner Berth are typically loaded with high moisture dredge or bulk soil-like materials. The barge is moored to the dock, which positions it close enough to the concrete dock so that the spill plate will reach to the barge under normal tidal conditions on the LDW. If there is an extreme tidal fluctuation, such that the spill plate cannot divert the excess sediment water back to the barge, the barge offloading operation will be ceased until the tide changes to allow proper function of the spill plate. The barges are towed by independent operators under contract to others, and all barge movement on the LDW will be conducted in accordance with Federal Navigation Regulations. The track-mounted barge offloader and/or slurry pumping system is anticipated to offload a monthly average of 5,000 tons per day (TPD). The track-mounted barge offloader is controlled by an operator located within a climate-controlled cabin on the machine. Electricity is supplied via insulated cables from a generator or electric panels at the Facility. The barge offloader has the capability to traverse along the pier during

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barge offloading operations; however, unloading will always occur over the spill plate. Efforts will be made to minimize the risk for spills. In the unlikely event of accidental spillage of contaminated dredge materials into the LDW during offloading operations, immediate cleanup of the spilled materials will be conducted, and the spill will immediately be reported to both King County Public Health and Ecology. See the Facility Stormwater Pollution Prevention Plan (SWPPP most current version on site) for spill prevention and control procedures. In the event of a spill during offloading operations, control, mitigation, and response procedures will be followed according to the Spill Prevention, Control and Countermeasures Plan (Appendix Z of the RAWP). Based on sediment characteristics, the material will be unloaded differently. Each of these methods are described in the sections below.

Non-Free Draining Sediments

Non-free draining sediments will not be slurried or otherwise hydraulically offloaded from barges during typical operations.

Free Draining Sediments

Free draining sediments and debris are moved from the barge using the track-mounted barge offloader. The barge offloader transfers sediments to the sediment processing area over the spill apron. The sediment processing area is located adjacent to the barge berthing area. During track-mounted offloader operations, a spotter is positioned on the dock to monitor for spillage from the environmental bucket before transferring materials from the barge over the apron. The barge offloader swing radius allows the environmental bucket to empty into the sediment processing area grizzly screen. Once the sediment has been sufficiently dewatered, the sediment will be transferred to a storage pile on the asphalt within the OCA. From there, it will be transferred to truck or rail for off-site disposal.

Barge Offloading in preparation for decontamination

Described below are the processes for barge decontamination at DRF at the end of all dredging activities:

- Prior to offloading free-draining sediments, accumulated water in the barge is removed via a portable pump and transferred into the water pre-treatment system with discharge of pre-treated water to the sanitary sewer. Free draining sediments and debris are moved from the barge using the track-mounted barge offloader. The barge offloader transfers sediments to the sediment processing area over the spill apron. The sediment processing area is located adjacent to the barge berthing area. During track-mounted offloader operations, a spotter is positioned on the dock to monitor for spillage from the environmental bucket before transferring materials from the barge over the apron. The barge offloader swing radius allows the environmental bucket to empty into the sediment processing area grizzly screen. Once the sediment has been sufficiently dewatered, the sediment will be transferred to a storage pile on the asphalt within the OCA. From there, it will be transferred to truck or rail for off-site disposal.
- Non-free draining sediments are offloaded from barges using a slurry pumping system that adds process water to the sediments at the pump. The slurried sediments are pumped to mixing tanks in the sediment processing area inside the OCA. Slurried sediments are pumped from the mixing tanks to the dewatering equipment. Once the sediment has been sufficiently dewatered, the sediment will be transferred to a storage pile on the asphalt within the OCA. From there, it will be transferred to truck or rail for off-site disposal.

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SEDIMENT PROCESSING

A majority of the material will be transported via barge from the water to DRF. However, operations from SMA 5 during Construction Season 3 will use haul trucks to transport material over land. The below excerpt from Attachment A, Sections 3.2.6 and 3.2.7 describe the processes for both types of upland transportation and how they will be contained.

Sediment Processing Area

Sediments are processed in the sediment processing area within the OCA. This area is constructed with Conex container walls on two sides, as shown in the details provided in Appendix A. This area is designed to process all sediments offloaded from the barge. Within the processing area, a mechanical separator and other associated equipment is used toprocess dredge material. The sediment processing area facilitates the dewatering of sediments using either heavy equipment or other mechanical means, if needed. Captured decant water is pumped to the wastewater pre-treatment system via a portable pump and overland hoses. Overland hoses are used in areas of low traffic that do not interfere with operations or risk damage of equipment in the OCA. After the material is sufficiently dewatered, the sediment will either be staged on the ground inside the OCA or, transferred by mechanical means directly to a rail car.

Dredge Material Processing

The following are available options (material dependent) for processing dredged material at the DRF:

-
- Initial size classification and scalping operation to manually remove large debris with the environmental bucket.
- Water Treatment:
  - granular-activated carbon (GAC) filtration to remove contaminants
  - recovery of solids from clarification and filtration backwash at weir tank

At the discretion of the Operations Manager, dredge materials could be amended to reduce free liquid content for the purpose of improving materials handling. The materials used for amending wet sediments are fly ash, Portland cement, diatomaceous earth, cement kiln dust, upland soil, or other acceptable effective absorbent materials depending on availability. If amendment materials are used addition of the materials will be mixed in at the OCA. Amendment materials may be stored under cover to reduce contact with precipitation and to minimize emissions to the air. Per Specification Section 35 20 23.01, Article 1.05 B.2.e.3.b, if amendments are proposed to be used for dewatering purposes, the manufacturer data and safety data sheets (SDS) will be provided prior to use to the Project Representative for approval. Environmental management practices for storing and handling the amendments include: avoiding placement of the materials where there is risk for it to come into direct contact with groundwater or with surface water bodies; storing materials in an area that is dry and where contact with stormwater, surface water, or groundwater can be avoided; and using dry cleanup methods that do not create dust in the case of a spill. The use of required personal protective equipment (PPE), such as a dust mask, safety glasses with side shields, a hard hat, and gloves will be required when workers are exposed to direct contact with amendment materials (outside of equipment and vehicle cabs).”

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WASTE CHARACTERIZATION

Waste characterization will occur according to the Special Waste Acceptance & Hazardous Waste Exclusion Plan included in Attachment A. Profiling of waste occurs according to the above referenced document in Section 4: In order to prevent unacceptable waste from entering the facility, the facility requires the generator to submit a waste profile package for all special waste streams including dredged sediments, upland contaminated soil, and non-categorical wastewaters. An example of a Generator's Waste Profile form is supplied in Attachment A. All relevant information including generator profile, analytical reports, and generator signed certification statement are required for processing of the profile by the waste approval manager (WAM). The completed generator's waste profile package is reviewed to determine whether the special waste will be managed at both the transfer/reload facility and the final destination facility. WAM's will provide any specific handling conditions that will be required on the approval document. Additional waste or industry specific profile forms, or modifications to the Generator's Waste Profile form will be developed and utilized upon Waste Management approval.

If significant large-dimensional steel Dredge Debris (e.g., beams, sheet pile) is encountered during dredging activities, the PPM will separate this material and recycle it to the extent practicable. The material will be placed in a contaminated sediment barge for processing at DRF.

The Waste Management Technical Service Center (TSC) is responsible for working with the generator or their authorized representative to assemble the complete profile package ready for review by the WAM.

The analyses or information required on individual waste streams varies according to the waste stream and applicable regulatory requirements. In any case, analytical reports or other information, such as MSDS/SDS/GHS Sheets or generator knowledge and certification sufficient to perform a characterization of the waste are required as part of the Generator's Waste Profile.

Typical analyses for non-wastewaters (solids, sludges, semisolids) will include laboratory analytical for:

- Metals (TCLP)
- Organics
- Corrosivity (pH)
- Flashpoint
- Reactivity
- BTEX

Typical analyses for non-categorical wastewaters will include laboratory analytical for:

- Metals (TCLP)
- Corrosivity (pH)
- Flashpoint
- Reactivity
- BTEX

Required minimum analyses for the receipt of non-categorical wastewaters at DRF are detailed in Attachment B. Required testing parameters and informational data are at the discretion of the WAM.

WAM's request analytical from the generator based on the suspected contaminants and/or the process generating the waste. In some cases, additional laboratory analysis of the waste could also be

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requested. PPM shall collect samples and obtain the correct material testing to ensure compliance with all permit requirements and assure it can be transported to the DRF.

WM will utilize the dredged sediment from the Lower Duwamish Waterway Upper Reach Remedial Action project as Alternative Daily Cover (ADC) at Columbia Ridge Landfill, consistent with the project design intent. This classification allows for its beneficial use at the landfill site and aligns with the project's environmental objectives as outlined in Contract Specification 35 20 23.01.

MATERIAL TRANSFER AND DISPOSAL

Material will be processed and then transferred per Attachment A, Section 3.2.8:

"All sediment, contaminated soils, and containers handled at the Facility have been approved into the Facility by the Waste Management (WM) approvals process, see Appendix C "SPECIAL WASTE ACCEPTANCE & HAZARDOUS WASTE EXCLUSION PLAN." Materials shipped for disposal or transfer must also be approved through the WM approval process for the destination facility. Once approved, shipments will be transported via local haul trucks, intermodal containers, or gondola rail cars. All transloading operations occur within the OCA. The gondola railcars are steel containers that have no doors and are only open on the top for loading and unloading. Gondola cars are inspected on arrival for damage (e.g., holes, gaps, or openings in the side or bottom of the rail container) that could compromise their containment capability and cause spillage. A liner for the purpose of covering the loads will be utilized and will be visually inspected after installation to ensure liner integrity. Materials loading BMP's will be employed to maximize liner effectiveness and to prevent spillage. Railcars found to have free liquids prior to transport offsite will be amended with dry soils or other amendments to absorb any free liquids. If the DRF is nearing capacity certain dredge and contaminated soils could be directly loaded into transport trucks with dump beds for transport to WM's Alaska St. facility for loading into gondola railcars. All materials must be approved by the Project Representative and through the WM waste approval framework prior to shipment to the Alaska Street facility. Vehicle dump beds used to transport these materials will be inspected prior to loading to ensure that there is no damage that would compromise their integrity. Should defects be found in a dump bed, a plastic liner will be placed in the dump bed prior to it being loaded. Materials loading BMP's will be employed to maximize liner effectiveness and to prevent spillage. Truck Loads found to have free liquids prior to transport offsite will be amended with dry soils or other amendments to absorb any free liquids."

Selection of transportation methods will be consistent with Specification Section 35 20 23.01 3.03.C.1.b., which specifies that the primary transportation method from the Contractor Transload Facility to the Disposal Facility(ies) shall be rail if the distance is greater than 50 miles.

A 14 mil thick liner will be installed in the gondola, the material loaded into it, and then the liner will be "burrito wrapped" over the top to cover the load as it transits the rail lines to the landfill. Each liner is approximately 150lbs in weight and there will be approximately 1,975 liners installed during the project. The liner will also allow for WM to decrease the freeboard to 18" as the material will be secured with the liner negating the need for 36" of freeboard. The excess cover will be folded and tucked within the bin walls of the rail car, if additional measures are necessary they will be discussed and accepted by the KCPR.

After the material is processed and transferred to another container, it will then be brought to a disposal site per Attachment A, Section 3.2.9:

"The Facility will generally have the capacity to transload a monthly average of 6,000 TPD. Loaded railcars will generally be picked-up once loaded by UPRR for transport at an approved landfill. At the

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time of pick-up, empty cars will be dropped off and spotted to continue the loading process. Empty and loaded railcars will be moved, as needed, to facilitate UPRR transportation to the approved landfill for disposal. All railcar coordination will be conducted by Facility personnel to keep a steady flow of materials transloaded. The rail spur includes two parallel sidings to provide capacity and operational flexibility during railcar loading and spotting activities. Front-end loaders will alternate between the eastern and western sidings during loading. Once the inside siding has reached capacity, the loaded cars on the inside siding will be moved so the empty railcars spotted on the outside siding can be loaded. Loading of the railcars will progress from north to south so that loaded railcars are in a position where they can be easily connected to an outgoing train. All loaded cars will be taken offsite by UPRR staff at the time of the scheduled pick-up. Additional empty cars are available for continuous materials offloading from the incoming barges in order to maintain uninterrupted materials movement. The existing rail spur located along the northwestern side of the DRF could be used to store cars. Additional empty or loaded railcars will be temporarily spotted adjacent to the Facility along the East Marginal Way South mainline, which is operated by UPRR.

Before departing the railcar loading area, each railcar will undergo a comprehensive visual inspection to confirm that there are no leaks and that no dredged materials, sediments, or contaminants are present on the exterior surfaces. This inspection process will be thorough, with trained personnel examining all accessible areas of each railcar to ensure compliance with environmental standards.

Additionally, while within the Operational Control Area (OCA), any materials, including water, sediments, or other residues that may be washed or dislodged from the railcar surfaces will be promptly contained and collected. This collected material will then be directed to the on-site water pre-treatment system for proper handling and treatment, ensuring that no unfiltered or untreated materials are released into the environment.

To maintain these high standards, railcars will only be cleared for departure once they meet all inspection criteria, thereby minimizing any risk of sediment or contaminants being transported outside the controlled area. This process demonstrates our strong commitment to environmental stewardship, preventing the spread of dredged materials and safeguarding nearby ecosystems and waterways.Refer to the Erosion and Sediment Control Plan and the Spill Prevention, Controls and Countermeasure Plan for information regarding the cleanup of accidental spills on paved roadways.

Decontamination Process

Duwamish Reload Facility

The Duwamish Reload Facility ensures that decontamination procedures keep equipment within the Operations Containment Area (OCA). Equipment washing is conducted as necessary, with wash water treated through the on-site water pretreatment system. The OCA is designated for operations, including equipment cleaning and maintenance. Land-based decontamination facilities at the Duwamish Reload Facility ensure that vehicle and equipment washing occurs within the OCA, with wash water collected and pumped to the on-site water pretreatment system before being discharged to the municipal sewer system.

Trucks entering the OCA will exit through a wheel wash system, where water is recycled, and particulates and floatable oils are separated. Accumulated solids are routinely removed and properly disposed of. If the system needs to be emptied for maintenance or repairs, the water will either be transferred to the on-site water pretreatment system or hauled off-site to an authorized treatment facility. Any drip-off or drag-out past the wheel wash will be collected in a nearby plugged catch basin and piped to the on-site water pretreatment system. All railcars will be thoroughly inspected prior to release from the OCA. The exterior of each railcar will be checked for residual sediment and potential leaks. If sediment is observed

on the railcar body, it will be removed using hand brushes or other appropriate mechanical means before the railcar is cleared for departure. Sediment and any contaminated materials generated during the cleaning process will be placed in the disposal stockpile for transport to the landfill with the next railcar. Railcars exhibiting any signs of leakage will not be permitted to leave the OCA until the issue is fully resolved

Columbia Ridge Landfill

At Columbia Ridge, railcars will undergo a stringent decontamination process in accordance with 40 CFR § 261.7 to ensure the safe and compliant transport of materials. Before leaving the site, each railcar will be inspected and thoroughly cleaned to ensure no residue of dredged materials or contaminants remains on the exterior. If any sediment or wash water is generated during cleaning, it will be contained and treated within the site's water pre-treatment system, preventing any discharge of contaminants.

This approach aligns with federal regulations requiring that all residues be removed from containers used for transport before they are deemed "empty" and ready for reuse or disposal. Our decontamination protocol helps ensure that railcars meet all applicable regulatory standards, reducing environmental risk and ensuring that transport vehicles do not carry sediment or contaminants off-site.

Please review the DRF HASP for information on personnel safety and decontamination processes for the DRF located in Appendix F of the RAWP. Please refer to the decontamination processes for the DRF and Columbia Ridge Landfill located in Appendix AD of the RAWP.

Final Disposal Facilities

All Site material for disposal defined in **Section 2.0** will be loaded into gondola railcars onsite and transported by rail to WM's Columbia Ridge Landfill located at 18177 Cedar Springs Lane Arlington, Oregon. Disposal of materials in this manner meets the requirements of Seattle Municipal Code Section 21.36.112(A), and King County Code Section 10.30.20(A)."

For further Transloading, Upland Transportation, Waste Characterization, and Disposal operations sequencing and information refer to the Waste Management Transload Facility (8th Ave Plan of Operation document in Attachment A, and also the Draft Project Schedule in the RAWP, Section 3. Table 1 below contains all of the sections in Attachment A that are required per the Specifications for this Plan.

CYCLE TIMES & MATERIAL CAPACITIES

The Waste Management Duwamish Reload Facility (DRF) can typically offload and transload 1,500 tons (approximately 1,071 CY) of material in 8-10 hours or approximately 5,357 CY over a five day work week. This cycle time can be drastically affected dependent on the composition of the material, and how much water management is needed. DRF's rail capacity onsite is 22 railcars/day, that hold an average of 105 tons/railcar. There is also an option at DRF for a second switch in the day that will increase the output to 44 railcars of material. DRF has an overall storage capacity of 47,000 tons (approximately 33,571 CYs). Rail service is subject to many outside factors outside of WM's control, which should also be considered. Waste Characterization must be completed prior to the Work. Waste Characterization profiles typically take 3-5 days to be approved.

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All other information regarding the approach taken for Transloading, Upland Transportation, Waste Characterization, and Disposal can be found in the Waste Management *Plan of Operation Duwamish Reload Facility* document in Attachment A.

Truck Weight Tracking

Upland soil hauled via truck and trailer are weighed at the DRF scale house.

BARGE WEIGHT TRACKING

All weight tickets from waste coming from barges are generated using barge displacement calculations. PPM will measure and record the light barge drafts and loaded barge drafts to track barge displacements for a daily estimate on weight of material removed. These measurements will be included in the daily reports.

At the DRF, the Barge Displacement Measurements will follow:

- After arrival at the DRF, each barge will be secured in a stable, floating condition. Lines used to secure the barge will have an adequate amount of slack to ensure the barge is free-floating.
- Freeboard measurements will be taken by a WM representative as soon as possible after the barge arrives at the DRF (during normal business hours). Measurements will be taken prior to unloading and then again after unloading has been completed.
- Freeboard will be measured to 1/8-inch using an oil-gauging tape with 6-inch brass plumb bob at the starboard bow, port bow, starboard stern, and port stern of the disposal barge. The position at which freeboard is measured will be clearly identified at a weldment above draft markings and communicated clearly to those involved in taking freeboard measurements.
- Specific gravity of the water will be measured during initial and final surveys. Three measurements will be taken at three different depths in 5-foot increments. Water collected will be tested for specific gravity using a hydrometer (accurate to 0.0005) within a graduated cylinder.

Please refer to the Barge Displacement and Measurement found in Attachment D of this plan and described in Section 4.

2.3 Hours of Operation

The standard in-water work hours allowed for this Project are: 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 7:00 p.m. on Saturdays, for a 6-day-per-week work schedule. Any need for after-hours work outside of the above listed normal work hours must obtain the approval of the Project Representative in coordination with the EPA at least 72 hours in advance.

DRF keeps the regular office hours of: Monday through Friday, 7am to 4pm. If conditions allow and if the request is approved, the Facility has the ability to be open outside of regular hours by appointment and can also operate 24/7. The Facility is closed on Thanksgiving Day, Christmas Day, and New Year's Day. WM has agreed to work with PPM in the event after hours are needed to assist with operational schedules, as long as sufficient notice is provided to WM for staffing purposes.

2.4 Notifications

PPM shall notify the Project Representative 10 working days in advance of anticipated work at the work site or contractor transload facilities, and conduct all necessary testing, inspection, and surveying. PPM

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shall notify the Project Representative in the event that there are defects observed in the gondola rail cars, truck beds, and their respective liners. The Project Representative will determine if the level of defectiveness warrants removal of the material transport vessel from service, or if the issue(s) can be remedied.

3.0 Proposed Equipment

A detailed list of equipment to be used for transloading operations, including:

3.1 DRF Equipment

The Facility is outfitted with four major types of equipment: powered industrial trucks (forklifts, excavators, etc.), specialized barge offloading equipment, water pre-treatment system equipment, and sediment processing equipment. Equipment could be changed to meet the needs of the inbound material barges. The list of equipment typically available for daily operations is as follows:

- (2) Loaders
- (1) Excavator
- (1) Barge Offloader
- (1) Water Truck/Sweeper
- (1) Forklifts
- (1) Top Lift (intermodal container lift)
- (1) Trackmobile (railcar mover)
- (1) Skid-Steer
- (1) Wheel wash station

The Facility also uses task-specific equipment for treating and processing contaminated stormwater for discharge, and for sediment dewatering. Refer to Section 2.2 of this plan for more details on the dewatering process and equipment. Data sheets will be provided prior to start of the work.

Waste Management uses a third-party contractor for operating a mechanical sediment dewatering system as-needed. Equipment used for these purposes could include all or some of the following: centrifuges, shaker screens, conveyors, belt presses, dissolved air flotation unit, and other equipment as required. The site water and sediment management systems will comply with the ISGP and IW permit requirements.

3.2 SMA 5 Equipment

The equipment used at SMA 5 for transportation to DRF will approximately be: 2 excavators, 1 dozer, 2 off-road jobsite trucks, and haul trucks as available for hauling material to DRF from SMA 5. A more detailed equipment list will be provided prior to the 2026 Construction Season, when the SMA 5 work is set to begin.

4.0 Documentation and Reporting

Daily and weekly reporting and record-keeping requirements for project compliance per Section 01 33 00, Article 1.07 include:

1. Daily Reporting: The Contractor is responsible for keeping a daily record (and submitting) of transloading, upland transportation, and disposal activities including:
    a. Weight tickets and associated documentations.

b. Full barge displacement measurements of each barge received at the DRF with dredge material, dredge debris, identified debris, and piling, and corresponding tonnage.

2. Weekly Reporting:
   a. Summarize the week's Work for transloading, upland transportation, and disposal activities including: Work completed to date, latest Certificates of Disposal or other documentation to track the final disposition of Dredge Material, Dredge Debris, Identified Debris, and Piling to the Disposal Facility in the Weekly Construction Report.
      i. Certificates of Disposal are to be submitted no later than 30 calendar days after the material has been disposed.
3. Barge Displacement Reporting:
   a. Specific Gravity Recording and Calculations:
      i. Specific Gravity at WM's DRF Slip 2 will be recorded by Waste Management personnel and reported on barge tonnage report to PPM.
      ii. PPM will utilize the recorded specific gravity to perform interpolation calculation and provide an adjusted weighted tonnage (Attachment D).
   b. Material Density QC Measurement:
      i. A 1 (one) cubic-foot (cf) wood crate will be loaded with project-only sediment material.
      ii. The 1 cubic-foot wood crate will be weighed on a certified scale and a material density will be calculated.
      iii. A minimum of three measurements described in b.i. and b.ii. will be taken for each barge.

The QC density measurements will be taken in the Contamination Reduction Zone (CRZ) (Appendix AD Decontamination Plan) .

The barge displacement reporting will be provided on PPM's Daily Reports. Further information pertaining to barge displacement calculations are contained in Attachment D and Substitution Request No. 2 which includes the following requirements:

a. 35 20 23.01 1.05 C 1 and 3.03 A 2 will be revised to reflect that:
   i. Pre-offloaded, and post-offloaded barge displacement measurements will be performed at the Contractor Transload Facility in the presence of, and accepted by, the KC Project Representative (KCPR).
   ii. The KCPR will decide when the mechanical removal of the dredged solids is completed and the post-offloaded barge displacement measurement of the empty barge is conducted. The Contractor must not remove free water from the barge during offloading after the pre-offloaded barge measurement has been conducted and before the post-offloaded barge displacement measurement is conducted.
   iii. The barge displacement measurement tonnage will be calculated using Specific Gravity data collected at the time of performing barge displacement measurements at the Contractor Transload Facility. The Specific Gravity data will be collected from 3 depths (i.e., top, middle, and bottom) over the distance of the actual barge displacement depth. The Contractor will provide the calculation details in an updated revision of the Transloading, Upland Transportation, Waste Characterization, & Disposal Plan that clearly shows how the Specific Gravity data will be used along with the Saltwater and Freshwater barge sinkage table charts, to determine the cargo tonnage. The calculation that uses the collected Specific Gravity data will be provided for each barge

displacement measurement ticket. The Contractor will provide barge displacement charts that are signed and stamped by a Certified Naval Architect, for all material barges used for offloading.

iv. The Contractor acknowledges that the KCPR may identify that an "empty barge" may contain remaining water, slurry, and residual solids. The Contractor will discuss the "empty barge" determination with the KC PR prior to collecting the post-offloaded barge displacement measurement.

b. 35 20 23.01 3.03 will be revised with the addition of "E. Weight Recording and Reporting" that includes the following:
   i. The Contractor will perform Quality Control (QC) certified weight scale measurements to determine a material density, to verify and/or adjust the tonnage measurements developed by barge displacement contained herein in the presence of and to the satisfaction of the KCPR.
   ii. The Contractor will report the QC measurements on its Daily Report.
   iii. The Contractor will handle and measure material in the following sequence after project material has been offloaded to the Contractor Transload Facility:
      1. A known volume of 5 gallons, or 1 (one) cubit foot (cf) will be verified by the KCPR and loaded with project-only sediment material immediately prior to loading the gondola, and before any amendment or soil from other projects is added to the project sediment.
      2. The bucket filled to the 5 gallon mark, or 1 (one) cf, with project sediment will be weighed on a certified scale and a material density will be calculated.
      3. A minimum of 3 buckets, or 3 individual cf measurements, for certified scale weight measurements and density calculations will be performed per offloaded barge.
      4. The frequency of the known volume container measurements, and the size of known volume container, may be adjusted by the KCPR in consultation with the Contractor.
   iv. KC PR, in consultation with the Contractor, may require the Contractor to record barge displacement measurements in accordance with the procedures above using an object of known weight (e.g. a crane counterweight) to demonstrate the above procedures and verify the accuracy of the barge displacement measurements, Specific Gravity calculations, and recorded tonnage.

See the Construction Quality Control Plan (Appendix N of the RAWP) for additional details on documentation and reporting requirements.

In the event that a spill occurs, the spill must be documented and reported properly. Refer to Attachment A for spill control procedures at DRF and the Spill Prevention, Control and Countermeasures Plan (Appendix Z of the RAWP) for the remainder of Site operations.

5.0 Waste Management Coordination Personnel

One Coordinator will be responsible for the Transportation and Disposal Coordination and who will be responsible for all stages of waste management of Dredge Material, Dredge Debris, Identified Debris,

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and Piling. Coordinator(s) possess at least one year of experience managing and transporting CERCLA wastes. Resumes for the Coordinator and backups can be found in Attachment A The Coordinator for DRF is Zachary Jenkins. Phone number: 206-496-7480, e-mail: zjenkins@wm.com.

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Attachment A

DRF Plan of Operation

Plan of Operation
Duwamish Reload Facility
7400 8th Avenue South
Seattle, Washington

November, 2020

Prepared for

Waste Management National Services, Inc.
Seattle, Washington

LANDAU ASSOCIATES
130 2nd Avenue South
Edmonds, WA 98020
(425) 778-0907

This Plan of Operation has been prepared under the supervision and direction of the following key staff.

LANDAU ASSOCIATES, INC.

Kent W. Wiken, PE
Senior Associate Engineer

KWW/KMS/JAK/tam
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APPENDICES

LIST OF ABBREVIATIONS AND ACRONYMS

BMP ..... Best Management Practice
CESF ..... Chitosan-enhanced Sand Filtration
City ..... City of Seattle
cy ..... cubic yard
Ecology ..... Washington State Department of Ecology
GAC ..... Granular Activate Carbon
gpd ..... gallons per day
gpm ..... gallons per minute
HDPE ..... High Density Polyethylene
KCIW ..... King County Industrial Waste
LDW ..... Lower Duwamish Waterway
NPDES ..... National Pollutant Discharge Elimination System
O&M ..... Operations and Maintenance
OCA ..... Operations Containment Area
PAH ..... Polycyclic Aromatic Hydrocarbon
PCB ..... Polychlorinated Biphenyl
PPE ..... Personal Protective Equipment
Public Health ..... King County Public Health Department
SWPPP ..... Stormwater Pollution Prevention Plan
TPD ..... Tons per Day
UPRR ..... Union Pacific Railroad
VOC ..... Volatile Organic Compound
WAC ..... Washington Administrative Code
WM ..... Waste Management National Services, Inc.

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1.0 INTRODUCTION

Waste Management National Services, Inc. (WM) operates the Duwamish Reload Facility, also called the 8th Avenue South Reload Facility or 8ASR (Facility). The Facility is a reload facility for contaminated dredge sediment, industrial wastes, and contaminated upland soil from the Duwamish River and other sites in the Pacific Northwest, including Alaska and Canada. Accepted materials arrive at the Facility from commercially operated barges, as well as trucks, and is transferred to rail or trucks for transport offsite. WM has operated the Facility since August 2014.

This Plan of Operation (Plan) establishes the practices and guidelines for the operation, use, and maintenance of the Facility in accordance with applicable requirements of the King County Board of Health Solid Waste Regulations; and standards of Chapter 173-350 of the Washington Administrative Code (WAC), *Solid Waste Handling Standards*.

The Facility operates under several permits and authorizations including, but not limited to, a "Piles Used for Storage or Treatment" Permit (Solid Waste Permit) issued by King County Public Health Department (Public Health); a Waste Discharge Permit issued by King County Industrial Waste (KCIW); and an Industrial Stormwater General Permit issued by the Washington State Department of Ecology (Ecology). This Plan applies to those current and planned Facility activities that are regulated under the Solid Waste Permit, including:

- Offloading, transloading, loading, and storage of bulk non-hazardous contaminated dredge sediments from/to over-the-road vehicles, barges, and rail cars.
- Processing of bulk dredge sediments by screening, stabilization, dewatering, and/or mechanical means.
- Unloading, storage, and transloading of contaminated upland soil from/to over-the-road vehicles, barges, and rail cars.
- Offloading, loading, transloading, and storage of bulk and containerized non-putrescible, solid and semi-solid waste generated from marine debris and piling removal, manufacturing operations or industrial processes from/to over-the-road vehicles, barges, and rail cars.

The following current and planned Facility activities are regulated by other governing agencies or are not subject to the solid waste handling standards, but are also included in this Plan:

- Offloading, loading, transloading, and storage of marine cargo and equipment from/to over-the-road vehicles, barges, and rail cars.
- Offloading, loading, transfer, and storage of containerized non-hazardous contaminated materials in closed rigid containers (intermodal operations) from/to over-the-road vehicles, barges, and rail cars. Should any rigid container fail in structural integrity, the uncontained waste is regulated under the solid waste handling permit.
- Offloading, loading, transfer, and storage of containerized non-hazardous contaminated materials in closed non-rigid containers (intermodal operations) from/to over-the-road vehicles, barges, and rail cars. Should any non-rigid container fail in structural integrity, the uncontained waste is regulated under the solid waste handling permit.

- Storage of trucks, vehicles, rail cars and equipment.
- Mooring of marine vessels.
- Offloading, loading, transloading, and storage of clean bulk soil, sand, and gravel from/to over-the-road vehicles, barges, and rail cars.
- Offloading, loading, transloading, and storage of bulk non-hazardous liquids from/to over-the-road vehicles, barges, and rail cars.
- Processing and treatment of contaminated stormwater for discharge to sanitary sewer.
- Offloading, loading, transloading, storage, processing and treatment of bulk and containerized wastewater from non-categorical industrial sources.

This Plan has been revised from the August 21, 2017 revision previously submitted for regulatory review.

A copy of this Plan is maintained at the Facility and located in the Operations Supervisor's office. This Plan will be reviewed at least annually and will be updated, as necessary, based on any significant changes to Facility operations. Major revisions are submitted to Public Health for review and approval prior to implementation. A formal cover letter must be submitted to document the requested changes and page locations of the proposed pages to revise. Once the changes are approved by Public Health, a printed and digital copy of the revised document with a new date will be submitted to Public Health.

This Plan incorporates the following documents that may be amended in the future:

- Vicinity Map and Facility Layout (Appendix A)
- Permits, including Solid Waste Permit, Industrial Stormwater General Permit, and KCIW Waste Discharge Permit (Appendix B)
- Special Waste Acceptance & Hazardous Waste Exclusion Plan (Appendix C)
- Material Flow Schematic and Wastewater Flow Schematic (Appendix D)
- Emergency Action Plan (Appendix E)
- Forms and Reports (Appendix F)
- Storage and Throughput Capacity Calculations (Appendix G).

2.0 PERSONNEL AND FACILITIES

This section describes the Facility site, its general layout, and the roles of Facility personnel.

2.1 Site Description

The Facility is located at 7400 8th Avenue South within the city of Seattle (City) in King County, Washington (see Figure 1 of Appendix A). The property is leased to WM. The Facility is bordered on the southwest by the Lower Duwamish Waterway (LDW), to the southeast by Slip No. 4 of the LDW, to the west by 8th Avenue South, to the north by South Garden Street, and to the northeast by East Marginal Way South. The Facility covers approximately 16 acres and consists of one parcel (No. 213620-0641), which is zoned as Industrial General 1 Unlimited 85 (IG1 U/85) within the Greater Duwamish Manufacturing Industrial Urban Village Overlay, as designated by the City (City of Seattle 2014). Figure 1 of Appendix A presents the land use within a one-mile radius of the Facility, which includes King County International Airport, Interstate 5 freeway, Washington State Routes 99 and 509, and other industrial zoned property, as well as commercial and residential zoned property.

2.2 Features

The Facility layout, including the following key features, is shown on Figure 2 in Appendix A:

- Office trailers
- Barge berthing areas
- Truck scale
- Rail siding
- Water pre-treatment facility and treated water storage system
- Non-categorical liquids offload and decant system connected to the water pretreatment system
- Upland soil/Industrial/Manufacturing waste containment area
- Sediment processing area/Equipment
- Maneuvering areas, including entrance and exit
- Spill containment zone and Operations Containment Area (OCA)
- Rigid containerized media units' storage area (e.g., drums, dumpsters, intermodal and other containers designed to contain materials for transport)
- Non-hazardous bulk liquids offloading area
- Active and inactive stormwater outfalls.

2.3 Hours of Operation

The Facility's regular office hours are Monday through Friday, 7am to 5pm. Depending on operating conditions, the Facility may be open outside of regular hours by appointment and has the ability to operate 24 hours per day, 7 days per week. The Facility is closed on New Year's Day, Thanksgiving Day, and Christmas Day.

2.4 Site Access

Access to the Facility is shown on Figure 2 in Appendix A. The Facility is accessed three ways: by truck, rail, and barge. Truck access is via 8th Avenue South or South Othello Street. The Facility perimeter is completely fenced (land-side) to prevent unauthorized vehicle access. Two entrance and exit gates located on 8th Avenue South, and one gate located at the East end of South Othello Street, control access to the Facility. Gates are locked during non-business hours to prevent unauthorized access.

Rail access is via the existing Union Pacific Railroad (UPRR) rail line that runs adjacent to East Marginal Way South, and the rail spur extending from the East Marginal Way South rail line along the east side of the site, adjacent to the LDW Slip No. 4. As shown on Figure 2 in Appendix A, two additional temporary railroad tracks were installed in 2015 from the East Marginal rail line to allow for a more efficient operation and to minimize the risk of any spillage into Slip No. 4. A third temporary railroad track was installed in 2018 from the adjacent to the two existing temporary railroad lines to increase efficiency and material throughput. These tracks are located outside the 200-foot (ft) shoreline buffer.

Barge access is via berthing areas (piers) located on the south and southeast portion of the Facility on the LDW and Slip No. 4, respectively. These berthing areas are shown on Figure 2 in Appendix A.

2.5 Signs

A sign posted at the 8th Avenue South and South Othello Street entrances indicates the Facility name and normal business hours of operation.

2.6 On-Site Traffic Flow

Traffic patterns are designed to optimize traffic flow and maximize safety. All-weather driving surfaces are provided throughout the Facility, which is primarily paved with asphalt.

2.7 Personnel

This section describes staff functions involved in managing the Facility.

District Manager

The District Manager is directly responsible for operations and financial performance at the Facility, including compliance with environmental permits and regulations. The District Manager is the primary contact person for the Facility. The District Manager or his/her designee maintains information to be reported to local and state agencies, and manages reporting tasks. This individual may be located offsite.

Operations Supervisor

The Operations Supervisor is responsible for personnel, equipment, and operations. He/she is responsible for ensuring that proper operational practices are maintained and that the Facility is operating in conformance with the design plans and applicable regulatory requirements. He/she or his/her designee conducts various Facility inspections to ensure safe and compliant operations.

The Operations Supervisor or his/her designee maintains information to be reported to local and state agencies, and manages reporting tasks.

Equipment Operators

The Equipment Operators' activities include screening waste, operating equipment, directing traffic, managing the operations area, conducting housekeeping and regular Facility maintenance, and ensuring that materials are handled properly and efficiently.

Equipment Maintenance Personnel

Equipment Maintenance Personnel are responsible for maintaining the safe and effective operation of equipment used at the Facility. Maintenance for portable equipment occurs both onsite and offsite. Maintenance activities for rolling stock and large, fixed, and heavy equipment occur where the equipment is stationed, and may be performed either by company personnel or vendors.

Environmental Protection Manager

The Environmental Protection Manager is responsible for assessing environmental compliance at the Facility and working with the District Manager and other personnel to ensure that applicable regulatory requirements are met. This individual may be located offsite.

The above-listed job descriptions may be combined. The number of Facility personnel and specific job descriptions are subject to change.

Safety Manager

The Safety Manager is responsible for assessing OSHA compliance at the Facility and working with the District Manager and other personnel to ensure that applicable regulatory requirements are met. This individual may be located offsite.

2.8 Equipment

This section describes the types of equipment used for operations at the Facility. The Facility is equipped with four major types of equipment: 1) specialized barge offloading equipment; 2) powered industrial trucks (loaders, excavators, forklifts, etc.); 3) water pre-treatment system equipment; and 4) sediment processing equipment.

This equipment may be modified to meet inbound tonnage demands and to increase or improve processing capabilities over time. Over the period of Facility operation, equipment deletions, substitutions, or additions may occur. The Facility will maintain sufficient equipment to manage accepted materials in compliance with applicable laws, regulations, and permits.

Table 1 lists the types of mobile equipment typically available for daily operations.

Table 1 Mobile Equipment

Mobile Equipment[1]	Number
Loader	2
Excavators	1
Barge Offloader	1
Water Truck/Sweeper	1
Forklifts	1
Top Lift (intermodal container lift)	1
Trackmobile (railcar mover)	1
Skid-Steer	1

[1]The Facility may rent and/or hire third-party equipment, if necessary.

The Facility also uses task-specific equipment for the processing and treatment of contaminated stormwater for discharge to sanitary sewer, and for sediment dewatering and stabilization.

WMNS utilizes a third party contractor for implementation and operation of a mechanical sediment dewatering system on an as-needed basis. This system may use some of the following equipment: centrifuges, belt presses, shaker screens, conveyors, mix tanks, dissolved air flotation unit, and other equipment as required by each specific project. This system is discussed further in Section 3.2.7.

2.9 Maintenance Schedule

Routine maintenance and cleaning is performed, as necessary, to keep the on-site equipment in good working order. Preventive maintenance is performed per manufacturer's recommendations and company standards for each type of equipment. Scheduled maintenance is tracked, and maintenance records are maintained electronically. Powered industrial trucks and handling equipment are inspected before and after each use to identify and correct potential safety and maintenance issues.

3.0 MATERIALS HANDLING OPERATIONS

The Facility operates as a processing, intermodal, and transload facility for several types and classes of materials. With respect to this operations plan, the Facility handles two major categories of materials: Solid Waste Permit regulated and Non-Solid Waste Permit regulated materials. This section describes how these materials are managed by the Facility, how reporting information is obtained and tracked, and how materials generally move throughout the Facility.

3.1 Accepted Waste Types

All sediment and contaminated soil handled at the Facility must be approved into the Facility through the WM approvals process. Materials shipped offsite for disposal or transfer must also be approved through the WM approval process for the destination facility.

The types of regulated solid waste accepted at the Facility are classified as non-hazardous, non-dangerous waste (per WAC 173-303 and 40 CFR Parts 261 & 761) and include:

- Bulk contaminated dredge sediments.
- Bulk contaminated upland soils.
- Bulk and containerized non-hazardous industrial wastes and sludges.
- Non-putrescible, solid and semi-solid waste generated from marine debris and piling removal, manufacturing operations or industrial processes.
- Automotive Shredder Residue (auto fluff) and other soil-like materials that have been approved for use as alternate daily cover, other beneficial uses, or disposal at Subtitle D landfills.

Other materials transloaded at the Facility not requiring a solid waste permit include:

- Bulk liquids transloading and storage
- Bulk and containerized wastewater from non-categorical industrial sources
- Marine cargo/equipment transloading and storage
- Rigid containerized materials – Intermodal Operations
- Non-rigid containerized materials - Intermodal Operations
- Empty waste handling container storage
- Over-the-road chassis storage
- Bulk clean soil and gravel materials storage and transloading.

The Facility employs waste screening procedures to prevent the receipt of unacceptable waste types. These screening procedures are described in Appendix C, Special Waste Acceptance & Hazardous Waste Exclusion Plan. As listed in the Facility's Waste Discharge Permit, issued by KCIW, there is a requirement that waste solids processed at the Facility will not exceed the general pollutant concentrations listed in the permit (see Appendix B). As noted in the permit, WM will not accept waste materials that exceed the acceptance criteria without first obtaining written approval (email is sufficient) from KCIW.

3.2 Regulated Solid Waste Materials

The Facility receives contaminated dredge sediments via barge. Contaminated upland soils, bulk and containerized non-hazardous industrial wastes and sludges, auto fluff, non-putrescible, solid and semi-solid waste generated from manufacturing operations or industrial processes; and other soil-like materials that have been approved for use as alternate daily cover, other beneficial uses, or disposal at Subtitle D landfills arrive via trucks. These materials are offloaded from the barge or truck, and then may be further dewatered, amended, contained and/or stored onsite before being transloaded into trucks or rail cars for disposal at WM's Columbia Ridge Landfill or another approved landfill facility. Water that is removed from the dredge sediments (decant water) is conveyed to an on-site water pre-treatment system for processing, prior to being discharged to a City sanitary sewer pipe, which discharges to a King County wastewater treatment facility.

3.2.1 Materials Handling Capacity

The capacity of any facility is based upon throughput. This, in turn, is influenced by several factors, notably the amount of materials delivered to the facility, capacity of designated materials handling areas, the availability of rail cars to transport, and the amount of time devoted to accepting and transloading materials.

The maximum Facility design throughput is based on a monthly average of 6,000 tons per day. The maximum amount of materials storage at the Facility is approximately 47,000 tons including the dredge soils and the upland soils storage area. The capacity calculations for designated materials handling areas are provided in Appendix G.

The Facility's standard operating procedure for loading is generally "first-in/first-out." This provides for continual materials throughput and eliminates older materials storage. This procedure may change occasionally, when necessary, as a result of materials conditions. Materials will generally be loaded in a timely manner to minimize stockpiling and optimize incoming materials capacity.

3.2.2 Operations Containment Area

The area where contaminated sediments and upland materials are handled has been established as the (OCA). In addition to these materials streams, all non-rigid containerized (i.e. super sack) materials having the potential for stormwater contamination if spilled will be stored within the OCA. The boundary of this area is shown on Figure 2 in Appendix A. Stormwater runoff from the OCA is contained and treated as wastewater because it potentially may have contacted contaminated materials.

3.2.3 Best Management Practices

The Facility will use the following Best Management Practices (BMPs) to contain stormwater and contaminated materials within the OCA:

1) A minimum 6-inch-height curb is installed around the OCA to contain decant water and contaminated stormwater.

2) A sediment processing area, used to contain and/or process sediment, is constructed over the asphalt pavement.

3) A wheel wash located inside the OCA is used for trucks leaving the OCA.

4) A spill containment zone is located between the barge berthing area and the sediment processing area, where the barge offloading bucket moves back and forth when offloading barges. This area is asphalt-lined with an asphalt berm that is sloped away from the water to a small basin to allow accumulated water to be pumped to the wastewater treatment system. This provides containment for liquids and minimizes the potential for spillage into the LDW. During active unloading operations, the barge unloading containment area will be cleaned daily, at a minimum, or more frequently as site conditions warrant.

5) All asphalt paving in the OCA and the spill containment zone is sealed to prevent potential leakage of contaminated water. OCA integrity is inspected monthly during the Facility inspection. In the event that issues are identified, corrective actions are taken (i.e. resealing or replacing asphalt, etc.).

6) Bulk material barge unloading activities requiring dewatering or solidification will occur on Slip No. 2 in a fashion to minimize splash of material from the environmental bucket. A sloped spill plate is placed in the spill containment zone between the barges and the barge offloader so that any material spillage will go back into the barges (see Appendix A for spill plate photo). During these activities, the barge offloader is fitted with an environmental bucket that is constructed to minimize leakage during materials handling. Additionally, a permanently fixed spill apron will be placed at the edge of the dock. This spill apron is fitted with a poly tarp type bib that will extend into the barge prior to beginning the unloading process. Therefore, any drippings or spillage of material landing on the apron will be conveyed by the bib back into the barge.

7) Bulk material barges not requiring dewatering will occur on Slip No. 1 and/or Slip No. 3 by loading bulk materials into containers, or over the dump type vehicles on the barge prior to movement of the materials off the barge to the OCA or offsite.

8) Containerized material barges may be unloaded on Slip No. 1 and/or Slip No. 3 into larger intermodal containers or over-the-road dump type vehicles on the barge prior to movement of the materials off the barge to the OCA or offsite.

9) Barges with Intermodal containers may be unloaded using Slips No. 1 and No. 3 with intermodal containers loaded directly onto on-shore or on-barge intermodal chassis using top lift, crane, or forklift for over-the-road transfer offsite or transfer to the on-site container storage areas.

10) Dockside sediment control (e.g., sweeper truck, shoveling, sweeping, wash down) is performed weekly, at a minimum, or more frequently as site conditions warrant, to avoid the tracking of sediment by vehicles and personnel and to generally maintain a clean site. This includes the dock, transload area, and the haul routes.

The Operations Supervisor is responsible to ensure that all BMPs are maintained during Facility operations.

3.2.4 Truck Unloading – Solid Waste Operations

Contaminated upland soil non-hazardous industrial wastes and sludges, auto fluff, and other soil-like materials are delivered to the Facility in trucks, which dump the materials directly into the upland storage bunker. The trucks may be weighed on a certified scale when they arrive depending on Customer requirements.

The upland storage containment area is part of the OCA, which is surrounded by a 6-inch-minimum height curb (see Figure 2 in Appendix A). Free liquids collected from within the OCA area, including contact and *in situ* liquids, will be conveyed to the water pre-treatment system for discharge to the sanitary sewer. Upland soils and industrial/manufacturing wastes may arrive at the Facility in a dry state or have *in situ* water content. Dewatering is not typically required for upland materials, but, should dewatering be required, upland materials may be transferred to the Sediment Processing Area for processing or dewatering.

3.2.5 Barge Offloading – Solid Waste Operations

Barges are received and moored in one of three Slips on the LDW. The following is a general description of barge offloading practices for each slip at the Facility;

3.2.5.1 Slip No. 1 and No. 3 Operations

Barges moored at both Slip No. 1 and No. 3 are typically loaded with low-moisture bulk soils, rigid and non-rigid containerized materials, equipment, intermodal containers, or bulk liquids. Upon spotting of the barge at the dock, WM crews will coordinate with the pilots to have the barge spotted at a location where a dock ramp can be lowered onto the barge. Depending on how the individual barge is loaded, bulk soils and non-rigid containerized materials will be offloaded using equipment on-shore or on the barge into on- or off-road dump-type transport vehicles. It is anticipated that Slip One and Three can offload a monthly average of 5,000 tons per day (TPD). The transport vehicle will be positioned initially on the Slip ramp or on the barge. Materials being offloaded will be swung over the barge onto the transport vehicle, eliminating the probability of spills to the LDW or on shore. Bulk and non-rigid containerized materials offloaded from the barge will be placed in either the upland soils or the Dredge Storage and Containment Area. Intermodal containers and equipment will be stored either in the various storage areas across the site or moved offsite.

3.2.5.2 Slip No. 2 Operations

Barges moored at Slip No. 2 are typically loaded with high moisture dredge or bulk soil-like materials. The barge is moored to the dock, which positions it close enough to the concrete dock so that the spill plate will reach to the barge under normal tidal conditions on the LDW. If there is an extreme tidal fluctuation, such that the spill plate cannot divert the excess sediment water back to the barge, the barge offloading operation will be ceased until the tide changes to allow proper function of the spill plate. The barges are towed by independent operators under contract to others, and all barge movement on the LDW will be conducted in accordance with Federal Navigation Regulations.

The track-mounted barge offloader and/or slurry pumping system is anticipated to offload a monthly average of 5,000 TPD. The track-mounted barge offloader is controlled by an operator located within a climate-controlled cabin on the machine. Electricity is supplied via insulated cables from a generator or electric panels at the Facility. The barge offloader has the capability to traverse along the pier during barge offloading operations; however, unloading will always occur over the spill plate. Efforts will be made to minimize the potential for spills. In the unlikely event of accidental spillage of contaminated dredge materials into the LDW during offloading operations, immediate cleanup of the spilled materials will be conducted, and the spill will immediately be reported to both King County Public Health and Ecology. See the Facility Stormwater Pollution Prevention Plan (SWPPP most current version on site) for spill prevention and control procedures.

Based on sediment characteristics, the material may be unloaded differently. Each of these methods are described in the sections below.

3.2.5.2.1 Non-Free Draining Sediments

Non-free draining sediments are offloaded from barges using a slurry pumping system that adds process water to the sediments at the pump. The slurried sediments are pumped to mixing tanks in the sediment processing area inside the OCA. Slurried sediments are pumped from the mixing tanks to the dewatering equipment. Once the sediment has been sufficiently dewatered, the sediment will be transferred to a storage pile on the asphalt within the OCA. From there, it will be transferred to truck or rail for off-site disposal.

3.2.5.2.2 Free Draining Sediments

Prior to offloading free-draining sediments, accumulated water in the barge is removed via a portable pump and transferred into the water pre-treatment system with discharge of pre-treated water to the sanitary sewer. Free draining sediments and debris are moved from the barge using the track-mounted barge offloader. The barge offloader transfers sediments to the sediment processing area over the spill apron. The sediment processing area is located adjacent to the barge berthing area. During track-mounted offloader operations, a spotter is positioned on the dock to monitor for spillage from the environmental bucket before transferring materials from the barge over the apron. The barge offloader swing radius allows the environmental bucket to empty into the sediment processing area grizzly screen.

3.2.6 Sediment Processing Area

Sediments are processed in the sediment processing area. This area is constructed with Conex container walls on two sides, as shown in the details provided in Appendix A. This area is within the OCA and is designed to process all sediments offloaded from the barge. Within the processing area, a mechanical separator and other associated equipment is used to dewater dredge material. This equipment is portable, expandable, and may be disassembled during site remediation or closure activities. After the completion of each transload project or at the end of the dredging season, the

surrounding work area will be cleaned and any accumulated wash water will be processed through the on-site water pre-treatment system for discharge to the sanitary sewer.

The sediment processing area facilitates the dewatering of sediments using either heavy equipment or other mechanical means. Captured decant water is pumped to the water pre-treatment system via a portable pump and overland hoses. After the material is sufficiently dewatered, the sediment will either be staged on the ground inside the OCA, transferred by mechanical means directly to a rail car, or, depending on conditions, transferred to the upland soil bunker.

3.2.7 Dredge Material Processing

The dredged material will be processed as follows:

- Decanting of water from barges, if material is free draining material. Sediment will then be transferred to the system using an excavator.
- If sediment conditions are favorable, water will be added to the barge and sediment mixed into a slurry then pumped into the process.
- Initial size classification and scalping operation to manually remove large debris.
- Mechanical Dewatering Facility may include, but is not limited to:
  - centrifuges
  - belt presses
  - shaker screens
  - conveyors
  - mix tanks
  - dissolved air flotation units.
- Water Treatment:
  - granular-activated carbon (GAC) filtration to remove contaminants
  - recovery of solids from clarification and filtration backwash at weir tank.

At the discretion of the Operations Manager, dredge materials may be amended to reduce free liquid content for the purpose of improving materials handling.

The materials used for amending wet sediments are fly ash, Portland cement, diatomaceous earth, cement kiln dust, or other acceptable effective absorbent materials depending on availability. Amendment materials will be stored under cover to reduce contact with precipitation and to minimize emissions to the air. Environmental management practices for storing and handling the amendments include: avoiding placement of the materials where there is potential for it to come into direct contact with groundwater or with surface water bodies; storing materials in an area that is dry and where contact with stormwater, surface water, or groundwater can be avoided; and using dry cleanup methods that do not create dust in the case of a spill.

The use of appropriate personal protective equipment (PPE), such as a dust mask, safety glasses with side shields, a hard hat, and gloves will be required when workers are potentially exposed to direct contact with amendment materials (outside of equipment and vehicle cabs).

3.2.8 Materials Transfer to Rail Cars or Trucks

All sediment, contaminated soils, and containers handled at the Facility have been approved into the Facility by the WM approvals process, see Appendix C "SPECIAL WASTE ACCEPTANCE & HAZARDOUS WASTE EXCLUSION PLAN." Materials shipped for disposal or transfer must also be approved through the WM approval process for the destination facility. Once approved, shipments will be transported via over-the-road trucks, intermodal containers, or gondola rail cars. All transloading operations occur within the OCA.

The gondola railcars are steel containers that have no doors, and are only open on the top for loading and unloading. Gondola cars are inspected on arrival for damage (e.g., holes, gaps, or openings in the side or bottom of the rail container) that could compromise their containment capability and cause potential spillage. Should defects be found in a gondola railcar, a plastic liner will be placed in the gondola rail car prior to it being loaded. If a liner is installed, this will be done in a safe manner adhering to OSHA safety standards. Each liner will be visually inspected after installation to ensure liner integrity. Materials loading BMP's will be employed to maximize liner effectiveness and to prevent spillage. Railcars found to have free liquids prior to transport offsite will be amended with dry soils or other amendments to absorb any free liquids.

Certain dredge and contaminated soils may be directly loaded into transport trucks with dump beds for transport to WM's Alaska St. facility for loading into gondola railcars. All materials must be approved through the WM waste approval framework prior to shipment to the Alaska Street facility. Vehicle dump beds used to transport these materials will be inspected prior to loading to ensure that there is no damage that would compromise their integrity. Should defects be found in a dump bed, a plastic liner will be placed in the dump bed prior to it being loaded. Materials loading BMP's will be employed to maximize liner effectiveness and to prevent spillage. Truck Loads found to have free liquids prior to transport offsite will be amended with dry soils or other amendments to absorb any free liquids.

3.2.9 Railcar Management and Shipment Offsite

The Facility will generally have the capacity to transload a monthly average of 6,000 TPD. Loaded railcars will generally be picked-up once loaded by UPRR for transport at an approved landfill. At the time of pick-up, empty cars will be dropped off and spotted to continue the loading process.

Empty and loaded railcars will be moved, as needed, to facilitate UPRR transportation to the approved landfill for disposal. All railcar coordination will be conducted by Facility personnel to keep a steady flow of materials transloaded.

The rail spur includes two parallel sidings to provide capacity and operational flexibility during railcar loading and spotting activities. Front-end loaders will alternate between the eastern and western sidings during loading. Once the inside siding has reached capacity, the loaded cars on the inside siding will be moved so the empty railcars spotted on the outside siding can be loaded. Loading of the railcars will progress from north to south so that loaded railcars are in a position where they can be easily connected to an outgoing train. All loaded cars will be taken offsite by UPRR staff at the time of the scheduled pick-up.

Additional empty cars are available for continuous materials offloading from the incoming barges in order to maintain uninterrupted materials movement. The existing rail spur located along the northwestern side of Slip No. 4 may be used to store cars. Additional empty or loaded railcars may be temporarily spotted adjacent to the Facility along the East Marginal Way South mainline, which is operated by UPRR.

Prior to leaving the railcar loading area, all railcars will be visually inspected to ensure that no railcars are leaking or have dredge materials on the outside. Any materials (water or dredge sediment) that are washed off the railcar exterior surfaces will be collected and transferred to the on-site water pre-treatment system.

3.2.9.1 Final Disposal Facilities

Contaminated upland materials and dredge materials loaded into gondola railcars onsite are transported by rail to WM's Columbia Ridge Landfill located in Arlington, Oregon, or another WMs Chem Waste Management located in Arlington, Oregon. Disposal of materials in this manner meets the requirements of Seattle Municipal Code Section 21.36.112(A), and King County Code Section 10.30.20(A).

3.3 Overview - Non-Solid Waste Permit Activities

The Facility receives the following non-solid waste permit materials via Barge, Rail, and Overland Trucks:

- Bulk liquids transloading and storage
- bulk wastewater from non-categorical industrial sources
- Marine cargo/equipment - transloading and storage
- Rigid containerized materials – Intermodal Operations
- Non-rigid containerized materials - Intermodal Operations
- Empty waste handling container storage
- Over-the-road chassis storage
- Bulk clean soils and gravel materials storage and transloading.

These materials are offloaded and either temporarily stored onsite or transloaded to another conveyance offsite.

3.3.1 Non-Hazardous Bulk Liquids Transloading and Storage

The Facility receives non-hazardous bulk liquids via barge, over-the-road trucks, and rail cars. These materials are offloaded from the original conveyance and may be stored onsite in temporary tanks; treated for discharge to the sanitary sewer; or transloaded into barges, trucks, or rail cars. Transloaded liquids will be sent for disposal to an approved disposal or treatment facility. Treated non-categorical liquids will be managed in compliance with the facilities KCIW industrial discharge permit and sent to the sanitary sewer. Solids that may be settled in these processes may be removed and comingled with other materials in the sediment processing area or OCA. Stabilized soils will be managed in accordance with Section 3.2.8 of this plan.

3.3.1.1 Bulk Barge Liquids Transfer Best Management Practices

Prior to initiating bulk barge liquid transfer operations, the transfer operator shall inspect and confirm:

1) The transfer system and valve alignment are ready for liquid transfer.
2) All parts of the transfer system not to be used during the transfer are securely closed.
3) Hoses and loading arms are long enough to allow movement to their limits without placing strain on the hose, loading arm, or transfer piping system.
4) Each hose is supported to prevent kinking or other damage to the hose and strain on its coupling.
5) Each hose end and loading arm that is not connected for the transfer of materials is closed off using appropriate closure devices.
6) All transfer hoses are free of defects that would permit the discharge of materials through the hose material or cause the hose to fail under normal operating conditions.
7) All connections in the transfer system are leak free.
8) Discharge containment equipment is readily accessible or deployed, as applicable, and is in place and drained to provide the required capacity.
9) The transfer operator is maintaining visual contact with connection and overflow devices during the entire transfer operation, and the emergency means of shutdown is in position and operable.
10) Adequate lighting is provided for transfer operations between vessels, trucks, or rail cars from sunset to sunrise.

For transfers from/to moored marine vessels, the transfer operator shall check the mooring of the vessel to ensure proper alignment of transfer connections with minimum surge of the vessel.

For transfers from/to a truck or rail car, the transfer operator shall ensure the brakes are set and wheel chocks are placed, as appropriate, to ensure proper alignment of transfer connections.

The transfer operator shall have a pre-transfer conference with other individuals involved to ensure each person assisting with the transfer understands the details of the transfer operation. Suggested topics for discussion as are follows;

1) The type materials being transferred.
2) The sequence of transfer operations.
3) The expected transfer rate.
4) The name and location of each person participating in the transfer operation.
5) Details of the transferring and receiving systems including procedures to ensure that the transfer pressure does not exceed the maximum allowable working pressure (MAWP) for each hose assembly, loading arm, and/or transfer pipe system.
6) Emergency procedures.
7) Discharge containment procedures.
8) Discharge reporting procedures.
9) Transfer shutdown procedures.
10) If the transfer operations personnel use radios, a predetermined frequency for communications during the transfer, agreed upon by both.

Site personnel shall review and inspect the liquids storage areas and conveyances for leaks and spills as outlined in Section 5.2.1.

3.3.1.2 Non-Categorical Liquids Treatment

Volumes of non-categorical liquids will arrive at the Facility via, barge, rail, or over-the-road vehicles. Bulk non-categorical liquids arriving on barges or by rail tanker will be offloaded using the procedures in 3.3.1.1 and sent to the water pretreatment system. Volumes arriving in over-the-road tankers and vacuum-type vehicles will tip directly into either the OCA or into a receiving system piped directly to the process water pre-treatment system. The materials accepted in this process will be in compliance with the facilities KCIW industrial discharge permit. Liquids that decant from the solids tipped directly in the OCA will be transferred to the treatment system using the same return pipeline that leads from the treated water storage tanks to the wastewater pretreatment system. Liquids that decant from the receiving system will be sent directly to the process water pre-treatment system.

3.3.1.3 Materials Acceptance and Final Disposal Facilities

All non-hazardous liquids handled at the Facility have been approved into the Facility by the WM approvals process (Appendix C); liquids shipped for disposal or transfer must also be approved through the WM approval process for the destination facility. Once approved, shipments offsite will be transported via over-the-road trucks, intermodal containers, or rail cars.

3.3.2 Marine Cargo/Equipment Transloading and Storage

The Facility receives general marine cargo via barge, over-the-road trucks, and rail cars. These materials are offloaded from the original conveyance and may be stored onsite or transloaded onto barges, trucks, or rail cars for shipment offsite. Marine cargo generally includes containerized and un-containerized products and equipment used in the marine industry.

3.3.2.1 Marine Cargo Transfer Best Management Practices

Upon arrival at the Facility, and prior to unloading and transfer, the exterior surfaces of the marine cargo shall be visually inspected for the presence of stormwater contaminants. Should the visual inspection indicate the presence of possible contaminants, the cargo will be securely tarped or stored undercover.

Site personnel shall review and inspect the marine cargo storage areas for leaks, spills, and tarp integrity as outlined in Section 5.2.1.

3.3.3 Rigid Containerized Materials – Intermodal Operations

The Facility receives non-hazardous materials and media destined for disposal in rigid sealed containers via barge, over-the-road trucks, and rail cars. These materials are offloaded from the original conveyance and may be stored onsite in temporary storage areas or transloaded into barges, trucks, or rail cars. Transloaded rigid containerized materials destined for disposal will be sent to an approved disposal or treatment facility.

3.3.3.1 Rigid Containerized Materials Transfer BMPs

Upon arrival at the Facility and prior to unloading and transfer the exterior surfaces of the rigid sealed containers shall be visually inspected for the presence of stormwater contaminants and leaking seals. Should the visual inspection indicate the presence of possible contaminants or defects, the cargo will be securely tarped and/or transferred to the upland soil containment area. Should any rigid container fail in structural integrity, the uncontained waste is regulated under the solid waste handling permit.

Site personnel shall review and inspect the Rigid Container storage areas for leaks, spills, and tarp integrity as outlined in Section 5.2.

3.3.3.2 Materials Acceptance and Final Disposal Facilities

All ridged containerized materials handled at the Facility have been approved into the Facility by the WM approvals process, materials shipped for disposal or transfer must also be approved through the WM approval process for the destination facility. Once approved, shipments will be transported via over-the-road trucks, intermodal containers, or gondola rail cars.

3.3.4 Non-Rigid Containerized Materials - Intermodal Operations

The Facility receives non-hazardous materials and media destined for disposal in non-rigid sealed containers (i.e. Supersacks) via barge, over-the-road trucks, and rail cars. These materials are offloaded from the original conveyance and may be stored onsite in the upland soils storage areas or

transloaded directly onto barges, trucks, or rail cars. Transloaded non-rigid containerized materials destined for disposal will be sent to an approved disposal or treatment facility.

3.3.4.1 Non-Rigid Containerized Materials Transfer BMPs

Upon arrival at the Facility, and prior to unloading and transfer, the exterior surfaces of the non-rigid sealed containers shall be visually inspected for the presence of defects (rips, tears); stormwater contaminants; and leaking media. Should the visual inspection indicate the presence of possible contaminants or defects, the cargo will be securely tarped and/or transferred to the upland soil containment area. Non-Rigid containers with damage significantly affecting the structural integrity of the container shall be reloaded in new containers prior to shipment offsite. Should any non-rigid container fail in structural integrity, the uncontained waste is regulated under the solid waste handling permit.

Site personnel shall review and inspect the non-rigid containers in the upload soils storage area for leaks, spills, container integrity, and tarp integrity as outlined in Section 5.2.

3.3.5 Empty Waste Handling Container Storage

The Facility receives empty waste handling containers via barge, over-the-road trucks, and rail cars. These containers are offloaded from the original conveyance and may be stored onsite in the container storage areas or transloaded directly onto barges, trucks, or rail cars.

Site personnel shall review and inspect the containers in the storage area for leaks, spills, container integrity, and tarp integrity as outlined in Section 5.2.

3.3.6 Over-the-road Container Handling Equipment Storage

The Facility receives over-the-road container handling equipment (intermodal container chassis, rolloff container trailers) via barge, over-the-road trucks, and rail cars. The equipment is offloaded or disconnected from the original conveyance and may be stored onsite in the storage areas or transloaded directly onto barges, trucks, or rail cars.

Tarps, spill pans, and a spill containment device will be placed at container handling equipment with observable leaks.

Site personnel shall review and inspect the container handling equipment in the storage area, as appropriate, for leaks, spills, and containment integrity as outlined in Section 5.2.

3.3.7 Bulk Clean Soils and Gravel Materials Storage and Transloading

Once the materials storage area is constructed, the Facility will receive un-contaminated soils and gravels via barge, over-the-road trucks, and rail cars. These materials are offloaded from the conveyance, and then stored onsite in dedicated storage areas before being transloaded into barges, trucks, or rail cars.

3.3.8 Bulk Clean Soils and Gravel Materials Handling Capacity

The capacity of any facility is based upon throughput. This, in turn, is influenced by several factors, notably the amount of materials delivered to the facility, capacity of designated materials handling areas, and the amount of time devoted to accepting and transloading materials.

The maximum Facility design acceptance for bulk soil and gravel is 2,000 TPD. The maximum amount of bulk soil and gravel storage at the Facility is approximately 20,000 tons within several future storage areas to be located throughout the site.

The Facility's standard operating procedure for loading is generally "first-in/first-out." This provides for continual materials throughput. This procedure may change occasionally, when necessary, as a result of materials conditions.

3.3.9 Bulk Clean Soils Stormwater Management Area

No contaminated soils will be stored in the bulk clean soils area. The areas where the uncontaminated soils and gravels will be handled and stored will have stormwater structural controls. Figure 2 in Appendix A will be updated to show the storage areas once constructed. Stormwater runoff from these areas is managed with structural controls and BMP's prior to being discharged to the LDW in compliance with the Facility's NPDES permit.

3.3.9.1 Bulk Clean Soils BMPs

The Facility will use the following BMPs to contain stormwater and contaminants:

1) Tarps, silt fences, hay bales, and straw waddles will be employed to reduce the stormwater contaminant loading to the catch basins in the area.
2) A wheel wash will be used for trucks leaving the site from the storage areas.
3) Sediment control (e.g., sweeper truck, shoveling, sweeping, wash down) is performed weekly, at a minimum, or more frequently as site conditions warrant, to avoid the tracking of sediment by vehicles and personnel and to generally maintain a clean site. This includes the storage and transload areas, and the haul routes.

The Operations Supervisor is responsible to ensure that all BMPs are maintained and effective during Facility operations.

4.0 FACILITY MAINTENANCE/HOUSEKEEPING

This section describes Facility maintenance and housekeeping procedures. The Facility is inspected in compliance with Section 5.2 of the plan, and any noted issues requiring attention are addressed promptly to assure that appropriate standards of cleanliness and environmental protection are maintained. The sections below describe items that are critical in maintaining these standards.

4.1 General Spill Cleanup and Containment Procedures

Procedures and engineering controls are in place to eliminate the potential for spills. There are three categories of potential spills at the Facility: those inside the OCA; those outside the OCA, but on asphalt; and those draining directly to the LDW.

4.1.1 Spills into the OCA

Site personnel will perform cleanup operations to maintain general housekeeping within the OCA at a minimum daily, or more frequently as site conditions warrant.

4.1.2 Spills Outside the OCA

For spills outside the OCA, but on the asphalt areas, site personnel will immediately contain and clean up spilled materials. Spilled materials will be returned to the OCA.

4.1.3 Spills Directly into the LDW

In the unlikely event of accidental spillage of uncontained contaminated dredge materials into the LDW during offloading operations, unloading operations will be ceased and the appropriate regulatory agencies will be notified. Spill response and cleanup shall follow the Spill Plan within the Facility SWPPP (a copy of the most current version SWPPP is located in the Facility office). Cleanup of the spilled materials will be completed once a cleanup plan is approved. For contained materials, an immediate effort will be undertaken to remove the spilled material from the LDW; concurrently, both King County Public Health and Ecology will be notified.

4.2 Equipment Fueling, Maintenance and Cleaning

Facility equipment is fueled by a third-party vendor. There are no fuel storage tanks at the Facility. Fueling frequency depends on operational activity and will be generally performed on the areas shown on Figure 2 in Appendix A. All fueling is done via wet-line transfer (direct from fuel truck to equipment). The driver is required to report any spills or observed leaks from equipment prior to leaving the site.

All vehicle/equipment washing will occur within the OCA and any wash water will be collected and pumped to the on-site water pretreatment system and then discharged to the municipal sewer system. Trucks entering the OCA will exit through a wheel wash. The water used in the wheel wash system is recycled. Particulates and floatable oils will be separated by the system. Accumulations will be removed on a routine basis and properly disposed of. Should the system need to be emptied for

maintenance or repairs, the water in the system will be removed and either transferred to the on-site water pretreatment system or hauled off-site to an authorized treatment facility. Any drip-off or drag out past the wheel wash will be collected in a nearby plugged catch basin and piped to the on-site water pretreatment system.

4.3 Equipment Leaks and Spills

Leaks or spills at the Facility are most likely to be caused by defective or broken equipment. The substances most likely to be released include hydraulic fluid, diesel fuel, motor oil, or radiator fluid. Spill kits are placed at various locations around the Facility (as shown on Figure E-1 in Appendix E). In addition, spill kits are located on each fueling truck. Inside each spill kit is a catch basin cover to prevent any spills from entering a catch basin, which will be deployed to cover the nearest catch basin(s) should a spill occur. WM employees receive spill prevention and response training during new hire training and refresher training on a regular basis.

Should a spill or leak occur, priority is given to safety for employees and to preventing the released substance from entering any sanitary or stormwater collection point. Per the Facility SWPPP (Sound Earth Strategies 2015 or most current version), the spill should be immediately contained to prevent entry into the stormwater system. Once contained, all impacted areas/equipment should be immediately (or as soon as possible) cleaned and decontaminated. Should a reportable quantity of spilled material enter the storm or sanitary system, or any water body, the spill will immediately (or as soon as possible) be contained and removed. Regulatory agencies, including City of Seattle Public Utilities, Public Health, KCIW, Ecology, and the National Response Center, will be notified of the incident according to applicable regulatory requirements. All spills will be investigated and documented pursuant to regulatory requirements with the intent of preventing future recurrences.

For all reportable events, written notice will submitted to the appropriate regulatory agencies describing the incident and providing specifics on the material released, possible causes, and actions taken.

4.4 Odor Control

The following methods are used to minimize the likelihood of odors drifting offsite:

- The materials move continually throughout the Facility, which minimizes potential for odors.
- Materials processing equipment is cleaned monthly, or more frequently if necessary, to minimize potential for odors.
- Full railcars are covered with plastic sheets if odors become problematic.
- Standard operating procedure for loading is “first-in/first-out.”

Should off-site odors be identified, the Operations Supervisor investigates, determines the source of the problem, and institutes corrective actions, as appropriate. Corrective actions would typically

include: 1) spraying a mist with an organic odor-neutralizing agent over the odiferous material, or 2) covering any materials in storage bins that are not active.

4.5 Litter Control

Although litter is not expected to be an issue since the material being handled is sediment and soil, the following BMPs will be used to minimize off-site litter:

- The Facility and surrounding area is inspected for the presence of litter related to Facility activities on a daily basis.
- Litter is removed from roadways used to access the Facility on a weekly basis, at a minimum, or more frequently as conditions warrant.

4.6 Noise Control

Noise could be a potential concern at material handling facilities. WM operates a noise management and hearing conservation program to minimize the potential for employee exposure to excessive noise. WM also takes measures to ensure that the Facility operates in accordance with local noise ordinances. Measures include use of engineering controls such as enclosing engines, generators, and noisy machinery, as needed; ongoing equipment maintenance; operational controls; training; and availability of PPE. An example of this is the use of an electric barge offloader, which is much quieter than conventional diesel-powered equipment.

4.7 Pest Control

Since wastes are continually transloaded and consist of sediment and soil, there should be little attraction for pests. However, the following methods are used to minimize pest occurrence:

- Monthly inspection of the Facility focuses attention on areas or practices where pests may be encountered so that their occurrence can be prevented or minimized.
- Operational areas at the Facility are paved or graveled and free of vegetation that could harbor pests.
- Materials are handled and processed as quickly as possible to minimize potential for pest harborage.
- A pest control program, including rodent, insect, and bird control, will be contracted to a qualified pest control company should the inspections indicate a need for this service.

4.8 Dust Control

The primary material handled is dredge soil, which is sufficiently wet to not create dust. Should an issue arise, fugitive dust is controlled during dry weather periods by Facility personnel using a hose or water truck to spray water intermittently over the material unloading and the railcar loading areas. A misting system, either portable or stationary, may be used as well, if necessary. Facility personnel are given training on dust control BMPs and proper use of PPE (such as dust masks). Facility personnel will

monitor on-site dust conditions continuously during active operations to ensure adequate control measures are being employed to control fugitive dust.

Facility access ways and traffic areas are watered and swept, daily, at a minimum, or more frequently as site conditions warrant, to control dust. In addition, on-site fire hydrants are used to spray down roadways, when necessary, during dry weather periods. This keeps the potential for fugitive dust low while mechanical sweeping is performed. Suction sweeping with water sprayers is also performed.

4.9 Wastewater and Stormwater Management

Stormwater runoff and discharge is managed through a National Pollutant Discharge Elimination System (NPDES) Permit administered by Ecology. Wastewater discharge from solid waste handling activities is managed through a Waste Discharge Permit administered by KCIW. Wastewater sources include contaminated sediment decant water and OCA stormwater that has contacted contaminated sediments or contaminated upland materials. A pre-treatment system is in place to treat Facility wastewater prior to discharge to the sanitary sewer.

4.9.1 Decant Water

Decant water will generally be collected from the OCA, spill containment zone, non-categorical liquids receiving station, and incoming barges. Decant water will be transferred via a portable pump and overland piping/hoses to the water pre-treatment system.

Collection and removal of carriage (decant) water from the dredge barges will be dependent upon the amount of free water in the barge as a result of the dredging operation. A submersible pump within a larger diameter perforated pipe will be placed in a low section of the barge that has the largest observed volume of free water and/or saturated sediments. The water will then be pumped via hose to the water pre-treatment system.

Once the dredge sediment is off-loaded, the remaining water within the barge will be pumped to the water pre-treatment system.

Wet non-free draining dredge sediments will be processed in the sediment processing area. Within the sediment processing area, the free water will be pumped, as needed, to the water pre-treatment system or reused in the process by a pump and overland piping/hoses.

The amount of water in each barge varies, so the time for the dewatering process will vary depending on conditions.

4.9.2 Wheel Wash Water

The wheel wash at the exit from the OCA has a closed-loop wash-water recirculation system. During normal operations, no volume of truck wash-water is expected to drain to the pre-treatment system. The system uses flocculant to remove solids on an ongoing basis from the recirculated water. The

wheel wash will be inspected daily to ensure proper system function and verify recirculated wash-water remains suitable to prevent sediment track out from the site. If wheel wash water becomes unsuitable for use, the wheel wash water will be processed through the pre-treatment system prior to discharge to the sanitary sewer.

4.9.3 Stormwater

As required by the Facility's NPDES Permit(**No. WAR302034)**, a SWPPP has been prepared for the Facility. The SWPPP is updated, as needed, to reflect changes to the adaptive management stormwater controls at the Facility, including changes in industrial activities or associated pollution prevention BMPs. If the SWPPP changes, this section of the Plan must be updated accordingly.

All stormwater runoff collected outside the OCA is treated via an advanced stormwater treatment system (ATS) prior to discharge to the LDW. The stormwater collection and drainage system convey stormwater from the five drainage areas outside of the OCA to the ATS via a single force main. Treated stormwater is discharged through a single outfall, Outfall A, in accordance with the NPDES permit.

The stormwater ATS has been designed to manage in excess of the 2-year recurrence interval, 24-hour duration storm event. The design calculations are provided in the Phase II engineering report (Landau Associates 2016).

All stormwater runoff collected within the OCA is treated as wastewater and directed to the water pre-treatment system prior to being discharged to the sanitary sewer. Most of the stormwater within the OCA flows into storm drain catch basins associated with Outfall 3, although a portion is collected in catch basins that drain to Outfalls 1 and 2. To contain the contact stormwater collected in the OCA, Outfall 3 is plugged prior to the discharge point to the LDW, to prevent stormwater runoff from the operation area from discharging to surface water. Stormwater runoff is pumped to the water pre-treatment system from a stormwater catch basin located just upstream of Outfall 3. In addition, the existing catch basins in Outfall 1 and 2 that are located within the OCA are closed with conventional mechanical plugs typically used for this purpose, as well as being covered with solid steel plates in place of grates.

4.9.4 Water Pre-Treatment System

The water pre-treatment system is required by the KCIW Waste Discharge Permit and treats all Facility wastewater and non-categorical liquids prior to discharge to the sanitary sewer. The pre-treatment system is located to the southwest of the sediment processing area (see Figure 2 in Appendix A). An engineering report (*Engineering Report, 8th Avenue South Reload Facility, 7400 8th Avenue South, Seattle, Washington*) for the water pre-treatment system was prepared by Landau Associates and approved by KCIW. Figures 3 and 3A of the engineering report show schematic diagrams of the water pre-treatment system, and are also provided in Appendix D.

The water pre-treatment system is a chitosan-enhanced sand filtration (CESF) system with granular activated carbon (GAC) vessels for a polishing treatment step, designed to remove suspended solids and associated pollutants such as hydrocarbons, metals, polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs). In general, the pre-treatment process includes an inlet weir/settling tank, storage/treatment tanks, a sand filter system consisting of individual sand filter vessels, and a control system housed within a trailer. Two GAC vessels are used for the final polishing treatment step prior to discharge. Treated water may either be temporarily stored in the storage tanks or discharged directly to the sanitary sewer.

The water pre-treatment system has been designed to manage in excess of the 2-year recurrence interval, 24-hour duration storm event. The design calculations are provided in the wastewater pre-treatment engineering report (Landau Associates 2015).

The pre-treatment system is designed with pre-treatment and post-treatment storage to support 24-hour dredge operations during the design storm event. An operations and maintenance (O&M) manual has been prepared by the pre-treatment system vendor prior to the system being installed and operational, and is available for reference onsite. The pre-treatment system is operated only by appropriately trained and qualified personnel.

5.0 RECORDS AND REPORTS

This section describes the records maintained by the Facility and the reports that are submitted by the Facility. Daily, weekly, monthly, and annual records are maintained for the purpose of meeting applicable regulatory requirements. The information recorded is sufficient to generate the data needed to meet regulatory reporting obligations.

These reports include an annual report that is submitted to Public Health and/or Ecology by April 1 of each year. The annual report describes the Facility's activities during the previous calendar year and includes a report of the annual quantity and type of solid waste handled by the Facility, including amounts received, amounts removed, and the amount of waste remaining at the Facility at year's end, in tons.

Records required by Public Health and/or Ecology, which include inspection documentation, tonnage reports, etc., are maintained for a minimum of 5 years. Other records are maintained according to pertinent regulatory requirements, contractual obligations, and company policies.

5.1 Comments, Suggestions, Complaints

Comments, suggestions, and complaints are accepted in writing or by telephone at the Facility mailing address shown on the cover. The telephone is staffed during normal working hours. An automated messaging system records calls during busy periods and after hours. The Operations Supervisor assures that calls are returned promptly and that all valid complaints are entered on our complaint log and addressed in a reasonable manner. A copy of the complaint log in included in Appendix F.

5.2 Inspections

There are two categories of inspections at the Facility: self-inspection and regulatory inspection, as described below.

5.2.1 Self-Inspection

The Operations Supervisor or his/her designee conducts a visual review covering significant aspects of Facility operations, including stockpile areas, weekly, at a minimum, or more frequently as site conditions warrant. If deficiencies are noted, a corrective action plan will be initiated within 24 hours. Additional inspections are performed during and following high precipitation events.

Documented inspections by the Operations Supervisor or his/her designee occur at a minimum weekly. A Weekly Inspection Form (Appendix F) is used to assure all pertinent areas of the Facility are inspected. The date and time of the inspection, the inspector's printed and written name, observations, and the date and nature of corrective actions are included on the inspection log. Documented monthly stormwater inspections are completed to comply with the Industrial Stormwater General Permit.

The completed inspection forms constitute the Inspection Log and are kept at the Facility for 5 years. Environmental, safety, or compliance issues noted on self-inspections are corrected as soon as is feasible and the date of corrective action is noted.

5.2.2 Regulatory Inspection

Agency personnel, including Public Health, Ecology, Washington Department of Labor & Industries, and others, may inspect the Facility at any reasonable time. Agency inspections may be announced or unannounced.

Necessary corrective actions are monitored through an internal tracking system to ensure timely resolution. The internal tracking system used is WM's electronic CYCLE task management program. CYCLE is used to track timely corrective action completion incorporating the issue, corrective action, preventative action, and deadline for task completion.

6.0 TRAINING AND WORKER SAFETY

Safety is a key part of operating a material handling facility. WM implements and constantly inspects, trains, and adjusts programs and policies for the purpose of protecting public health and worker safety. Worker safety is regulated under WAC Chapter 296-62, 296-65, and 296-24, administered by the Washington Department of Labor & Industries. In general, materials handled onsite are not classified as hazardous substances and, therefore, HAZWOPER training is not required for Facility employees. Other certifications are maintained as required by other regulatory agencies.

A site-specific health and safety plan is maintained at the Facility. Key topics are summarized below. The site-specific health and safety plan is available for review.

Employees are trained on topics relevant to their job description at the time of initial hiring or transfer, and training is refreshed on an annual basis, thereafter. The list of training topics is extensive and includes, but is not limited to: unacceptable waste recognition and exclusion; Facility housekeeping and maintenance; equipment operation and inspection; employee right to know; PPE; safe work practices; hazard recognition and avoidance; control of hazardous energy; blood borne pathogen awareness; slips, trips, and falls; walking and working surfaces; fire extinguishers; spill prevention and management; solid waste permit requirements; industrial waste discharge permit requirements; stormwater permit requirements; and emergency management procedures.

An Emergency Management Plan describing the type and location of potential hazards, as well as the location and type of emergency response equipment, is maintained onsite and is reviewed with employees annually, at a minimum. The current Emergency Management Plan is attached as Appendix E.

First aid kits and fire extinguishers are located onsite in buildings and near and/or on equipment as specified by the Uniform Fire Code, the Washington Industrial Safety and Health Act, and environmental regulations and permits, and are maintained as appropriate. A shower and eyewash station is located in the office. Spill response kits are located throughout the Facility. Appendix E, Figure E-1, Emergency Site Plan, shows the location of these items.

7.0 FACILITY PERMANENT CLOSURE

Public Health will be notified 60 days in advance of closure. At the time the Facility is permanently closed, as described in WAC 173-304-100, the following tasks will be performed:

- All materials shall be removed and managed at a disposal facility authorized to accept the materials. WM will develop, keep, and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the methods of removing waste.
- The OCA will be thoroughly swept and cleaned.
- Debris will be removed from stormwater drains, sumps, and catch basins.
- Litter around the Facility will be removed.
- The fence and gate will be left intact, and unauthorized persons will be prevented from entering by means of a gate and signs.
- Regulatory agencies will be notified as required by applicable laws, regulations, and permits.

The Facility may be converted to other uses in accordance with applicable leases, contracts, permits, and regulations.

At some future date, the Facility will undergo planned cleanup and remediation activities. While these activities are occurring, certain operations may be temporarily discontinued, modified, or relocated.

8.0 BACKUP OPERATIONS

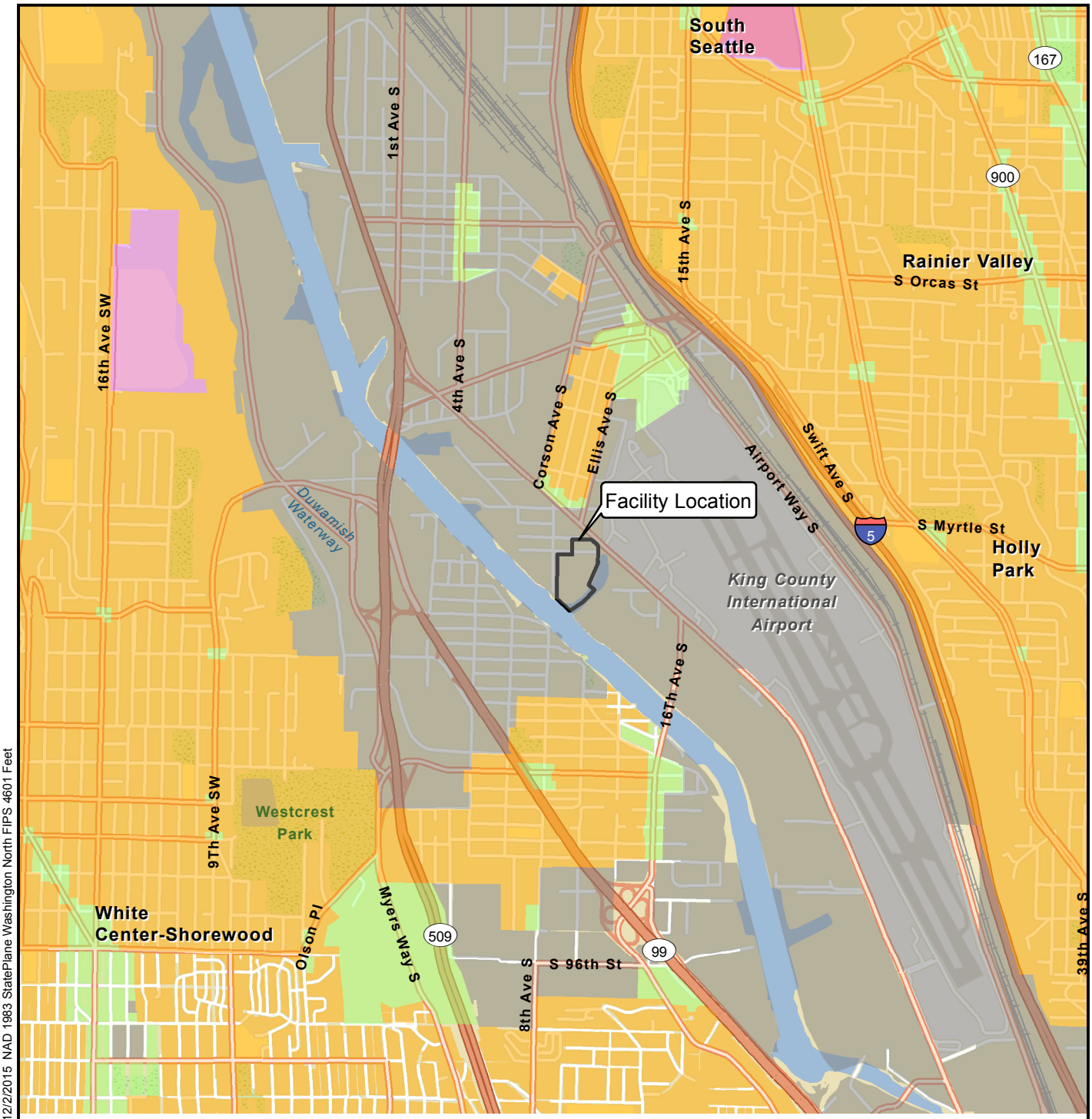
In the event the Facility is unable to process materials due to unexpected or unforeseen circumstances, the following alternative facilities/methods may be implemented:

- Diversion of incoming materials to other contracted and authorized handling facilities:
  - WM will contract with WM approved facilities, such as LaFarge Seattle, as backup facilities on a per project basis for diverted dredge materials.
  - WM will use the WM Alaska Street facility for all diverted upland materials
- Shipping via truck.

Examples of instances in which the above actions may be taken include, but are not limited to, a natural disaster such as an earthquake, a fire/explosion related to Facility equipment or machinery, or other severe conditions that limit the Facility's operational capabilities.

APPENDIX A

Vicinity Map and Facility Layout



Zoning
- Commercial
- Industrial
- Major Institution
- Residential

N

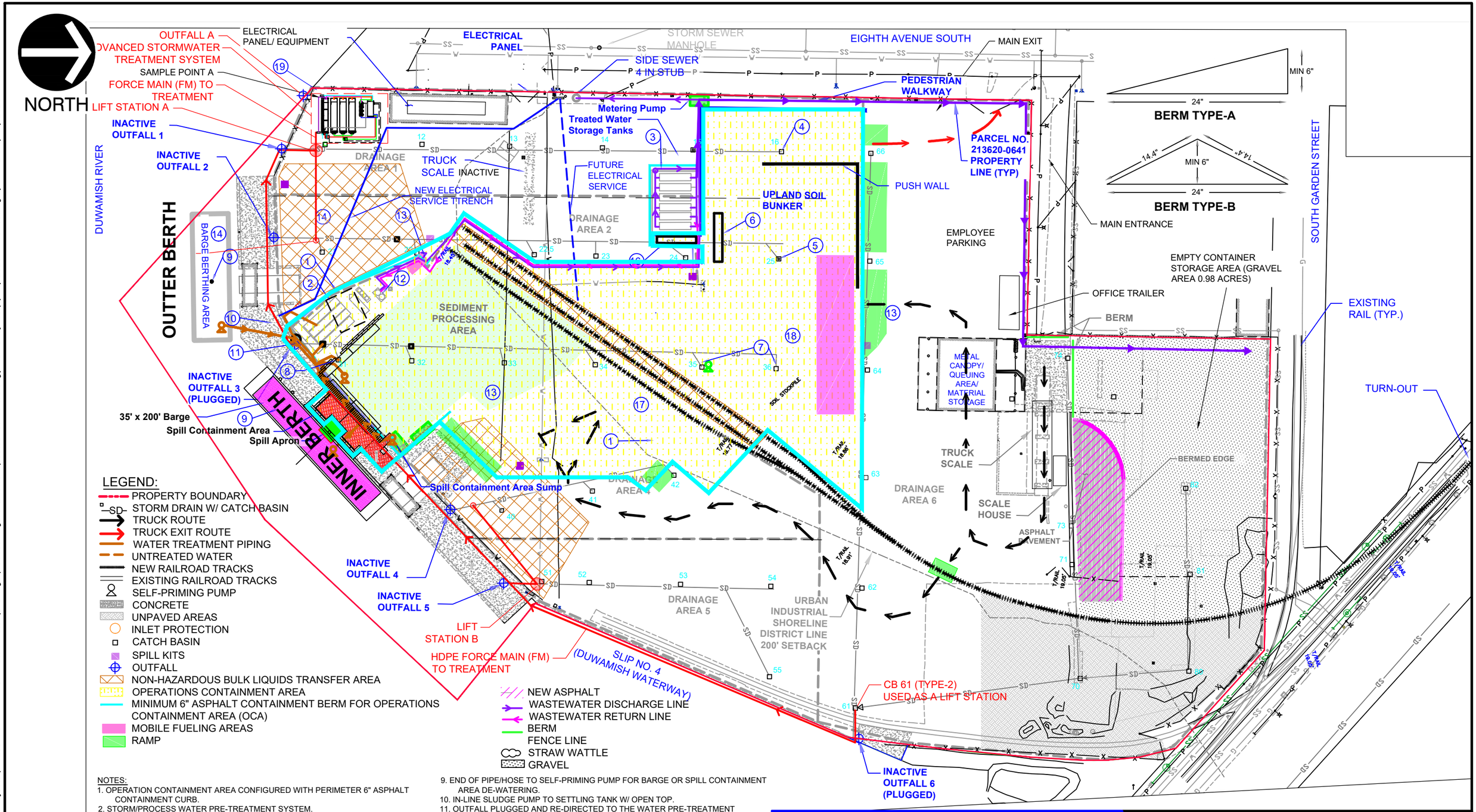
0 0.5 1
Miles

Data Sources: King County GIS; Esri 2012.

G:\Projects\1517\0006\020\021\F01VicinityMap.mxd 12/2/2015 NAD 1983 StatePlane Washington North FIPS 4601 Feet

LANDAU ASSOCIATES

Waste Management Duwamish Reload Facility 7400 8th Avenue South Seattle, Washington	**Vicinity Map**	Figure 1



NOTES:

1. OPERATION CONTAINMENT AREA CONFIGURED WITH PERIMETER 6" ASPHALT CONTAINMENT CURB.
2. STORM/PROCESS WATER PRE-TREATMENT SYSTEM.
3. TREATED WATER STORAGE SYSTEM. 23,000 GAL. CURBED CONTAINMENT, WITH DRAIN VALVE NORMALLY CLOSED.
4. STORMWATER CATCH BASIN MODIFIED BY INSTALLING A MECHANICAL PLUG IN DOWNSTREAM PIPE TO PREVENT FLOW INTO MAIN TRUNK LINE.
5. INSTALL MECHANICAL PLUG OVER THE INLET TO TEMPORARILY PREVENT FLOW TO DUWAMISH RIVER.
6. WHEEL WASH - ALL VEHICULAR TRAFFIC LEAVING SOIL STOCK PILE AREA AND RAIL LOADING AREA WILL PASS THROUGH WHEEL WASH UPON EXITING.
7. SEDIMENT TRAP PLACED WITHIN CATCH BASIN.
8. SELF-PRIMING PUMPS AT CATCH BASIN TO DIRECT TO WATER PRE-TREATMENT SYSTEM.
9. END OF PIPE/HOSE TO SELF-PRIMING PUMP FOR BARGE OR SPILL CONTAINMENT AREA DE-WATERING.
10. IN-LINE SLUDGE PUMP TO SETTLING TANK W/ OPEN TOP.
11. OUTFALL PLUGGED AND RE-DIRECTED TO THE WATER PRE-TREATMENT SYSTEM.
12. GRANULAR ACTIVATED CARBON VESSELS.
13. MOBILE FUELING AREAS.
14. CONTAINERIZED MEDIA TRANSFER AREA.
15. RIGID CONTAINERIZED MEDIA STORED THROUGHOUT SITE.
16. WHEEL WASH WATER TANK.
17. LIQUIDS TRUCK DUMPING AREA. WASTEWATER DRAINED TO PRETREATMENT SYSTEM VIA CB#34.
18. VAC TRUCK SOLIDS TRUCK DUMPING AREA.
19. ADVANCED STORMWATER TREATMENT SYSTEM.

Civil & Environmental Consultants, Inc.
4045 NW 64th Street · Suite 415 · Oklahoma City, OK 73116
Ph: 405.246.9411
www.cecinc.com

WASTE MANAGEMENT
DUWAMISH RELOAD FACILITY

OVERALL SITE PLAN

DRAWN BY:	CWS	CHECKED BY:		APPROVED BY:		FIGURE NO.:
DATE:	05/09/2023	DWG SCALE:	SEE SHEET	PROJECT NO:	196-659	2

FIGURE 3 - Spill Plate Used During Barge Offloading

APPENDIX B

Permits

Oregon
Kate Brown, Governor

Department of Environmental Quality
Eastern Region The Dalles Office
400 East Scenic Drive, Suite 307
The Dalles, OR 97058
(541) 298-7255
FAX (541) 298-7330
TTY 711

December 7, 2016

James Denson
Waste Management Disposal Services of Oregon
18177 Cedar Springs Lane
Arlington, OR 97812

RE: Solid Waste Disposal Site
Permit Renewal
Columbia Ridge Transfer Station
S.W. Permit No. 465
Gilliam County

Dear Mr. Denson:

The thirty (30) day comment period for the review of the draft Solid Waste Transfer Station Permit document has ended. No comments were received. The enclosed permit explains in detail the requirements you will need to adhere to during the permit period. You are urged to carefully read the permit and comply with the conditions. The permit will remain in effect for a period of ten (10) years, with an expiration date of December 7, 2026.

The enclosed permit is effective the date it was signed. If you are dissatisfied with the conditions or limitations of the permit, you have 20 days from the date it was issued to contest the permit or parts of the permit by requesting a hearing. The request for a hearing must be in writing and state the grounds for the request.

If you have any question or comments about the permits, please contact John Straughan in our Pendleton Eastern Region office at (541) 278-4611.

Sincerely,

Elizabeth Druback

Elizabeth Druback, Manager
Eastern Region
Solid and Hazardous Waste Programs

Encl: Final Permits

Cc: John Straughan, Solid Waste Program, DEQ Eastern Region

State of Oregon
Department of
Environmental
Quality

SOLID WASTE DISPOSAL SITE PERMIT:

TRANSFER STATION

Oregon Department of Environmental Quality
400 E. Scenic Drive, Suite 307
The Dalles OR 97058
Telephone (Information): (541)298-7255

Issued in accordance with the provisions of Oregon Revised Statute Chapter 459; Oregon Administrative Rules 340, Divisions 90, 93, 95, 96 and 97; and subject to the Land Use Compatibility Statement referenced below.

ISSUED TO:	FACILITY NAME AND LOCATION:
Waste Management Disposal Services of Oregon, Inc. 18177 Cedar Springs Lane Arlington, OR 97812	Columbia Ridge Transfer Station Arlington, OR T2N, R21E, TL1101

PROPERTY OWNER:	OPERATOR:
Waste Management Disposal Services of Oregon, Inc. 18177 Cedar Springs Lane Arlington, OR 97812 (541) 454-2030	Waste Management Disposal Services of Oregon, Inc.

ISSUED IN RESPONSE TO:

- An application for renewal of a solid waste disposal site permit received on September 21, 2015; and
- A Land Use Compatibility Statement from Gilliam County dated September 10, 2015.

The determination to issue this permit is based on findings and technical information included in the permit record.

ISSUED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Elizabeth Druback - Solid and Hazardous Waste Programs Manager
Eastern Region

12/7/2016
Date

Permitted Activities

Until this permit expires or is modified or revoked, the permittee is authorized to establish, operate and maintain a Solid Waste Transfer Station in conformance with the requirements, limitations, and conditions set forth in this document including all attachments.

TABLE OF CONTENTS

1.0 WASTE DISPOSAL LIMITATIONS

1.1 This permit authorizes the facility to accept solid waste and hazardous waste in accordance with Oregon Revised Statutes 459, 459A, 465 and 466. 459.005, subject to the following limitations:

a. Unless otherwise approved in writing by DEQ the permittee must not knowingly accept the following wastes or mix the following wastes in with municipal solid waste or transfer the following wastes to a landfill for disposal. The following wastes may be collected for storage, management, and recycling:

i. Lead-acid batteries;
ii. Source Separated recyclable material;
iii. Large home or industrial appliances;
iv. Used Oil that does not contain PCBs
v. Covered electronic devices:
- Computer monitors having a viewable area greater than four (4) inches diagonally;
- Televisions having a viewable area greater than four (4) inches diagonally;
- Desktop computers; or
- Portable computers.

vi. Discarded or abandoned vehicles; and
vii. Whole tires.

These wastes must be stored and managed to prevent spills, fires or impacts to waters of the state.

1.2 Waste excluded from the above authorization may be authorized for acceptance only if the Department approves acceptance in writing.

1.3 The permittee must remove all intermodal containers containing hazardous waste and hazardous waste in gondolas from the transfer station within 10 calendar days of receipt. All other containers of solid waste must be emptied on a frequency to prevent malodors, unsightliness and attractions of insects or other vectors.

1.4 Any solid wastes discovered at the Transfer Station that appear to be prohibited waste must be isolated or removed as soon as practicable. The permittee must, within 48 hours, notify the Department of the discovery. Non-putrescible, non-hazardous prohibited waste must be transported to a disposal site authorized to accept such waste within 90 days, unless otherwise approved or restricted by the Department. Putrescible, non-hazardous prohibited wastes must be removed as soon as practicable. Any storage of putrescible wastes must be approved by the Department.

2.0 STORAGE AND MANAGEMENT

2.1 The Eastern Region Pendleton Office shall be contacted for approval prior to open burning. Burning must be controlled in compliance with all applicable federal, state and local regulations.

2.2 The permittee is authorized to accept up to 100 whole waste tires for storage, management, and removal; or accept up to 2,000 waste tires for storage and removal if the permittee maintains a continuous contract with a waste tire carrier to remove tires from the site.

3.0 MINIMUM MONITORING AND REPORTING REQUIREMENTS

3.1 The permittee must collect the following information:

- The number of containers of hazardous waste received at the transfer station which are sent to the Chemical Waste Management disposal site each calendar quarter.
- The number of tons of municipal solid waste and special waste received and transferred to the Columbia Ridge Landfill and Recycling Center each quarter. Data collected will represent a calendar year.
- The permittee must submit the information collected above, on an approved form, to the Department annually by January 30 of each year for the preceding calendar year.
- The permittee must pay the Solid Waste Compliance fee for each year this permit is in effect. An invoice indicating the amount of the fee, set in accordance with the DEQ's regulations, will be mailed by the DEQ prior to the date due.

This submittal must be sent to:

Oregon Department of Environmental Quality
Operations Division – Materials Management Program
700 NE Multnomah St, Suite #600
Portland, OR 97232
(503) 229-5913

4.0 SPECIAL CONDITIONS

4.1 The permittee must immediately clean up any spill of oil or hazardous material in accordance with the DEQ approved operations plan. In addition to notifying the appropriate DEQ office, if the spill is of a reportable quantity the permittee must immediately report the spill to the Oregon Emergency Response System (OERS), at 1-800-452-0311.
Reportable quantities include:

a. *Any* amount of oil spilled to waters of the state;
b. Oil spills on land in excess of 42 gallons;
c. 200 pounds (25 gallons) of pesticide residue; or
d. Spills of hazardous materials that are equal to, or greater than, the quantity listed in the Code of Federal Regulations, 40 CFR Part 302 (List of Hazardous Substances and

Reportable Quantities), and amendments adopted before July 1, 2002. For a complete list of hazardous materials required to be reported, please refer to OAR 340-142-0050.

5.0 FACILITY, OPERATIONS, SPECIAL WASTE PLANS

5.1 Submit all plans required by this section to DEQ at:

Oregon Department of Environmental Quality
Eastern Region Solid Waste Program
400 E. Scenic Drive, Suite 307
The Dalles OR 97058
Telephone (Information): (541)298-7255

Section A – Facility Design and Construction Plans

5.2 At least six (6) months prior to the anticipated construction date for new facility design, the permittee must submit engineering design plans to DEQ for review and approval. The design plans must be prepared and stamped by a qualified Professional Engineer with current Oregon registration and specify and/or provide the following:

a. All applicable performance criteria, construction material properties and characteristics, dimensions, and slopes; and
b. The design basis and all relevant engineering analyses and calculations.

5.3 The permittee must construct all improvements according to DEQ approved plans and specifications including any DEQ imposed conditions of approval and any future DEQ approved amendments to the plans and specifications. Prior to construction, the permittee must submit construction documents for DEQ approval. The construction documents must:

a. Be consistent with the applicable DEQ-approved design plan(s), including accurate translation of design specifications into construction documents;
b. Define the construction project team;
c. Specify material and workmanship requirements to guide the Constructor in executing work and furnishing products; and
d. Include a Construction Quality Assurance (CQA) plan that describes how the project team will monitor the quality of materials and the Constructor's work performance and assure compliance with project specifications and contract requirements.

5.4 When construction is nearly complete, the permittee must notify DEQ so that an inspection can be made before the facility is placed into operation.

5.5 Within ninety (90) days of completing construction, the permittee must submit to DEQ a Construction Certification Report and "as constructed" facility plans. The report must be prepared by a qualified independent party and certify that the construction of all required components and structures comply with this permit and the DEQ-approved design specifications or note any deviations and reasons for deviations from the design specifications. The "as constructed" facility plans must note any changes from the original approved plans.

Section B – Operations Plan

5.6 The permittee must operate the facility in accordance with the Operations Plan, including any amendments, approved by DEQ. The Operations Plan must describe the proposed method of operation of the facility in accordance with all regulatory and permit requirements.

5.7 The permittee must revise the Operations Plan as necessary to keep it current and reflective of current facility conditions and procedures and must describe procedures for dealing with cleanup of an oil or hazardous materials spill. The plan must also include the procedure for reporting the spill to the Oregon Emergency Response System (OERS) at 1-800-452-0311. All revisions of the Operations Plan must be submitted to the Department for approval.

Section C - Special Waste Management Plans

5.8 Individual Special Waste Management Plans are required as part of the Operations Plan for certain waste materials that because of their nature can be potentially hazardous to human health or the environment and require careful handling at transfer facilities. The Plan must address, among other things, procedures for identification, receipt, handling, storage, and spill cleanup and transport for reuse, recovery or disposal of the material at an appropriately permitted facility.

Special wastes requiring individual Plans include but are not limited to:

- Non-containerized friable and non-friable asbestos containing materials;
- Septage; and
- Sewage sludges and grits.

Note: Special Waste Management Plans are only required if the facility chooses to accept special solid wastes. Reference: Guidance on Special Waste Management Plans can be found in OAR 340-093-0190(1) and OAR 340-094-0040(11)(b)(J) and in Section 9.5 of the Department's *Solid Waste Guidance Municipal Solid Waste Landfills*, dated September 1, 1996.

6.0 GENERAL OPERATIONS

Section A - Facility Operations:

6.1 All facility activities are to be conducted in accordance with the provisions of this permit.

6.2 All waste collection and disposal must be operated in a manner which will prevent discharges, health hazards, and nuisance conditions.

6.3 The permittee must display this permit, or a photocopy thereof, where it can be readily referred to by operating personnel.

6.4 All solid waste transfer vehicles and devices operated by the permittee, and using public roads, must be constructed, maintained, and operated so as to prevent leaking, shifting, or spilling of solid waste while in transit.

6.5 Roads from the facility property line to the active operational area must be constructed and maintained to deter, to the maximum extent practical, traffic hazards, dust and mud, and to provide reasonable all-weather access for vehicles using the site.

6.6 Equipment of adequate size and design to properly operate the facility must be available at all times. In the event of an equipment breakdown, alternative equipment must be provided, unless an exemption from DEQ is granted in writing.

6.7 The area(s) for unloading of solid waste must be clearly defined by signs, fences, barriers, or other devices.

6.8 Public access to the facility must be controlled as necessary to prevent unauthorized entry and dumping.

6.9 The permittee must post signs at the facility which are clearly visible and legible, providing the following information:

a. Name of facility;
b. Emergency telephone number;
c. Days and hours of operation;
d. Authorized and prohibited wastes;
e. Solid waste permit number; and
f. Operator's address.

Section B - Environmental Health and Safety:

6.10 Litter that results from facility operation must be controlled such that the entire disposal site and adjacent lands are maintained virtually free of litter at all times. Any debris from the facility must be retrieved and properly disposed of as soon as possible that operational day.

6.11 The permittee must control air emissions, including dust, malodors, air toxics, etc. related to disposal site construction, operation, and other activities, and comply with DEQ air quality standards including applicable visible emissions and nuisance requirements in OAR 340-208.

6.12 The permittee must attempt to resolve all complaints it receives regarding facility operations by doing the following:

a. Contact the complainant within 24 hours to discuss the problem;
b. Keep a record of the complaint, name and phone number of the complainant (when possible), date complaint was received and date of, and response by, the facility operator; and
c. Immediately initiate procedures at the facility, when possible, to resolve the problem identified by the complainant.

For odor, litter or dust complaints, the permittee must report to DEQ as soon as complaints are received at the facility from five (5) different businesses and/or individuals about a given event or if an odor event lasts longer than 24 hours without resolution or mitigation.

6.13 The permittee must manage and monitor stormwater in accordance with all federal and state requirements.

6.14 The permittee must divert surface and storm water drainage around or away from waste handling and storage areas and must maintain surface water diversion ditches or structures in a

serviceable condition and free of obstructions and debris at all times. The permittee must report to DEQ any significant malfunctions or damage and complete repairs within sixty (60) days of discovery of the problem.

6.15 The permittee must operate the facility in a manner that deters leachate production to the maximum extent practicable. Leachate must be collected and removed to prevent malodors, public health hazards, and discharge to public waters.

6.16 The permittee must provide rodent and insect control measures as necessary to prevent vector production and sustenance.

6.17 The permittee must remove all municipal solid waste from the Transfer Station at least as often as necessary to prevent malodors, unsightliness and attraction of insects or other vectors.

6.18 The permittee must clean all transfer containers as needed to maintain a sanitary operating environment, and to prevent malodors, unsightliness, and attraction of insects.

6.19 Fire protection must be provided in accordance with the operations plan and in compliance with pertinent state and local fire regulations. Fires must be immediately and thoroughly extinguished and reported to DEQ within 24 hours.

7.0 STANDARD CONDITIONS

Section A – Responsibility of Permittee

7.1 Issuance of this permit as authorized by Oregon Revised Statutes 459.245 (2) does not relieve the permittee from the responsibility to comply with any applicable federal, state or local laws or regulations including Oregon Revised Statutes, Chapters 459, 459A, 465 and 466; and Oregon Administrative Rules, Chapter 340.

7.2 The issue date of this permit is the date this document is signed. This is a 10 (ten) year permit, with an expiration date of December4 7, 2026. An application for a permit renewal is required if a permittee intends to continue operation beyond the permitted period. A complete renewal application must be filed at least 180 days before the existing permit expires.

7.3 The authorization to accept solid waste and hazardous waste will terminate at the time of site closure. After that time no solid waste and hazardous waste may be accepted without written authorization by DEQ.

7.4 The permittee must apply for a modification to this permit if there is a significant change in facility operations or a deviation from activities described in this document or any approved plans that are made part of this permit. The permittee must not implement any change in operations that requires a permit modification prior to receiving approval from DEQ.

7.5 At any time in the life of the permit, DEQ or the permittee may propose changes to the permit.

7.6 Conditions of this permit are binding upon the permittee. The permittee is liable for all acts and omissions of the permittee's contractors and agents and must at all times maintain legal control of the disposal site property.

7.7 The permittee must allow representatives of DEQ access to the disposal facility at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data and carrying out other necessary functions related to this permit.

7.8 The permittee must report to DEQ any changes in either ownership of the disposal site property or of the name and address of the permittee or operator within ten (10) days of the change.

7.9 The permittee must operate the facility in accordance with the approved Operations Plan, including any amendments, approved by DEQ. All plans required by this permit become part of the permit by reference once approved by DEQ.

7.10 The permittee must at all times maintain and properly operate all waste collection and disposal facilities to achieve compliance with the terms and conditions of this permit.

7.11 In the event the permittee is unable to comply with any of the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error or negligence, or any other cause such as an act of nature, the permittee must:

a. Immediately take action to stop, contain, and correct the problem.
b. Immediately notify DEQ's Regional office, so that an investigation can be made to evaluate the impact and the corrective actions taken and determine additional action that must be taken.
c. Unless otherwise approved by DEQ, within 5 days of the time the permittee becomes aware of the circumstances, the permittee must submit to DEQ a detailed written report describing the breakdown, corrective action taken, steps taken to prevent a recurrence, and any other pertinent information.

Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

7.12 The permittee must keep copies of all records and reports for five years from the date created.

7.13 Upon request, the permittee must make all records and reports related to the permitted facility available to DEQ.

Section B- Property Rights, Liability & Permit Actions

7.14 The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws, or regulations.

7.15 The Director may, at any time before the expiration date, modify, suspend, or revoke this permit in whole or in part, in accordance with Oregon Revised Statutes 459.255, for reasons including but not limited to the following:

a. Violation of any terms or conditions of this permit or any applicable statute, rule, standard, or order of the Commission;
b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

c. A significant change in the quantity or character of solid waste received or in the operation of the disposal site;
d. Changes in state or federal rules which should be incorporated into the permit.

7.16 Significant changes in the permit will be made public by the issuance of a public notice as required by DEQ rules.

7.17 This permit must not be transferred to a third party without prior written approval from DEQ. Such approval may be granted by DEQ only after a permit modification application is submitted to and approved by DEQ and that the transferee agrees in writing to fully comply with all the terms and conditions of this permit and the rules of the Commission.

7.18 The DEQ, its officers, agents, or employees do not sustain any liability on account of the issuance of this permit or on account of the construction, maintenance, or operation of facilities pursuant to this permit.

7.19 Violations of any permit condition or any incorporated plan may subject the permittee to civil penalties of up to $25,000 for each day of each violation. ORS 459.995 (1)(a).

Oregon
Kate Brown, Governor

Department of Environmental Quality
Eastern Region The Dalles Office
400 East Scenic Drive, Suite 307
The Dalles, OR 97058
(541) 298-7255
FAX (541) 298-7330
TTY 711

Nov. 8, 2017

Mr. James Denson
Oregon Environmental Protection Manager
Waste Management Disposal Services of Oregon, Inc.
18177 Cedar Springs lane
Arlington, OR 97812

RE: Solid Waste Disposal Site Permit
Columbia Ridge Landfill
S.W. Permit No. 391
Gilliam County

Dear Mr. Denson:

The 30-day comment period for the review of the draft Solid Waste Disposal Site Permit document has ended. No comments were received. The enclosed permit explains in detail the requirements you will need to adhere to during the permit period. You are urged to carefully read the permit and comply with the conditions. The permit will remain in effect for a period of 10 years, with an expiration date of Nov. 7, 2027.

The enclosed permit is effective the date it was signed. If you are dissatisfied with the conditions or limitations of the permit, you have 20 days from the date it was issued to contest the permit or parts of the permit by requesting a hearing. The request for a hearing must be in writing and state the grounds for the request.

If you have any question or comments about the permits, please contact Ken Lucas in our The Dalles, Eastern Region office at 541-298-7255, ext. 224.

Sincerely,

for Gina Ramoz

Gina Ramoz, Manager
Eastern Region
Solid and Hazardous Waste Programs

Encl: Final Permit

cc: Ken Lucas, Solid Waste Program, DEQ Eastern Region

SOLID WASTE DISPOSAL SITE PERMIT:

Municipal Solid Waste Landfill

Oregon Department of Environmental Quality
400 E. Scenic Drive, Building 2
The Dalles, OR 97058-3434
541-298-7255 ext. 221

Issued in accordance with the provisions of Oregon Revised Statute Chapter 459; Oregon Administrative Rules 340, Divisions 90, 93, 95, 96 and 97; and subject to the Land Use Compatibility Statement referenced below.

Issued to:
Waste Management Disposal Services of Oregon, Inc.
Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, Oregon 97812
(541) 454-2030 Fax (541) 454 3247

Facility name and location:
Columbia Ridge Landfill and Recycling Center
18177 Cedar Springs Lane
Arlington, Oregon 97812
T2N, R21E, S32/33 WM.

Property Owner:
Waste Management Disposal Services of Oregon, Inc.
18177 Cedar Springs Lane
Arlington, Oregon 97812

Operator:
Waste Management Disposal Services of Oregon, Inc.

ISSUED IN RESPONSE TO:

- A solid waste permit renewal application received July 25, 2016.
- A Land Use Compatibility Statement from Gilliam County dated July 19, 2016

The determination to issue this permit is based on findings and technical information included in the permit record.

ISSUED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

for Gina Ramoz

Gina Ramoz
Solid Waste Manager
Eastern Region

11/08/2017
Date

Permitted Activities

Until this permit expires or is modified or revoked, the permittee is authorized to operate and maintain a solid waste land disposal site in conformance with the requirements, limitations, and conditions set forth in this document, including all attachments.

TABLE OF CONTENTS

Introduction

This document is a solid waste permit issued by the Oregon Department of Environmental Quality in accordance with Oregon Revised Statutes (ORS) 459 and Oregon Administrative Rules (OAR), Chapter 340.

PERMIT ADMINISTRATION

1 Permit Issuance

1.1 Permittee

This permit is issued to Waste Management Disposal Services of Oregon, Inc..

1.2 Permit number

This permit will be referred to as Solid Waste Permit Number 391

1.3 Permit term

The permit is issued on the date it is signed.

The permit's expiration date is Nov.7, 2027.

1.4 Facility type

The facility is permitted as a municipal solid waste landfill.

1.5 Facility owner/ operator

The owner of this facility is:

Waste Management Disposal Services of Oregon, Inc.

The operator of this facility is:

Waste Management Disposal Services of Oregon, Inc.

1.6 Basis for permit issuance

This permit is issued based upon the following documents submitted by the permittee:

- Solid waste permit application received July 25, 2016.
- Land Use Compatibility Statements from Gilliam County dated July 19, 2016.

1.7 Definitions

Unless otherwise specified, all terms are as defined in OAR 340-093-0030.

1.8 Legal control of property

The permittee shall at all times maintain legal control of the disposal site property; including maintaining a current permit, contract or agreement that allows the operation of the facility if the site is not owned by the permittee.

1.9 Submittal & notification address

Unless otherwise specified, all submittals and notifications to DEQ under this permit must be sent to:

Oregon Department of Environmental Quality
Manager, Solid Waste Program
400 E. Scenic Drive, Building 2
The Dalles, OR 97058-3434

Telephone: 541-298-7255 ext. 221

All submittals must include, at a minimum, one paper copy and one electronic copy in a format that is approved by the DEQ project manager. Note that some submittals may require more paper copies. Therefore, the permittee must confirm with the permit manager how many copies are necessary prior to submittal of a document.

Note: Whenever possible, the permittee must submit two-sided paper copies of all reports. DEQ may accept electronic submittals for portions of some reports, as approved in the Environmental Monitoring Plan or by DEQ.

2 Disclaimers

2.1 Property rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights.

2.2 DEQ liability

DEQ, its officers, agents, or employees do not sustain any liability on account of the issuance of this permit or on account of the construction, maintenance, or operation of facilities pursuant to this permit.

3 Authority

3.1 Ten year permit

This permit is issued for a maximum of ten years as authorized by Oregon Revised Statutes 459.245 (2).

3.2 Documents superseded

This document is the primary solid waste permit for the facility, superseding all other solid waste permits issued for Columbia Ridge Landfill and Recycling Center by DEQ.

3.3 Permittee responsibility and liability

Conditions of this permit are binding upon the permittee. The permittee must conduct all facility activities in compliance with the provisions of the permit. The permittee is liable for all acts and omissions of the permittee's contractors and agents in carrying out the operations and other responsibilities pursuant to this permit.

3.4 Other compliance

This permit's issuance does not relieve the permittee from the responsibility to comply with all other applicable federal, state, or local laws or regulations, including the following solid waste requirements, and any future updates or additions to these requirements:

- Solid waste permit application received July 25, 2016
- Oregon Revised Statutes, Chapters 459 and 459A
- Oregon Administrative Rules Chapter 340
- Any documents submitted by the permittee and approved by DEQ

3.5 DEQ access to disposal site

The permittee shall allow representatives of DEQ access to the disposal facility at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data and carrying out other necessary functions related to this permit.

Reference: OAR 340-093-0050(6)

3.6 Penalties

Violation of permit conditions will subject the permittee to civil penalties of up to $25,000 for each day of each violation.

Reference: ORS 459.995(1)(a)

4 Permit Modification

4.1 Permit review

During the permit's term, DEQ may review the permit and amend it if necessary. DEQ will consider the following factors in making this determination:

- Compliance history of the facility
- Changes in volume, waste composition, or operations at the facility
- Changes in state or federal rules which should be incorporated into the permit
- A significant release of leachate or landfill gas to the environment from the facility

- Significant changes to a Department-approved site development plan, and/or conceptual design
- Other significant information or events

4.2 Permit modification

DEQ or the permittee may, at any time during the permit's term, propose to change the permit.

Once approved by DEQ, any permit-required plans become part of the permit by reference. DEQ may provide notice and opportunity for review of permit-required plans.

4.3 Modification and revocation by Department

The Director may, at any time before the expiration date, modify, suspend, or revoke this permit in whole or in part, in accordance with Oregon Revised Statutes 459.255, for reasons including but not limited to the following:

- Violation of any terms or conditions of this permit or any applicable statute, rule, standard, or order of the Commission
- Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts
- A significant change in the quantity or character of solid waste received or in the operation of the disposal site

4.4 Modification by permittee

The permittee must apply for a modification to this permit if there is a significant change in facility operations or a deviation from permitted activities.

4.5 Public participation

DEQ will issue a public notice to inform the public of any significant changes to the permit.

4.6 Changes in ownership or address

At least 10 days in advance, the permittee must report to DEQ any change in the facility's ownership or the permittee's or operator's name and/or address.

Reference: OAR 340-093-0070(6)(a)(A)

ALLOWABLE ACTIVITIES

5 Authorizations

5.1 Waste authorized for receipt

This permit authorizes the facility to accepThis permit authorizes the facility to accept solid waste as defined in ORS 459.005, except non-digested sewage sludges and septic tank pumping and free liquids other than those allowed in Condition 6.2.

5.2 Authorization of other waste

DEQ may authorize the permittee to accept other waste if:

- The permittee develops a Special Waste Management Plan and submits it to DEQ for review and approval
- DEQ approves the Special Waste Management Plan
- The permittee can demonstrate that the materials are not hazardous waste, as defined by state and federal regulations or otherwise a threat to human health or waters of the state

5.3 Tires for recycling

This permit authorizes the permittee to accept up to 100 whole tires at this facility for storage and removal. This permit authorizes the permittee to accept up to 2000 whole tires at this facility for storage and removal if the permittee maintains a continuous contract with a waste tire carrier to remove the tires from the site.

5.4 Salvaging and recycling

This permit authorizes the permittee to conduct salvaging and recycling in a controlled and orderly manner. The permittee must notify DEQ prior to changing salvaging and recycling operations.

5.5 Recirculation of leachate & condensate

Landfill leachate and gas condensate removed from the on-site landfill disposal units may be recirculated into lined portions of the landfill as specified in the DEQ-approved Operations Plan, and provided that the leachate/condensate recirculation design and operation will:

- enhance leachate evaporation and absorption into the waste mass
- not return appreciable amounts of recirculated leachate back to the leachate collection system

5.6 Authorization of activities

All facility activities are to be conducted in accordance with the provisions of this permit. All plans required by this permit become part of the permit by reference once approved by the DEQ. Any conditions of the approval are also incorporated into this permit unless contested by the permittee within 30 days of the receipt of a conditional approval.

6 Prohibitions

6.1 Hazardous waste disposal

The permittee must not accept any regulated hazardous waste.

Reference: 40 CFR 258.20 (b).

In the event discovered waste is hazardous or suspected to be hazardous, the permittee must, within 24 hours, notify DEQ and initiate procedures to identify and remove the waste. Hazardous waste must be removed within 90 days, unless DEQ approves otherwise. The permittee's temporary storage and transportation practices must comply with Department rules.

6.2 Liquid waste disposal

1. The Permittee is not allowed to accept liquid waste for disposal; except in a Department approved surface impoundment or as authorized in the August 2003 *RD&D Permit Application and Operation Plan* (RD&D application), revised RD&D applications, RD&D renewal applications, the Liquids Addition Plan dated January 23, 2015, and in accordance with any revisions and modifications to the RD&D application approved by the Department. Approved liquid waste disposal is limited to liquid wastes for which it has been determined that they support the microbiological processes acting to decompose landfilled waste. Such determination must be made for each liquid waste stream in accordance with acceptance criteria contained in a Department-approved special waste management plan.

   Definition: Liquid wastes are wastes that do not pass the paint filter test performed in accordance with EPA Method 9095.

2. The primary goal of this RD&D permit addendum is to use liquid disposal to enhance waste decomposition and landfill gas production in a manner that when compared to existing "dry" landfill operations will provide an environmental benefit(s) without increased risk to human health or the environment. To achieve this goal, based on RD&D application proposals, the Permittee must both control the increased gas emissions caused by liquids disposal, and recover energy from landfill gas when feasible.

3. Disposal of liquids must be conducted in a manner that will optimize landfill gas production for energy recovery. Operations must emphasize effective introduction of liquids into the waste mass in a manner approved by the Department.

4. Increased gas emissions related to liquids disposal must be controlled without increasing emissions into the environment (compared to existing "dry" landfill operations) in a manner approved by the Department.

5. By not later than June 15 of each year the Permittee shall submit an annual report. Included in the annual report, the Permittee shall show whether and to what extent progress is being made to attain project goals, and summarize all monitoring and testing requirements as well as operating information specified in the RD&D application.

6. This RD&D permit condition will expire January 1, 2019. The Director may terminate this condition at any time the overall primary goals of the RD&D application are not being attained, including protection of human health and environment.

6.3 Vehicle disposal

The permittee shall not knowingly accept discarded or abandoned motor vehicles, including trailers or mobile homes, for disposal.

6.4 Used oil disposal

The permittee must not accept used oil for disposal.

6.5 Battery disposal

The permittee must not accept lead-acid batteries for disposal.

6.6 Tire disposal

The permittee must not accept waste tires for disposal.

6.7 Recyclable material disposal

The permittee must not landfill or dispose of any source separated recyclable material brought to the disposal site.

Exception: If the source separated material is unusable or not recyclable it may be landfilled. DEQ must agree to such disposal and pre-approve the identified sources of unusable source separated material prior to its disposal.

6.8 Open burning

The permittee must not conduct any open burning at the site.

6.9 Specific demolition clean up items

The permittee must not accept any of the following items without an approved Special Waste Management Plan that addresses the specific item or items in question and, for each instance, an email or letter of approval from DEQ:

- Automobile salvage material
- Heaters or furnaces
- Appliances of any type or size

6.10 Electronic waste disposal

The permittee must not knowingly accept the following covered electronic devices for disposal:

- Computer monitors having a viewable area greater than four inches diagonally
- Televisions having a viewable area greater than four inches diagonally
- Desktop computers
- Portable computers

Reference: Oregon Revised Statutes 459.247 and 459A.300-365.

OPERATIONS AND DESIGN

7 Operations Plan

7.1 Operations plan submittal

Within 180 days of the permit issue date, the permittee must review and submit any necessary updates to the site Operations Plan to DEQ for review and approval. The updated plan must be consistent with the conditions of this permit. A Department-approved plan becomes an integral part of the permit.

7.2 Plan content

The Operations Plan must describe facility operations, including the elements listed below, and demonstrate how the facility will comply with all regulatory and permit requirements:

General Topics	Describe plans or procedures for:
General operations	• Screening incoming waste to detect unauthorized or prohibited waste as required by 40 CFR 258.20(a) • Handling and removing unauthorized waste discovered at the facility • Managing landfill gas • Managing landfill leachate in compliance with Subsection 9.9 and 9.10 • Recirculating landfill leachate and gas condensate in compliance with Subsection 5.5 • Monitoring landslide stability • Designing surface water and erosion control structures • Responding to non-compliance events or situations
Disposal operations	• Placing daily and interim cover • Detecting and preventing the disposal of regulated hazardous waste • and any other DEQ-prohibited waste • Disposing of putrescible waste • Disposal of cleanup materials contaminated with hazardous substances • Waste unloading and handling • Disposing of special waste • Using, stockpiling, and tracking the receipt and use of waste approved for use as alternative daily cover • Reducing and controlling the risk of a landfill fire and • Fill progression and phasing that is consistent with landslide stability recommendations, and takes into account other operational considerations such as leachate recirculation, etc.
Special Waste Management Plan	• Identifying and characterizing special waste (for example: waste which require special management or waste streams not otherwise authorized by this permit) • Identifying the source of all special waste • Determining appropriate handling and disposal procedures • Documenting Solid Waste Management Plan implementation, including waste characterization and location of waste disposition References: OAR 340-093-0190, OAR 340-094-0040[11][b][J]
Ancillary operations	• Waste unloading and handling • Solidifying liquid waste prior to disposal • Handling and removal of waste tires • Placing and maintaining interim cover over inactive landfill areas • Managing transfer containers • Receipt and management of recyclable materials – recycling depot, sorting, and other recovery efforts

General Topics	Describe plans or procedures for:
Inspection and maintenance	• Washing equipment • Maintaining leachate and gas collection systems • Maintaining monitoring stations and devices • Periodically inspecting the continuity and integrity of primary leachate collection pipes • Maintaining surface water control structures
Operating record	• Establishing and maintaining the operating record • Establishing and maintaining a complaint log and complaint response procedure
Contingency	• Backup methods for storing and/or disposing of leachate • Providing fire protection equipment, and arrangements made with local fire control agency and • Notifying DEQ about emergencies and fires

7.3 Operations and maintenance manual

Within 60 days of approval of revisions to the Operations Plan the permittee must prepare an updated Operations and Maintenance Manual which includes detailed inspection and maintenance procedures and an associated schedule for all facility components that require periodic inspection.

The Operations and Maintenance Manual must include specific procedures for routine preventative maintenance and repairs and for response to emergency situations. The preventative inspection and maintenance program should address the following equipment and facilities: personnel safety equipment, operating equipment, support facilities, environmental control systems, environmental monitoring systems, and the transportation system.

The permittee must keep a copy of the Operations and Maintenance Manual with the Operating Record, readily available for Department inspection and review.

7.4 Plan and manual updates

The permittee must update and revise both the Operations Plan and the Operations and Maintenance Manual as necessary to reflect current and future facility conditions and procedures.

The permittee must submit any associated revisions or updates to DEQ for review and approval.

7.5 Plan and manual compliance

The permittee must operate the facility in accordance with the approved Operations Plan and the current Operations and Maintenance Manual, and any amendments to these documents.

8 Recordkeeping and Reporting – Operations

8.1 Non-compliance reporting

The permittee must take immediate corrective action for any violations of permit conditions or Department rules and notify DEQ at: 541-298-7255

Department response: DEQ may investigate the nature and extent of the compliance problem and evaluate the adequacy of the permittee's corrective action plans.

8.2 Permit display

The permittee must display this permit where operating personnel can easily refer to it.

8.3 Access to records

DEQ must have access, when requested, to all records and reports related to the permitted facility.

8.4 Procedures

The permittee's record keeping and reporting procedures are as follows:

Step	Action
1	Keep the Operating Record at the facility or at another DEQ-approved location.
2	Place information required by 40 CFR 258.29 and this permit in the Operating Record.
3	During facility operations, record the daily amount of each waste type received and approved alternative daily cover qualified waste used for daily cover. Record zero (0) if the waste is not received. *Identify the following waste types received and categorize them as either in- or out-of-state waste:* • Domestic solid waste and construction and demolition waste • Industrial solid waste • Asbestos • Contaminated cleanup materials (except materials counted as ADC-qualified waste) • Approved alternative daily cover qualified waste received • Approved special waste • Other (for example: specify any waste type not included in the above list)
4	If applicable, every quarter, record the amount of each material recovered for recycling or other beneficial purpose.
5	Collect the following operations information: • amount of solid waste received and by source each month • number of containers received each month • number of waste tires shipped annually • type and tonnage of special waste received by source each quarter source, type and tonnage of Clean-up material contaminated with hazardous substances each quarter
6	Submit the information collected in Step 3 above on the Solid Waste Disposal Report/Fee Calculation form provided by the DEQ. Pay solid waste fees as required by OAR 340-097. Date due: last day of the month following the end of the calendar quarter.
7	Submit the information collected in Step 3 and 4 above to the Wasteshed Representative on a DEQ provided or approved form. Date due: Jan. 25 of each year.
8	Submit the information collected in Step 5 above, on an approved by the Department, to the regional solid waste program. Date due: the last day of the month following the end of the calendar quarter
9	Retain copies of all records and reports for 10 years after their creation.
10	Update all records to reflect current conditions at the facility.

8.5 Submittal address

All submittals to the DEQ under this section must be sent to:

Oregon Department of Environmental Quality
Materials Management Program
700 NE Multnomah St., Suite 600
Portland, OR 97232

Telephone: 503-229-5409

The submittal required in step 8 must be sent to:

Oregon Department of Environmental Quality
Manager, Solid Waste Program
400 E. Scenic Dr. Suite 307
The Dalles, OR 97058

(541) 298-7255

9 Specific Operating Conditions

9.1 Discovery of prohibited waste

If the permittee discovers prohibited waste, the permittee must notify DEQ within 24 hours and begin to isolate or remove the waste. In addition the permittee must take digital photos of the prohibited waste to document its quantity, nature, identity and source.

Within 60 days following the discovery, the permittee must transport non-putrescible, non-hazardous prohibited waste to a disposal or recycling facility authorized to accept such waste, unless otherwise approved or restricted by DEQ. The permittee must obtain DEQ's written approval to store putrescible, non-hazardous, prohibited waste.

9.2 Spills notification

Oregon Revised Statue 466.635 and Oil and Hazardous Materials Emergency Response Requirements, Chapter 340, Division 142 require immediate notification to Oregon Emergency Response System after taking any required emergency actions to protect human health and the environment when oil or hazardous materials are spilled. The spill must be immediately reported to OERS at 1-800-452-0311 if the spill is of a reportable quantity. Reportable quantities include:

- *Any* amount of oil spilled to waters of the state
- Oil spills on land in excess of 42 gallons
- 200 pounds, 25 gallons or more of spilled pesticide residue
- Spills of hazardous materials that are equal to, or greater than, the quantity listed in the Code of Federal Regulations, 40 CFR Part 302 (List of Hazardous Substances and Reportable Quantities) and amendments adopted before July 1, 2002

For a complete list of hazardous materials required to be reported, please refer to OAR 340-142-0050.

9.3 Access roads

The permittee must provide all-weather access roads from the landfill property line to the active operational area and the environmental monitoring stations, and maintain them in a manner that prevents traffic hazards, dust and mud.

The permittee must use appropriate means, including truck washing, as needed to prevent haul trucks from tracking mud on external roadways outside the landfill boundaries. Any truck washing activities must be conducted on a hard surface and any disposal of waste water must be accomplished in a manner approved by DEQ.

9.4 Waste Unloading

Intermodal containers of regional solid waste must be emptied on a frequency to prevent vectors, conditions for the transmission of disease, air pollution, odors, dust, and other objectionable conditions.

9.5 Daily cover

At the end of each working day the permittee must cover all solid waste with a six inch, or thicker, layer of compacted soil or with a Department-approved, alternative daily cover. The permittee must not claim ADC usage of the greater of 10% of "Total Tons Received" in Reporting Period, or 15% of "Counting Waste" on the Solid Waste Disposal Report/Fee Calculation form without first obtaining written DEQ approval.

9.5 Interim cover

As specified in Department-approved design and operations plans, the permittee must place and maintain interim cover over fill areas that will not receive additional waste for an extended period of time (for example: greater than 120 days) and actively revegetate, in a Department-approved manner, any interim cover that will remain exposed for more than two years.

9.6 Surface water structures

The permittee must maintain all stormwater drainage structures in good functional condition, report to DEQ any significant malfunctions or damage and complete repairs within 60 days of discovery the problem.

9.7 Stormwater pollution control plan

The permittee must update and implement the Storm Water Pollution Control Plan consistent with site conditions and the stormwater permit requirements. Refer to the National Pollutant Discharge Elimination System Storm Water Discharge Permit No. 1200-Z. In addition, the permittee must keep a current copy of the SWPCP in the facility Operating Record.

9.8 Asbestos waste management

The permittee must off load and dispose of friable and non-friable asbestos-containing solid waste as specified in DEQ-approved Operations Plan, Operations & Maintenance Manual, and applicable Oregon Administrative Rules.

9.9 Leachate management systems

The permittee must operate the disposal site in a manner that deters leachate production to the maximum extent practicable, and construct, operate and maintain in good functional condition all Department-approved leachate containment, collection, detection, removal, storage and treatment systems. The permittee must remove leachate continuously from all landfill leachate collection systems, to minimize fluid buildup on the bottom liner and prevent the hydraulic head (fluid depth) from exceeding one foot. Immediately notify DEQ if at any time the hydraulic head exceeds one foot.

9.10 Leachate surface impoundments

The permittee must:

- Completely contain leachate stored within lined surface impoundments
- Maintain a minimum dike freeboard of three feet above the maximum leachate level in those impoundments unless otherwise approved by DEQ
- Fence the impoundments to control public access
- Lock all gates when no attendant is on duty.
- Post clearly legible, visible signs that describe the surface impoundment's contents and display the words "no trespassing"

9.11 Litter control

The permittee must at all times minimize windblown litter and collect it quickly and effectively to prevent scattering, nuisance conditions and unsightliness.

9.12 Vector control

The permittee must minimize vectors in the active disposal area, including insects, rodents, and birds.

9.13 Air emissions

The permittee must control air emissions, including dust, malodors, air toxics, etc. related to disposal site construction, operation, and other activities, and comply with Department air quality standards.

9.14 Access control

The permittee must control public access to the landfill as necessary to prevent unauthorized entry and dumping.

9.15 Landfill entrance sign

A prominently displayed sign must indicate the following:

- The name of facility
- The emergency telephone number
- The days and hours of operation
- The authorized and prohibited waste
- The Solid Waste Permit number
- The operator's address
- The consequences to haulers if they attempt to dispose of prohibited materials
- Any other information critical to the safe and efficient operation of the facility

9.16 Fire protection and reporting

The permittee must provide complete and sufficient protection equipment and facilities in accordance with DEQ-approved Operations Plan.

Arrangements must be made with the local fire control agency to immediately acquire their services when needed. The permittee must implement preventative measures to ensure adequate on-site fire control, as determined by the local fire control agency. Fires must be immediately and thoroughly extinguished.

Fires shall be reported to DEQ within 8 hours at:541-298-7255 ext. 221

9.17 Water supply

The permittee must provide water in sufficient quantities for fire protection, dust suppression, establishment of vegetation, and other site operations requiring water.

9.18 Landfill gas management

The permittee must control landfill gas in accordance with the requirements of 40 CFR Parts 51, 52 and 60 and OAR 340-094-0060(4).

9.19 Landfill gas control system operation and maintenance

The permittee must operate and maintain the landfill gas control and monitoring systems in good working order as required to prevent nuisance odors, air emissions and landfill gas migration (see methane compliance limits in Section 18).

If critical landfill gas control equipment is significantly damaged or compromised, the permittee must replace or repair that equipment, within 60 days of discovering the problem, and submit a written inspection report to DEQ.

10 Site Development and Design

10.1 Site development plan

Within180 days of the permit issue date, the permittee must update and submit the long-term Site Development Plan to DEQ for review and approval. Once approved, the plan becomes an integral part of this permit.

Reference: The *Solid Waste Landfill Guidance, September 1996,* describes the basic elements of a Site Development Plan. Organizing the plan in accordance with the Guidance will expedite DEQ's review.

10.2 Baseline design criteria

New MSW landfill disposal units must include the following engineering controls:

- A composite liner system, including a Department-approved geomembrane liner (at least 60 mils thick for high density polyethylene, and at least 30 mils thick for approved alternative geomembranes) and at least two feet of compacted soil with an in-place permeability of 1×10^{-7} cm/sec or less, or a Department-approved alternative liner pursuant to 40 CFR Part 258.40(a)(1)
- A primary leachate collection and removal system which fully covers the liner system and maintains a leachate depth of less than a one foot above the liner, per 40 CFR 258.40(a)(2). All leachate collection pipes must be serviceable by clean outs

- A secondary leachate collection and removal system(s) designed to effectively monitor the overlying composite-liner system's performance and (1) detect and collect leachate at locations of maximum leak probability; and (2) prevent groundwater intrusion and related monitoring biases
- A leachate collection sump(s) with a double composite liner system and a leak detection and removal system. Each composite liner must meet the minimum design criteria previously cited in this subsection
- An operations layer that covers and protects the primary leachate collection and removal system and liner system from physical damage
- A leachate surface impoundment (if applicable) with a double liner and leak detection and removal system. One liner must meet the minimum composite liner criteria described above.

10.3 Design plans

At least six months prior to the anticipated construction date for new disposal units, closure of existing units, or development of other ancillary facilities, the permittee must submit engineering design plans to DEQ for review and approval. The design plans must be prepared and stamped by a qualified Professional Engineer with current Oregon registration and specify and/or provide the following:

- All applicable performance criteria, construction material properties and characteristics, dimensions, and slopes
- The design basis and all relevant engineering analyses and calculations

10.4 Construction requirements

The permittee must construct all improvements in accordance with:

- The approved plans and specifications
- Any Department imposed conditions of approval
- Any future Department approved amendments to the plans and specifications
- Construction work must begin within eighteen (18) months of plan approval

10.5 Construction documents

Prior to constructing any landfill engineering controls (e.g., final cover, new disposal unit, or other waste containment facilities or improvements), the permittee must submit complete construction documents and receive DEQ's written approval. The construction documents must:

- Define the construction project team
- Specify material and workmanship requirements to guide the Constructor in executing work and furnishing products
- Include a Construction Quality Assurance plan that describes how the project team will monitor the quality of materials and the Constructor's work performance and assure compliance with project specifications and contract requirements.

Reference: Follow the current *Solid Waste Guidance* to expedite Department review of the construction documents.

10.6 Construction inspection

During construction of a new landfill disposal unit, final cover system, or any other landfill controls or engineered features, the permittee must provide DEQ with a summary and schedule of planned construction activities to facilitate DEQ's inspection and oversight.

10.7 Construction report submittal

Within 90 days of completing construction of a new landfill disposal unit, a final cover system, or other engineering controls, the permittee must submit to DEQ a Construction Certification Report prepared by a qualified independent party. The report must document and certify that the construction of all required components and structures complies with this permit and DEQ-approved design specifications.

10.8 Construction report content

The construction report must include:

- An executive summary describing the construction project and any major problems encountered
- A list of the governing construction documents
- A summary of all construction and Construction Quality Assurance activities
- The manufacturer's written certifications that all geosynthetic materials conform with project specifications
- Test data documenting that soil materials conform with project specifications
- A summary of all Construction Quality Assurance observations, including daily inspection records and test data sheets documenting that materials deployment and installation conform with project specifications
- A description of the problems encountered and the corrective measures implemented
- The designer's acceptance reports for errors and inconsistencies
- A list/description of any deviations from the design and material specifications, including justification for the deviations, copies of change orders and recorded field adjustments, and copies of DEQ's written approvals for deviations and change orders
- Signed certificates for subgrade acceptance prior to placement of soil liner and for acceptance of the soil liner prior to deployment of geomembrane liner
- Photographs and as-constructed drawings, including record surveys of the subgrade, soil liner, granular drainage layer and protective soil layer
- The certification statement(s) and signatures of the CQA consultant, designer, and facility owner. One of these representatives must be a Professional Engineer with current Oregon registration

10.9 Approval to use new disposal units

The permittee must not dispose of solid waste in newly constructed disposal units until DEQ has accepted the Construction Certification. If DEQ does not respond to the Construction Certification Report within 30 days of its receipt, the permittee may place waste in the unit.

11 Recycling Requirements

11.1 Materials

The permittee must provide a place for receiving the following recyclable materials:

☒	ferrous scrap metal	☐	hi-grade office paper
☒	motor oil	☒	non-ferrous scrap metal (including aluminum)
☒	newspaper	☐	corrugated cardboard and craft paper (brown paper bags)
☒	container glass	☒	tin cans

11.2 Receiving location

The place for receiving recyclable material must be located at the disposal site or at another location more convenient to the population served by the disposal site. The recycling center must be available to every person whose solid waste enters the disposal site.

11.3 Material use

All source separated recyclable materials must be reused or recycled.

11.4 Recycling information

The permittee must provide, to disposal site users, the following recycling information on printed handbills:

- The on-site or off-site location of the recycling center
- The recycling center's hours of operation
- A list of acceptable materials for recycling
- Instructions for preparing source separated recyclable material
- Reasons why people should recycle

11.5 Sign

A prominently displayed sign must indicate the following:

- The availability of recycling at the disposal site or another location
- The materials accepted at the recycling center
- The recycling center's hours of operation (if different than disposal site hours)

Note: the sign must indicate the recycling center location, if not at the disposal site

11.6 Storage

Unless DEQ approves otherwise, all recyclable materials, except car bodies, white goods and other bulky items must be stored in containers.

SITE CLOSURE

12 Closure Construction and Maintenance

12.1 Worst-case closure plan development

The permittee must develop a conceptual "worst-case" closure plan and a conceptual post-closure plan(s), obtain Department approval of the plan(s), and maintain up-to-date copies of these plan(s) in the facility file.

Reference: The plans must comply with 40 CFR, Part 258, Subpart F, and OAR 340-094-0110.

12.2 Notification

The permittee must notify DEQ and receive Department approval when the conceptual "worst-case" closure and conceptual post-closure care plans are updated and placed in the file.

12.3 Closure permit

In accordance with OAR 340-094-0100, the permittee must apply for a closure permit at least five years prior to the landfill's anticipated final closure.

12.4 Closure plan approval

At least six months prior to final closure of any portion of the landfill, the permittee must submit detailed engineering plans, specifications, and a closure schedule to DEQ for review and approval.

The design plans must be prepared and stamped by a qualified Professional Engineer with a current Oregon registration and specify and/or provide the following:

- All applicable performance criteria, construction material properties and characteristics, dimensions and slopes
- The design basis and all relevant engineering analyses and calculations

Reference: The *Solid Waste Landfill Guidance, September 1996,* describes Closure Plan preparation. Following that format will expedite Department review of the plan.

12.5 Closure schedule

The permittee must initiate and complete closure of each landfill disposal unit in accordance with 40 CFR 258.60(f)&(g), or an alternate schedule approved by DEQ.

12.6 Final cover

Unless DEQ approves otherwise, the final landfill cover must be:

- At least three feet thick {OAR 340-094-0120(2)(a)}
- Designed to minimize infiltration of precipitation as required by 40 CFR Part 258.60
- Graded to compensate for estimated differential settlement and maintain positive drainage. Final (post-settlement) slopes must range between two percent and 30 percent

12.7 Vegetation

Unless otherwise approved by DEQ the permittee must establish and maintain a dense, healthy growth ofnative vegetation over the closed areas of the landfill consistent with the proposed final use.

12.8 Final cover maintenance.

The permittee must maintain the final surface contours of the landfill cover such that:

- Erosion is minimized and ponding of water is prevented
- The integrity of the cover system is preserved in accordance with the approved plans

The permittee must reconstruct the cover system with approved materials and grade and seed all areas that have settled or where water ponds, and all areas where the cover soil has been damaged or thinned by cracking or erosion. Areas where vegetation has not been fully established shall be fertilized, re-seeded and maintained. Any damage repair or other reconstruction of a geomembrane barrier component in the final cover system shall be conducted in accordance with a construction quality assurance plan approved by the DEQ.

12.9 Deed record

Within 30 days after the disposal site's final closure, the permittee must record a notation on the deed to the facility property as required by 40 CFR 258.60(i) and OAR 340-094-0130(1)(a), and submit a copy of the notation on the deed to DEQ.

13 Financial Assurance

13.1 Financial assurance plan

The permittee must submit an updated financial assurance plan to the Department for review and approval and provide financial assurance for the costs of site closure, post-closure care, and potential corrective action as required in section 13.3. In addition, the permittee must place the plan in the facility file.

Reference: The plan must be prepared in accordance with OAR 340-094-0140. Acceptable mechanisms are described in OAR 340-094-0145.

13.2 Financial assurance required.

The permittee must comply with applicable financial assurance criteria requirements prescribed by OAR 340-094-0140. The permittee must maintain an up-to-date Financial Assurance Plan in the facility Operating Record, and provide financial assurance for landfill closure, post-closure care and, if required, corrective action. The financial assurance provided must:

- Be in the amount required by OAR 340-094-0140(5)
- Be updated, annually, in accordance with OAR 340-094-0140(6)(e)
- Consist of a financial assurance mechanism complying with OAR 340-094-0145

13.3 Recertification of financial assurance

The permittee must annually review and update their financial assurance in accordance with OAR 340-094-0140(6)(e).

By June 15 of each year, a notarized annual recertification of financial assurance must be submitted to DEQ demonstrating that this review has been completed. If a discount rate is used to estimate costs, the annual update must also include the certifications listed in OAR 340-094-0140(6)(d).

13.4 Use of financial assurance

The permittee must not use the financial assurance for any purpose other than to finance the permitted facility's approved closure, post-closure, and corrective action activities or to guarantee that those activities will be completed.

13.5 Continuous nature

The permittee must continuously maintain financial assurance for the facility until the permittee or other person owning or controlling the site is no longer required by DEQ to demonstrate financial responsibility for closure, post-closure care, or corrective action.

ENVIRONMENTAL MONITORING

14 Environmental Monitoring Plan

14.1 Environmental monitoring plan submittal

Within 180 days of the permit issue date, the permittee must submit three copies (2 hard copy and 1 CD) of an updated environmental monitoring plan to DEQ for review and approval. The plan must be prepared and stamped by a Registered geologist or a Certified Engineering Geologist, with current Oregon registration. Once approved, this plan will become an integral part of the permit.

14.2 Environmental monitoring plan contents

The updated environmental monitoring plan must establish an environmental monitoring program that will characterize potential facility impacts. The updated plan may consist of the previous approved environmental monitoring plan with any subsequent changes or additions (i.e., approved permit-specific concentration limits, revised parameter lists, revised schedules, new wells...). At a minimum, the updated environmental monitoring plan should address the issues and topics found in Section 10 of DEQ's Solid Waste Guidance dated Sept. 1, 1996.

14.3 Environmental monitoring plan revisions and updates

The permittee must revise the current environmental monitoring plan as necessary to reflect current and future environmental conditions, facility development and regulatory requirements. A geologist or Certified Engineering Geologist, with current Oregon registration, must prepare and stamp the Environmental Monitoring Plan revisions and submit three copies (2 hard copies and 1 CD) to DEQ for review and approval.

14.4 Long-term monitoring plan

After DEQ approves any risk-based concentration limits, permit-specific concentration limits, concentration limit variances, action limits, or site-specific limits, the permittee must update the environmental monitoring plan to reflect the long-term monitoring program and submit the updated plan for Department review and approval.

Note: Also see this permit's requirements for establishing permit-specific concentration limits, action limits, or site-specific limits and OAR 340-040-0030(4) for procedures to establish concentration limit variances.

The permittee must incorporate any new or replacement monitoring point or device into the environmental monitoring plan and submit the updated environmental monitoring plan to DEQ for review and approval.**EMP maintenance**

The permittee must revise the EMP as necessary to keep it reflective of current facility conditions, procedures, and sampling requirements or changes. The permittee must submit all EMP revisions to DEQ for approval.

15 Environmental Sampling Requirements

15.1 Notification of sampling events

The permittee must notify DEQ, in writing, at least 10 working days prior to a scheduled sampling event.

15.2 Split sampling events

The permittee must split samples with DEQ at DEQ's request, and schedule split-sampling events with DEQ's laboratory at least 45 days ahead of time.

Oregon Department of Environmental Quality
Laboratory, Groundwater Monitoring Section
3150 NW 229, Suite 150
Hillsboro, OR 97124
Phone: (503) 693-5700
Fax: (503) 693-4999

The permittee must conduct the following split sampling events with DEQ:

- Fall 2021
- Fall 2016

15.3 Monitoring schedule

The permittee must refer to the approved environmental monitoring plan for environmental monitoring procedures. Quarterly monitoring benchmarks are defined below:

If sampling in the...	Schedule the sampling event	
	On, or after....	But on, or before...
Winter	Jan. 1	Feb. 28
Spring	April 1	May 31
Summer	July 1	Aug. 31
Fall	Oct. 1	Nov. 30

15.4 Interim monitoring

Until superseded by an updated Environmental Monitoring plan approved by the DEQ, the permittee must conduct all environmental sampling in accordance with the following documents:

- April 15, 2010 Environmental Monitoring Plan, Columbia Ridge Landfill and Recycling Center

For new or any additional wells, groundwater samples must be collected quarterly on the schedule outlined in Section 15.3 until a minimum of nine acceptable data points have been acquired for each monitoring well.

The permittee may commence semiannual groundwater sampling at those wells which have accumulated nine acceptable data points. All semiannual groundwater sampling must be conducted during the spring (April 1 - May 31) and fall (Oct.1 – Nov. 30) quarters.

15.5 Monitoring after EMP approval

The permittee must monitor the facility in accordance with:

- the approved environmental monitoring plan
- any conditions of DEQ's approval
- any Department-approved amendments and updates

15.6 Changes in sampling or split sampling

The permittee must submit a written request and obtain DEQ's written approval before changing the sampling program, including sampling frequency, parameters, or locations. Approved changes will become an integral part of the environmental monitoring plan.

DEQ reserves the right to add to or delete from the list of scheduled sampling events, sampling locations, and sampling parameters, and to conduct unscheduled sampling or split sampling events.

If the split-sampling schedule changes, DEQ will try to notify the permittee at least 30 days prior to the next scheduled event.

16 Establishing Permit-Specific Concentration Limits, Action Limits, Concentration Limit Variances and Site-Specific Limits

16.1 Gathering data

The permittee must monitor the designated background wells in accordance with the approved environmental monitoring plan or propose an alternative intrawell approach. Background monitoring must continue until all necessary data sets have been collected and permit-specific concentration limits, action limits, and/or site-specific limits are proposed for each non-hazardous parameter of concern. The permittee then must demonstrate to DEQ's satisfaction that the selected background-data set is valid and unaffected by facility releases.

16.2 Future disposal units or cells

Before using a new landfill unit or cell for waste disposal, the permittee must collect enough samples to determine background groundwater quality.

16.3 Statistical analysis

To establish compliance concentration limits (permit-specific concentration limits, action limits, and site-specific limits), the permittee must perform statistical evaluations of the monitoring results for each sampling event.

Use methods outlined in 40 CFR 258.53 or other Department accepted statistical methods.

References: The permittee should use methods outlined in Environmental Protection Agency's "Statistical Analysis of Groundwater Monitoring at RCRA facilities" (March 2009) or other DEQ accepted statistical methods. DEQ's 2011 Guidance Document "Developing Concentration Limits at Permitted Solid Waste Facilities" provides some examples of acceptable methods.

16.4 Proposing permit-specific concentration limits, action limits, and/or site-specific limits

The permittee must propose for DEQ's review and approval, permit-specific concentration limits, action limits, or site-specific limits pursuant to the guidelines specified in OAR 340-040. The proposal must address all required parameters. Once a statistically valid data set (at least nine acceptable data points) are established from the appropriate background well(s), the permittee may generate a permit-specific concentration limits, action limits, or site-specific limits for each designated, long-term monitoring parameter.

16.5 Changing permit-specific concentration limits, action limits, and/or site-specific limits

If the permittee demonstrates to DEQ's satisfaction that background groundwater quality has significantly changed since the permit-specific concentration limits, action limits, or site-specific limits was established, and if the change is unrelated to the permitted facility's influence, the permittee can propose, to DEQ, a revised level for the affected permit-specific concentration limit(s), action limit(s), or site-specific limit(s).

Note: This does not apply to intrawell comparisons, only to interwell methods.

16.6 Establishing and changing concentration limit variances

The permittee should refer to DEQ's Groundwater Quality Protection Rules [OAR 340-040-0030(4)] for guidance in establishing and changing concentration limit variances.

17 Environmental Monitoring Standards

17.1 Applicable regulatory standard

The permittee must not allow the release of any substance from the landfill into groundwater, surface water, or any other media which will result in a violation of any applicable federal or state air or water limit, drinking water rules, or regulations, beyond the solid waste boundary of the disposal site or an alternative boundary specified by DEQ.

Reference: OAR 340-094-0080.

17.2 Compliance points

This permit establishes compliance points at the following monitoring locations:

MW 2, 3, 4, 5, 6, and 7

17.3 Review of results

After each monitoring event, the permittee must review the analytical results according to the following table.

If monitoring results are...	Then...
Above any permit-specific concentration limits, concentration limit variances or action limits, or more than two site-specific limits (if established), or if data indicate a significant change in water quality at any monitoring point Note: Examples of significant changes: • Detection of a volatile-organic-compound or other hazardous constituent that is absent in background water quality • Exceedance of a Table 1 or 3 value listed in OAR 340-040 unless the background water quality is above these numerical limits • Exceedance of a safe drinking water standard or • Exceedance, by an order of magnitude or more, of any compound's background concentration	1. Notify DEQ in writing within 10 days of receipt of laboratory results 2. Perform resampling immediately and evaluate results as described below Note: Re-sampling is not required for a known release, previously confirmed in writing to DEQ.
None of the above	Continue groundwater monitoring with next scheduled sampling event.
Note: Established permit-specific concentration limits, concentration limit variances, action limits, and site-specific limits are listed in the approved environmental monitoring plan.	

17.4 Resampling results

The permittee must review re-sampling results according to the following table.

If resampling results ...	then ...
Confirm the exceedance of at least one permit-specific concentration limit or a Table 1,or 2 value as listed in OAR 340-040 or concentration limit variance.	1. Notify DEQ in writing within 10 days of receipt of laboratory data, or within 60 days of the sample date (whichever occurs first) 2. Submit, within 90 days of the date of re-sampling, a remedial investigation workplan for DEQ's review and approval. The workplan must specify how the remedial investigation will meet OAR 340-040 objectives, and may need to include provisions for monitoring Groups 4 and 6* parameters in addition to routine detection monitoring *See Attachment 1: Parameter Groups
Confirm the significant change in water quality results noted in the routine sampling event or confirm that at least one action limits or more than two site-specific limits were exceeded.	1. Notify DEQ in writing within 10 days of receipt of laboratory data, or within 60 days of the sample date (whichever occurs first) 2. Submit a plan for developing an assessment program to DEQ within 30 days (unless another time period is authorized)

Do not confirm the routine sampling results.	1. Continue with routine monitoring 2. Discuss the results of the routine sampling and resampling in the next annual environmental monitoring report

17.5 Methane limits

The methane concentration must not exceed:

- 25 percent of methane's lower explosive limit in onsite structures (excluding gas control structures or gas recovery system components)
- Methane's lower explosive limit at the facility property boundary

Note: Methane's lower explosive limit is equal to a concentration of five percent by volume in air.

17.6 Methane exceedance

If methane levels exceed the specified limits, the permittee must:

1. Take immediate steps to protect human health and safety and notify DEQ within 24 hours
2. Within seven days of detection, confirm the measures taken to protect human health and safety (unless DEQ approves an alternative schedule), and describe the methane test results and response measures in the facility operating record
3. Within 60 days of the methane exceedance, develop and implement a remediation plan, incorporate the plan into the monitoring records, and submit a progress report to DEQ

18 Recordkeeping and Reporting – Environmental Monitoring

18.1 Annual environmental monitoring report

Prior to April 30th of each year, the permittee must submit to DEQ three copies of (2 hard copies and 1 CD) an annual monitoring report for the past year's monitoring period (Jan. 1 to Dec. 31) the report must conform to the approved environmental monitoring plan format and be prepared and stamped by a geologist or a Certified Engineering Geologist, with current Oregon registration.

Note: Whenever possible, the permittee must submit two-sided copies of all reports and may submit electronic submittals of reports.

18.2 Statement of compliance

The annual environmental monitoring report must include a brief (approximately one-page) cover letter that:

- Compares the analytical results with the relevant monitoring standards (risk based concentrations, permit-specific concentration limits, concentration limit variances, action limits, or site-specific limits
- Documents any exceedances of or federal or state standards for relevant media
- Documents any significant change in water quality, land quality, air quality or methane levels in monitored media

18.3 Annual environmental monitoring report contents

The annual environmental monitoring report must reflect the facility's current conditions, present accurate data that corresponds with the original field and lab data, and include the following elements:

- A review of the past year's significant events at the site
- An evaluation of the monitoring network performance and a summary of any recommended changes
- A summary of all the past year's sampling data for, but not limited to groundwater, surface water, leachate, landfill gas (including any air sampling data), and soil
- A summary of any data quality problems (e.g., quality assurance/quality control failures, flagged data, switched samples, etc.)
- Piezometric maps for each sampling event and each groundwater bearing zone monitored
- Time history plots for field specific conductivity, dissolved oxygen, and all group 1b and group 2a and 2b parameters

- Box plots for field specific conductivity, dissolved oxygen, and all group 1b and group 2a and 2b parameters
- An anion-cation balance for each sample event at all monitoring points for which there is adequate data. Include an additional explanation for any balance outside of ±10% in error
- A copy of all the past year's field and lab data, including all chain of custody forms

Reference: The report format should reflect DEQ's guidance: *Solid Waste Landfill Guidance*, September 1996.

In addition, the permittee must measure, record, and place in the Operating Record and in the Annual Environmental Monitoring Report the following:

- The weekly volume of leachate removed from each discharge point
- The weekly volume of liquid removed from all basin lysimeters
- The weekly leachate levels in all leachate impoundment ponds
- The weekly leachate level in the most critical hydraulic head location (max. depth) within each cell
- The daily leachate level measured in the bullet above during construction and/or maintenance activity.

18.4 Split sampling submittal

Within 90 days of any split sampling event, the permittee must submit the following information to DEQ's laboratory:

- A copy of all information pertinent to the sample collection handling, transport and storage, including field notes
- Copies of all laboratory analytical reports
- Copies of all laboratory quality assurance/quality control reports
- Any other data or reports requested by DEQ

18.5 Lab address

Report all required split sampling information to:

Oregon Department of Environmental Quality
Laboratory, Groundwater Monitoring Section
3150 NW 229, Suite 150
Hillsboro, OR 97124

Phone: 503-693-5700
Fax: 503-693-4999

18.6 DEQ response to split samples

If the permittee submits all required split sampling data and requests DEQ's results, DEQ's lab may provide, to the permittee, copies of the following information:

- DEQ's analysis of the split sample
- The quality assurance/quality control report
- The analytical report
- The field data sheets

19 Environmental Monitoring Network

19.1 Monitoring device installation

The permittee must install additional groundwater monitoring wells, landfill gas monitoring probes, or other monitoring devices no later than 180 days after Department notification. Well locations and construction methods must comply with DEQ's requirements.

For future disposal units or cells, the permittee must install Department-approved background and detection and/or compliance wells at least 12 months before refuse disposal occurs in the new cells. A site characterization report may also be required for any proposed new cell. DEQ may waive or modify this requirement if the permittee provides adequate justification for an alternative approach.

19.2 Monitoring stations and equipment

To ensure that every sample is representative of the site's environmental conditions, the permittee must protect, operate, and maintain all environmental monitoring stations and equipment in accordance with DEQ's requirements.

19.3 Access to monitoring stations and equipment

To facilitate sample collection and/or inspection and maintenance activities, the permittee must maintain reasonable all-weather access to all monitoring stations and associated equipment.

19.4 Reporting equipment damage

Within 14 days of discovering any damaged monitoring equipment or station, the permittee must submit to DEQ a report describing the damage, the proposed repair or replacement measures, and the schedule to complete this work.

Example: A well's impaired function or altered position/location.

19.5 Monitoring well construction

The permittee must complete any monitoring well or gas monitoring probe abandonment (decommissioning), replacement, repair, or installation in a manner that complies with the Water Resources Rules, OAR 690-240, and with DEQ's "Guidelines for Groundwater Monitoring Well Drilling, Construction, and Decommissioning", dated August 1992.

19.6 Gas system maintenance

The Permittee must operate and maintain in good working order the landfill gas containment, collection, removal, treatment, and monitoring system such that nuisance odors are deterred to the maximum extent practical and methane concentrations do not exceed compliance limits.

19.7 Reporting well construction and repairs

The permittee must document all monitoring well or gas probe repair and construction activities, including driller's logs, well location information, and construction information in a report prepared and stamped by a geologist or Certified Engineering Geologist, with current Oregon registration. The permittee must submit the report to DEQ within 30 days of the action and include this documentation in the next annual environmental monitoring report.

19.8 Well decommissioning or replacement

The permittee must submit a written recommendation to DEQ prior to decommissioning or replacing any well or gas monitoring probe in the monitoring network. After receiving DEQ's approval, the permittee must decommission or replace any well or gas probe that meets the following criteria:

- The well or gas probe was installed in a borehole that hydraulically intersects two saturated stratas
- The permittee lacks supporting documentation demonstrating that the well or gas probe was properly installed and constructed
- The well or gas probe was damaged beyond repair or destroyed
- Other reasons as determined by either the permittee or DEQ

COMPLIANCE SCHEDULE

20 Summary of Due Dates

20.1 Summary

The permittee must comply with the event-driven schedule shown below. This compliance schedule does not apply to many of the routine reporting requirements specified in other sections of the permit.

Due Date	Activity	See subsection...
Within 180 days of permit issuance	Submit updated operations plan	7.1 Operations plan submittal
Within 60 days of operations plan approval	Update the operations and maintenance manual	7.3 Operations and maintenance manual
Within 180 days of permit issuance	Review and submit site development plan update	10.1 Site development plan
EMERGENT:		
Within 24 hours of discovery of hazardous or suspected hazardous waste	Notify Department, initiate procedures to identify and remove the hazardous waste	6.1 Hazardous waste disposal
Immediately upon identification of permit violation	Take corrective action for permit condition violation and notify DEQ	8.1 Non-compliance reporting
Within 60 days of discovery of non-hazardous prohibited waste	Transport non-hazardous prohibited waste to authorized facility	9.1 Discovery of prohibited Waste
Within 90 days of discovery of hazardous or suspected hazardous waste	Remove hazardous waste	9.1 Discovery of prohibited waste
Within 24 hours of discovery of prohibited waste	Notify DEQ of prohibited waste and take digital photos. For non-hazardous prohibited waste, begin to isolate or remove.	9.1 Discovery of prohibited waste
Immediately	Oregon Emergency Response System notification of reportable spill	9.2 Spills notification
Immediately when the liquid depth in a leachate collection and removal system, liner system, or secondary containment system sump exceeds 12 inches	Notify DEQ	9.9 Leachate Management System
Within 60 days of discovery of surface water structural damage/malfunction	Notify DEQ and complete repairs	9.6 Surface water structures
Within 60 days of discovery of landfill gas equipment damage/compromise	Replace or repair equipment, submit written inspection report to DEQ	9.19 Landfill gas management
Discovery of fire	Immediately and thoroughly extinguish fire. Notify DEQ within eight hours of discovery.	9.16 Fire protection and reporting

Due Date	Activity	See subsection...
Within 10 days of receipt of lab results with exceedance(s)	Notify DEQ of monitoring exceedance(s)	17.3 Review of results, 17.4 Resampling results
Within 30 days of confirmed significant change in water quality results	Submit assessment plan to DEQ	17.4 Resampling results
Within 90 days of resampling date	Submit remedial investigation workplan to DEQ	17.4 Resampling results
Immediately upon methane exceedance identification	Take steps to protect human health and safety, promptly notify DEQ	17.6 Methane exceedance
Within seven days of methane exceedance	Confirm protective measures, describe results and measures in facility operating record	17.6 Methane exceedance
Within 60 days of methane exceedance	Develop and implement remediation plan, submit progress report to DEQ	17.6 Methane exceedance
Within 14 days of discovery of monitoring equipment or station damage	Submit report to DEQ	19.2 Reporting equipment damage
RECURRENT:		
Last day of month following end of calendar quarter	Submit solid waste disposal report/fee calculation form to DEQ	8.4.6 Procedure
By Jan. 25 for each year	Submit amount of material recovered for recycling/other beneficial purposes to DEQ wasteshed representative	8.4.7 Procedure
By June 15 of each year	Submit annual financial assurance recertification	13.2 Recertification of financial assurance
By April 30 of each year	Submit an annual environmental monitoring report	18.1 Annual environmental monitoring report
SAMPLING:		
At least 10 working days prior to scheduled sampling event	Notify DEQ	15.1 Notification of sampling events
At least 45 days prior to split sampling event	Schedule split sampling event with DEQ laboratory	15.2 Split sampling events
Within 90 days of split sampling event	Submit required data/documents to DEQ laboratory	18.5 Split sampling submittal
EVENTS:		
Within 18 months of plan approval	Begin construction	10.4 Construction requirements
At least six months before any new disposal unit construction	Submit design plans	10.4 Design plans
Within 90 days after completion of any major construction	Submit construction certification report	10.7 Construction report submittal

Due Date	Activity	See subsection...
Within 90 days after completion of any major construction	Submit construction certification report	10.8 Construction certification report submittal
At least six months prior to closing any portion of the landfill	Submit design plans	12.4 Closure plan approval
Within 30 days of any well, gas probe, or inclinometer construction or repair	Submit construction/repair report	19.7 Reporting monitoring devise construction and repairs
SELDOM:		
At least 10 days in advance of ownership or operator change	Notify DEQ	4.6 Changes in ownership or address
Five years prior to final closure	Submit closure permit application	12.3 Closure permit
Within 30 days of final site closure	Modify property deed record	12.9 Deed record

ATTACHMENTS

21 Attachment 1: Parameter groups

21.1 Overview

This attachment describes the environmental-monitoring parameter groups and associated requirements. Due to the duration of this permit, suggested analytical methods may change. If that is the case, use the most currently promulgated Environmental Protection Agency method or DEQ-approved equivalent.

Note: Method means EPA SW 846 Methods [suggested methods are in square brackets].

21.2 Group 1a: Field indicators

The **field indicators parameter group** includes the following parameters:

- Elevation of water level
- pH
- Dissolved Oxygen
- Specific conductance
- Temperature
- Eh

With instruments calibrated to relevant standards, measure these parameters in the field when collecting samples. Acceptable methods include:

- Down-hole in situ
- In a flow-through well
- Immediately following sample recovery

21.3 Group 1b: Leachate indicators

The **laboratory indicators parameter group** includes the following parameters:

- Hardness (as $CaCO_3$)
- Total Alkalinity (as $CaCO_3$)
- Total Organic Carbon (TOC)
- pH (lab)
- Specific Conductance (lab) [Method 9050]
- Total Dissolved Solids (TDS)
- Total Suspended Solids (TSS)*
- Chemical Oxygen Demand (COD)
- Tannin/Lignin

Proper techniques for sample handling, preservation, and analysis are specific to each individual analyte: Follow appropriate EPA techniques or the most recent version of the Standard Methods for the Examination of Waste and Wastewater, published by the American Public Health Association, American Water Works Association, and Water Environment Federation.

*Note these special considerations for **total suspended solids**:

If the TSS concentration is...	...then analyze for:
Less than or equal to 100.0 mg/L in the sample	Total concentrations (unfiltered)
Greater than 100.0 mg/L in the sample	Both total (unfiltered) and dissolved (field-filtered)
Field-preserve samples according to standard DEQ and/or EPA guidelines and analyze by EPA Method 6010C or DEQ-approved equivalent.	

21.4 Group 2a: Common anions and cations

The common anions and cations parameter group includes the following parameters:

- Calcium (Ca)
- Sulfate (SO_4)
- Ammonia (NH_3)
- Sodium (Na)
- Nitrate (NO_3)
- Silica (SiO_2)
- Iron (Fe)
- Fluoride (F)
- Manganese (Mn)
- Magnesium (Mg)
- Chloride (Cl)
- Carbonate (CO_3)
- Potassium (K)
- Bicarbonate (HCO_3)
- Ammonium (NH_4)

Dissolved concentrations must be measured. Field-filter and field-preserve samples according to standard DEQ and/or Environmental Protection Agency guidelines and analyze by appropriate EPA techniques or the most recent version of the Standard Methods for the Examination of Waste and Wastewater, published by the American Public Health Association, American Water Works Association, and Water Environment Federation.. Report results in mg/L and meq/L.

21.5 Group 2b: Trace Metals

The trace metals parameter group includes the following parameters:

- Antimony (Sb)
- Arsenic (As)
- Barium (Ba)
- Beryllium (Be)
- Cadmium (Cd)
- Chromium (Cr)
- Cobalt (Co)
- Copper (Cu)
- Lead (Pb)
- Nickel (Ni)
- Selenium (Se)
- Silver (Ag)
- Thallium (Tl)
- Vanadium (V)
- Zinc (Zn)

21.6 Group 3: Volatile organic constituents

Analyze for all compounds detectable by EPA Method 8260B (C- other method 8/06) or EPA Method 524.2, include a library search to identify any unknown compounds present. The volatile-organic-compounds parameter group is equivalent to the EPA Method 8260B list.

DEQ must pre-approve alternative methods like EPA Method 8021B.

21.7 Group 4: Assessment monitoring

The assessment monitoring parameter group includes the following parameters:

- Semi-volatile organic constituents, including phenols, EPA Method 8270D
- Mercury, EPA Method 7470A
- Cyanide, EPA Method 9010C (manual distillation) or 9012B (automated distillation)
- Nitrite

All Method 8270D analyses must include a library search to identify any unknown compounds present.

21.8 Group 5: Surface water and leachate

The surface water parameter group includes the following parameters:

- Total kjeldahl nitrogen (TKN)
- Total phosphorus (P)
- Orthophosphate (PO_4)
- Biological oxygen demand (BOD)
- Total halogenated organics (TOX) [EPA Method 9020B]
- Total coliform bacteria [EPA Method 9131]
- Fecal coliform bacteria [EPA Method 9131]
- E. Coli

21.9 Group 6: Other assessment parameters

Additional assessment parameters include the following:

- Dioxins and furans [EPA Methods 8280B and/or 8290A]
- Phenolics [EPA Methods 9065, 9066, and 9067]
- PCBs [EPA Methods 8082A and 8270D]
- Pesticides, herbicides and fungicides [EPA Methods 8081B, 8141B, 8151A, 8270D]

22 Attachment 2: Permit-Specific Concentration Limits, Action Limits, and Site Specific Limits

Permit-specific concentration limits, concentration limit variances, action limits, and site specific limits are located in the current, DEQ approved, Environmental Monitoring Plan.

King County
Wastewater Treatment Division
Industrial Waste Program
Department of Natural Resources and Parks
201 South Jackson Street, Suite 5513
Seattle, WA 98104-3855
206-477-5300 Fax 206-263-3001
TTY Relay: 711

March 18, 2022

SENT VIA EMAIL ONLY
ELECTRONIC READ RECEIPT REQUESTED

Zachary Jenkins
Waste Management Inc.
7400 8th Avenue S.
Seattle, WA 98108
zjenkins@wm.com

Issuance of Revised Wastewater Discharge Permit No. 7928-05 to Waste Management National Services - Duwamish Reload Facility by King County Department of Natural Resources and Parks

Dear Mr. Jenkins:

The enclosed revised Permit No. 7928-05 covers the wastewater discharge from the Waste Management National Services - Duwamish Reload Facility operation located at 7400 8th Avenue South, Seattle, Washington. All discharges from this facility, and actions and reports relating thereto, shall be in accordance with the terms and conditions of this permit.

The enclosed Permit No. 7928-05 supersedes and cancels Permit No. 7928-04 effective April 7, 2022. There will be no issuance fee assessed for this revision as it was initiated by the King County Industrial Waste Program.

The main changes to this revised permit are corrections to acceptance criteria values for gasoline range organics, benzene, tetrachloroethylene, and trichloroethylene in Table 1 (S3.C.4). Due dates for reports required per S3.E, S3.G, S3.J, and S3.K have been updated to reflect an approved extension.

If you have any questions about this permit or your wastewater discharge, please call Ryan Salem at 206-477-5476 or email him at ryan.salem@kingcounty.gov. You may also wish to visit our program's Internet pages at: www.kingcounty.gov/industrialwaste.

Thank you for helping support our mission to protect public health and enhance the environment.

Sincerely,

DocuSigned by:
Mark Henley
E27BB25CD98948B...

Mark Henley
Program Manager

Enclosures

e-cc: Maia Hoffman, Washington State Department of Ecology, mhof461@ecy.wa.gov
Julie Howell, Seattle Public Utilities, julie.howell@seattle.gov

Permit No.: 7928-05
Issuance Date: August 4, 2021
Effective Date: August 15, 2021
Revision Effective Date: April 7, 2022
Expiration Date: August 14, 2026

King County

REVISED WASTE DISCHARGE PERMIT

Department of Natural Resources and Parks
Industrial Waste Program
201 S. Jackson Street, Suite 5513
Seattle, WA 98104-3855

In accordance with the provisions of Chapter 90.48 RCW as amended, Public Law 92-500, and King County Code 28.84.060, a Waste Discharge Permit is issued to:

Waste Management National Services - Duwamish Reload Facility

Facility location:	7400 8th Avenue S. Seattle, WA 98108
Business hours phone:	206-496-7480
Emergency (24-hour) phone:	206-305-6022
Mailing address:	7400 8th Avenue S. Seattle, WA 98108

Permission is hereby granted to discharge industrial wastewater from the above-identified facility into the King County sewerage system in accordance with the effluent limitations and monitoring requirements set forth in this permit.

This permit is based on information provided in the permit application, which together with the following conditions and requirements are considered part of the permit. All requirements and ordinances of King County pertaining to the discharge of wastes into the King County sewerage system are hereby made a condition of this permit. All discharges and activities authorized herein shall be consistent with the terms and conditions of this permit.

This permit is not transferable without authorization from the King County Industrial Waste Program (KCIW). Failure to provide advance notice of a transfer renders this waste discharge permit voidable on the date of facility transfer.

DocuSigned by:
By Mark Henley
E27BB25CD98948B...
Mark Henley, Industrial Waste Program Manager

Permit No.: 7928-05
Issuance Date: August 4, 2021
Effective Date: August 15, 2021
Revision Effective Date: April 7, 2022
Expiration Date: August 14, 2026

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S1. EMERGENCY CONTACTS

KING COUNTY

Industrial Waste Program (8 a.m. – 5 p.m., weekdays):	206-477-5300
Ryan Salem, Industrial Waste Compliance Investigator:	206-477-5476
Mark Henley, Industrial Waste Program Manager:	206-263-6994

Your emergency contact after 5 p.m. weekdays and on weekends is:

West Point Treatment Plant:	206-263-3801

If unable to reach anyone at this number call:

South Treatment Plant:	206-263-1760

WASHINGTON STATE DEPARTMENT OF ECOLOGY

24-Hour emergency spill phone number:	206-594-0000

S2. PERMIT SUMMARY AND COMPANY IDENTIFICATION

A. Summary Information

The following industrial waste discharge sites have been identified for this facility:

Sample Site No.	*Limit Type*	*Daily Maximum Discharge Volume (gpd)*	*Description*
IW1215A	King County Local Limits	144,000 or 846,000*	Sample tap on treatment system discharge pipe
		Maximum Flow Rate (gpm)	
IW1215B	Flow Rate	100	Flow meter on discharge pipe to SPU sewer on 8th Ave. South
IW1215C	Flow Rate	572	Flow meter on discharge pipe to Markey Machinery private sewer line

*Maximum daily discharge volume is 144,000 gpd until discharge to Markey Machinery private side sewer on S. Garden Street is approved. Once KCIW approves the discharge to the S. Garden Street side sewer, the maximum daily discharge volume will be 846,000 gpd (see S3.A and S4.A of this permit)

Effluent limitations and self-monitoring requirements for this sample site are detailed in S4.A of this permit.

B. Reports

Report Name	*Section(s)*	*Due Date*
Determination of authorized 24-hour composite sample collection methods	S3.E	Within 90 days of approval by KCIW that discharges may begin per S3.A.
Updated Slug/Spill Control Plan	S3.G S6.A	Within 30 days of approval by KCIW that discharges may begin per S3.A and as requested by KCIW
Updated Wastewater Treatment System Operations and Maintenance (O&M) Manual	S3.J	Within 30 days of approval by KCIW that discharges may begin per S3.A.
Contingency Sample Site Evaluation and Sample Site Relocation Assessment	S3.K	Within 90 days of approval by KCIW that discharges may begin per S3.A.
Monthly self-monitoring reports	S4.A	15th day of each month
14-Day Report: Discharge or permit violation	S4.D	Within 14 days after a discharge or permit violation becomes known

Report Name	*Section(s)*	*Due Date*
5-Day Report: Slug discharge or spill	S6.A	Within 5 days after a slug discharge or spill
Installation/Modification of Pretreatment System Report	S6.C	Prior to installation or modification
Hazardous waste discharge notification	S6.D	Within 90 days after waste is identified through RCRA.
Washington State Department of Ecology Dangerous Waste Reports	S6.D	As requested by KCIW

C. Major Changes in the Revised Permit

This revised permit contains the following major changes since last issuance:

1. Values for gasoline range organics, benzene, tetrachloroethylene, and trichloroethylene have been revised in Table 1 (S3.C.4).

2 The due dates for reports per S3.E, S3.G, S3.J, and S3.K have been updated in accordance with an extension approved by KCIW on September 30, 2021.

3. Emergency contacts for King County (S.1) have been updated to remove Patricia Magnuson and add Ryan Salem.

D. Company Identification

SIC Code No.: 4212

Hazardous Waste Generator No.: NA

Industry Type: Waste Material Transfer Facility

S3. SPECIAL CONDITIONS OR COMPLIANCE SCHEDULE

A. Pre-Operative Inspection

Discharge to the sanitary sewer through the Markey Machinery private sewer line on South Garden Street shall not begin until KCIW has conducted a preoperative inspection of the pretreatment facilities and has sent written notification (email is sufficient) to the permittee that discharges may begin. Prerequisites for scheduling the site inspection include finalizing curb modification to increase OCA boundary expansion, upgrades to the wastewater pretreatment system, sample site configuration and plumbing revisions.

B. Approved Waste Streams

This authorization grants the discharge of limited amounts of industrial wastewater and contaminated stormwater from the following waste streams:

1. Wastewater generated on-site during the transloading (transferring) of contaminated dredged sediments and contaminated upland soils, including:

    a. Contaminated stormwater from operational areas within the bermed area
    b. Pressure washing of equipment for decontamination
    c. Truck wash water
    d. Incidental dewatering of dredged material and soils during transloading activities

2. Wastewater generated by the processing of the following off-site non-hazardous wastes provided that these wastes do not meet categorical standards as outlined in S3.C.1 of this permit:

    a. Stormwater catch basins and systems clean-out
    b. Groundwater well drilling and development slurries and liquids
    c. Construction related slurries (i.e. jet grout)
    d. Construction site wastewater and stormwater
    e. Pond clean-outs and maintenance
    f. Boiler maintenance
    g. Others, with prior approval from KCIW

Wastes or contaminants from sources other than permitted herein shall not be discharged to the sanitary sewer without prior approval from KCIW.

C. Waste Material Acceptance Conditions, Prohibitions, and Records Retention

1. The Waste Management National Services – Duwamish Reload Facility (Waste Management) shall not accept off site metal, oily and organic wastes, as defined in 40 CFR Part 437, for the primary purpose of treatment or recovery and disposal to the sanitary sewer.

2. Waste Management shall not accept off site wastes that designate as dangerous (hazardous) waste as per WAC 173-303, radioactive wastes and polychlorinated biphenyls (PCBs) wastes regulated under the Toxic Substances Control Act (TSCA).

3. Waste Management shall develop, implement, and maintain a waste profiling and evaluation program that requires waste generators to submit a signed Waste Profile form for each dredged sediment and upland contaminated soil stream brought on site. Waste profiling records required by the permit shall be retained on site for a period of three years and shall be available for review at reasonable times by authorized representatives of KCIW.

4. Waste Management is authorized to accept contaminated dredged sediments and upland contaminated soils without prior notification to KCIW provided that the waste material profile does not exceed the Acceptance Criteria specified in Table 1 below:

Table 1: Contaminated Dredged Material and Upland Soil Acceptance Criteria

Parameter	CAS-RN	Sediment or Soil (mg/kg)
Metals		
Arsenic	7440-38-2	2,100
Cadmium	7440-43-9	42
Chromium, Total	7440-47-3	810
Copper	7440-50-8	3,900
Lead	7439-92-1	3,600
Mercury (inorganic)	7439-97-6	10
Nickel	7440-02-0	330
Silver	7440-22-4	25
Zinc	7440-66-6	11,400
Organometallics		
Tributyltin (oxide)	56-35-9	0.25
PAH		
Total LPAH		
Napthalene	91-20-3	7.2
Acenaphthylene	208-96-8	3.9

Parameter	CAS-RN	Sediment or Soil (mg/kg)
Acenaphthene	83-32-9	6.0
Fluorene	86-73-7	11
Phenanthrene	85-01-8	63
Anthracene	120-12-7	39
2-Methylnaphthalene	91-57-6	5.7
Total HPAH		
Fluoranthene	206-44-0	90
Pyrene	129-00-0	48
Benzo(g,h,i)perylene	191-24-2	9.6
cPAH		
Benzo(a)pyrene	50-32-8	33
Benzo(a)anthracene	56-55-3	53
Benzo(b)fluoranthene	205-99-2	15
Benzo(k)fluoranthene	207-08-9	18
Chrysene	208-01-9	63
Dibenz(a,h)anthracene	53-70-3	6.6
Indeno(1,2,3-cd)pyrene	193-39-5	19
Benzo(a)pyrene (as TEQ)	50-32-8	44
Phthalates		
Bis(2-ethylhexyl)phthalate	117-81-7	25
Butylbenzyl phthalate	85-68-7	7.5
Diethyl phthalate	84-66-2	3.6
Dimethyl phthalate	131-11-3	4.2
Di-n-butyl phthalate	84-74-2	15
Di-n-octyl phthalate	117-84-0	19
Pesticides / PCBs		
Chlordane	57-74-9	0.60
Dieldrin	60-57-1	5.1
DDT	50-29-3	0.21
Endrin	72-20-8	0.40
Heptachlor	76-44-8	0.81
Total PCBs	-	49
Petroleum Hydrocarbons		
Total Petroleum Hydrocarbons (TPH)		
Gasoline Range Organics (GRO)	-	2,000
Diesel Range Organics (DRO)	-	15,500
Oil Range Organics (ORO)	-	29,000
Phenols		
2,4-Dimethylphenol	105-67-9	0.63
2-Methylphenol (o-Cresol)	95-48-7	0.23
4-Methylphenol (p-Cresol)	106-44-5	11

Parameter	CAS-RN	Sediment or Soil (mg/kg)
Pentachlorophenol	87-86-5	2.1
Phenol	108-95-2	3.6
Dioxins / Furans		
Total TEQ (Dioxins/Furans)	-	0.000170
Other Organics		
Benzene	71-43-2	10.0
Benzoic Acid	65-85-0	4.5
Benzyl Alcohol	100-51-6	2.6
Dibenzofuran	132-64-9	5.1
1,2-Dichlorobenzene	95-50-1	0.50
1,4-Dichlorobenzene	106-46-7	1.4
Ethylbenzene	100-41-4	8.3
Ethylene Dibromide (EDB)	106-93-4	0.005
Hexachlorobenzene	118-74-1	0.69
Hexachlorobutadiene	87-68-3	0.81
Methylene Chloride	75-09-2	0.020
MTBE	1634-04-4	0.10
N-nitrosodiphenylamine	86-30-6	0.39
Tetrachloroethylene	127-18-4	14.0
Toluene	108-88-3	7.2
1,2,4-Trichlorobenzene	120-82-1	0.19
1,1,1-Trichloroethane	71-55-6	2.0
Trichloroethylene	79-01-6	10.0
Total Xylenes	1330-20-7	32

5. Prior to accepting, for transloading purposes, contaminated dredged sediments and upland soils that exceed the Acceptance Criteria outlined in Table 1 in S3.C.4 of this permit, Waste Management must first obtain written approval (email is sufficient) from KCIW. For each proposed waste stream that exceeds the acceptance criteria, Waste Management shall submit for KCIW review and approval the following information at least 30 days before accepting the waste onto the site:

   a. Generator/source
   b. Waste profile form signed by the generator or authorized agent
   c. Analytical results summarized in table form
   d. Volume of material to be processed
   e. Projected dates material will be processed
   f. Disposal destination

   Upon receipt and review of the waste profile information KCIW reserves the authority to revise the conditions of this permit.

D. Granulated Activated Carbon (GAC) Vessels Breakthrough Monitoring Requirements

1. Waste Management shall collect weekly samples between the lead and lag GAC vessels (mid GAC) to check for breakthrough and have samples run on a 48-hour turn around or shorter. Samples must be analyzed for PCBs with a method detection limit not to exceed 0.1 µg/L.

2. The mid GAC sample results required by the permit shall be retained on site for a period of three years and shall be available for review at reasonable times by authorized representatives of KCIW

3. If PCBs (per aroclor, see S4.A.1 footnote) are detected in the effluent of the lead GAC unit at concentrations exceeding the established discharge limit (see S4.A.1), the permittee shall cease treatment and discharge to the sanitary sewer system until GAC change out of the lead unit is performed.

E. 24-Hour Composite Sampling Collection Method Plan

By no later than 90 days after receiving KCIW approval to discharge wastewater to the sanitary sewer through the Markey Machinery private sewer line on South Garden Street, the permittee shall submit a plan for KCIW review and approval to implement flow-proportional composite sampling or a justification to continue to collect time-proportional samples.

1. For flow proportional samples this plan shall include the following elements:

    a. Description of equipment to be used, such as flow meter(s) and sampling equipment types, manufacturers, and models, including specifications
    b. Schematic flow diagram indicating location of sample site and proposed metering and sampling equipment
    c. Sampling equipment settings
    d. Coordination with KCIW that the proposed sampling equipment and associated devices of the permittee will be compatible with the KCIW discharge compliance monitoring equipment

2. To continue to collect time proportional samples, the justification must describe the methods that will be used to collect time proportional samples and demonstrate that collection of time proportional composite samples is representative of the discharge. At a minimum, the justification must consider:

    a. Flow volumes from various processes and batch discharges
    b. The variability of these flows and the pollutant levels anticipated in each waste stream

c. The treatment systems employed
d. Discharge mode (continuous vs. batch, gravity vs. pumped)
e. The variability observed in wastewater quality to date
f. Any available comparisons between time and flow-proportional samples from this or similar sites

3. Until KCIW approves a composite sampling collection method (time vs. flow based), the permittee may collect time-proportional composite samples.

4. If it is determined that flow-proportional composite sampling must be implemented, the permittee must begin collecting flow-proportional composite sampling in accordance with the KCIW approved method within 90 days from KCIW's approval.

F. Flow Meter Calibration and Calibration Verification

The following are requirements for the calibration and calibration verification of flow meters.

1. The permittee must use calibrated flow meters to measure discharge volume and flow rate and follow the manufacturer's specification for calibration.

2. At least annually, the permittee shall verify the calibration of all flow meters used to calculate the discharge volume and flow rate from the industrial wastewater treatment systems.

   a. The verification must be performed by qualified staff. This could be either permittee's employee or third party.
   b. The verification may be performed on site or at a vendor site.
   c. At a minimum flow meter verification must be conducted, either a) by discharge to or from a vessel of known volume, b) by use of another flow meter that is calibrated by an independent third party, or c) by recalibration by the original manufacturer or another vendor.
   d. The acceptance limit for calibration verification is 90-110 percent of the reference measurement. The permittee must re-calibrate the flow meter(s) per manufacturer's specifications if the verification fails. All self-monitoring data taken with flow meters that fail verification must be noted on self-monitoring reports until the subject flow meter is back within acceptance limits.

3. Flow meter calibration and verification must be documented, and records must be obtained and be maintained on site for a minimum of three years.

G. Slug Discharge Control Plan

By no later than 30 days after receiving KCIW approval to discharge wastewater to the sanitary sewer through the Markey Machinery private sewer line on South Garden Street, Waste Management National Services - Duwamish Reload Facility shall submit an updated Slug Discharge Control Plan that includes all new areas. The purpose of the Slug Discharge Control Plan is to minimize the potential for slug discharges into the sanitary sewer system. The U.S. Environmental Protection Agency (EPA) defines a slug discharge as "any discharge of a nonroutine, episodic nature, including but not limited to, an accidental spill or a noncustomary batch discharge, which has a reasonable potential to cause interference or pass through, or in any way violate the POTW's [publicly owned treatment works] regulations, local limits, or permit conditions." At a minimum, your plan must include the following elements:

1. General company information:

    a. Company name
    b. Address
    c. Contact person(s)
    d. Phone number(s)
    e. Emergency 24-hour phone number(s)
    f. Operating schedule (days of week, hours)
    g. Describe nature of business

2. Facility layout flow diagrams (The information submitted with your KCIW permit application can be attached to this plan.)

3. Inventory of process tanks and new and waste chemicals stored on site (include location, chemicals and concentration, container type, average stored volume, total container volume, and special provisions taken to prevent slug discharges)

4. Description of discharge practices, including nonroutine batch discharges

5. Procedures for immediately notifying KCIW of spills or slug discharges and for follow-up written notification within 5 days

6. Inventory of spill and leak prevention equipment

7. Operation and preventative maintenance measures used to prevent a spill or slug discharge

8. Employee Safety and Training Program content and schedule. The program must include procedures for ensuring that all employees who work in production areas, that have wastewater which drains to a King County regulated sample site, are familiarized with the requirements of this permit prior to their working in those areas. Also, that employees specifically involved with wastewater treatment, sampling, or reporting are trained in the permitted discharge limits, reporting requirements, violation criteria, and how to appropriately respond in the event they become aware of a discharge, permit, or King County Code violation.

9. Description of previous slug or spill discharges that have occurred at your facility and corrective actions implemented to prevent recurrence

H. Sedimentation Tanks Maintenance

The permittee shall properly operate and maintain all wastewater treatment units to ensure compliance with established discharge limits. Solids accumulation in tanks used for solids settling shall not exceed 25 percent of the tank's working hydraulic capacity. Each tank's working hydraulic capacity is based on the water column height as measured from the bottom of the tank to either the invert elevation of the tank's outlet pipe (gravity discharges) or discharge pump intake (pumped discharges).

I. Organic Compound Screening Levels and Reporting Requirements

1. Discharges that exceed the following screening levels have the potential to cause health hazards in the sewage collection system or indicate that treatment has not been sufficient enough to remove hazardous waste characteristics.

Compound	CAS Number	Wastewater Screening Level (µg/L)
Benzene	71-43-2	70
Ethylbenzene	100-41-4	1,700
Tetrachloroethylene (PCE)	127-18-4	240
Toluene	108-88-3	1,400
Total Xylenes	1330-20-7	2,200
1,1,2 Trichloroethylene (TCE)	79-01-6	500

2. For each exceedance of the screening levels, the permittee shall:

   a. Notify KCIW within 24 hours of learning of the exceedance
   b. Collect a sample and submit new data to KCIW within 14 days of becoming aware of the exceedance (or the next time discharge occurs if greater than 14 days)

c. Submit a written report within 14 days of learning of the exceedance (*14-Day Report*)
d. The report should explain the cause of the exceedance and corrective actions taken to respond to the exceedance and ensure ongoing compliance

3. Whenever KCIW's monitoring or the permittee's self-monitoring results exceed the screening level for three out of four consecutive sampling events, the permittee shall submit a plan indicating the steps that will be taken to ensure that organic compound discharges do not exceed screening levels. The report:

   a. Shall be submitted within 30 days of the third self-monitoring result that shows organic compound discharges that exceed screening levels
   b. Shall indicate the steps that will be taken to reduce organic chemical concentrations so that they remain consistently below screening levels within 60 days
   c. May be used by the permittee or KCIW to evaluate the adequacy of your pretreatment system and other best management practices in order to identify whether additional waste characterization needs to be performed; or additional operational and structural upgrades are needed that will enable you to consistently meet King County organic compound screening levels

J. Wastewater Treatment System Operations and Maintenance Manual

By no later than 30 days after receiving KCIW approval to discharge wastewater to the sanitary sewer through the Markey Machinery private sewer line on South Garden Street, Waste Management shall submit a Wastewater Treatment System O&M Manual. The purpose of the manual is to present technical guidance and regulatory requirements to the operator(s) to enhance operation under both normal and emergency conditions. The operation and maintenance manual shall include the following topics:

1. The names and phone numbers of the responsible individuals

2. A description of plant type, flow pattern, operation, and efficiency expected

3. The principal design criteria

4. A process description of each plant unit, that includes function, relationship to other plant units, and schematic diagrams

5. An explanation of the operational objectives for the various wastewater parameters

6. A discussion of the detailed operation of each unit and a description of various controls, recommended settings, fail-safe features, etc.

7. A discussion of how the facilities are to be operated during anticipated startups and shutdowns, maintenance procedures, and less than design loading conditions, so as to maintain efficient treatment

8. A section on laboratory procedures that includes sampling techniques, monitoring requirements, and sample analysis

9. Recordkeeping procedures and sample forms to be used

10. A maintenance schedule that incorporates manufacturer's recommendations, preventative maintenance and housekeeping schedules, and special tools and equipment usage

11. A section on safety

12. A section that contains the spare parts inventory, address of local suppliers, equipment warranties, and appropriate equipment catalogues

13. Emergency plans and procedures

K. Contingency Sample Site Evaluation and Sample Site Relocation Assessment

By no later than 90 days after receiving KCIW approval to discharge wastewater to the sanitary sewer through the Markey Machinery private sewer line on South Garden Street, Waste Management shall submit an evaluation of autosampler performance under discharge conditions at the contingency sampling location prior to the split for the 8th Avenue and Garden Street discharges and report on the feasibility of relocating the official effluent sampling spigots for sample site A1215A to this location. The process flow diagram entitled Operations Containment Area Water Pretreatment System (Figure 3) provided with the December 6, 2019 (and subsequent updates) engineering report identifies the location of the WM and KCIW sampling ports on the effluent discharge pipe to the Markey Machinery private sewer line (Garden Street discharge). Unless there are demonstrated reasons that it is not feasible to collect representative samples, KCIW's preferred location is identified as "Contingency auto-sampler ports" on Figure 3. This preferred location is on the effluent discharge pipe, but before it splits into the two discharge pipes to the SPU sewer line on 8th Avenue South and the effluent discharge pipe to the Markey Machinery private sewer line.

S4. EFFLUENT LIMITATIONS & SELF-MONITORING REQUIREMENTS

A. Effluent Limitations and Self-Monitoring Requirements:

1. **Until discharge to the Markey Machinery private sewer line begins**, the permittee shall comply with the following discharge limits and monitor its discharges to the King County sewerage system as specified for IW1215A below.

Sample Site No.	*Limit Type*	*Sample Site Description*
IW1215A	King County Local Limits	Sample tap on treatment system discharge pipe

Parameter	*Daily Average (mg/L)*	*Instantaneous Maximum (mg/L)*	*Maximum Loading*[1] *(lbs/day)*	*Sampling Frequency*	*Sample Type*
Arsenic, Total[2]	1.0	4.0	0.39	Weekly	Composite
Cadmium, Total	0.5	0.6	0.16	Weekly	Composite
Chromium, Total	2.75	5.0	2.74	Weekly	Composite
Copper, Total	3.0	8.0	3.60	Weekly	Composite
Lead, Total	2.0	4.0	0.57	Weekly	Composite
Mercury, Total	0.1	0.2	0.06	Weekly	Composite
Nickel, Total	2.5	5.0	2.60	Weekly	Composite
Silver, Total	1.0	3.0	0.27	Weekly	Composite
Zinc, Total	5.0	10.0	6.00	Weekly	Composite
Cyanide, Amenable	2.0	3.0	NA	NA	NA
Nonpolar FOG	100	NA	NA	Weekly	Composite
Settleable Solids, Volumetric	NA	7 ml/L	NA	Daily	Grab
PCBs per Aroclor[3]	0.17 µg/L	NA	NA	Weekly	Composite
BNAs					
Benzo(a)pyrene	6.9 µg/L	NA	NA	Weekly	Composite
Pentachlorophenol	6.9 µg/L	NA	NA	Weekly	Composite
VOAs					
Benzene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Ethylbenzene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Tetrachloroethylene	See S3.I. for screening levels and reporting requirements			Weekly	Composite

[1] Applicable poundage limit for copper and zinc equals the daily average concentration in mg/L, multiplied by the flow in million gallons per day, multiplied by 8.34. Applicable poundage limit for arsenic, cadmium, chromium, lead, mercury, nickel and silver have been adjusted to prevent significant increase of pollutants at King County's West Point Treatment Plant influent.

[2] For the determination of total metals (which are equivalent to total recoverable metals) the sample is not filtered before processing.

[3] Discharge limit is for each Aroclor (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, and Aroclor 1260)

Sample Site No.	***Limit Type***	***Sample Site Description***
IW1215A	King County Local Limits	Sample tap on treatment system discharge pipe

Parameter	***Daily Average (mg/L)***	***Instantaneous Maximum (mg/L)***	***Maximum Loading[1] (lbs/day)***	***Sampling Frequency***	***Sample Type***
Toluene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Total Xylenes	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Trichloroethylene	See S3.I. for screening levels and reporting requirements			Weekly	Composite

pH (s.u.)	***Daily Minimum***	***Minimum***	***Maximum***	Daily	Grab
	5.5	5.0	12.0		

Daily Maximum Discharge Volume (gpd)	144,000	Continuous (In-line meter)	Meter Reading
Maximum Flow Rate (gpm)	100	Daily (In-line meter)	Meter Reading

A. Effluent Limitations and Self-Monitoring Requirements (continued):

2. **Once discharge to the Markey Machinery private sewer line is approved by KCIW**, the permittee shall comply with the following discharge limits and monitor its discharges to the King County sewerage system as specified for sample site numbers IW1251A, B, and C below.

Sample Site No.	***Limit Type***	***Sample Site Description***
IW1215A	King County Local Limits	Sample tap on treatment system discharge pipe

Parameter	***Daily Average (mg/L)***	***Instantaneous Maximum (mg/L)***	***Maximum Loading[1] (lbs/day)***	***Sampling Frequency***	***Sample Type***
Arsenic, Total[2]	1.0	4.0	0.39	Weekly	Composite
Cadmium, Total	0.5	0.6	0.16	Weekly	Composite
Chromium, Total	2.75	5.0	2.74	Weekly	Composite
Copper, Total	3.0	8.0	5.08	Weekly	Composite
Lead, Total	2.0	4.0	0.57	Weekly	Composite
Mercury, Total	0.1	0.2	0.06	Weekly	Composite
Nickel, Total	2.5	5.0	2.60	Weekly	Composite
Silver, Total	1.0	3.0	0.27	Weekly	Composite
Zinc, Total	5.0	10.0	9.11	Weekly	Composite
Cyanide, Amenable	2.0	3.0	NA	NA	NA
Nonpolar FOG	100	NA	NA	Weekly	Composite
Settleable Solids, Volumetric	NA	7 ml/L	NA	Daily	Grab
PCBs per Aroclor[3]	0.1 µg/L	NA	0.000408	Weekly	Composite
BNAs					
Benzo(a)pyrene	2.4 µg/L	NA	NA	Weekly	Composite
Pentachlorophenol	2.4 µg/L	NA	NA	Weekly	Composite
VOAs					
Benzene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Ethylbenzene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Tetrachloroethylene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Toluene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Total Xylenes	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Trichloroethylene	See S3.I. for screening levels and reporting requirements			Weekly	Composite

[1] Applicable poundage limit for arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc have been adjusted to prevent significant increase of pollutants at King County's West Point Treatment Plant influent.
[2] For the determination of total metals (which are equivalent to total recoverable metals) the sample is not filtered before processing.
[3] Discharge limit is for each Aroclor (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, and Aroclor 1260)

Sample Site No.	***Limit Type***	***Sample Site Description***
IW1215A	King County Local Limits	Sample tap on treatment system discharge pipe

pH (s.u.)	***Daily Minimum***	***Minimum***	***Maximum***	Daily	Grab
	5.5	5.0	12.0		

Daily Maximum Discharge Volume (gpd)	846,000	Continuous (In-line meter)	Meter Reading

Sample Site No.	***Limit Type***	***Sample Site Description***
IW1215B	King County Local Limits	Flow meter on discharge pipe to SPU Sewer on 8th Avenue South

Daily Maximum Discharge Rate Gallons per minute	100	Daily (In-line meter)	Meter Reading

Sample Site No.	***Limit Type***	***Sample Site Description***
IW1215C	King County Local Limits	Flow meter on discharge pipe to Markey Machinery private sewer line

Daily Maximum Discharge Rate Gallons per minute	572	Daily (In-line meter)	Meter Reading

3. A self-monitoring report of all required and nonrequired sampling must be filed no later than the 15th day of the time period following the reporting period (i.e., the 15th day of the following month for monthly reports; January 15, April 15, July 15, and October 15 for quarterly reports; January 15 and July 15 for semiannual reports; and January 15 for annual reports). The permittee shall use the KCIW self-monitoring form to submit results unless an alternate form is approved by KCIW. If no discharge has occurred during the sampling period, the report shall be submitted notifying KCIW that no discharge has occurred.

4. The total volume discharged for any processing day shall be calculated by reading the volume passing through a KCIW approved meter with numbers to be determined or shall be estimated using another KCIW approved method. The total volume for each processing day on which metal samples are collected shall be reported on self-monitoring reports. The total monthly discharge volume shall be reported on self-monitoring reports.

5. Volume and waste type from all batch discharges shall be recorded on the self-monitoring form.

6. For self-monitoring, the permittee shall collect composite samples in accordance with the following methods:

    a. Heavy metals and organics parameters (other than volatile organics):

        i. If time-proportioned composite sampling is authorized, a composite sample shall consist of four or more grab samples of equal volume collected at least 15 minutes apart and no more than two hours apart throughout the processing day from a well-mixed effluent chamber.
        ii. A flow-proportioned composite sample shall mean a sample composed of grab samples collected continuously or discretely, by hand or machine, in proportion to the flow at the time of collection or to the total flow since collection of the previous grab sample. The grab sample volume or frequency of grab collection may be varied in proportion to flow.

    b. A cyanide composite sample shall consist of four grab samples of equal volume collected at least 15 minutes apart and no more than two hours apart from a well-mixed effluent chamber. Each aliquot shall be collected, treated, and preserved in the field in accordance with 40 CFR 136 and 403 appendix E. Treated aliquots may be collected into a single container and analyzed as one sample.

    c. For volatile organic analysis (VOA), a composite sample shall consist of four grab samples of equal volume collected at least 15 minutes apart and no more than two hours apart from a well-mixed effluent chamber. Each aliquot shall be collected and preserved in the field in accordance with 40 CFR 136. The individual grab samples may be composited (at the laboratory) prior to analysis.

7. Discharges of caustic solutions greater than pH 12.0 are prohibited unless King County provides prior written authorization (email is sufficient). The authorized discharge of caustic solutions greater than pH 12.0 shall be subject to special conditions to protect worker safety and the POTW.

8. Should an automatic pH recording system fail (if required by permit or compliance order), the permittee shall manually check the pH at least four times per hour. Any discharge without a pH record shall be considered a violation of this permit.

B. Non-Required Self-Monitoring

All sampling data collected by the permittee, at the point of compliance, and analyzed using procedures approved by 40 CFR 136 or approved alternatives

shall be submitted to KCIW whether required as part of this permit or done voluntarily by the permittee.

C. Violation Criteria

1. Wastewater from regulated processes shall comply with the effluent limitations prior to dilution with other wastewaters unless a fixed alternative discharge limit is approved by KCIW. (See Section S8.C.4 for further information about dilution.)

2. A review of any violation will include consideration of testing accuracy prior to enforcement action.

3. The more restrictive limitation (concentration or mass) shall prevail for determining violations.

4. Daily average and maximum monthly average limits apply to composite samples and to grab samples from short-term batch discharges.

5. Instantaneous maximum limits apply to grab samples, with the exception of grab samples from short-term batch discharges.

6. The instantaneous minimum pH limit is violated whenever any single grab sample or any instantaneous recording is less than pH 5.0. The daily minimum pH limit is violated whenever any continuous recording of 15 minutes or longer remains below pH 5.5 or when each pH value of four consecutive grab samples collected at 15-minute intervals or longer within a 24-hour period remains below pH 5.5.

7. Non-polar FOG (mineral/petroleum origin) limit: 100 mg/L

   The limit for non-polar FOG is violated when either:

   - The arithmetic mean of the concentration from the individual analyses of three grab samples, taken no more frequently than 5-minute intervals, exceeds the limitation, or
   - The concentration of a single composite sample of three grab samples, taken no more frequently than 5-minute intervals, exceeds the limitation.

   Industrial users that violate the non-polar FOG limit may be required to complete, for King County review and approval, a FOG control plan.

D. Response when Violations Are Detected

1. When monitoring data shows a violation, the permittee shall:

   a. Take immediate action to stop the violation and notify KCIW within 24 hours of learning of the violation.

   b. Collect a sample and submit new data to KCIW within 14 days of becoming aware of the violation.

   c. Submit a written report within 14 days of learning of the violation (*14-Day Report*). The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.

2. In the event the permittee is unable to comply with any of the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature, the permittee shall:

   a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem.

   b. Immediately notify KCIW and, if after 5 p.m. weekdays and on weekends, call the emergency King County treatment plant phone number in Section S1 so steps can be taken to prevent damage to the sewerage system.

   c. Submit a written report within 14 days of the event (*14-Day Report*) describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent a recurrence.

3. Whenever an effluent check shows a pH violation, as defined in King County Code 28.84.060.N “Violations,” the permittee shall take immediate steps to bring the discharge back into compliance. If this is not possible, the permittee shall cease discharge.

4. Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

E. Limitations Applicable to All Sites

1. General

   The permittee's discharge shall not interfere with the operation of the King County sewerage system, cause King County to exceed its NPDES permit limits, or endanger local utility or King County sewer workers.

   The permittee's discharge shall not violate any discharge standard, limitation, or specific prohibition of King County Code 28.84.060 or local discharge limits applicable on the date of discharge. (See Section 28.84.060.D-F of King County Code.)

   Prohibitions previously referenced include, but are not limited to, substances causing fire or explosion hazard, flow obstruction, excess oxygen demand, and toxic vapors.

   Limitations listed in Section S4 include, but are not limited to, restrictions on settleable solids, organic compounds, hydrogen sulfide, and polar FOG.

2. Organic compounds

   No person shall discharge any organic pollutants that result in the presence of toxic gases, vapors, or fumes within a public or private sewer or treatment works in a quantity that may cause acute worker health and safety problems. Organic pollutants subject to this restriction include, but are not limited to, the following:

   - Any organic compound listed in the "Total Toxic Organics (TTO)" definition provided in 40 CFR Section 433.11(e) and 40 CFR Section 413.02(i)
   - Acetone, 2-butanone (MEK), 4-methyl-2-pentanone (MIBK), xylenes

   Industrial users are required to implement source control strategies and best management practices to minimize the concentration of any of the aforementioned organic pollutants.

3. Lower explosive limit (LEL)

   At no time shall two successive readings on an explosive hazard meter at the point of discharge into the King County sewerage system (or at any point in the system) be more than 5 percent of the LEL. No single reading shall exceed 10 percent of the LEL.

4. Closed cup flashpoint

   Discharges shall not have a closed cup flashpoint of less than 140° Fahrenheit or 60° Centigrade using test methods specified in 40 CFR 261.21.

5. Settleable Solids

   Discharge shall not have a settleable solids volume greater than 7 ml/L.

F. Responsibility for Compliance

It is the responsibility of the permittee to ensure that all effluent limitations of this permit are met whether or not self-monitoring for the parameter is required.

S5. SAMPLE SITE ACCESS AND IDENTIFICATION

A. Unobstructed access to sample sites shall be available to authorized KCIW personnel during normal operating hours. The permittee shall be responsible for providing alternate sample sites in the event of obstruction of access or upon evidence of tampering with the monitoring equipment.

B. The permittee shall allow KCIW to permanently label the sample sites used to collect wastewater samples.

C. The permittee shall, at all reasonable times, allow authorized representatives of KCIW to enter, inspect, and sample as specified in King County Code 28.84.060.L, "Inspection and Sampling of Industrial Users."

S6. NOTIFICATION REQUIREMENTS

A. Spills and Slug Discharges

1. The permittee shall notify KCIW immediately in the event of a spill or slug discharge to the sanitary sewer. A written report regarding the cause of the spill and/or slug discharge shall be submitted to KCIW within 5 days of the date of occurrence. The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance. (See Section S8.B for spill and slug discharge control procedures.)

2. Following a spill and/or slug discharge, KCIW may require the submission or modification of a spill/slug control plan.

B. Changes in Discharge Characteristics

The permittee shall inform KCIW prior to any facility or manufacturing changes that will result in:

1. Introduction of new wastewater pollutants

2. Significant alteration in the volume (greater than 20% increase from permit application) or character of the pollutants discharged to the King County sewerage system

3. Discharge of waste streams not listed in the permit application

4. Addition of a new point of discharge or a new chemical, process, product, manufacturing line, or waste processing activity

5. Elimination or replacement of a process, manufacturing line, or activity that produces wastewater

6. A modification to the sample site or sample collection method

7. Changes in the potential for spill or slug discharges

No change shall be made until plans have been approved and either written permission or a new or modified permit has been received. In no case are any changes permitted that will cause violation of the effluent limitations specified herein.

C. Installation/Modification of Pretreatment System

The permittee must provide engineering submittal(s) for KCIW review and approval prior to installing or modifying a pretreatment system. KCIW retains the authority to determine if the engineering submittal(s) must be developed under the supervision of a Washington state professional engineer and pursuant to Chapter 173-240 WAC.

D. Hazardous Wastes

1. Within 180 days following commencement of discharge or permit issuance, whichever is later, the permittee must notify KCIW, the U.S. EPA, and the Washington State Department of Ecology of any discharge of a listed or characteristic RCRA hazardous waste. Identifying the listed or characteristic RCRA hazardous wastes on the permittee's wastewater discharge permit application serves as notice to KCIW. This is a one-time notification requirement. The contents of the notification may vary according to the quantity of waste discharged. (See "Notification of the Discharge of Hazardous Wastes" in King County Code 28.84.060.)

2. Whenever the U.S. EPA publishes new RCRA rules identifying additional hazardous wastes or new characteristics of hazardous wastes, the permittee must notify KCIW, the U.S. EPA, and the Washington State Department of Ecology if any of these wastes are discharged to the King County sewerage system. Notification must occur within 90 days of the effective date of the published regulation.

E. Continuing Discharge after Permit Expiration Date

This permit does not authorize discharge after its expiration date. If the permittee wishes to continue discharge after the expiration date, an application must be filed for reissuance of this permit at least 180 days prior to the expiration date. If the permittee submits its re-application in the time specified herein, the permittee shall be deemed to have an effective waste discharge permit or authorization until KCIW issues or denies the new waste discharge permit. If the permittee fails to file its re-application in the time period specified herein, the permittee will be deemed to be discharging without a discharge permit after the current permit's expiration date.

S7. MONITORING AND RECORD KEEPING

A. Record Keeping and Retention

1. The permittee shall maintain records relating to all permitted discharges to the King County sewerage system including routine maintenance, waste disposal dates, manifests, self-monitoring reports, analytical lab results, pH monitoring records, and flow records.

2. All records required by the permit shall be available for review at reasonable times by authorized representatives of KCIW.

3. Records of all such testing shall be retained for a period of 3 years unless litigation or the direction of KCIW requires an extension of that time.

B. Recording of Results

For each measurement or sample taken to comply with this permit, the permittee shall record the following information:

1. Date, exact place, and time of sampling

2. Dates the analyses were performed

3. Person who performed the analyses

4. Analytical techniques or methods used

5. Results of all analyses

C. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and nature of the monitored discharge.

D. Test Procedures

All analyses shall be performed in accordance with procedures established by the administrator of the U.S. EPA pursuant to Section 304(g) of the federal Clean Water Act and contained in 40 CFR Part 136 and amendments thereto or with any other test procedure approved in writing by the U.S. EPA administrator, and/or KCIW. In all cases, except total dissolved sulfide, the detection limit shall be well below the discharge limit. Where 40 CFR Part 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analysis shall be performed in accordance with the procedures set forth in the U.S. EPA publication entitled *Sampling and Analysis Procedures for Screening of Industrial Effluents or Priority Pollutants*, April 1977 or *Standard Methods*, latest edition

and amendments thereto, or with any other sampling and analytical procedures approved by the U.S. EPA.

E. Lab Accreditation

All self-monitoring data submitted to KCIW that required a laboratory analysis must have been performed by a laboratory accredited by the Washington State Department of Ecology for each parameter tested. This does not apply to field measurements performed by the permittee such as pH, temperature, flow, atmospheric hydrogen sulfide, total dissolved sulfides, settleable solids by Imhoff cone, or process control information.

F. Falsifying Information

The act of knowingly falsifying, tampering with, or knowingly rendering inaccurate any monitoring device, report, or method required pursuant to the federal pretreatment standards, King County Code 28.84.060, or special conditions of this permit shall constitute a violation of this permit, and shall be subject to the legal remedies available under "Revocation of Permit or Authorization" and "Penalties and Enforcements" in King County Code 28.84.060.

G. Toxicity Testing

If KCIW is required by the Washington State Department of Ecology to determine the source of a pattern of acute toxicity pursuant to its treatment plant NPDES permit, the permittee may be required to test its effluent for toxicity according to procedures to be determined by KCIW.

H. Signatory Requirements for Industrial User Reports

Any report required by this permit shall meet the signatory and certification requirements listed in King County Code 28.84.060 and King County Code 28.82.

S8. OPERATIONS AND MAINTENANCE

The permittee shall use waste preventative practices to reduce or eliminate contaminant loading to the King County sewerage system. These practices shall include proper chemical storage, spill prevention and notification, and maintenance and operation of any required pretreatment equipment.

A. Chemical Storage

Chemical solutions, solid chemicals, waste materials, oils, and solvents shall be stored in a manner that will prevent the entry of these materials into the King County sewerage system.

1. Non-compatible chemicals shall be segregated and securely stored in separate containment areas that prevent mixing of incompatible or reactive materials.

2. The permittee shall install shut-off devices to all drains in any hazardous waste storage areas.

3. Chemicals shall be dispensed only in roofed and bermed areas that eliminate potential spills to the King County sewerage system.

4. All empty barrels that have not been cleaned (steam-cleaned or triple-rinsed) shall be adequately stoppered and stored in an upright position.

5. Process tanks shall be located in a bermed, roofed, secured area capable of containing 110% of the volume of the largest tank. The permittee shall ensure that process solutions are used and stored in such a manner as to minimize spills of concentrated solutions to the sanitary sewer.

B. Spill or Slug Discharge Control Procedures (See Section S6.A)

1. In the event of a concentrated solution spill such as a tank failure, the permittee shall not discharge any spilled solution to the metropolitan sewer system unless laboratory test results indicate that the substance meets the conditions of this permit and the permittee receives approval from KCIW.

2. Concentrated waste or spilled chemicals that do not meet, or are not treated to meet, the discharge conditions of this permit shall be transported off site for disposal at a facility approved by the Washington State Department of Ecology or appropriate county health department.

3. The permittee shall maintain and inspect all process solution tanks on a regular basis. Any leaks shall be repaired promptly.

4. The permittee shall use spill prevention practices to preclude the discharge of liquids, solids, or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion.

5. All process tanks and chemical storage containers shall be accurately labeled. Emergency phone numbers of King County, the fire department, the permittee's 24-hour corporate contact, and Washington State Department of Ecology shall be posted at all sites that KCIW requires.

6. The permittee shall ensure that concentrated waste from process tank filters and other equipment is prevented from entering the sanitary sewer unless it is treated to meet the discharge conditions of this permit.

7. The permittee shall maintain and use product recovery options such as drag-out rinses for each plating bath or process as required to meet the discharge conditions of this permit. Recovered materials shall not be discharged to the sanitary sewer unless they are treated to meet the discharge conditions of this permit.

C. Pretreatment Equipment Maintenance and Operations

1. All pretreatment systems used to bring the permittee's discharge into compliance with King County's discharge limitations and all compliance monitoring equipment shall be maintained continuously in satisfactory and effective operations by the permittee at the permittee's expense, and shall be subject to periodic inspections by authorized KCIW personnel. These systems shall be attended at all times during discharge to the King County sewerage system. In the event that such equipment fails, the permittee must notify KCIW immediately and take spill prevention precautions.

2. The permittee shall not initiate construction or modification of a pretreatment system prior to receiving KCIW approval of plans and specifications per WAC 173-240. In addition, KCIW may require an engineering report and an operations and maintenance manual.

3. KCIW shall be contacted before the beginning of any limited experimental modifications or new equipment testing that could reasonably be expected to affect effluent quality or quantity. This experimental work shall proceed only after securing written approval from KCIW and following the permittee's adherence to any applicable special conditions.

4. The effluent limitations specified in this permit are to be met by treatment of the wastes for pollutant removal. The use of municipal water, groundwater,

seawater, stormwater, or other materials, including waste products, for the purpose of diluting a waste to achieve those limitations is prohibited.

5. The permittee shall adequately maintain and efficiently operate all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

D. Water/Sewer Meter Requirements

The permittee shall obtain or maintain access to a water or sewer meter that can provide accurate information regarding industrial process wastewater and cooling water discharge to the sewer. Another method of volume determination may be used only upon approval by KCIW.

E. Solid Waste

1. The permittee shall handle and dispose of all solid waste material (as defined in WAC 173-304-100) not otherwise authorized by this permit in such a manner as to prevent its entry into the King County sewerage system.

2. All covers, screening devices, sumps, hoppers, conveyors, and other facilities provided for the recovery and handling of solid wastes are to be maintained in an efficient operating condition.

F. Stormwater

Stormwater, surface water, groundwater, and roof runoff shall be excluded, except where specifically authorized by this permit or King County Code 28.84.060, from the King County sewerage system.

S9. GENERAL CONDITIONS

A. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Whenever the permittee refuses to take corrective action or continues the violating condition, the imposition of civil penalties including fines up to $10,000 for each violation per day and/or termination of this permit may result. Termination of this permit may require disposal of the industrial waste in some manner other than into the public sewer, private sewer, or side sewer tributary to the King County sewerage system at the expense of the person holding the permit. Any person causing damage to a public sewer or treatment facility by discharges in violation of the terms and conditions of this permit shall be liable for any such damage incurred by King County as a result of such damage or discharge. Where criminal enforcement action is considered in a particular case, that case may be referred to state or federal authorities.

B. The diversion or bypass of any discharge from any pretreatment facility utilized by the permittee to maintain compliance with the terms of this permit is prohibited except where unavoidable to prevent loss of life or severe property damage. The procedure outlined in Section S4.D shall be followed in case of such a diversion or bypass.

C. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its terms for those causes cited in King County Code 28.84.060.

D. If a toxic standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the federal Clean Water Act for a toxic pollutant, which is present in the discharge authorized herein, and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, this permit will be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee shall be so notified. Section 307(a) requires that the administrator of the U.S. EPA shall promulgate effluent standards (or prohibitions) for toxic pollutants that he or she has listed as such.

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

F. All requirements and ordinances of the U.S. EPA and the Washington State Department of Ecology pertaining to hazardous and toxic wastes, disposal facilities, and discharge of wastes into the King County sewerage system, are hereby made a condition of this permit.

S10. WASHINGTON STATE DEPARTMENT OF ECOLOGY CONDITIONS

This permit does not constitute authority for discharge into waters of the state. Any such discharge is subject to enforcement action by the Washington State Department of Ecology.

Upon issuance of this permit, the permittee assumes the responsibility to abide by the following environmental requirements and any other appropriate regulations stipulated by the Department of Ecology. **The Department of Ecology retains authority to enforce these permit conditions (RCW 70.105 and RCW 90.48).**

A. Conditions to Protect Ground and Surface Waters

1. Contaminated waters or wastes shall not be discharged to state waters.

2. Boiler blow down and water shall not be discharged to state waters.

3. Solid chemicals, chemical solutions, waste materials, oils, and solvents shall be stored in a manner that will prevent the entry of these materials into state, ground, or surface waters, and in a manner that will prevent spillage by overfilling, tipping, or rupture.

4. The permittee shall handle and dispose of all solid waste material in such a manner as to not cause any adverse effect on ground or surface water quality.

5. Filtered solids or sludge shall be stored in such a manner that drainage from this material is prevented from either draining across public rights-of-way or entering the local storm drain system or the groundwater.

6. No emulsifiers or dispersants are to be used on waters of the state without approval from the Department of Ecology.

7. If corrosive processing solutions are used, the processing/plating floor shall be sealed with corrosion resistant material that prevents leakage. This coating shall be repaired or replaced as needed.

Questions regarding the implementation of conditions outlined in Section S10 should be directed to the regulatory authority, the Washington State Department of Ecology, at 206-594-0000 (Northwest Regional Office, 15700 Dayton Ave. N., Shoreline WA 98133).

King County

Industrial Waste Program
Company Fact Sheet – For Revision Within Permit Cycle

March 18, 2022

COMPANY INFORMATION

Company/Agency name:	Waste Management National Services - Duwamish Reload Facility
Facility address:	7400 8th Avenue S. Seattle, WA 98108
Mailing address:	7400 8th Avenue S. Seattle, WA 98108
Treatment plant:	West Point
Corp. contact & phone:	Zachary Jenkins, 206-496-7480
Site contact & phone:	Zachary Jenkins, 206-694-0586
Company/Agency type:	Solid Waste - Transfer Facility
Days operating:	365
SIC number:	4212 / 4953
EPA ID number:	NA
Compliance investigator:	Ryan Salem

PERMIT INFORMATION

Permit number: 7928-05

Original permit information

Issuance Date: August 4, 2021
Effective date: August 15, 2021
Expiration date: August 14, 2026

Permit revision information

Issuance Date: March 18, 2022
Effective Date: April 7, 2022

Description of sample sites, limit types, and discharge volumes:

Sample Site No.	Description	Limit Type	Maximum Discharge Volume (gallons per DAY)
IW1215A	Sample tap on treatment system discharge pipe	King County Local Limits	144,000 initially then 846,000[1]

[1] Maximum daily discharge volume is 144,000 gpd and discharge rate is 100 gpm until discharge to Markey Machinery private side sewer on South Garden Street is approved. Once KCIW approves discharge to the South Garden Street side sewer, the maximum daily discharge volume will be 846,000 gpd and discharge rate will be recorded under IW1215B & C.

Sample Site No.	Description	Limit Type	Maximum Discharge Volume (gallons per MINUTE)
IW1215B	Flow meter on discharge pipe to SPU sewer on 8th Avenue S.	Flow Rate	100
1W1215C	Flow meter on discharge pipe to South Garden Street via Markey Machinery private sewer line	Flow Rate	572

MONITORING FEE PARAMETER

Compliance Monitoring & Administration (CM&A) Fee

Category: NON-CATEGORICAL
Tier: 4/5*

*Waste Management Duwamish Reload facility will remain at the Tier 4 level of the Non-Categorical category (existing maximum daily discharge volume of 144,000 gallons per day [gpd]) until the facility is authorized to discharge to the South Garden Street Markey Machinery private sewer. Once the Waste Management Duwamish Reload facility is authorized to discharge to the South Garden Street Markey Machinery private sewer at the maximum daily discharge volume of 846,000 gpd, the facility will then be subject to Tier 5 CM&A fees associated with the Non-Categorical category.

Waste Management Duwamish Reload facility is a significant industrial user (SIU) with one regulated sample site. King County Industrial Waste Program (KCIW) collects composite effluent samples for field parameters, trace organics (VOAs, BNAs & PCBs); fats, oil, and grease (HEM); and trace metals. KCIW has determined that once the facility is authorized to discharge 846,000 gpd, KCIW will increase oversight and collect, at a minimum, quarterly effluent compliance samples. The basis for this determination is the extremely large permitted daily discharge volume coupled with other site specific considerations, such as the complexity and variability with the pollutants of concern that can be expected to be present at the site, based on the nature of the operation. Based on these factors, and in accordance with KCIW's CM&A fees criteria, Waste Management Duwamish Reload facility will be assigned to the CM&A fees Non-Categorical category, Tier 5 once the permitted daily discharge volume is set at 846,000 gpd.

PERMIT REVISION PROCESSING

Permit number: 7928-05

Action	Date
Final publication date	July 5, 2019
Published volume	846,000 gallons per day
Draft revision issued	NA
Final revision issued	March 18, 2022

PERMIT REVISION COMMENTS

This permit fact sheet primarily discusses the revisions made to the original permit. The fact sheet accompanying the original permit No. 7928-04 issued on August 4, 2021, includes detailed information about the company's nature of business, sources of wastewater, treatment systems, compliance history, trends in pollutants concentrations, self-monitoring requirements, KCIW monitoring, special conditions, applicable limitations, and other site information.

This permit is being revised by KCIW to address errors discovered in Table 1: Contaminated Dredged Material and Upland Soil Acceptance Criteria, located within Section S3.C.4 of Permit No. 7928-04.

The changes to Table 1 in this permit revision are as follows:

Parameter	CAS-RN	[Original] Sediment or Soil (mg/kg)	[Revised] Sediment or Soil (mg/kg)
Petroleum Hydrocarbons			
Total Petroleum Hydrocarbons (TPH)			
Gasoline Range Organics (GRO)	-	830	2,000
Other Organics			
Benzene	71-43-2	0.30	10.0
Tetrachloroethylene	127-18-4	0.09	14.0
Trichloroethylene	79-01-6	0.15	10.0

Additional changes to this permit revision are as follows:

1. The due dates for reports per S3.E, S3.G, S3.J, and S3.K have been updated in accordance with an extension approved by KCIW on September 30, 2021. The new due dates will be contingent upon Waste Management receiving approval to discharge wastewater to the sanitary sewer through the Markey Machinery private sewer line on South Garden Street.

2. Emergency Contacts for King County (S.1) have been updated to remove Patricia Magnuson and add Ryan Salem.

1. Updated slug/spill control plan
2. Updated O&M Manual
3. Contingency sample site evaluation

Waste Management explained that "upgrades to the treatment system will likely not be fully completed by May 1, 2020 and therefore discharge to the new Garden Street sewer connection is likely not set to occur before this date". Waste Management rationalized that it will take some time after modification to the treatment system and discharge practices are implemented before some of the required submittals can be submitted to KCIW. Waste Management requested that KCIW extend the required submittals due date to "120 days after the upgraded system begins discharging to the new sewer connection". KCIW evaluated Waste Management's request and determined that it was appropriate to extend the due date for all subject submittals from May 1, 2020 to September 1, 2020.

In its e-mail dated March 3, 2020, Waste Management did not request an extension for submittal of the Updated Determination of authorized 24-hour composite sample collection methods (S3.E.). While Waste Management did not specifically request an extension for submittal of this report, KCIW has extended the due date for this report to September 1, 2020, like other reports. KCIW made this decision since the reasoning for granting an extension for the other three reports also applies to this submittal.

If needed, Waste Management can request additional extensions for report(s) submittal, provided that the request is made in writing and submitted to KCIW at least one calendar week before each report due date.

Industrial Waste Program Monthly Self-Monitoring Report

King County

Send to: King County Industrial Waste Program
201 S. Jackson Street, Suite 513
Seattle, WA 98104-3855
Phone 206-477-5300 / FAX 206-263-3001
Email: info.KCIW@kingcounty.gov

Company Name: Waste Management National Services - Duwamish Reload Facility **Sample Site No.** IW1215A **Permit No.:** 7928-03

Please Specify Month & Year: **Month:** _____ **20**____ **This form is available at www.kingcounty.gov/industrialwaste.**

All units are mg/l unless otherwise noted. Note: For cyanide, circle test performed - amenable or total ▼

Sample Date (circle)	**Sample Type** C (Composite) G (grab) BC (batch)	pH (su) Min	pH (su) Max	Arsenic, As	Cadmium, Cd	Chromium, Cr	Copper, Cu	Lead, Pb	Mercury, Hg	Nickel, Ni	Silver, Ag	Zinc, Zn	Settleable Solids (ml/L)	NP Fats, Oils, and Grease	Daily Discharge Volume (GPD)	Flow Rate (gpm) **Circle maximum**	)
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Monthly Min pH _____ & Date _____ Total Monthly Flow (gallons) _____

Monthly Max pH _____ & Date _____ Maximum Daily Flow _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the 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. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Signature of Principal Executive or Authorized Agent Date

& Date _____

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: **Monthly report is due by the 15th each month.**

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
201 S. Jackson Street, Suite 513
Seattle, WA 98104-3855
Phone 206-477-5300 / FAX 206-263-3001
Email: info.KCIW@kingcounty.gov

Company Name: Waste Management National Services - Duwamish Reload Facility **Sample Site No.** IW1215A **Permit No.:** 7928-03

Please Specify Month & Year: **Month:** _____ **20**____

This form is available at www.kingcounty.gov/industrialwaste.

All units are µg/l unless otherwise noted.

Sample Date (circle)	**Sample Type** C (Composite) G (grab)	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Benzene	Benzo(a)pyrene	Ethylbenzene	Pentachlorophenol	Tetrachloroethylene	Toluene	Total Xylenes	Trichloroethylene	Comments / Notes
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the 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. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Signature of Principal Executive or Authorized Agent Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: **Monthly report is due by the 15th each month.**

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

December 30, 2019

WAR302034

John Borghese
Waste Management National Services, Inc.
7400 8th Ave S
Seattle, WA 98108-3460

Alaska Logistics LLC
7400 8th Ave S
Seattle, WA 98108

RE: Reissuance of the Industrial Stormwater General Permit

Dear John Borghese:

On November 20, 2019, the Department of Ecology (Ecology) reissued the Industrial Stormwater National Pollutant Discharge Elimination System and State Waste Discharge General Permit (permit). The permit becomes effective on January 1, 2020, and expires on December 31, 2024. A mobile friendly copy of the permit, permit forms, and information related to your permit can be viewed and downloaded at www.ecology.wa.gov/ISGPeCoverage-packet. **Retain this letter with your permit and Stormwater Pollution Prevention Plan. It is the official record of permit coverage for your facility.**

Permit Overview: The new permit has a number of changes. The changes are summarized in the fact sheet. You can find more information on Ecology's website at: https://ecology.wa.gov/industrialstormwaterpermit. Please contact Ecology if you have any questions.

Site Specific Monitoring Requirements: Your monitoring requirements may be viewed by logging in to WebDMR and viewing your first DMR. If you believe there is a discrepancy between what the permit requires and the DMR, please contact Ecology immediately. In the case of a difference between the permit as applied to your facility and the DMR, the permit requirements take precedence.

Copies of the Permit: You may download copies of the final permit, Fact Sheet, Response to Comments, and other supporting documents online at https://ecology.wa.gov/industrialstormwaterpermit.You may also request copies from Dena Jaskar at (360) 407-6401 or by email at dena.jaskar@ecy.wa.gov.

Appeal of Permit Coverage

You have a right to appeal coverage under the general permit to the Pollution Control Hearings Board (PCHB). Appeals must be filed within 30 days of the date of receipt of this letter. Any appeal is limited to the general permit's applicability or non-applicability to a specific discharge. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

Included is a Focus Sheet describing where and how to appeal this permit coverage. The Focus Sheet may also be accessed at https://fortress.wa.gov/ecy/publications/SummaryPages/1710007.html.

For Additional Information or Assistance

Ecology is committed to providing assistance to you. Please review our web page at https://ecology.wa.gov/industrialstormwaterpermit. For questions about transfers, terminations, and other administrative issues, please contact Josh Klimek at jokl461@ecy.wa.gov or (360) 407-7451.

If you have questions regarding stormwater management issues at your site, please contact Ben Billick at bbil461@ecy.wa.gov or (425) 649-7059.

Questions

If you have questions regarding the permit, please contact Travis Porter at (360) 407-6127, or Travis.Porter@ecy.wa.gov.

Sincerely,

Vincent McGowan, P.E., Manager

Program Development Services Section
Water Quality Program

Permit Number: 3016713

CITY OF SEATTLE
Land Use Permit

Department of Planning
and Development
700 Fifth Ave., Suite 2000
P.O. Box 34019
Seattle, WA 98124-4019
(206) 684-8600

APN #: 213620-0641

Site Address: 7400 8TH AVE S, SEATTLE, WA
Building ID(s): NONE
Location:

Legal Description: PARCEL A, LBA #3005372, KCR #20071010900018

Records Filed At: 7400 8TH AVE S

OWNER
EDWARD VINSON
1302 W RANDOLPH ST
CHICAGO, IL 60607
Ph: (312) 733-9320

APPLICANT
JOSH JENSEN
720 OLIVE WAY SUITE 1900
SEATTLE, WA 98101
Ph: (206) 903-3374

Primary Applicant

Application Date:	02/20/2014
Issued Date:	06/30/2014
Expiration Date:	06/24/2017
Fees Paid:	$11,340.75
As of Print Date:	07/07/2014

Description of Project: Land Use Application to install 1,300 linear ft. rail spur at existing marine terminal to connect existing Union Pacific Rail track to support future off-loading (removal) of contaminated waterway sediment. Review includes grading of 5,900 cu. yds. of material (1,900 cu. yds. cut; 4,000 fill). Environmental documents prepared by King County Environmental Health Services.

Permit Remarks:

Use: N
TRAO Applies: N
Land Use Conditions: N
Decision Type: II

Approved Uses	Location
Heavy Mfg	

Zoning/Overlays:
Industrial Genrl1 Unlimited/85
Liquefaction Prone Soils
Shoreline Habitat Buffer
Urban Industrial
Additional Information on File

Land Use Component Information

Component Type	Component Detail	Outcome
SEPA THRESHOLD DETERMINATION	SEPA FOR CONDITIONING ONLY	GRANTED

A/P #	Related Cases/Permits
6406480	Construction and Development Permit
6403798	Site Work Permit

Project Contacts	Name	Phone
Final Reviewer	BEN PERKOWSKI	(206) 684-0347
Zoning Reviewer	SCOTT RINGGOLD	(206) 233-5132

Applicant Signature: **Date:**

This Land Use Permit authorizes the use of the property and/or work described above. Permission is hereby given to develop the site address shown, according to the conditions hereon and according to the specification pertaining thereto, subject to compliance with the Ordinances of the City of Seattle.

Subsequent Demolition, Construction, Site Work, or Mechanical work may require additional permits and may not begin without the appropriate approval. Additional information may be obtained from the Department of Planning and Development at (206) 684-8169.

City of Seattle
Edward B. Murray, Mayor

Department of Planning and Development
D. M. Sugimura, Director

CITY OF SEATTLE
ANALYSIS AND DECISION OF THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND DEVELOPMENT

Application Number: 3016713

Applicant Name: Josh Jensen

Address of Proposal: 7400 8th Ave. S.

SUMMARY OF PROPOSED ACTION

Land Use Application to install 1,300-linear-foot rail spur at existing marine terminal to connect existing Union Pacific Rail track to support future off-loading (removal) of contaminated waterway sediment. Review includes grading of 5,900 cubic yards of material (1,900 cubic yards cut; 4,000 fill). Determination of Non-Significance has been prepared by King County. *

The following approvals are required:

SEPA – to impose conditions (Chapter 25.05, Seattle Municipal Code.)

SEPA DETERMINATION: [ ] Exempt [X] DNS * [ ] EIS

[ ] DNS with conditions

[ ] DNS involving non-exempt grading or demolition or involving another agency with jurisdiction.

BACKGROUND DATA

Site and Vicinity

The subject site is a total of 690,795 square feet and is located at 7400 8th Avenue South in Seattle. The portion of the site where the project will take place is zoned Industrial General-1 and is outside the Shoreline District. The remaining portion of the site adjacent to the project area is within the Shoreline District and is within the Urban Industrial (UI) shoreline environment, adjacent to the Duwamish Waterway. The southeastern corner of the property includes a portion of Slip 4. The northern part of the property is used by First Student, Inc., to schedule, stage and park school buses. The southern part of the property is used by Organic Fuel Processors, Inc., to receive, grind, and store wood, and by KRS Marine to load and unload cargo from barges. Approximately 97 percent of the site is impervious surface area.

* Determination of Non-Significance issued by King County (May 1, 2014).

Project Description

A property ownership transfer agreement was signed on April 22, 2014, between the former property owner, Crowley Marine Services (Crowley), and DeNovo. DeNovo is proposing rail maintenance and improvement activities at the subject site. The project includes the installation of a new rail spur to connect to the existing East Marginal Way rail line in support of sediment offloading and transfer activities. The proposed rail spurs will be constructed in an area that historically served for rail access on the property. No portion of this project involves development within the Shoreline District or structures requiring a building permit from DPD.

The proposed rail spur will extend approximately 1,300 feet along the eastern portion of the site from an existing Union Pacific Railroad (UPRR) line, splitting into three individual tracks approximately 400 feet from the existing UPRR line. The foundation of the proposed rail spur will consist of continuously welded steel rails that are either set on man-made ties or embedded in reinforced concrete slabs. The rails may be set on concrete ties and then encased with reinforced concrete or installed on precast concrete sections.

Proposed grading will require approximately 1,900 cubic yards (CY) of cut generated by removing the existing pavement and underlying imported fill material (approximately 0 to 3.5 feet below existing grade) within the footprint of the proposed rail spur to install reinforced concrete slabs and aggregate bedding for the rails. Additionally, grading of approximately 175 CY of existing pavement and imported fill material will occur in the upland portion of the site to accommodate an underground concrete electrical duct bank from the existing electric panel to the proposed rail to provide power to the motor operated rail switches. The total area of disturbance will be approximately 38,500 square feet (0.9 acre), all outside Shoreline District.

The reinforced concrete slab will be installed within the excavated area. The reinforced concrete slab thickness will be approximately 2 feet (totaling approximately 2,250 CY), placed atop a 1- to 2-foot-thick clean aggregate bedding layer (totaling approximately 1,750 CY), requiring approximately 4,000 CY of total fill. The footprint of the reinforced concrete slab is estimated to be approximately 15 to 45 feet wide (assuming the slab extends 5 feet on either side of the rails).

The proposed rail spur will be installed with a finished surface approximately 6 inches above the existing grade. After the proposed rail spur construction is finished in July 2014, the dredge sediments reload operation will commence. Barges will be received and moored in the barge berthing area adjacent to the existing pier in Slip No. 4 of the Lower Duwamish Waterway. The barges will be towed by independent operators under separate contract. All barge movement on the Duwamish Waterway will be conducted in accordance with Federal Navigation Regulations. It is anticipated that approximately 300- to 500-ton-capacity barges will be received at the facility.

Sediments will be offloaded from barges using a track-mounted barge offloader, over spill plates, and into prefabricated storage containers located adjacent to the barge berthing area. Operational equipment (wheeled loaders and excavators) will be mobilized from an upland storage area, located outside of the Shoreline District to the existing pier, in order to support sediment offloading operations, and will then be returned to the upland storage area when operations have ceased. Operational equipment will include a track-mounted Sennebogen 875 or equivalent material handler for offloading sediment from barges to pre-fabricated steel boxes located adjacent to the barge berthing areas.

The pre-fabricated steel boxes will facilitate transloading and dewatering of sediments by transferring the sediment from the steel boxes either to lined gondola rail cars on the proposed rail spur, or to a secondary containment area located outside the Shoreline District. The pre-fabricated steel boxes will be temporary, watertight containers that can be transported with container moving equipment and will be mobilized from the upland to the shoreline area during sediment offloading operations. The steel boxes will be loaded with sediment and then unloaded using front-end loaders either to the new rail spur or to the secondary containment area. All sediment handled at the site (either from the steel boxes or from the upland secondary containment area) will be placed into lined gondola rail cars for transport off-site for disposal at an approved landfill facility. The site will serve as a throughput facility, so offloaded sediment will not remain on-site for extended durations of time.

Dredge sediments offloaded into the pre-fabricated storage containers may be direct loaded into lined gondola rail cars if the water content of the sediments is adequate for transport. Sediment transportation requirements require that the gondola rail cars do not contain free liquids at the time they are loaded. Sediments too wet for direct loading will be amended with environmentally benign absorbent material either in the prefabricated storage containers or the secondary containment area until the material is within a satisfactory moisture content range for rail transport. The material used for amending wet sediments is anticipated to be cement kiln dust or other acceptable absorbent material.

Collection of decant water from the operations will occur in the barge, steel boxes, and secondary containment area. Stormwater runoff will also be collected from the operational area. Collected water will be pumped to portable detention/equalization tanks, put through an on-site portable temporary water pretreatment facility located outside of the Shoreline District, and discharged to the local Publicly Owned Treatment Works (POTW) via the existing sewer system, in compliance with a King County Wastewater Discharge Permit. The water pre-treatment facility is a typical best management practice (BMP) required by a King County Industrial Wastewater Discharge Permit for permit compliance.

Public Notice and Comment Period

Notice of the application was published on February 27, 2014. The required public comment period ended on March 12, 2014. No public comments were received.

SEPA ANALYSIS

A SEPA Checklist dated Feb. 11, 2014, was submitted to King County and is part of the project file for this application. On May 1, 2014, King County made a Determination of Non-Significance for the proposal. Project specific environmental impacts of the improvements have been disclosed and analyzed in the documents provided by King County, acting as Lead Agency. The Seattle SEPA Ordinance provides substantive authority to require mitigation of adverse environmental impacts resulting from a proposed project (SMC 25.05.655 and 25.05.660). Mitigation, when required, must be related to specific environmental impacts identified in an environmental document and may only be imposed to the extent that a given impact is attributable to a proposal, and to the extent that the mitigation is reasonable and capable of being accomplished. Additionally, mitigation may be imposed only when based on policies, plans and regulations referenced in SMC 25.05.665 to SMC 25.05.675 inclusive (SEPA Overview Policy, SEPA Cumulative Impacts Policy, SEPA Specific Environmental Policies). In some instances, local, state or federal regulatory requirements will provide sufficient mitigation of an impact and additional mitigation imposed through SEPA may not be necessary.

Short-term Impacts

Grading and filling activities pose some potential danger of contamination of groundwater and surface water at and adjacent to this site. The proposed project at this site is within the boundaries of Model Toxics Control Act site regulated by Washington Department of Ecology. Pursuant to an Agreed Order, Ecology is working with the applicant to determine an appropriate sampling plan to be conducted in the area where excavation will occur for the rail line prior to conducting certain grading activities. Through coordination with Ecology under the Agreed Order, material found to be contaminated will be disposed of at an appropriate off-site disposal facility. During construction, stormwater within the active construction area will be prevented from entering nearby surface waters, per the Construction Stormwater Control Plan. In addition, A Spill Prevention, Control, and Countermeasures Plan (SPCC) will be implemented to prevent, prepare for, and respond to any incidental spills that may occur during the project. Erosion control measures will be addressed in a Temporary Erosion and Sediment Control (TESC) Plan prepared by the contractor and adhered to during construction.

City codes and/or ordinances apply to the proposal and will provide mitigation for some of the identified impacts in the submitted environmental documents. Specifically, these are: 1) Street Use Ordinance (watering streets to suppress dust, obstruction of the pedestrian right-of-way during construction, construction along the street right-of-way, and sidewalk repair); 2) Building Code (construction measures in general, including best management practices to address potential runoff of surface water and sediment to the Duwamish during construction); and 3) the Stormwater Code and Grading Code place considerable emphasis on protecting water quality. This generally takes the form of best management practices being required on building permits.

Compliance with these applicable codes and ordinances and BMPs will be adequate to achieve sufficient mitigation and further mitigation by imposing specific conditions is not necessary for these impacts. The other short-term impacts not noted here as mitigated by codes, ordinances or conditions (e.g., increased traffic during construction, additional parking demand generated by construction personnel and equipment, increased use of energy and natural resources) are not sufficiently adverse to warrant further mitigation or discussion.

Greenhouse Gas

Construction activities including construction worker commutes, truck trips, the operation of construction equipment and machinery; and the movement of vehicles — themselves result in increases in carbon dioxide and other greenhouse gas emissions which adversely impact air quality and contribute to climate change and global warming. While these impacts are adverse, they are not expected to be significant due to the increased contribution of greenhouse gas emissions from this project.

Long-term Impacts

Long term or use-related impacts are also anticipated as a result of this proposal, including: increased bulk and scale on the site; increased traffic and railroad activity in the area and increased demand for parking; increased demand for public services and utilities; and increased noise, light and glare. While these impacts are adverse, they are not expected to be significant and do not warrant further mitigation or discussion.

The project also will result in an increased risk of contamination of soil, surface and ground water, due to the handling and storage of contaminated sediments. Stormwater generated within areas of

operation for the facility will be collected, pumped to portable detention/equalization tanks, put through an on-site portable water pre-treatment facility and then discharged to the local sewer system in compliance with a King County Industrial Wastewater Discharge Permit for the project, per the Drainage Control Plan. In addition, spill prevention measures will be employed as well as other operational BMPs, described in application and the SPCC, to address the risk of contamination due to incidental spills. Prior to operation of the facility, the applicant will obtain a "Piles Used for Storage or Treatment Permit" from King County. Compliance with applicable codes and ordinances will reduce or eliminate most adverse long-term impacts to the environment.

Operational activities, primarily vehicular and railcar trips associated with the project and the projects' energy consumption, are expected to result in increases in carbon dioxide and other greenhouse gas emissions which adversely impact air quality and contribute to climate change and global warming. While these impacts are adverse, they are not expected to be significant due to the relatively minor contribution of greenhouse gas emissions from this project.

No further conditioning or mitigation is warranted pursuant to specific environmental policies or the SEPA Overview Policy (SMC 25.05.665).

DECISION - SEPA

This decision was made after review by the responsible official on behalf of the lead agency of a completed environmental checklist and other information on file with the responsible department. This constitutes the Threshold Determination and form. The intent of this declaration is to satisfy the requirement of the State Environmental Policy Act (RCW 43.21.C), including the requirement to inform the public of agency decisions pursuant to SEPA.

[X] Determination of Non-Significance. This proposal has been determined to not have a significant adverse impact upon the environment. An EIS is not required under RCW 43.21C.030 (2)(C).

SEPA Conditions

None.

Signature: (signature on file) Date: June 9, 2014
Ben Perkowski, Land Use Planner
Department of Planning and Development

BP:rgc
K:\Decisions-Signed\3016713.docx

Permit Number:
6403798

CITY OF SEATTLE
Site Work Permit

Department of Planning
and Development
700 Fifth Ave., Suite 2000
P.O. Box 34019
Seattle, WA 98124-4019
(206) 684-8600

DISTRICT 7

APN #:
213620-0641

Site Address: 7400 8TH AVE S, SEATTLE, WA

Location:

Legal Description: PARCEL A, LBA #3005372, KCR #20071010900018

Records Filed At: 7400 8TH AVE S

OWNER	CONTRACTOR
ALUN JONES 9487 REGENCY SQ BLVD JACKSONVILLE, FL 32225 Ph: (904) 727-8800	

Application Date:	03/11/2014
Issue Date:	07/20/2014
Expiration Date:	01/20/2016
Fees Paid:	$905.00
As of Print Date:	07/20/2014

Description of Work: Grading for installation of rail spur for existing marine terminal, per plans.

Permit Remarks:

GRADING

DPD Valuation: $0.00

Special Inspections: N

Land Use Conditions: N

Zoning/Overlays:
Industrial Genrl1 Unlimited/85
Liquefaction Prone Soils
Shoreline Habitat Buffer
Urban Industrial
Additional Information on File

A/P #	Related Cases/Permits
3016713	Master Use Permit

Project Contacts	Name	Phone
LU Planner	BEN PERKOWSKI	(206) 684-0347
Zoning Reviewer	SCOTT RINGGOLD	(206) 233-5132
Primary Applicant	JOSH JENSEN	(206) 903-3374

Applicant Signature: **Date:**

Approved work must not progress without prior inspection approval. When ready for inspection, make request with the Department of Planning and Development at (206) 684-8900, or on the internet at: www.seattle.gov/dpd/permits/inspections/. **Provide the permit number, site address, and contact phone.**

Permission is given to do the above work at the site address shown, according to the conditions hereon and according to the specification pertaining thereto, subject to compliance with the Ordinances of the City of Seattle. Correct information is the responsibility of the applicant. Permits with incorrect information may be subject to additional fees.

THIS PERMIT MUST BE CONSPICUOUSLY POSTED AT THE WORK SITE

PERMIT # 6403798

City of Seattle
Department of Planning and Development
700 Fifth Ave., Suite 2000

POST THIS SIDE OUT: THIS APPROVAL MUST BE CONSPICUOUSLY POSTED AT THE WORK SITE

TO THE CONTRACTOR/OWNER,

Additional permits may be required for work occurring under this permit. This permit does not authorize Sewer, Public Right-of-Way Shoring, Drainage and Street Use, Fire Department, Boiler, Electrical, Elevator, Furnace, Gas Piping, Plumbing, or Sign permits. If other permits are required, they must be applied for separately from this permit. The requirements for all other permits related to this Permit, must be completed prior to the Final Inspection of this permit.

This Permits Final Inspection is required. The premises must not be occupied until the Final Inspection is provided and occupancy is authorized by the Seattle Department of Planning and Development.

ISSUED PERMIT STATUS:

You can check the status of issued permits on the internet at: www.seattle.gov/dpd

INSPECTION REQUESTS:

Please clarify which inspections your project requires before proceeding with your project.

You may request an inspection on the internet or by phone. Inspection requests received **before 7:00 AM** are scheduled for the same working day. Inspection requests received **after 7:00 AM** are scheduled for the next working day. Inspectors are available between the hours of 7:30 AM and 8:30 AM.

A) **Internet:** www.seattle.gov/dpd/permits/inspections/ Under ***Scheduling an Inspection*** click ***Requesting an inspection online***.
B) **24 hour inspection request line at (206) 684-8900**, cell phones are discouraged due to frequent connection problems.
C) **Customer Service at (206) 684-8950** between the hours of 7:30 AM and 4:30 PM.

FIRST GROUND DISTURBANCE:

A) Before First Ground Disturbance, request an inspection of installed **Erosion Control Measures**.
B) When required, request a **Pre Construction Conference** to review project conditions and Special Inspections by calling (206) 684-8860.
C) If this permit requires a **Soil Bearing Capacity** special inspection by a Geotechnical Engineer, that approval is required before the foundation pour. The Building Inspector will accept the Geotechnical Engineer's approval signature below.
D) When **Special Inspections** are required, notify the Special Inspection Agency at least 24 hours in advance.

Waste Management Special Waste Acceptance and Hazardous Waste Exclusion Plan

SPECIAL WASTE ACCEPTANCE & HAZARDOUS WASTE EXCLUSION PLAN

8TH AVENUE RELOAD FACILITY
7400 8TH Avenue S
Seattle, WA 98108

May 2019

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1 PROGRAM OVERVIEW

This Special Waste Acceptance & Unacceptable Waste Exclusion Plan (SWAHWEP) specifies standard protocols and document forms to accomplish the following:

(a) Prevent unacceptable wastes, such as regulated hazardous waste from entering the facility.

(b) Detect and properly manage unacceptable wastes, when identified.

(c) Profile special waste streams managed at the facility.

(d) Provide an avenue for submission of special waste stream applications to a centralized unit of the Company (Region/District or Corporate) for authorization prior to acceptance.

(e) Effect a proper review of each waste stream application by qualified personnel.

(f) Provide a mechanism for an orderly submission of special waste applications to regulatory agencies for approval (if required).

(g) Assign and issue a specific identifying Waste Authorization Code for tracking of paperwork.

(h) Manifest of all authorized waste streams into each facility where required by law, regulation or market standard.

(i) Provide on-site waste verification and record keeping for each waste stream.

(j) Complete a regular in-house review of special waste procedures and documentation.

Wastes covered by this program shall not be accepted for transfer, storage, or disposal without first completing the WM approval process by receiving an approval from a WM Waste Approval Manager (WAM). Wastes defined as "unacceptable" under this program will not knowingly be accepted for transfer through the facility to the offsite disposal facility. A prevention, detection, and management program is in place to;

- minimize the possibility of having unacceptable wastes delivered to the facility,
- detect and reject unacceptable wastes that are being or have been delivered to the facility, and
- properly manage any unacceptable wastes that may escape prevention and detection efforts.

1.1 DEFINITIONS

The following definitions apply to terms referenced in this program document.

- Dangerous Waste – as defined by Chapter 173-303 Washington Administrative Code.
- RCRA - Resource Conservation and Recovery Act of 1976, as amended.
- Hazardous Waste - as defined under 40 CFR, Part 261.
- TCLP - Toxicity Characteristic Leaching Procedure.
- Regulator – state or local agency with permitting and surveillance/enforcement authority over the site.
- Site – the WM 8th Avenue waste transfer/reload facility, and all downstream landfills or treatment facilities permitted to accept the waste.
- Generator – an entity that has generated a waste and seeks to dispose of it at a Waste Management facility.

- Transporter – an entity with responsibility for transporting the waste to the Waste Management receiving or transfer/reload site.

1.2 SPECIAL WASTE DEFINITION

1.2.1 Wastes Covered by this Program

"Special wastes" generally covered under this program are defined as any waste liquid, semi-solid, solid material and associated containers generated as a direct result of an industrial, manufacturing or processing operation. Examples of these special wastes are generally as follows;

- any chemical or petroleum contaminated media
- any sludge or residue from an industrial process or treatment unit
- any non-hazardous contaminated dredge sediment or upland soils;
- any waste classified as "special" or regulated by a State or other regulatory agency.

The 8th Ave Reload Facility (8ARF) will also process through the onsite wastewater pre-treatment unit all non-hazardous wastewaters that do not meet the categorical wastewater standards as defined in 40 CFR Part 437. These include but are not limited to;

- Stormwater catch basin, conveyance and systems clean-out
- Groundwater well drilling and development slurries and liquids
- Construction related slurries (i.e. jet grout)
- Construction related non-hazardous wastewater and stormwater
- Pond clean-outs and maintenance
- Boiler Maintenance
- Others, with prior regulatory approval

"Unacceptable wastes" are bulk and containerized wastes that are not acceptable for treatment or disposal at the final destination facility, based on restrictions in local, state, or federal regulation, permit condition, or by management discretion. Such wastes include;

- Unapproved special wastes,
- Burning or hot wastes,
- Radioactive wastes,
- Regulated polychlorinated biphenyls (PCBs) under the Toxic Substances Control Act (TSCA),
- Non-containerized categorical liquid wastes as defined in 40 CFR Part 437,
- Non-containerized MSW, C&D, yard and landscaping waste, food waste,
- Non-containerized regulated state or federal dangerous or hazardous wastes,
- Non-containerized tires and white goods.

2 IMPLEMENTATION AND TRAINING

2.1 Responsibility

- The District Manager is responsible for the program and is the ultimate authority for any modifications to the program not specifically defined by the SWAHWEP.
- The Area Environmental Manager (EM) and Waste Approval Manager working with the various Sales Consultants and Site Managers are responsible for the conduct of the program at the Area level.
- The Site Manager and Sales staff implement the SWAHWEP at each individual operating site.

2.2 Training

- The District Manager (DM) will monitor the general program and the training of program personnel using various tools including program audits, regular visits and review with the EM and staff, participation in Managers' Workshops, or similar events, and management discretion. Feedback on the program from Area and site personnel will serve as the basis for any directives concerning training of personnel or modifications in the program.
- The EM may directly provide the training of the Region/District staff or staff will be trained electronically using the WM proprietary training delivery system.
- Staff and managers will also employ training from outside the Company or professional courses as necessary. WM managers and EM will review the knowledge and capabilities of training personnel at the Area level and will coordinate such outside training activities with the DM.
- The Site Manager will provide training of site personnel involved either directly or indirectly in acceptance and handling of wastes covered by this plan. Such training will be done at least annually using scheduled sessions, such as site safety meetings. Training content and personnel attending will be documented using WM standard forms. Training is tailored to the site and the specific personnel present, and may cover such topics as a program overview, responsibilities of specific personnel, how to identify acceptable and unacceptable wastes, hazards associated with waste streams and protective measures to ensure environmental health and safety, how to conduct and document random load checks, what to do if an unacceptable waste, including hazardous waste or regulated PCB waste is found, and any specific directives concerning individual special waste streams.

3 PERSONNEL AND DOCUMENTS

3.1 Personnel

- District Manager - individual responsible for site operation and the one who will ultimately manage the special waste stream.
- Operator - employee at the site who is charged with performing duties at the transfer facility.
- Sales Staff - individuals from Waste Management who is working with the special waste generator to develop an agreement to bring the special waste to a Waste Management site.
- Waste Approval Manager – (WAM) technical person at the WM Corporate office who reviews and approves all generator profiles.
- Technical Service Center – (TSC) experienced technical personnel who assist the generator in completing the profile package and the service contracts.

4 PROFILING OF WASTE STREAMS

In order to prevent unacceptable waste from entering the facility, the facility requires the generator to submit a waste profile package for all special waste streams including dredged sediments, upland contaminated soil, and non-categorical wastewaters. An example of a Generator's Waste Profile form is supplied in Attachment A. All relevant information including generator profile, analytical reports, and generator signed certification statement are required for processing of the profile by the waste approval manager. The completed generator's waste profile package is reviewed to determine whether the special waste may be managed at both the transfer/reload facility and the final destination facility. WAM's will provide any specific handling conditions that may be required on the approval document.

Additional waste or industry specific profile forms, or modifications to the Generator's Waste Profile form may be developed and utilized upon Waste Management approval.

4.1 Completion of Profile Sheets

The Technical Service Center (TSC) is responsible for working with the generator or their authorized representative to assemble the complete profile package ready for review by the WAM.

4.2 Minimum Waste Data

The analyses or information required on individual waste streams varies according to the waste stream and applicable regulatory requirements. In any case, analytical reports or other information, such as MSDS/SDS/GHS Sheets or generator knowledge and certification sufficient to perform a characterization of the waste are required as part of the Generator's Waste Profile.

Typical analyses for non-wastewaters (solids, sludges, semisolids) may include laboratory analytical for:

- Metals (TCLP)
- Organics
- Corrosivity (pH)
- Flashpoint
- Reactivity
- BTEX

Typical analyses for non-categorical wastewaters may include laboratory analytical for:

- Metals (TCLP)
- Corrosivity (pH)
- Flashpoint
- Reactivity
- BTEX

Required minimum analyses for the receipt of non-categorical wastewaters at 8ARF are detailed in **Attachment B**. Required testing parameters and informational data are at the discretion of the Waste Approval Manager.

WAM's request analytical from the generator based on the suspected contaminants and/or the process generating the waste. In some cases, additional laboratory analysis of the waste may also be requested.

4.3 Use of Process Knowledge

The use of process knowledge may be utilized to modify, reduce, or eliminate the required spectrum of analytical testing for a given waste stream. Use of process knowledge is at the discretion of the Waste Approval Manager.

5 WASTE APPROVAL PROCESS

5.1 Waste Management Profile Approval

Once the WAM has reviewed the generators waste profile and found it acceptable for the facilities requested, the WAM creates a waste profile approval document which is sent to the generator by the TSC. The TSC then uploads the approved profile into the FastLane system. The Waste Profile number acts as the waste approval and tracking number for the waste throughout the approval timeframe.

5.2 Submission for Approval

The WM TSC group obtains the completed signed profile package from the Generator such that the WM WAM can begin their review and approval process. If the WAM requires additional information, the WAM and/or TSC personnel obtain it from the generator.

5.3 Profile Review and Approval

The WAM is responsible for determining if the profile package is complete and that all generator supplied data and information is consistent and reasonable. Once the package is complete the WAM reviews the waste characterization versus the transfer/reload facility and the final disposal facilities permits. If the generators profile information package submitted is complete, WAM review of the package is generally completed within three business days.

5.4 Wastes Found to be Unacceptable at Intended Facility

In most cases if the waste is not acceptable for the facility requested by the generator; the generator is requested to modify the waste profile requesting another permitted facility approved for the waste as characterized. The TSC works with the Sales Consultant and/or Generator to approve the generators waste into the proper facility.

5.5 Point of Sale System

WM operates a proprietary point of sale system known as FastLane^{tm} in all scale houses at facilities accepting wastes. For a WM facility to be able to accept wastes an approved profile must be uploaded to the FastLane^{tm} point of sale system by the TSC group. The profile in FastLane^{tm} has an expiration date and all the particulars for the approved waste stream. The FastLane^{tm} system also is used for customer billing.

5.6 Duration of Authorization

The duration of a waste authorization varies on a case-by-case basis, depending on customer needs, the type of waste, how the waste is generated, or expected variability in the waste stream. Waste authorizations become invalid after the duration of authorization ends. Waste authorizations must be renewed if continued disposal is desired. Additional analytical data may be required at the discretion of the Waste Approval Manager. Generally, profiles are approved for 2 years if the project is ongoing.

5.7 Approval by Regulatory Agencies

Once the waste stream request is reviewed and approved by WM, waste exhibiting contaminants in exceedance of the facilities King County Industrial Discharge Permit are submitted to the agency,

6 MANIFESTS

6.1 Approved Manifests

Shipping manifests or bills of lading may be part of the special waste documentation in locations where it is required by law, regulation or market practice. Manifests are **not** required for use by 8ARF.

7 ACCEPTANCE AT FACILITY

7.1 Verification Upon Arrival

Upon arrival at the facility, loads of special waste are checked for conformity with the approved Profile beginning at the scale, and again during unloading. Loads of special waste are screened for the presence of unacceptable waste via visual inspection and/or questioning the driver or barge operator about the load. Special waste loads that do not conform to the approved Profile may be rejected. Unacceptable wastes of any kind are rejected.

7.2 Random Load Inspection Program

Incoming loads of waste materials are subject to random load inspections. Loads are selected for inspection on a random basis. Discrete loads of special wastes that do not unload directly into the Operations Containment Area (OCA)are inspected at the final destination and are not subject to random load inspection at 8ARF. Random load inspections are conducted at least once per week. The results of random load inspections are documented, and records are maintained at facility on file for at least three years.

7.3 Management of Unacceptable Waste

If unacceptable waste is detected, it is rejected, and, typically returned to the generator. If return to the generator is deemed unsafe due to the nature of the material, 8ARF will coordinate safe management of the material, and reserves the right to bill the generator for such services. The event is used to educate the generator about appropriate alternatives and to detect and prevent unacceptable waste at the facility. A sign at the facility entrance describes acceptable and unacceptable wastes.

7.4 Sampling of Load

Waste Management does not sample loads of waste entering the site, At a minimum verbal waste screening and visual inspection will be used to ensure the acceptability of special wastes and other wastes.

8 WASTE DISCREPANCIES

The entire documentation/characterization process must be complete and error-free for a special waste load to be accepted at the site.

8.1 Non-Conforming Conditions

A waste screening process is in place to assure that wastes that are delivered to the facility are acceptable for management, and that special wastes conform to the approved Profile. The following non-conforming conditions will result in refusal of the load:

Non-Conforming Paperwork - the paperwork is incomplete, inaccurate, out of date, or does not adequately characterize the waste load. Appropriate corrections or additions must be approved by the WAM before the waste load is accepted.

Non-Conforming Special Waste Load – based on verbal questioning, visual screening, or other screening techniques, the waste load appears to be inconsistent with the approved Profile or manifest or the general appearance is different from previous experience with the particular special waste.

Unacceptable Waste Load or Partial Load – based on verbal questioning, visual screening, or other screening techniques, all or part of the load is found to be unacceptable.

8.2 Rejection of Waste Load

Nonconforming loads are rejected and the District Manager or his designee informs the Generator as to the reason for rejection. Documentation of rejected loads may include written correspondence to the Generator, and/or analytical data.

8.3 Actions Taken if Unacceptable Wastes is Found at the Facility

Despite the best efforts by the facility to prevent unacceptable wastes from entering the facility, and to reject unacceptable wastes that are detected, a situation may occur in which unacceptable wastes are found, and the generator cannot be identified. If unacceptable wastes are detected, the first response is to return the material to the Generator. If the Generator cannot be identified, or the material poses an immediate risk to human health or the environment the Site Manager is notified immediately.

The Site Manager determines whether there is a safety risk involved in moving the material to an isolated location for proper designation and management. If possible, the material is segregated from the active waste handling area. The Site Manager works with the WAM and/or the EM to determine appropriate agency notification procedures, proper storage conditions, waste designation procedures, and final management alternatives for the material. Management follows procedures outlined in the site Emergency Action Plan for guidance in managing emergencies such as spills, unsafe materials, fires, and other non-typical situations that may require additional assistance.

Generators are responsible for properly characterizing their wastes. As such, WM reserves the right to bill generators for costs and staff time associated with managing unacceptable wastes brought to the facility.

If regulated hazardous or PCB wastes are found at the facility, and the generator cannot be identified for removal of said waste from the facility, the Washington Department of Ecology and Public Health are notified via telephone, email, or fax within 24 hours of confirmation.

9 RECORDS

The creation and maintenance of complete records of special waste transactions including approvals, denials, random load inspection records, and all tests and manifests is an important component of the Special Waste Program.

The District Manager is responsible for the complete special waste records system in the facility. Distribution of application packages, approval and denial documentation, manifests and test results should be coordinated with the Site Manager, Sales Consultant and Waste Approval Manager.

9.1 On-Site Records

The facility maintains a complete record of all approved Profiles, random load check results, and records of the disposition of unacceptable waste, electronically or at the site office. In many cases, special waste records located at the facility might not include original copies of analytical records. Such records are readily available on the computer system, and paper copies can be obtained quickly and easily from the Waste Approval Manager.

9.2 Corporate Records

The Waste Approval Group maintains electronic records for each site. The Waste Approval Group's files include electronic copies of all analytical data and correspondence related to special waste review and acceptance.

10 EMERGENCIES

Any condition associated with special waste handling that may be a potential health or safety hazard should immediately be brought to the attention of the Site Manager or his designee. Until instructed to do otherwise by those persons, such situations should be regarded as an emergency and appropriate actions as set forth in the Emergency Action Plan for the site should be implemented.

ATTACHMENT A
GENERATORS WASTE PROFILE DOCUMENTS

Approved profiles are managed electronically . Complete profiling records, including analytical data, reports, and disapprovals are electronically managed by the WM Solutions internet based system, and are available upon request.

EZ Profile™

Requested Facility: _____ D Unsure Profile Number: _____

D Multiple Generator Locations (Attach Locations) D Request Certificate of Disposal D Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: _____
2. Site Address: _____
   (City, State, ZIP) _____
3. County: _____
4. Contact Name: _____
5. Email: _____
6. Phone: _____ 7. Fax: _____
8. Generator EPA ID: _____ D N/A
9. State ID: _____ D N/A

B. BILLING INFORMATION

D SAME AS GENERATOR

1. Billing Name: _____
2. Billing Address: _____
   (City, State, ZIP) _____
3. Contact Name: _____
4. Email: _____
5. Phone: _____ 6. Fax: _____
7. WM Hauled? D Yes D No
8. P.O. Number: _____
9. Payment Method: D Credit Account D Cash D Credit Card

C. MATERIAL INFORMATION

1. Common Name: _____
   Describe Process Generating Material: D See Attached
2. Material Composition and Contaminants: D See Attached

   Total comp. must be equal to or greater than 100%
3. State Waste Codes: _____ D N/A
4. Color: _____
5. Physical State at 70˚F: D Solid D Liquid D Other: _____
6. Free Liquid Range Percentage: _____ to _____ D N/A
7. pH: _____ to _____ D N/A
8. Strong Odor: D Yes D No Describe: _____
9. Flash Point: D <140˚F D 140˚–199˚F D ≥200˚ D N/A

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? D Yes* D No
   Code: _____
2. State Hazardous Waste? D Yes D No
   Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? D Yes* D No
4. Contains Underlying Hazardous Constituents? D Yes* D No
5. From an industry regulated under Benzene NESHAP? D Yes* D No
6. Facility remediation subject to 40 CFR 63 GGGGG? D Yes* D No
7. CERCLA or State-mandated clean-up? D Yes* D No
8. NRC or State-regulated radioactive or NORM waste? D Yes* D No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? 7 If Yes, answer a, b and c. D Yes D No
   a. Regulated by 40 CFR 761? D Yes D No
   b. Remediation under 40 CFR 761.61 (a)? D Yes D No
   c. Were PCB imported into the US? D Yes D No
10. Regulated and/or Untreated Medical/Infectious Waste? D Yes D No
11. Contains Asbestos? D Yes D No
    7 If Yes: D Non-Friable D Non-Friable – Regulated D Friable

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached D Yes
   Please identify applicable samples and/or lab reports:
2. Other information attached (such as MSDS)? D Yes

F. SHIPPING AND DOT INFORMATION

1. D One-Time Event D Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: _____
   D Tons D Yards D Drums D Gallons D Other: _____
3. Container Type and Size: _____
4. USDOT Proper Shipping Name: D N/A
   _____

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.

Name (Print): _____ Date: _____

Title: _____

Certification Signature

ATTACHMENT B

Minimum Required Analyses for non-categorical wastewaters.

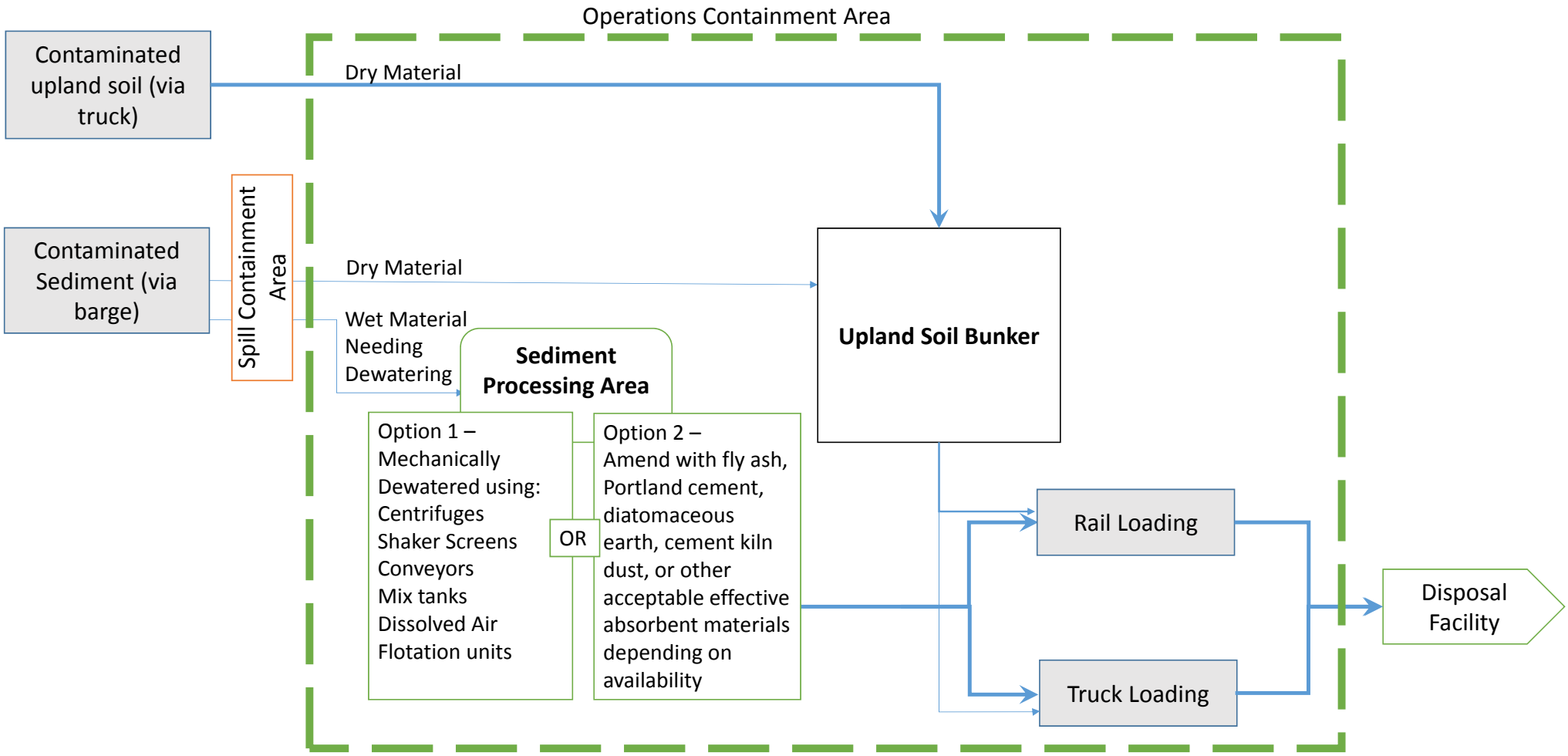
Revised 02/08/17

Confidential & Proprietary Information.
Not for use outside of Waste Management.

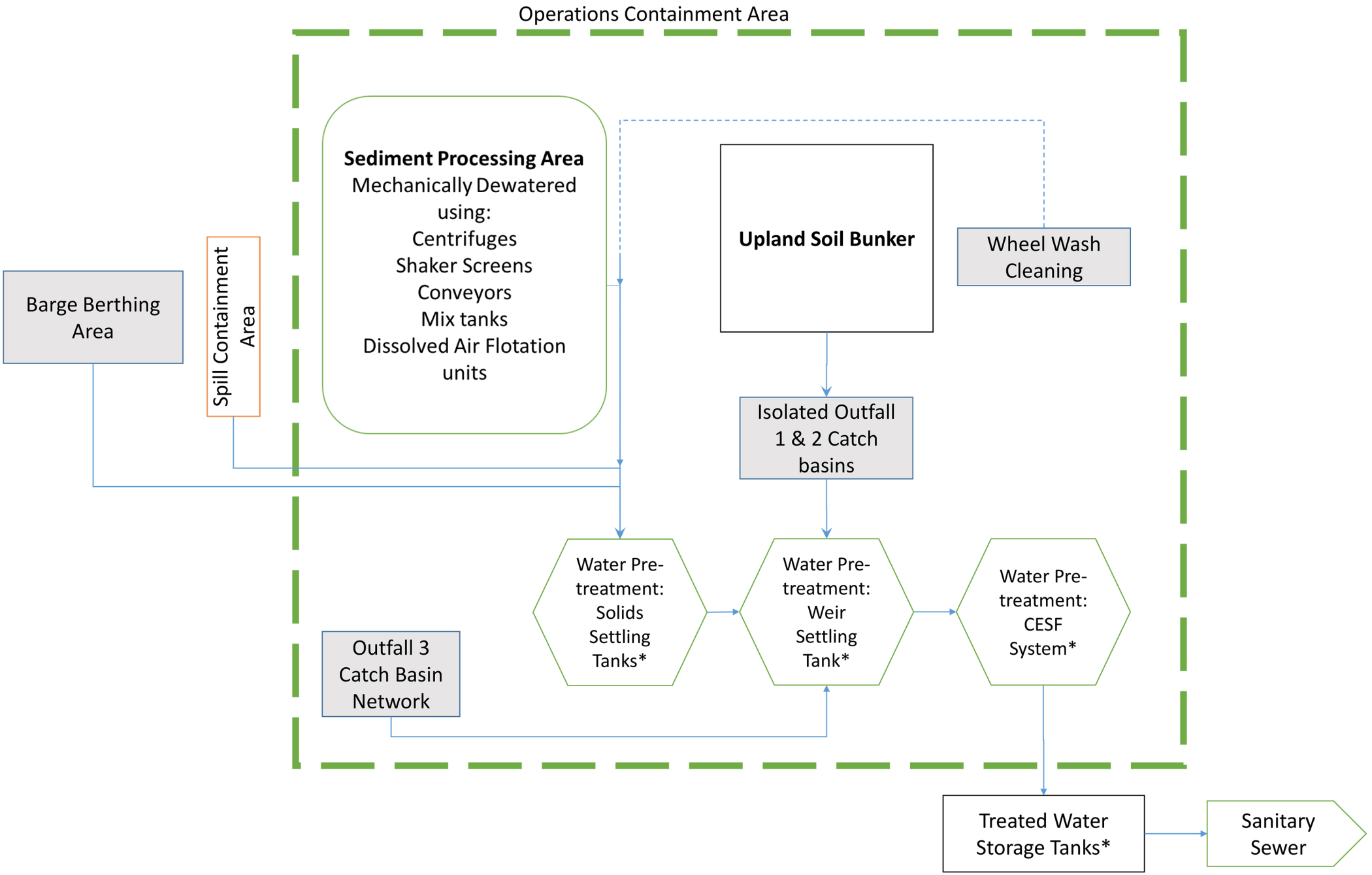
Waste Type	No Analysis Required	BTEX	TCLP Metals	pH	Flash Point / Ignitability	Reactivity: Cyanides & Sulfides	Reactivity: Ignitability (Oxidizer)	Reactivity: Water Reactive	RCI: Reactivity, Corrosivity & Ignitability
		8260C	Metals (6010/6020) Mercury (7471/7470) method 1311	9040C 9041A 9045D	1020B 1010A 1030	Sulfides: 734S Cyanides: 733C	ASTM D4981	(DOT Division 4.3 Dangerous when wet material) water reactivity test	
CATCH BASIN WASTES/SUMP WASTE:									
- Car wash sediment		X	Cd, Pb, Cr	X	X				
- Sanitary sewer grit and screenings			X	X	X				
- Storm sewer sludge and grit			X	X	X				
- Vehicle maintenance catch basin waste		X	X	X	X				
SLUDGE - GENERAL/PROCESS:									
- Car/Truck wash grit trap sediment (industrial/commercial)		X	Cd, Cr, Pb	X	X				X*
- Car/Truck wash grit trap (public)		X	Cd, Cr, Pb	X	X				
- Pond/surface Impoundment Sludge/Solid			X	X	X				X
- Oil water separator sludge (API separator sludge)		X	X	X	X				X
- Petroleum derived sludges		X	X	X	X				X
- Sump/Catch Basin sludge		X	X	X	X				X
- Truck wash sludge (tank, tanker interior)		X	X	X	X				X

APPENDIX D

Material Flow Schematic and Wastewater Flow Schematic



WM Duwamish Reload Facility
Material Flow Schematic



WM Duwamish Reload Facility
Wastewater Flow Schematic

*Refer to Figures 3 and 3A of the Water Pre-Treatment System Engineering Report for more detail on pre-treatment system components.

APPENDIX E

Emergency Action Plan

<Waste Management Duwamish Relaod>	
Sub-element Title	Emergency Management Plan
Sub-element No.	
Corporate Issue Date	

Author/Owner	Name and Title	Date
Corporate Owner	Waste Management Safety Services, LLC	10/8/2019
Site Mgmt. Owner/ Site Employee Owner	Zach Jenkins Daniel Weppler	4/7/2023
Field Co-owner(s)	Updated emergency response team	1/25/2022
	Anthony Garland	
	Removed Fly Ash and Kiln Dust Procedures(Not Applicable)	
	Updated Area Safety Manager	4/7/2023

Program: Emergency Action Plan

Facility: 8th Avenue South Reload Facility

Facility Location: **7400 8th Avenue South, Seattle, WA 98108**

Date: 4/7/2023 Reviewed By: Zach Jenkins

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EMERGENCY ACTION PLAN AND CONTINGENCY PLAN

Introduction

This plan contains procedures for the 8th Avenue South Reload Facility personnel to follow in the event of an emergency on-site. In addition, a Fire Prevention Plan is included in Section C. *Personnel will be trained by their site management and if there are questions regarding the procedures in these plans, they should contact their site management.*

Emergency Telephone Numbers

EMERGENCY RESPONSE AGENCIES

Ambulance	911
Fire Department	911
Police Department	911
Highway Patrol	911
Non-Emergency Police	206-684-2489
Non-Emergency Fire	206-386-1400

MEDICAL CLINIC:

Concentra Urgent Care
3223 1st Avenue South
Seattle, WA 98134
Phone: 206-624-3651

HOSPITAL:

Harborview Medical Center
325 9th Avenue
Seattle, WA 98104
Phone: 206-744-3000

WMI KEY PERSONNEL:

Primary Emergency Coordinator – Daniel Weppler
Mobile: 206-200-6243

Alternate Emergency Coordinator – Anthony Garland
Mobile: 253-347-0118

District Manager- Zach Jenkins
Mobile- 206-496-7480

Area Safety Manager – Mark Frisco
Mobile: 503-250-2943

OTHER AGENCIES, UTILITIES AND RESPONSE SUPPORT PROVIDERS:

Captain of the Port	206-217-6002
U.S. Coast Guard National Response Center	800-424-8802
Air Quality: Puget Sound Clean Air	206-343-8800
Electric: Seattle City Light	206-684-7400
Environmental: Spill Response Center	800-258-5990
Environmental: City of Seattle Spill Response	206-386-1800
Environmental: Wash. Dept. of Ecology	425-649-7000
Public Health: Seattle-King County Public Health	206-263-9566
Poison Control	800-222-1222

EMERGENCY RESPONSE TEAM

Name	Work #	Cell #	CPR	First Aid	Security	Equip Operation
Anthony Garland		253-347-0118	Yes	Yes	Yes	Yes
Daniel Weppler		206-498-8273	Yes	Yes	Yes	Yes

Emergency Procedures

Evacuation Procedure

Notify site personnel of the evacuation via oral instructions(Also broadcasted over the radio by stating “Emergency, Emergency, Emergency, Please evacuate to primary rally point). Repeat 3 times..

Personnel and visitors should be directed to take the safest route out of the site and reassemble at the “rally point” designated for this site:

Outside the North exit and directly across the street if remaining on the property is not safe.

A secondary "rally point" is located outside the Othello Street gate if primary rally point cannot be reached safely.

If outside emergency support is required, call the emergency number 911 and report the emergency. Inform the operator that there is an emergency and:

- Caller's name and location.
- Type of emergency.
- Emergency aid required.

Stay on the line and answer all questions until told to hang up.

Advise a supervisor or the Emergency Coordinator of the situation and notifications made.

The Emergency Coordinator or supervisor in charge will be responsible for:

- Coordinating evacuation of the site including notification of adjacent property owners/tenants as required.
- Coordinating with incoming emergency response personnel.
- Conducting a head count at the designated assembly area or "rally point".
- Notifying drivers via radio to avoid the site.
- Notifying the Operations/District Manager of the emergency.
- Notifying WMI Safety personnel of the emergency if appropriate and determine if a 24 Hour Report is required.
- Determining when the "all clear" signal can be given to return to the site.

Fire Procedure

Activate the site's notification system or orally warn personnel on-site and call the emergency number 911 to report the fire. Inform the operator that there is a fire emergency and:

- Caller's name and location.
- Location of fire.
- If known, materials involved.
- If medical aid is required.

Stay on the line and answer all questions until told to hang up.

If the fire is small (less than 1 cubic yard), can be approached safely with an escape route, and available personnel are trained in the use of the appropriate fire extinguisher, an attempt can be made to put the fire out.

If unable to extinguish the fire, evacuate the site and proceed to the designated re-assembly area or "rally point".

Advise a supervisor or the Emergency Coordinator of the situation and notifications made.

The Emergency Coordinator or supervisor in charge will be responsible for:

- Coordinating evacuation of the site if required.

- Coordinating with incoming emergency response personnel.
- Conducting a head count at the designated assembly point.
- Notifying drivers to avoid the yard.
- Notifying the Operations/District Manager of the emergency.
- Notifying WMI Safety personnel of the emergency if appropriate and determine if a 24 Hour Report is required.

Medical Emergency Procedure

Get a helper. If you are qualified, begin first aid (e.g. stop bleeding, begin CPR, etc.). Do not move victim unless necessary to prevent further injury.

Call emergency number 911. Inform the operator that there is a medical emergency and:

- Caller's name and location.
- Location of victim.
- Nature and extent of injury/illness.

Stay on the line and answer all questions until you are told to hang up.

Advise a supervisor or the Emergency Coordinator of the situation and notifications made.

Continue necessary first aid and keep victim warm and quiet until help arrives.

The Emergency Coordinator or supervisor in charge will be responsible for:

- Coordinating with incoming emergency response personnel.
- Notifying the Operations/District Manager of the emergency.
- Notifying WMI Safety personnel of the emergency if appropriate and determine if a 24 Hour Report is required.
- Notifying WISHA, OSHA or other regulatory agency if required.

Spill/Release/Emission Response Procedure

Alert personnel in the immediate area. If required, secure facility and evacuate to upwind site or designated reassembly area.

Isolate affected area from incoming traffic and personnel.

If safe and trained in use of required protective equipment, contain spill or block off drains downstream.

If unable to contain or clean-up spill safety, call emergency number 911. Inform operator that there is a spill emergency and:

- Caller's name and location.
- Location of spill.
- If known, materials and volumes involved.

- Whether medical aid is required.
- Whether fire hazard exists.

Stay on the line and answer all questions until you are told to hang up.

Advise a supervisor or the Emergency Coordinator of the situation and notifications made.

The Emergency Coordinator or supervisor in charge will be responsible for:

- Coordinating with incoming emergency response personnel.
- Notifying the Operations/District Manager of the emergency.
- Notifying WMI Safety personnel of the emergency if appropriate and determine if a 24 Hour Report is required.
- Notifying WMI Environmental Compliance personnel of the emergency if appropriate.
- Determining if regulatory agency reporting is required and making oral and written reports as required.

Earthquake

During the quake:

- Remain calm.
- If indoors, stay there. Hazards and injuries are generally caused by objects that fall due to the shaking. Move quickly away from windows, shelves, cabinets and glass partitions. Get under a desk or table, or sit in an interior doorway or corner. Do not leave the building unless the building is unsafe.
- If outdoors, get into an open area away from structures, power lines and trees.
- If driving, pull over to the side of the road and stop. Avoid overpasses and power lines. Stay inside vehicle until shaking has stopped. Call dispatch for further instructions.
- If in a crowded public place, do not rush for the doors. Crouch and cover head with hands and arms.

After the quake:

- Unless there is an immediate life-threatening emergency, do not attempt to use the telephone.
- Check for gas and water leaks, broken electrical wiring or sewage lines. If there is damage, turn the utility off at the source. Immediately report gas leaks to the utility company. Do not re-open gas valve until the utility company has checked the system. Check for downed power lines and warn others to stay away.
- Check buildings for cracks and damage including the roof and foundation.
- Turn on portable radio for instructions and news reports. Cooperate fully with public safety officials and instructions.
- Do not use vehicles unless there is an emergency. Keep the streets clear for emergency vehicles.

- Be prepared for after shocks.
- Remain calm and lend a hand to others.
- If the site is evacuated, leave a message telling others where personnel can be found.

Bomb Threat (Instructions for CSRs)

Listen while the caller talks and fill out the bomb threat call checklist.

Attempt to determine the location and description of the bomb and time of detonation. Obtain as much information as possible including time of call, background noise, etc.

Notify one of the following personnel:

- Operations Manager
- District Manager

Report bomb threat to local police department.

Evacuation shall be initiated immediately after receiving bomb threat. Do not touch any suspicious items. Report any suspicious items to the Operations Manager and the local police department.

Evacuate the area where any suspicious items are located.

Next Page: Bomb Threat Call Checklist

Bomb Threat Call Checklist:

Date: _____ Time: _____ A.M. / P.M.

Call Received by: _____

Exact words of caller: _____

_____

_____

_____

Questions to Ask:

When will be bomb explode? _____

Where is the bomb located? _____

What does the bomb look like? _____

What kind of bomb is it? _____

Why did you place the bomb? _____

What do you hope to accomplish by this action? _____

What is your name? _____

Where are you calling from? _____

Voice Characteristics:

Male ____ Female ____ Child ____ Loud ____ Soft ____ Nasal ____

Raspy ____ High ____ Low ____ Familiar ____ Pleasant ____

Other _____

Speech Characteristics:

Fast ____ Slow ____ Stutter ____ Slurred ____ Intoxicated ____

Other _____

Accent Characteristics:

Local ____ Region ____ Foreign ____

Other _____

Manner of Caller:

Calm ____ Angry ____ Deliberate ____ Emotional ____

Laughing ____ Incoherent ____ Other _____

Background Noises:

Office Machines ____ Street Traffic ____ Factory Machines ____ Music ____

Airplanes ____ Trains ____ Trucks ____ Animals ____

Other _____

Origin of Call:

Internal ____ External ____ Local ____ Long Distance ____

Did caller appear to be familiar with the facility? _____

Number/extension at which call was received: _____

Contacts Made:

Operations/District Manager: Date _____ @ _____ am / pm

Police Department: Date _____ @ _____ am / pm

Fire Department: Date _____ @ _____ am / pm

Other: Date _____ @ _____ am / pm

Other: Date _____ @ _____ am / pm

Civil Disturbance/Demonstration

Do not become a spectator. Leave the area of the disturbance to avoid injury or arrest.

Lock all doors, gates and windows. Close all drapes and avoid window areas. Do not argue with or agitate the participants.

Remain calm, be courteous and do not do anything to provoke an incident.

Contact the District/Operations Manager and local police department as soon as possible.

If required to protect employees and company property, service may have to be limited and/or access to the building may have to be restricted.

Keep telephone lines open and avoid unnecessary inquiries regarding the incident.

Release of Information to the Public/Media

In the event of an emergency, expect to handle media inquiries. The Operations/District Manager or designated spokesperson will coordinate all media relations. In the event the Operations/District Manager is not available and a spokesperson has not been designated, unauthorized personnel should **not** make any statement to the media. Contact the Waste Management Area office, advise WM Area management of situation and coordinate response to media requests.

Armed Robbery

If confronted by an armed robber, do not argue with the individual.

Give the individual what he wants. Do not block his option to escape.

Remember what you can about the incident including individual's height, weight, length of hair, color of eyes, color of hair, race, distinguishing marks or scars. If a weapon or vehicle is visible, try to remember as much detail about it as possible.

After the incident is over, call the police immediately.

Under no circumstances should any one try to intercede or stop the individuals involved in the incident.

Anti-Terrorism

In The Office:

- Close business.
- If there are customers or visitors in the building, provide for their safety by asking them to stay – not leave. When authorities provide directions to shelter-in-place*, they want everyone to take those steps immediately, where they are, and not drive or walk outdoors.
- Unless there is an imminent threat, ask employees, customers and visitors to call their emergency contact to let them know were they are and that they are safe.
- Turn on call-forwarding or alternative telephone answering systems. Change the recording on voice mail to indicate that the business is closed, and that staff and visitors are remaining in the building until authorities advise it is safe to leave.
- Close and lock all windows, exterior doors, and any other openings to the outside.
- If you are told there is danger of explosion, close window shades, blinds, or curtains.
- Have employees familiar with your building's mechanical systems to turn off all fans, heating and air conditioning systems. Some systems automatically provide for exchange of inside air with outside air – these systems in particular need to be turned off, sealed or disabled.
- Gather essential disaster supplies, such as nonperishable food, bottled water, battery-powered radios, first aid supplies, flashlights, batteries, duct tape, plastic sheeting, and plastic garbage bags.
- Select interior room(s) above the ground floor, with the fewest windows or vents. The room(s) should have adequate space for everyone to be able to sit in. Avoid overcrowding by selecting several rooms if necessary. Large storage closets, utility rooms, pantries, copy and conference rooms without exterior windows will work well. Avoid selecting a room with mechanical equipment like ventilation blowers or pipes, because this equipment may not be able to be sealed from the outdoors.
- It is ideal to have a hard-wired telephone in the room(s) you select. Call emergency contacts and have the phone available if you need to report a life-threatening condition. Cellular telephone equipment may be overwhelmed or damaged during an emergency.
- Use duct tape and plastic sheeting (heavier than food wrap) to seal all cracks around the door(s) and any vents into the room.
- Bring everyone into the room(s). Shut and lock the door(s).
- Write down the names of everyone in the room, and call your business' designated emergency contact to report who is in the room with you, and their affiliation with your business (employee, visitor, customer).
- Keep listening to the radio or television until you are told all is safe or you are told to evacuate. Local officials may call for evacuation in specific areas at greatest risk in your community.

Emergency Shut Down Procedures
All WM facilities use energy (e.g., electricity, natural gas), and some operate machinery (stored hazardous energy) that may pose hazards to first responders or cause excessive property damage. An appropriate shutdown procedure is vital for protecting lives and reducing property damage. For an emergency shutdown, please follow these steps:

- Ensure all equipment is parked and secured
- Have emergency response binder available for EMS to access specific locations

In A Vehicle - If you are driving a vehicle and hear advice to "shelter-in-place" on the radio, take these steps:

- If you are very close to home, your office, or a public building, go there immediately and go inside. Follow the shelter-in-place recommendations for the place you pick described above.
- If you are unable to get to a home or building quickly and safely, then pull over to the side of the road. Stop your vehicle in the safest place possible. If it is sunny outside, it is preferable to stop under a bridge or in a shady spot, to avoid being overheated.
- Turn off the engine. Close windows and vents.
- If possible, seal the heating/air conditioning vents with duct tape.
- Listen to the radio regularly for updated advice and instructions.
- Stay where you are until you are told it is safe to get back on the road. Be aware that some roads may be closed or traffic detoured. Follow the directions of law enforcement officials.

Local officials on the scene are the best source of information for your particular situation. Following their instructions during and after emergencies regarding sheltering, food, water, and clean up methods is your safest choice.

Remember that instructions to shelter-in-place are usually provided for durations of ***a few hours***, not days or weeks. There is little danger that the room in which you are taking shelter will run out of oxygen and you will suffocate.

What shelter-in-place means:
One of the instructions you may be given in an emergency where hazardous materials may have been released into the atmosphere is to shelter-in-place. This is a precaution aimed to keep you safe while remaining indoors. (This is not the same thing as going to a shelter in case of a storm.) Shelter-in-place means selecting a small, interior room, with no or few windows, and take refuge there. It does not mean sealing off your entire home or office building.

Site Map

A site map of the 8th Avenue South Reload Facility that details the evacuation routes and re-assembly area or "rally-point" from all points on-site is available to you from your site

management. Location of emergency equipment and location(s) of emergency shut off(s) is also shown on map.

ADMINISTRATIVE PROCEDURES

Emergency Reporting

Reporting will be in compliance with federal, state, local and company requirements.

WMI reporting includes:

- Reporting of emergency incidents to the Operations/District Manager as soon as possible.
- Reporting of emergency incidents to Region management.
- Reporting of significant events (including bomb threats) to the WMI Safety/Environmental Compliance representatives.

Hazardous waste regulatory reporting requirements may include:

- If the emergency coordinator determines that the facility has had a release, fire, or explosion involving hazardous waste that could threaten human health, or the environment outside the facility, the emergency coordinator shall report the findings as follows:
- If evacuation may be advisable, the emergency coordinator shall immediately notify the appropriate local authorities and help these local officials decide whether local areas should be evacuated.
- The emergency coordinator shall in every situation, immediately notify the State Office of Emergency Services. This report shall include: name and telephone number of reporter; name and address of facility; time and type of incident; name and quantity of material(s) involved to the extent known; the extent of injuries, if any; and the possible hazards to human health, or the environment, outside the facility.

Training

Training will be in compliance with all federal, state, local and company requirements.

8ASR's training requirements include:

- A minimum of annual training of all employees in their responsibilities during an emergency.
- As required, testing of the plan by key staff.
- Semi-annual drills with all employees (see documentation form).
- Fire hazards of the materials and hazards to which employees are exposed.

- Location and operation of fire extinguishers.
- Proper and safe handling of gasoline and other petroleum products including cleanup of minor spills.
- Location of Emergency Action Plan, Contingency Plan, and Fire Prevention Plan.
- Location of evacuation routes and re-assembly points for the site.
- All training and drills will be documented and kept on file.

Plan Update and Distribution

The Emergency Management Plan, Contingency Plan, and Fire Prevention Plan will be updated as required.

The Emergency Management Plan, Contingency Plan, and Fire Prevention Plan will also be updated in the event:

- The plan fails in an emergency.
- The list of emergency equipment changes.
- Applicable regulations are revised.
- The emergency coordinator changes.

The Emergency Management Plan, Contingency Plan, and Fire Prevention Plan will be distributed to the following personnel/locations:

- Director of Operations
- District Manager
- Operations Manager
- Shift Supervisors, if any

Emergency Equipment Maintenance and Inspection.

Emergency equipment will be inspected on a monthly basis and deficiencies in supply or operation will be noted and corrected.

Emergency equipment on-site consists of:

- Safety Shower
- Eye Wash Station
- First-Aid Kit
- Hand-Held Radios

Personal protective equipment including:

- Hard hats
- High Visibility Vest
- Ear plugs
- Work boots
- Gloves
- Fire extinguishers
- Shovels
- Absorbent material

Documentation of Semi-Annual Drill

Date Performed _____

Facility Name _____

Certified By _____ Title _____

Comments _____

_____

_____

_____

_____

EIGHTH AVENUE SOUTH

RP#1

CONFINED SPACE

PRCS

LIFT STATION PRCS

MAIN ELECTRICAL SERVICE

PRCS

TREATED WATER STORAGE TANKS

UPLAND SOIL BUNKER

ACCESS RAMP (TYP.)

BARGE BERTHING AREA

SEDIMENT PROCESSING AREA

C.S.

SPILL CONTAINMENT AREA

DUWAMISH RIVER

GATE

SOUTH OTHELLO STREET

SOUTH GARDEN STREET

ADD AT A.E.D.

NEW OFFICE TRAILER

NORTH YARD ELECTRICAL SERVICE

RP#2

GATE

METAL CANOPY

RESTROOM TRAILER

CHANGING ROOM TRAILER

BREAKROOM TRAILER

LIFT STATION

PRCS

LIFT STATION PRCS

PRCS

VAULT

SLIP NO. 4 (DUWAMISH WATERWAY)

EAST MARGINAL WAY S.

PER

AER

ALT

LEGEND:

- PER — PRIMARY EVACUATION ROUTE
- ALT — ALTERNATE EVACUATION ROUTE
- FIRE EXTINGUISHER LOCATION
- FIRST AID KIT LOCATION
- RP#1 — RALLY POINT LOCATION
- SPILL KIT
- EMERGENCY SHOWER
- FIRE HYDRANT
- EYE WASH STATION
- C.S. — CONFINED SPACE
- PRCS — PERMIT REQUIRED CONFINED SPACE

N

0 100 200

Scale in Feet

Source: ©Bing Imagery, 2022

LANDAU ASSOCIATES

Waste Management
Duwamish Reload Facility
7400 8th Avenue South
Seattle, Washington

Emergency Site Plan

Figure
E-1

Site-specific Fire Prevention Plan

Facility Name:	**8th Avenue South Reload Facility**	
Facility Location:	**7400 8th Ave S** **Seattle, WA 98108**	**Revision Date: 09/23/2015**

Purpose

The purpose of a *Fire Prevention Plan* is to describe fire hazards, control measures, and necessary actions for emergencies. This is in addition to the location's *Emergency Action Plan*.

Fire Prevention Plan

General

(For California, this plan keeps your facility in compliance with Title 8, Section 3220 of the California Code of Regulations.)

This *Fire Prevention Plan* for <**8th Avenue South Reload Facility>** defines the following.

- Potential fire hazards
- Proper handling and storage procedures for combustible materials
- Potential ignition sources and their control procedures
- Type of fire protection equipment or systems available to control fire hazards

The names and job titles of personnel who are responsible for the maintenance of equipment and systems that are installed to prevent or control ignition of fires and the control of accumulation of flammable or combustible waste materials are:

Title	Name
Maintenance Manager	N/A
District/Site Manager	Nick Harbert
Operations Supervisor	Zach Jenkins

Housekeeping Procedures

Housekeeping procedures that must be followed on-site include the following.

- Avoid accumulating combustible materials.
- Keep flammable and combustible materials away from ignition sources.
- Keep all stairways, fire fighting equipment locations, and exit paths clear.
- Clean up spills/leaks promptly and store contaminated material safety.
- Report spill/leaks promptly to Site Management to ensure that a corrective action is taken.
- Remove all waste at the end of each shift and place it in appropriate waste receptacles.
- Store all oily rags in an approved receptacle for oily rags.
- Store flammables in an approved flammable cabinet that is a minimum of 25 feet from sources of ignition.
- Use correct cleaning agents and avoid the use of flammable/combustible materials for cleaning.

Potential Fire Hazards, Potential Ignition Sources, Proper Handling/Storage Procedures, and Fire Protection Equipment

Tables 1 and 2 list the potential fire hazards, potential ignition sources, proper handling/storage procedures, and fire protection equipment that can control these hazards.

Training

When portable fire extinguishers are provided at a WM facility and are intended for employee use, employees must receive education and training:

- Upon initial employment.
- At least annually thereafter.

The education and training must cover the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting.

The site's written *Fire Prevention Plan* must also be reviewed with employees. This review must be done at initial assignment and as necessary if/when conditions change.

The *Fire Prevention Plan* must be maintained in an area that is accessible to those employees.

This program is hereby approved:

Name	Signature	Date

TABLE 1

Site Locations with Potential Fire Hazards and Potential Ignition Sources

Location	Potential Fire Hazards	Potential Ignition Sources	Applicable to this location?
Administrative Offices	Combustible materials (e.g., paper, cardboard)	Open flames (e.g., smoking materials)	☒
	Electrical cords/outlets/wiring	Hot surfaces (e.g., appliances, electrical wiring)	☒
	Flammable/combustible liquids (e.g., aerosol cans, solvents)		☒
			☐
			☐
			☐

Location	Potential Fire Hazards	Potential Ignition Sources	Applicable to this location?
Storage Shed	Flammable/combustible liquids (e.g., diesel, solvents, product oils)	Open flames (e.g., welding, smoking materials)	☒
	Combustible materials (e.g., paper, cardboard)	Sparks from friction (e.g., grinding)	☒
	Electrical cords/outlets/wiring	Hot surfaces (e.g., power tools, electrical wiring)	☒
	Contaminated materials (e.g., oily rags)	Internal combustion engines (e.g., vehicles, forklifts)	☒
			☐
			☐
			☐
			☐
			☐
			☐

Location	Potential Fire Hazards	Potential Ignition Sources	Applicable to this location?
Container Shop	Flammable/combustible liquids (e.g., paints, solvents)	Open flames (e.g., welding, smoking materials, etc.)	☐
	Combustible materials (e.g., paper, cardboard)	Sparks from friction (e.g., grinding)	☐
	Electrical cords/outlets/wiring	Hot surfaces (e.g., power tools, electrical wiring)	☐
	Flammable/oxidizing gases (e.g., acetylene, oxygen)	Static electricity	☐
	Open flames (e.g., welding, cutting)	Internal combustion engines (e.g., vehicles, forklifts)	☐
	Contaminated materials (e.g., oily rags)		☐
			☐
			☐
			☐

N/A

Location	Potential Fire Hazards	Potential Ignition Sources	Applicable to this location?
MRF	Flammable/combustible liquids (e.g., diesel, solvents, product oils)	Open flames (e.g., welding, smoking materials)	☐
	Combustible materials (e.g., paper, cardboard)	Sparks from friction (e.g., grinding)	☐
	Electrical cords/outlets/wiring	Hot surfaces (e.g., power tools, electrical wiring)	☐
	Flammable/oxidizing gases (e.g., acetylene, oxygen)	Static electricity	☐
	Open flames (e.g., welding, cutting)	Internal combustion engines (e.g., vehicles, forklifts)	☐
	Contaminated materials (e.g., oily rags)		☐
			☐
			☐
			☐
			☐

N/A

Location	Potential Fire Hazards	Potential Ignition Sources	Applicable to this location?
Other Location(s):			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

TABLE 2

Control Procedures and Fire Protection Equipment for Potential Fire Hazards and Potential Ignition Sources

Potential Fire Hazards/Ignition Sources	Control Procedure/Fire protection Equipment
Combustible Materials	Avoid accumulation of combustible materials (e.g., empty boxes, cartons, loose paper).
	Keep combustible materials away from ignition sources, including establishment/enforcement of no smoking/no open flame areas.
	Keep all stairways, firefighting equipment locations, and exit paths clear.
	Remove all waste (e.g., dust, lint, loose paper) at the end of each shift in each work area (including floors, ceilings, walls, ledges, beams, and equipment) and place in the appropriate waste receptacles.
	Maintain fire extinguishing equipment that is capable of handling Class A fires within 75 feet of combustible materials.
	Perform annual maintenance and monthly inspections on fire extinguishing equipment.
	Train personnel in the use of fire extinguishing equipment.

Potential Fire Hazards/Ignition Sources	Control Procedure/Fire protection Equipment
Electrical Cords/ Outlets/Wiring	Inspect power cords for damaged insulation and damaged plugs.
	Discontinue the use of a power cord that gets warm.
	Maintain electrical motors in good operating condition.
	Do not overload motors, cords, or other electrical equipment.
	Maintain fire extinguishing equipment that is capable of handling Class C fires near electrical equipment.
	Perform annual maintenance and monthly inspections on fire extinguishing equipment.
	Train personnel in the use of fire extinguishing equipment.
Flammable/ Combustible liquids	Keep materials in covered containers when not in use.
	Do not transport materials in open containers.
	Store flammable liquids in containers with appropriate warning labels.
	Do not store flammable/combustible liquids near sources of heat/ignition.
	Inert and verify inert atmosphere of containers, piping, and tanks that have contained flammable/combustible liquids prior to exposure to heat/flame.
	Maintain fire extinguishing equipment that is capable of handling Class B fires within 50 feet of flammable/combustible liquids.
	Perform annual maintenance and monthly inspections on fire extinguishing equipment.
	Train personnel in the use of fire extinguishing equipment.
Welding/Cutting	Establish approved areas for cutting and welding.

Potential Fire Hazards/Ignition Sources	Control Procedure/Fire protection Equipment
Operations	Establish approved procedures for a hot work program to restrict cutting/welding in all other areas and a designated individual for approving such cutting/welding.
	Utilize only approved equipment for cutting/welding.
	Train all personnel who perform cutting/welding.
	Verify the training of contractors who perform cutting/welding.
	Provide contractor orientation of potential fire hazards on-site.
	Do not perform cutting/welding within 35 feet of combustible materials.
	Maintain fire extinguishing equipment that is capable of handling Class A, B, and C fires near the welding operation.
	Perform annual maintenance and monthly inspections on fire extinguishing equipment.
	Train personnel in the use of fire extinguishing equipment.

Potential Fire Hazards/Ignition Sources	Control Procedure/Fire protection Equipment
Flammable/Oxidizing Gas Cylinders	Do not store cylinders near sources of heat/flame.
	Cylinders that are stored inside buildings will be in a well-protected, well-ventilated, dry location at least 20 feet from highly combustible materials.
	Cylinder storage will be located where passing/falling objects will not damage cylinders.
	Do not store cylinders where they could be subject to tampering by unauthorized personnel.
	Do not store cylinders near elevators, stairs, passageways, or in unventilated enclosures.
	Do not store oxygen cylinders near highly combustible materials such as oil/grease.
	Maintain fire extinguishing equipment that is capable of handling Class A, B, and C fires within 75 feet of welding areas.
Open Flames	Keep sources of ignition (including open flames) away from combustible materials.
	Establish and enforce no smoking/no open flame areas.
	Establish and enforce a hot work program.
	Maintain fire extinguishing equipment that is capable of handling Class A, B, and C fires near areas with open flames.
Contaminated Materials	Keep sources of ignition away from contaminated materials.
	Store contaminated materials in appropriate waste receptacle (e.g., oily rag container).
	Maintain fire extinguishing equipment that is capable of handling Class A, B, and C fires where contaminated materials are stored.

Potential Fire Hazards/Ignition Sources	Control Procedure/Fire protection Equipment
Hot Surfaces	Keep sources of ignition (including hot surfaces) away from combustible materials.
	Maintain fire extinguishing equipment that is capable of handling Class A, B, and C fires near areas with hot surfaces.
Sparks from Friction	Keep sources of ignition (including sparks from friction) away from combustible materials.
	Maintain fire extinguishing equipment that is capable of handling Class A, B, and C fires near areas where sparks from friction may occur.
Static Electricity	Utilize proper grounding/bonding procedures when moving volatile liquids.
	Verify the continuity of grounds on a regular basis.
	Maintain fire extinguishing equipment that is capable of handling Class A, B, and C fires within 50 feet of flammable/combustible liquid storage.
Internal Combustion Engines	Maintain internal combustion engines in good repair.
	Clean up spills/leaks from internal combustion engines promptly and store contaminated material safely.
	Report spills/leaks from internal combustion engines promptly to supervision to assure corrective action is taken.
	Maintain fire extinguishing equipment that is capable of handling Class A, B, and C fires on all vehicles.

RP#1

RP#2

EIGHTH AVENUE SOUTH

OFFICE TRAILERS

TREATED WATER STORAGE TANKS

UPLAND SOIL BUNKER

GATE

SOUTH OTHELLO STREET

SOUTH GARDEN STREET

ACCESS RAMP (TYP.)

BARGE BERTHING AREA

SEDIMENT PROCESSING AREA

SPILL CONTAINMENT AREA

METAL CANOPY

GATE

DUWAMISH RIVER

SLIP NO. 4 (DUWAMISH WATERWAY)

PER

AER

101 102 103 104 105 106 107 108 109 110 111 112 113

LEGEND:

- PER → PRIMARY EVACUATION ROUTE
- AER → ALTERNATE EVACUATION ROUTE
- 107 ● FIRE EXTINGUISHER LOCATION
- ✚ FIRST AID KIT LOCATIONS
- RP RALLY POINT LOCATION
- ■ SPILL KIT
- ☂ EMERGENCY SHOWER
- ☆ FIRE HYDRANT
- ▲ EYE WASH STATION

N

0 100 200

Scale in Feet

Source: Adapted from TETRA TECH 9/3/15

LANDAU ASSOCIATES

Waste Managemnent Duwamish Reload Facility 7400 8th Avenue South Seattle, Washington	**Emergency Site Plan**	Figure E-1

LANDAU ASSOCIATES, INC. | G:\Projects\151\7006\050\051\FE01 EmergencySitePlan.dwg (A) "Figure E-1" 4/10/2017

Monthly Visual Fire Extinguisher Inspection Log

(Optional Form – This form may be used in lieu of the inspection tag on the fire extinguisher if the location or conditions prohibit the use of the tag. Each extinguisher must be assigned a unique identification number (ID#). For each month, the person performing the visual inspection will check the appropriate box on this form and then initial and date the column for the month.)

ID #	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Initial												
Date												

Annual Fire Extinguisher and Maintenance Inspection Record

Date of Inspection:	
Inspected By:	
Comments:	

Please attach the documentation from the fire extinguisher vendor to this form.

APPENDIX F

Forms and Reports

Daily Tonnage Report
Criteria: 09/15/2013 12:00 AM to 09/01/2013 11:59 PM
Profile.

Example Barge Log

Load	Barge	Arrival		Start Offload		Complete Offload		Tons (manual)			Tons (electronic)			Billing	Tonnage
		Date	Time	Date	Time	Date	Time	Gross	Tare	Net	Gross	Tare	Net	Tons	Determination
303	104	9/24/2014	19:20	9/24/14	21:13	9/24/14	23:40	532.44	185.04	347.40	549.82	180.74	369.07	347.40	Manual
304	101	9/24/2014	23:20	9/25/14	1:30	9/25/14	9:18	806.37	357.81	448.56	801.79	358.01	443.78	448.56	Manual
305	100	9/25/2014	4:00	9/25/14	12:30	9/25/14	14:38	723.97	323.87	400.09	723.81	330.32	393.49	400.09	Manual
306	104	9/25/2014	12:32	9/25/14	15:52	9/25/14	18:33	555.12	182.19	372.93	558.48	177.44	381.04	372.93	Manual
307	101	9/25/2014	16:09	9/25/14	19:00	9/25/14	21:01	777.15	364.47	412.69	767.11	367.81	399.30	412.69	Manual
308	166	9/26/2014	1:15	9/26/14	1:45			845.67	442.25	403.42	840.14	425.19	414.96	403.42	Manual
309	101	9/26/2014	13:22	9/26/14	13:47	9/26/14	16:35	816.65	376.55	440.11	817.91	382.38	435.53	440.11	Manual
310	104	9/26/2014	17:06	9/26/14	17:23	9/26/14	20:00	577.97	180.28	397.70	582.67	183.56	399.12	397.70	Manual
311	166	9/26/2014	22:15	9/27/14	1:00	9/27/14	5:45	903.44	439.12	464.32	896.96	439.85	457.11	457.11	Manual
312	101	9/27/2014	2:54	9/27/14	7:00	9/27/14	11:00				784.32	398.43	385.89	385.89	Manual
313	104	9/27/2014	6:40	9/27/14	12:35	9/27/14	14:19	526.83			525.52	181.67	343.84	343.84	Electronic
314	100	9/27/2014	15:05	9/27/14	15:56	9/27/14	18:35	753.19	307.34	445.85	751.69	304.85	446.85	445.85	Manual
315	166	9/27/2014	19:16	9/27/14	20:29	9/27/14	22:55	866.54	407.92	458.62	864.85	411.31	453.55	458.62	Manual
316	104	9/27/2014	23:34	9/28/14	1:30	9/28/14	4:52				539.95	194.83	345.12	345.12	Manual
317	101	9/28/2014	5:15	9/28/14	6:09						827.24	382.53	444.71	444.71	Electronic
318	104	9/30/2014	23:25	10/1/14	2:11	10/1/14	5:50				544.81	199.54	345.27	345.27	Electronic
	Totals													6,449.30 tons	

8TH AVENUE SOUTH RELOAD FACILITY COMPLAINT LOG			
DATE	**NAME/ADDRESS**	**COMPLAINT**	**ACTION TAKEN**

WASTE MANAGEMENT

Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Example Scale Ticket

Original
Ticket# 106691

Ph: 206 763 5025

Customer Name Waste Management National Ser
Ticket Date 07/22/2015
Payment Type Credit Account
Manual Ticket#
Route AK
Hauling Ticket#
Destination
PO# 110156WA

Carrier SELF HAULER *
Vehicle# R53S
Container
Driver BEN CARROLL
Check#
Billing# 0000387
Grid

Volume

	Time	Scale	Operator	Inbound		
In	07/22/2015 09:39:08	SCALE 1	lmercer		Gross	62740 lb
Out	07/22/2015 09:39:08		lmercer		Tare	27540 lb
					Net	35200 lb
					Tons	17.60

Comments RT - LM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	17.60	Tons				KING
2	GONDOLA T/10T MIN-GONDOL	100	17.60	Tons				
3	FEA-FUEL,ENV,ADMIN	100	17.60	Tons				

Driver's Signature

Total Tax
Total Ticket

DUWAMISH RELOAD FACILITY

Perform the following site inspection each *week*. Place a copy in the inspection file and maintain for at least 5 years. Note any deficiencies and note date and time of correction.

Date:	Time of Day:
Inspector Name:	Weather Conditions:
Inspector Signature:	

	YES	NO	Date/Time Corrected
1. Entrances and roadways			
• Signs posted with adequate information (entrance, traffic control, safety, hazardous waste prohibition,..)			
• Access secured by locking gate?			
2. Personnel			
• Safety equipment provided and used?			
• First-aid supplies and communication provided?			
3. Operations			
• Unloading watched by spotter/operator?			
• Sumps and catch basins maintained?			
• Equipment free of leaks and spills?			
• Storage areas clean and free of spills?			
• Loaded containers hauled when feasible?			
• Bin 1 and 2 liners functioning properly?			
4. Environmental			
• Effective litter control measures in place?			
• Is there significant track out or visible dust emissions?			
• Effective pest control measures in place?			
• Effective odor control measures in place?			
• Operations Containment Area functioning properly?			
• Is the integrity of the containment berm adequate?			
• Is the integrity of the wastewater lines adequate, and is the wastewater pretreatment system functioning properly?			
5. Other			
• Fire, police, and emergency response available?			
• Fire extinguishers accessible, mounted, signed, fully charged, and inspected monthly?			
• Adequate lighting provided?			
• Daily and monthly records maintained?			

6. Comments:

*The inspection form is subject to change as conditions warrant. Whatever form is used, it will address similar inspection points.

Storage and Throughput Capacity Calculations

Figure G - 8th Ave Capacity Demonstration and Recommendation;
Capacity for the 8th ave facility has been estimated using the theoretical maximum capacity of each individual inbound offload and acceptance lane. The facility has multiple acceptance and offloading lanes. the include Slips One, Two and Three , Upland Soils, Non-categorical Liquids, and Bulk liquids transfer.
1. **Bulk liquids transfer** is not included in these calculations as these volumes will be transferred to Rail or over the road conveyance at a rate based on pumping off the liquids to the conveyance or storage. Additionally bulk liquids are not covered by the solid waste regulations.
2. **Slips One, Two and Three** are limited by size of the barges moored at the dock, for purposes of this determination two barges are envisioned concurrently docked at the facility. Generally bulk materials and non-rigid containers have individual capacities of 5,000 tons per day for each lane.
3. **Upland Soils** acceptance is project driven and typically do not operate continuously over a 30 day period. for purposes of this determination a monthly average of 3,000 tons per day, 90,000 tons per month has been used. facility essentially has unlimited daily acceptance capacity for upland soils received by over the road vehicles.

Stockpile capacities have been developed using CAD to define the perimeter of the irregular pile and then calculating the volume of the pile based on a 30 foot high pile with an angle of repose of 30 degrees. Facility has seen greater vertical angle of repose materials in the past but uses the 30 degree average for these calculations. Based on the calculations below the facility has a total storage capacity of approximately 47,000 tons. Tonnage calculation assumes an average of 1.2 tons per cubic yard.

Throughput calculations are based on average incoming volume less rail capacity to define the length of time the facility can maintain the acceptance rate in the model and fill all available storage volume. Dredge volumes are assumed to contain 60% moisture and 40% solids, throughput calculations for the sediment processing stockpile is modeled with the liquid fraction removed and going to the process water treatment system and eventually to the sanitary sewer. Slip One acceptance rate is assumed to be 3 - 10,000 ton barges per month averaged over a 30 day period.

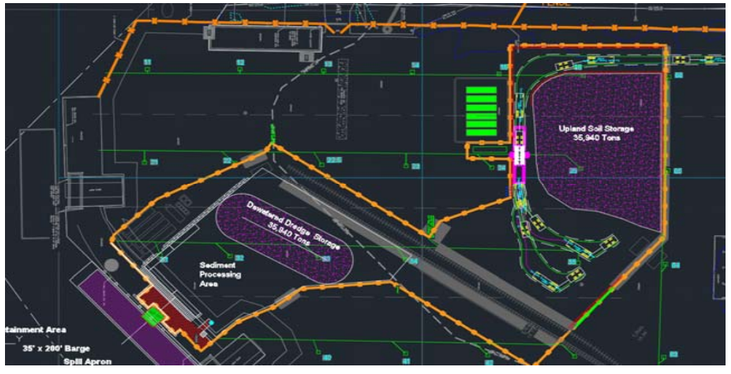
Therefore should the agency require a maximum throughput in the permit WMNS requests that the facility permit acceptance volume be limited to "a monthly average of 6,000 tons per day" based on the evaluation below.

8th Ave Reload Capacity

Assumptions		
Material Weight per Cubic Yard	1.2	
Dredge Avg incoming Moisture	60%	
	Daily Tons	
Slip 1 Barge unloading daily capacity	1,000	3 - 10K barges per month
Slip 2 Barge unloading daily capacity	5,000	
Slip 3 Barge Unloading daily capacity	5,000	
Upland Soil Area average daily acceptance	3,000	
	14,000	**Acceptance Capacity per day**
Upland Soil Area Storage	35,941	30 foot high pile
Dredge area Storage	11,139	one stacked pile two conveyors
Total Facility Storage	**47,081**	
Rail throughput	**3,600**	**Tons Per Day**

Max Scenario - 3-10K barges upland, 30-5K dredge, and 30-4K upland per month		
Slip One - 3 10K barges per month	1,000	Load to dump trailers into Upland Soils
Slip Two - Dredge unload	2,000	Total Solids w/60% water removal to sewer
Upland Soils	3,000	Monthly Avg per day Upland Soils Area
Total Daily inbound	**6,000**	
Volumes		
Upland processing	4,000	Upland and Slip 1 to Upland Area
Dredge processing	2,000	Slip 2 Processing
Storage		
Rail Throughput Per Day	3,600	Tons Per Day
Excess Materials To Storage @10K per day	2,400	
Days to reach capacity	**20**	

Request Monthly average of 6000 ton per day

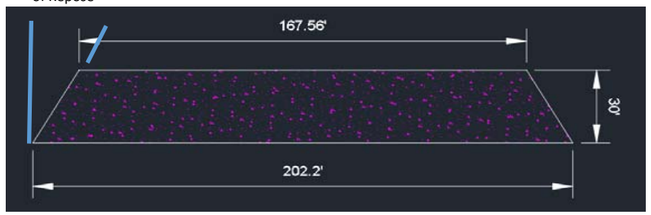


Upland Pile - use length of perimeter calculate as truncated cone

635 feet circumference
202.13 Diameter
101.1 r1 Radius7
152 2 Diameter
76 r2 Radius

Truncated Cone Volume
808,677 Cubic Feet
29,951 Cubic Yards
35,941 Tons

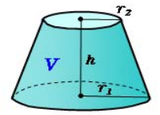
30 Deg Angle of Repose



Upland Soil Pile
35,941 Ton Cap

Volume of a circular truncated cone Calculator

Calculates the volume, lateral area and surface area of a circular truncated cone given the lower and upper radii and height.



lower radius r1: 101
upper radius r2: 84
height h: 30
Execute | Clear | Store/Read | 14dgt

volume V: 808,677.36496055
lateral area F: 20,040.683457304
surface area S: 74,255.1478803

Circular truncated cone
(1) *volume:* $V=\frac{1}{3}\pi(r_1{}^2+r_1r_2+r_2{}^2)h$

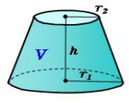
Dredge Area
Cone
54,388 Cubic Feet
2,014 Cubic Yards
2,417 Tons

Dredge Pile
11,139 Ton Cap

Triangle
196,247 Cubic Feet
7,268 Cubic Yards
8,722 Tons

Volume of a circular truncated cone Calculator

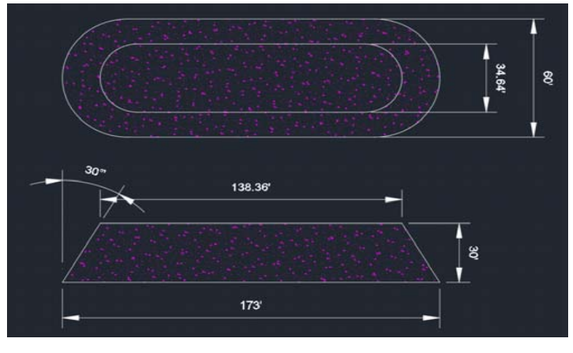
Calculates the volume, lateral area and surface area of a circular truncated cone given the lower and upper radii and height.



lower radius r1: 30
upper radius r2: 17.5
height h: 30
Execute | Clear | Store/Read | 14dgt

volume V: 54,388.822815273
lateral area F: 4,849.8336589792
surface area S: 8,639.3797973719

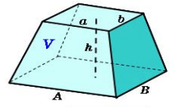
Circular truncated cone
(1) *volume:* $V=\frac{1}{3}\pi(r_1{}^2+r_1r_2+r_2{}^2)h$



Volume of a obelisk Calculator

Calculates the volume of a obelisk given the base and top sides, and height.

A obelisk is the polyhedron formed by two parallel rectangles whose side faces are trapezoids.



top side a: 34.6
top side b: 138.3
base side A: 60
base side B: 138.3
height h: 30
Execute | Clear | Store/Read | 14dgt

volume V: 196247.7

Obelisk
(1) *volume:* $V=\frac{h}{6}(Ab+aB+2(ab+AB))$

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

Attachment B

WM Stormwater Pollution Prevention Plan

STORMWATER POLLUTION PREVENTION PLAN

PREPARED IN ACCORDANCE WITH THE PROVISIONS OF WAR302034
INDUSTRIAL STORMWATER GENERAL PERMIT

Property:
Duwamish Reload Facility
7400 8th Avenue South
Seattle, Washington

Prepared for:
Waste Management of Washington, Inc.
7400 8th Avenue South
Seattle, Washington

Plan Revision Date:
May 2023

Stormwater Pollution Prevention Plan

Prepared for:

Waste Management of Washington, Inc.
7400 8th Avenue South
Seattle, Washington 98108

Duwamish Reload Facility
7400 8th Avenue South
Seattle, Washington 98108

Permit No.: WAR302034

Revised by:
Jason Davendonis
Environmental Protection Manager
Pacific Northwest Area
Waste Management
7227 NE 55th Ave.
Portland, OR 97218

May 2023

STORMWATER POLLUTION PREVENTION PLAN

Waste Management of Washington, Inc.
Duwamish Reload Facility
Seattle, Washington

Plan Review/Revisions Table

Date	Reviewer's Name	Revision Made to Plan
01/27/20	Jason Davendonis (WM)	Updated SWPPP and Site Figure to meet requirements of renewed ISGP effective January 1, 2020
04/30/21	Jason Davendonis (WM)	Minor revision to SWPPP monthly inspection form.
06/21/21	Jason Davendonis (WM)	Updated SWPPP and SWPPP Figure 2 to include newly constructed gravel lot for an empty container storage area.
05/10/23	Jason Davendonis (WM)	Updated SWPPP to include spill log as Appendix M, and minor revision to Figure 2 (Site Figure).

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TABLE OF CONTENTS (CONTINUED)

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FIGURES

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APPENDICES

ACRONYMS AND ABBREVIATIONS

ATS	advanced treatment system
BMP	best management practice
CESF	chitosan-enhanced sand filtration
CFR	Code of Federal Regulations
DMR	discharge monitoring report
Ecology	Washington State Department of Ecology
EPA	US Environmental Protection Agency
the Facility	Duwamish Reload Facility, 7400 8th Avenue South, Seattle, Washington
ISGP	Industrial Stormwater General Permit
KCIW	King County Industrial Waste
LDW	Lower Duwamish Waterway
NHBL	non-hazardous bulk liquids
OCA	Operations Containment Area
OSHA	Occupational Safety and Health Administration
OTR	over-the-road
the Permit	Industrial Stormwater General Permit
Permittee	Duwamish Reload Facility
PIC	person-in-charge
PPT	pollution prevention team
QI	qualified individual
SPECP	Spill Prevention and Emergency Cleanup Plan
SMR	solids monitoring report
super sacks	non-rigid containerized media
SWPPP	Stormwater Pollution Prevention Plan
TSS	total suspended solids
WAC	Washington Administrative Code
WM	Waste Management of Washington, Inc.
WMNS	Waste Management National Services
WMSS	Waste Management Sustainability Services

1.0 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared and updated for the Waste Management of Washington, Inc. (WM) Duwamish Reload Facility located in Seattle, Washington (the Facility). This SWPPP complies with the requirements of the Washington State Department of Ecology (Ecology) Industrial Stormwater General Permit, a National Pollutant Discharge Elimination System and State Waste Discharge General Permit for Stormwater Discharges Associated with Industrial Activities (the Permit) issued on November 20, 2019, effective on January 1, 2020, and expiring on December 31, 2024 (WAR302034). The industrial activities at the Facility are subject to Standard Industrial Classification codes 4953 (Refuse Systems), 4225 (General Storage) and 4212 (Local Trucking Without Storage), and/or North American Industry Classification System (NAICS) Code 493110 (General Warehousing and Storage)562111 (Solid Waste Collection).

This SWPPP addresses best management practices (BMPs) recommended for regulated industrial activities at the Facility, as well as BMPs that are currently in place for portions of the entire Facility that do not currently require coverage under the Permit.

The current Permit is included in Appendix A. Notation of any revisions must be provided in the original SWPPP prepared for the Facility (SWPPP Review/Revisions Table). This plan will be updated, as needed, to reflect changes to the adaptive management stormwater controls at the Facility, including changes in BMPs and of industrial activities.

1.1 PROPER SELECTION AND USE OF STORMWATER MANAGEMENT MANUALS

This SWPPP revision was prepared according to guidance provided by the *2019 Stormwater Management Manual for Western Washington* (Ecology 2019), which is Ecology's applicable Stormwater Management Manual for facilities west of the Cascade Mountains.

The BMPs selected for the site are practices contained in the stormwater technical manuals approved by Ecology.

2.0 FACILITY ASSESSMENT

2.1 SITE DESCRIPTION

The Facility is located at 7400 8th Avenue South in Seattle, Washington (Figure 1). The Facility is located in an industrial area of Seattle, bordered on the south by the Lower Duwamish Waterway (LDW), to the east by Slip 4 of the LDW, to the west by Eighth Avenue South, and to the north by South Garden Street and East Marginal Way South. The entire site covers 15.85 acres, which is mostly paved with asphalt and some covered buildings. The topography of the Facility and surrounding industrial area are relatively flat. A Facility location map is included as Figure 1. A site map is included as Figure 2. A stormwater drainage map is included as Figure 3. A Facility site map detail is included as Figure 4.

Current site features include the following:

- A waterfront dock facility

- Rigid containerized media units storage area (e.g., drums, dumpsters, intermodal, and other containers designed to contain material for transport, etc.)
- Non-hazardous bulk liquids (NHBL) offloading area
- Active and inactive stormwater outfalls
- On-site storm/process water pretreatment system
- On-site stormwater advanced treatment system (ATS)
- A sediment offloading area
- Spill-containment zone and Operations Containment Area (OCA)
- Rail spur
- Office trailers
- Barge berthing areas
- Truck scale
- Rail sliding
- Non-categorical liquids offload and decant system connected to the water pretreatment system
- Upland soil/industrial/manufacturing waste containment area
- Sediment processing area/equipment
- Maneuvering areas, including entrance and exit
- Empty container storage area.

The OCA includes a sediment processing area on the east side of the railroad tracks and an upland soil area to the west of the railroad tracks. The sediment processing area, used to contain and/or process sediment, is constructed over the asphalt pavement.

The upland storage containment area is part of the OCA, which is surrounded by a 6-inch-minimum-height curb. Free liquids collected from within the OCA area, including contact and in situ liquids, will be conveyed to the water pre-treatment system for discharge to the sanitary sewer. Upland soils and industrial/manufacturing wastes may arrive at the Facility in a dry state or have in situ water content. Dewatering is not typically required for upland materials; however, should dewatering be required, upland materials may be transferred to the Sediment Processing Area for processing or dewatering.

2.1.1 Business and Operational hours

The Facility's business hours are Monday through Friday, 7 AM to 5 PM. Depending on operating conditions, the Facility may be open outside of regular hours by appointment and has the ability to operate 24 hours per day, 7 days per week. The Facility may be closed on New Year's Day, Thanksgiving Day, and Christmas Day.

2.2 STORMWATER DRAINAGE SYSTEM

Stormwater accumulating on the Facility flows into a series of catch basins and conveyance lines to a single force main that conveys all stormwater collected by the five drainage basins outside of the OCA to

an ATS. Treated stormwater is conveyed to the LDW via a single outfall (Outfall A) from the ATS. Stormwater drainage areas are shown on Figure 3.

2.3 WASTEWATER DRAINAGE SYSTEM

The OCA became operational in June 2016 and as a result, the discharge to the LDW from Outfall 3 has been plugged and discontinued. Stormwater accumulating within the OCA and process water from dredge operations are conveyed to the on-site water pretreatment system and discharged to the municipal sewer system in accordance with King County Industrial Waste Discharge Permit (Appendix B). The OCA is sized to accommodate containment of a 24-hour 100-year storm event. Liquids contained inside the OCA unable to be managed via the on-site water pretreatment system may be hauled to an authorized treatment facility. An authorized treatment or disposal facility would be a facility that has the necessary permits to accept and properly manage our wastewater in the event that the system was down or otherwise incapable.

Liquids contained inside the OCA will be managed via the on-site storm/process water pretreatment system or hauled to an authorized treatment facility. An authorized treatment facility would be a facility that has the equipment, treatment facilities, and necessary permits to accept and properly treat our wastewater in the event that our system was down or otherwise incapable.

2.4 INVENTORY OF INDUSTRIAL ACTIVITIES

The current Facility's industrial activities include the following:

- Offloading, loading, transloading, and storage of marine cargo and equipment.
- Offloading, loading, transfer, and storage of containerized non-hazardous contaminated materials in closed rigid containers (intermodal operations).
- Offloading, loading, transfer, and storage of containerized non-hazardous contaminated materials in closed non-rigid containers (intermodal operations).
- Storage of trucks, vehicles, rail cars, equipment, and empty containers.
- Mooring of marine vessels.
- Offloading, loading, transloading, and storage clean bulk soils, sands, and gravels.
- Offloading, loading, transloading, and storage of NHBL.

These industrial activities may occur throughout the Facility and within the OCA. As described in Sections 2.1 and 2.3 and designated on the Site Map in Figure 2, the following activities will occur inside the OCA:

- Processing and treatment of contaminated stormwater for discharge to sanitary sewer.
- Offloading, transloading, loading, and storage of bulk nonhazardous contaminated dredge sediments from/to over-the-road (OTR) vehicles, barges, and rail cars.
- Offloading, transloading, loading, and storage of bulk nonhazardous, non-putrescible, solid and semisolid waste generated from marine debris and piling removal, manufacturing operations or industrial processes from/to OTR vehicles, barges, and rail cars.
- Offloading, loading, transloading, storage, processing and treatment of bulk and containerized wastewater from non-categorical industrial sources.

- Processing of bulk dredge sediments by screening, stabilization, dewatering, and mechanical means.
- Loading of bulk nonhazardous contaminated dredge sediments on OTR vehicles, barges, and rail cars.
- Unloading, storage, and transloading of contaminated upland soils on OTR vehicles, barges, and rail cars.

Industrial activities covered under the Permit are discussed below. Prior to commencing any industrial activity, not currently envisioned at the Facility and described herein, the SWPPP will be revised and the appropriate BMPs will be implemented.

The Facility receives the following non-solid waste permit materials via barge, rail, and OTR vehicles:

- Bulk liquids transloading and storage
- Bulk wastewater from non-categorical industrial sources
- Marine cargo/equipment—transloading and storage
- Rigid containerized materials—Intermodal Operations
- Non-rigid containerized materials—Intermodal Operations
- Empty waste-handling container storage
- OTR chassis storage
- Bulk clean soils and gravel materials storage and transloading

These materials are offloaded and either temporarily stored on-site or transloaded to another conveyance off-site.

The Facility receives non-hazardous bulk liquids via barge, OTR trucks, and rail cars. These materials are offloaded from the original conveyance and may be stored on-site in temporary tanks, treated for discharge to the sanitary sewer, or transloaded into barges, trucks, or rail cars. Transloaded liquids will be sent for disposal to an approved disposal or treatment facility. Treated non-categorical liquids will be managed in compliance with the Facility's King County Industrial Waste (KCIW) Discharge Permit and sent to the sanitary sewer. Solids that may be settled in these processes may be removed and commingled with other materials in the sediment processing area or OCA.

2.4.1 Barge Unloading/Loading

The Facility loads and unloads bulk and containerized contaminated non-hazardous soils, media, and dredge; marine equipment and cargo; and NHBL from marine barges. Barges dock at designated moorages adjacent to the shore-side. Materials are transported from/to the barge using heavy equipment or other mechanical means. The following is an overview of the methods for unloading and loading of materials from barges.

2.4.1.1 Non-Hazardous Bulk Liquids

NHBL transfer will occur either by pumping via hose line or by vactor truck directly into a conveyance such as barges, rail tankers, or tanker trucks for transport. BMPs for NHBL handling, storage, and transfer are listed in Section 4.

2.4.1.2 Non-Hazardous Dredge Sediments

Non-hazardous contaminated dredge sediments will be transferred using heavy equipment, pumping, or by mechanical means to processing equipment inside the OCA, and processed through the sediment processing equipment. BMPs for non-hazardous dredge sediments processing, handling, and storage are listed in Section 4.0.

2.4.1.3 Rigid Containerized Non-Hazardous Materials

Containerized non-hazardous materials in rigid containers will be offloaded using heavy equipment and stored in several locations outside the OCA. BMPs for containerized media handling, storage, and inspection are listed in Section 4.

2.4.1.4 Non-Rigid Containerized Non-Hazardous Materials

Non-rigid containerized non-hazardous materials will be transferred to the Upland Soil area using heavy equipment for storage prior to transportation off-site. BMPs for containerized media handling, storage, and inspection are listed in Section 4.

2.4.1.5 Marine Equipment and Cargo

Marine equipment and cargo will be offloaded using heavy equipment and stored in several locations outside the OCA. BMPs for marine equipment and cargo handling, storage, and inspection are listed in Section 4.

2.4.1.6 Non-Free-Draining Sediments

Non-free-draining sediments are offloaded from barges using a slurry pumping system that adds process water to the sediments at the pump. The slurried sediments are pumped to mixing tanks in the sediment processing area inside the OCA. Slurried sediments are pumped from the mixing tanks to the dewatering equipment. Once the sediment has been sufficiently dewatered, the sediment will be transferred to a storage pile on the asphalt within the OCA. From there, it will be transferred to truck or rail for off-site disposal.

2.4.1.7 Free-Draining Sediments

Prior to offloading free-draining sediments, accumulated water in the barge is removed via a portable pump and transferred into the water pre-treatment system with discharge of pre-treated water to the sanitary sewer. Free-draining sediments and debris are moved from the barge using the track-mounted barge offloader. The barge offloader transfers sediments to the sediment processing area over the spill apron. The sediment processing area is located adjacent to the barge berthing area. During track-mounted offloader operations, a spotter is positioned on the dock to monitor for spillage from the environmental bucket before transferring materials from the barge over the apron. The barge offloader swing radius allows the environmental bucket to empty into the sediment processing area.

2.4.2 OTR Truck Unloading/Loading

Contaminated upland soil non-hazardous industrial wastes and sludges, auto fluff, and other soil-like materials are delivered to the Facility in trucks, which dump the materials directly into the upland storage area. The trucks may be weighed on a certified scale when they arrive, depending on customer requirements.

The Facility unloads and loads containerized and bulk contaminated non-hazardous soils and materials, marine equipment and cargo, and NHBL from OTR trucks. Trucks are offloaded in designated areas, dependent on final mode of transportation and/or length of storage. Material is transported from/to the trucks using heavy equipment or other mechanical means. The following is an overview of the methods for unloading and loading of materials from OTR Vehicles.

2.4.2.1 Non-Hazardous Bulk Liquids

NHBL transfer will occur either by pumping via hose line or by vactor truck directly to a conveyance such as barges, rail tankers or tanker trucks for transport. BMPs for NHBL handling, storage, and transfer are listed in Section 4.

2.4.2.2 Rigid Containerized Non-Hazardous Materials

Containerized non-hazardous materials in rigid containers will be offloaded using heavy equipment and stored in several locations outside the OCA. BMPs for containerized media handling, storage, and inspection are listed in Section 4.

2.4.2.3 Non-Rigid Containerized Non-Hazardous Materials

Non-Rigid Containerized Non-Hazardous materials will be transferred to the Upland Soil area using heavy equipment for storage prior to transportation off-site. BMPs for containerized media handling, storage, and inspection are listed in Section 4.

2.4.2.4 Marine Equipment and Cargo

Marine equipment and cargo will be offloaded using heavy equipment and stored in several locations outside the OCA. BMPs for marine equipment and cargo handling, storage, and inspection are listed in Section 4.

2.4.2.5 Non-Hazardous Bulk Upland Soils

Non-hazardous bulk upland soils will be placed in the Upland Soil area inside the OCA. BMPs for non-hazardous bulk upland soils handling are listed in Section 4.

2.4.3 Railcar Unloading/Loading

The Facility unloads and loads containerized contaminated non-hazardous soils, media, marine equipment and cargo, and NHBL from railcars. Railcars are offloaded in designated areas dependent on final mode of transportation and/or length of storage. Offloaded material is transported from the trucks using heavy equipment or other mechanical means. The following is an overview of the methods for unloading and loading of materials from Railcars.

2.4.3.1 Non-Hazardous Bulk Liquids

NHBL transfer will occur either by pumping via hose line or by vactor truck directly to a conveyance such as barges, rail tankers or tanker trucks for transport. BMPs for NHBL handling, storage, and transfer are listed in Section 4.

2.4.3.2 Rigid Containerized Non-Hazardous Materials

Containerized non-hazardous materials in rigid containers will be offloaded using heavy equipment and stored in several locations outside the OCA. BMPs for containerized media handling, storage, and inspection are listed in Section 4.

2.4.3.3 Non-Rigid Containerized Non-Hazardous Materials

Non-rigid containerized non-hazardous materials will be transferred to the Upland Soil area using heavy equipment for storage prior to transportation off-site. BMPs for containerized media handling, storage, and inspection are listed in Section 4.

2.4.3.4 Marine Equipment and Cargo

Marine equipment and cargo will be offloaded using heavy equipment and stored in several locations outside the OCA. BMPs for marine equipment and cargo handling, storage, and inspection are listed in Section 4.

2.4.3.5 Non-Hazardous Bulk Upland Soils

Non-hazardous bulk upland soils will be placed in the Upland Soil area inside the OCA. BMPs for marine equipment and cargo handling, storage, and inspection are listed in Section 4.

2.4.3.6 Railcar inspection and Lining

Gondola railcars and intermodal containers may be used to transport bulk materials off-site. Gondola railcars are steel containers that have no doors and are only open on the top for loading and unloading. Gondola cars are inspected on arrival for damage (e.g., holes, gaps, or openings in the side or bottom of the rail container) that could compromise their containment capability and cause potential spillage. Should defects be found for a particular gondola railcar, a plastic liner will be placed in the gondola rail car prior to it being loaded. If a liner is installed, this will be done in a safe manner adhering to Occupational Safety and Health Administration (OSHA) safety standards. Each liner will be visually inspected after installation to ensure liner integrity. Heavy equipment will be used to load materials into lined rail cars. Heavy equipment will place materials in the railcars in a manner which minimizes splash and spillage. Railcars found to have free liquids prior to transport off-site will be amended with dry soils or other amendments to absorb any free liquids.

2.4.4 Non-Categorical Liquids Treatment

Volumes of non-categorical liquids will arrive at the Facility via, barge, rail, or OTR vehicles. Bulk non-categorical liquids arriving on barges or by rail tanker will be offloaded using the procedures in 2.4.2.1 and sent to the water pretreatment system. Volumes arriving in OTR tankers and vacuum-type vehicles will tip directly into either the OCA or into a receiving system piped directly to the process water pre-treatment system. The materials accepted in this process will be in compliance with the Facility's KCIW Discharge Permit. Liquids that decant from the solids tipped directly in the OCA will be transferred to the treatment system using the same return pipeline that leads from the treated water storage tanks to the wastewater pretreatment system. Liquids that decant from the receiving system will be sent directly to the process water pre-treatment system.

2.4.5 Bulk Clean Soils Stormwater Management Area

The Facility will from time to time accept, store, and/or transfer bulk clean soils and gravels. These materials will be stored on the asphalt outside of the OCA in "Eco" block type storage bunkers. No contaminated soils will be stored in the bulk clean soils area. The areas where the uncontaminated soils and gravels will be handled and stored will have stormwater structural controls. Figure 2 in Appendix A will be updated to show the storage areas once constructed. Stormwater runoff from these areas is managed with structural controls and treatment via the ATS prior to being discharged to the LDW in compliance with the Facility's Permit.

2.4.6 Outdoor Storage of Materials or Products

Stored un-containerized marine equipment or freight, which may have the potential to carry pollutants into the stormwater drainage system and discharge to surface waters, will be tarped or containerized during storage at the Facility, as feasible.

Dumpsters are stored with their lids closed or tarped so that storm water does not collect inside. Dumpsters are inspected regularly and are maintained to meet or exceed the State Minimum Function Standards, in accordance with Title 173, Chapter 304, Section 200 of the Washington Administrative Code (WAC).

Reagent products will be stored in silos, closed containers, tarped, or inside the OCA.

2.4.7 Wheel Wash System Operations

A majority of truck and equipment exiting the OCA will be run through the wheel wash system or decontaminated by pressure washing. Other decontamination methods may be utilized as long as they are effective in containing contaminants within the OCA. The wheel wash system is located inside the OCA. All vehicles exiting the OCA will drive through the wheel wash to prevent particulate track out from the OCA onto the Facility grounds. The time in the wash and the length of the wash deck are designed to wash the wheels and underside of vehicles so that contaminated materials are captured. As an additional precaution, there will be a gap between the exit ramp of the wheel wash, which is equipped with a rumble strip at the entrance and exit, and the speed bump on the perimeter of the OCA. This drip-off will run into the OCA where the water is collected and pumped to the on-site storm/process water pretreatment system and then discharged to the municipal sewer system. From the exit of the wheel wash to the exit of the OCA, vehicles will travel approximately 200 feet in an exit traffic lane inside the OCA; therefore, any drippings of wheel wash water is anticipated to be captured inside the OCA. No soil or sediment will be stored in the exit traffic lane area to minimize re-contamination of vehicles exiting the Facility.

2.4.8 Outdoor Dredge Processing

The staging for transloading of bulk non-containerized contaminated dredge sediments will occur in the OCA. Depending on consistency, sediments may be solidified by adding and mixing with bulking amendments to reduce moisture and improve handling properties, or be dewatered using mechanical means. Stormwater may come into contact with material during material bulking and loading out. Stormwater accumulating in the OCA will be collected and pumped to the on-site storm/process water pretreatment system, then be discharged to the municipal sewer system in accordance with King County Industrial Discharge Permit requirements. Alternatively, collected contaminated stormwater may be hauled off-site to a permitted facility for disposal.

2.4.9 Dust or Particulate Generating Processes

Truck traffic is a possible source of dust at the Facility. Soil/sediment handling and wet sediment amendment activities may generate dust. BMPs for dust control are discussed in Section 4.

2.4.10 Waste Treatment, Storage, or Disposal

Facility-generated wastes are disposed of by placing garbage bags or recyclables in a dumpster on-site. Each dumpster has a lid that is kept closed. Waste and recyclables are collected regularly by WM.

2.4.11 Vehicle and Equipment Fueling, Maintenance, and Cleaning

Facility equipment is fueled by a third-party vendor. Fueling frequency depends on operational activity. All fueling is done via wet-line transfer (direct from fuel truck to equipment). The driver is required to report any spills or observed leaks from equipment prior to leaving the site. There are no fuel storage tanks at the Facility. There are five spill kits placed around the working area in close proximity to all activities (Figure 2). In addition, spill kits are located on each fueling truck. Inside each on-site spill kit is a catch basin cover to prevent any spills from entering a catch basin, which will be deployed to cover the nearest catch basin(s), should a spill occur.

All vehicle/equipment decontamination or washing will occur within the OCA, and any wash water will be collected and treated through the on-site storm/process water pretreatment system and then discharged to the municipal sewer system.

Trucks entering the OCA will exit through a wheel wash. The water used in the wheel wash system is recycled. Particulates and floatable oils will be separated by the system. Accumulations will be removed on a routine basis and properly disposed of. Should the system need to be emptied for maintenance or repairs, the water in the system will be removed and either transferred to the on-site storm/process water pretreatment system or hauled off-site to an authorized treatment/disposal facility. An authorized treatment facility would be a facility that has the equipment, treatment facilities, and necessary permits to accept and properly treat wastewater in the event that the Facility's system was down or otherwise incapable. Any drip-off or drag out past the wheel wash will be collected inside the OCA as the trucks will drive approximately 200 feet in the exit traffic lane before they exit. This process is described in detail above in Section 2.4.5.

2.4.12 Roofs or Surfaces Exposed to Air Emissions

Industrial activities do not occur within buildings on-site that may generate air emissions. Materials stored on-site to be used as bulking amendments have the potential to create fugitive emissions. Good housekeeping BMPs will be used to minimize potential for fugitive emissions and are described in Section 4.

2.4.13 Roofs or Surfaces Composed of Materials That May Be Mobilized by Stormwater

The roof on the "Metal Canopy/Queuing Area" is galvanized. Additional galvanized surfaces on-site include steps and ramps for the temporary office trailers. These galvanized surfaces have the potential to convey zinc in surface runoff from rainfall.

Turbidity and sources of metals may be deposited from neighboring sources; on-site sources may include tire tread, vehicle break-pads, and particulates deposited during the transfer of materials. The northern portion of drainage basin 6 includes a vegetated area which is used as an infiltration

area. There are three catch basins (CB-80, CB-81, and CB-82) within the vegetated area that convey stormwater to the ATS prior to discharge to the LDW.

2.5 ACCEPTED WASTE TYPES

All sediment and contaminated soil handled at the Facility must be approved into the Facility through the Waste Management National Services (WMNS) approvals process. Materials shipped off-site for disposal or transfer must also be approved through the WMNS approval process for the destination facility.

The types of regulated solid waste accepted at the Facility are classified as non-hazardous, non-dangerous waste (per WAC 173-303 and Title 40, Parts 261 & 761 of the Code of Federal Regulations [CFR]) and include the following:

- Bulk contaminated dredge sediments
- Bulk contaminated upland soils
- Bulk and containerized non-hazardous industrial wastes and sludges
- Non-putrescible solid and semisolid waste generated from marine debris and piling removal, manufacturing operations or industrial processes
- Automotive Shredder Residue (auto fluff) and other soil-like materials that have been approved for use as alternate daily cover, other beneficial uses, or disposal at Subtitle D landfills

Other materials transloaded at the Facility not requiring a solid waste permit include the following:

- Bulk liquids transloading and storage
- Bulk and containerized wastewater from non-categorical industrial sources
- Marine cargo/equipment transloading and storage
- Rigid containerized materials—Intermodal Operations
- Non-rigid containerized materials—Intermodal Operations
- Empty waste handling container storage
- OTR chassis storage
- Bulk clean soil and gravel materials storage and transloading

The Facility employs waste-screening procedures to prevent the receipt of unacceptable waste types. These screening procedures are described in Appendix C, Special Waste Acceptance & Hazardous Waste Exclusion Plan of the Plan of Operations. As listed in the Facility's Waste Discharge Permit, issued by KCIW, there is a requirement that waste solids processed at the Facility will not exceed the general pollutant concentrations listed in the permit (see Appendix B of the Operations Plan). As noted in the KCIW Discharge Permit, WM will not accept waste materials that exceed the acceptance criteria without first obtaining written approval (email is sufficient) from KCIW.

2.6 REGULATED SOLID WASTE MATERIALS

The Facility receives contaminated dredge sediments via barge. Contaminated upland soils; bulk and containerized non-hazardous industrial wastes and sludges; auto fluff; non-putrescible solid and semisolid waste generated from manufacturing operations or industrial processes; and other soil-like materials that

have been approved for use as alternate daily cover, other beneficial uses, or disposal at Subtitle D landfills arrive via trucks. These materials are offloaded from the barge or truck, and then may be further dewatered, amended, contained and stored on-site before being transloaded into trucks or rail cars for disposal at WM's Columbia Ridge Landfill or another approved landfill facility. Water that is removed from the dredge sediments (decant water) is conveyed to an on-site water pretreatment system for processing, prior to being discharged to a City sanitary sewer pipe, which discharges to a King County wastewater treatment facility.

2.7 INVENTORY OF MATERIALS

The following section describes the types of materials that are currently stored or may be stored on-site, the potential for pollutants to be present in stormwater runoff, and any potential pollutant sources from past activities, materials or spills.

2.7.1 Materials That May Be Exposed to Precipitation or Runoff

When applicable, soils/sediments may be exposed to stormwater during storage and transloading activities. These soil/sediments may include non-hazardous contaminated soils and non-hazardous contaminated dredge sediments. Handling equipment, including trucks, forklifts, cranes, excavators, railcars, railcar pullers, intermodal containers, containerized media units, and other similar items, may also be exposed to stormwater. BMPs for controlling or reducing stormwater pollution are described in Section 4.0.

2.7.2 Potential for Pollutants to Be Present in Stormwater Discharges

This section identifies areas associated with industrial activities that have been, or may potentially be, sources of pollutants. The primary risks to stormwater from the Facility were determined to include the following:

- For material handling; the release of contaminants from outdoor storage and/or transfer of the following materials:
  - Non-hazardous contaminated soils
  - Non-hazardous contaminated dredge sediments
  - Non-hazardous liquids
  - Containerized media in non-rigid units
- Equipment operations and storage of the following:
  - Forklifts
  - Trucks
  - Cranes
  - Loaders
  - Excavators
  - Rail car pullers or other similar items
  - Intermodal containers (empty or in use)

- Rigid and non-rigid containerized marine debris storage
- Non-hazardous liquids

Additional sources of stormwater pollutants from industrial activities may include the following:

- Marine freight transloading
- The wheel wash system
- Petroleum releases during wet fueling operations
- Accumulation of small drips of residual petroleum or automotive fluids and dirt from vehicles and loading equipment in outdoor areas
- Mobilization of zinc from rainfall onto galvanized surfaces
- Track on/out of dirt on tires of vehicles entering and exiting the Facility
- Accumulation of miscellaneous airborne contaminants from off-site industrial activity sources

2.7.3 Potential Sources of Pollutants from Past Activities, Materials, and Spills

WMNS is unaware of historical spills that may have occurred at the Facility prior to WMNS operations.

3.0 POLLUTION PREVENTION TEAM

The pollution prevention team (PPT) meets at least annually to review the Facility's SWPPP, prevention protocols, inspection results, and lessons learned. The list of people who are involved in the annual training is located in Table 3-1, below. The PPT is responsible for implementing, monitoring, maintaining, and modifying the SWPPP, and suggesting changes to pollution prevention protocols. The various team members are responsible for employee training, spill response, maintenance, stormwater system maintenance, site maintenance, and material storage and use on-site.

Table 3-1 Pollution Prevention Team

Lead	
Title	Senior District Manager or District Manager
Responsibilities	▪ Oversee ongoing implementation of SWPPP and BMPs. ▪ Manage compliance with implementation schedule. ▪ Properly record and report results and observations of inspections. ▪ Review and update SWPPP in accordance with regulations. ▪ Coordinate training, such as new employee orientations, existing employee training, and annual training.

Members		
Title	Operations Manager	
Responsibilities	▪ Manage compliance with implementation schedule. ▪ Properly record and report results and observations of inspections. ▪ Coordinate and provide employee training including new employee orientation, existing employee training and annual training.	
Title	Environmental Protection Manager	
Responsibilities	▪ Review inspection records and reports. ▪ Review and update SWPPP. ▪ Provide technical support for necessary corrective actions.	
Title	Stormwater System Manager or third-party	
Responsibilities	▪ Manage ATS ▪ Monitor compliance with implementation schedule. ▪ Perform stormwater compliance sampling.	
EMERGENCY RESPONSE AND SUPPORT SERVICE PROVIDERS		
Environmental Recovery Services	Marine Vacuum Bravo Environmental NRC Environmental PSC	206-762-0240 425-424-9000 800-337-7455 877-577-2669

3.1 SPILLS AND LEAKS

Potential spills and leaks could occur throughout the Facility from vehicle traffic or operating equipment.

If small spills occur at the Facility, they are cleaned up immediately using spill kits. Spill kits are located around the Facility at the locations identified in Figure 2. The spilled material and other contaminated material are disposed of using BMPs described in the table below. Further elaboration of spill BMPs are described in Section 4.0. WMNS will hire a commercial spill response company for larger spills beyond the recovery capability of the Facility. Every incident is recorded, and the record is kept on file for 5 years.

Table 3-2 Spilled Materials BMPs

Potentially Spilled Material	BMPs for cleanup and disposal
Contaminated soils and sediments.	Sweeping with a broom or sweeper truck to occur upon discovery at point of spill. Soil will be placed in a container, upland soil area, or railcar for disposal.

Potentially Spilled Material	BMPs for cleanup and disposal
Petroleum products from fueling operations, drips from residual petroleum or automotive fluids, and oil or lubricants from heavy equipment use and operation, and NHBL.	Absorbent pads, booms, and loose absorbent material such as "oil dry" will be deployed as necessary to contain and absorb any spilled "wet" materials. If catch basins are in the vicinity, a catch basin cover will be placed to prevent spilled material from entering the basin. Used absorbent material will be disposed of properly.

3.1.1 Known Spills or Leaks

A spill of water-based asphalt sealant occurred on July 10, 2015. As a result of this, spill sealant entered a catch basin connected to the LDW. The spill was reported, responded to properly, and cleaned up the day it occurred.

On March 27, 2017, Pro-Vac was removing accumulated sediments in catch basins and conveyance piping in Drainage Basin 3. The last portion of piping conveyance, from CB 31 to the end of Outfall 3 was vacuumed as far as possible, leaving a small amount of liquids behind the cap at the end of Outfall 3. Prior to removing the outlet plug, Pro-Vac placed a 50-gallon spill containment bucket at the Outfall. Upon removal of the plug, most of the process water was captured in the containment bucket, however approximately 5 to 10 gallons of process water was discharged into the LDW. Pro-Vac immediately placed their hose at the end of the outlet pipe to prevent any additional discharge of the process water. This spill was reported and responded to properly.

In response to this spill, the Facility replaced the mechanical plug at Outfall 3's outlet pipe with a valve. Pro-Vac again removed accumulated process water in the catch basins and conveyance piping within Drainage Basin 3. Upon installation of this valve, Pro-Vac placed a 30-gallon spill containment bucket at the end of the outfall. Upon removal of the mechanical plug, most of the process water was released out of the pipe into the secondary containment bucket, however, and estimated 5 to 10 gallons of the process water discharged into the LDW. Immediately following removal of this plug, Pro-Vac placed their hose over the end of the Outfall 3 outlet pipe to prevent any additional discharge of process water. This spill was reported and responded to properly.

4.0 BEST MANAGEMENT PRACTICES

The Permit identifies five categories of BMPs that may be either required or recommended for a facility to control stormwater discharge:

1. Operational source control BMPs
2. Structural source control BMPs
3. Treatment BMPs
4. Stormwater peak runoff rate and volume control BMP
5. Erosion and sediment control BMPs

BMPs will be implemented as necessary for the industrial activities occurring at the Facility. The SWPPP will be revised to reflect any change in industrial activity and BMPs will be implemented accordingly.

4.1 OPERATIONAL SOURCE CONTROL BEST MANAGEMENT PRACTICES

This section describes operational source control BMPs at the Facility. All required and recommended operational source control BMPs are contained in Volume IV, Chapter 2 of the *Stormwater Management Manual for Western Washington* (Ecology 2019).

4.1.1 Good Housekeeping

Good housekeeping includes the ongoing maintenance and cleanup of areas that are most likely to contribute pollutants to stormwater. The following good housekeeping BMPs are practiced.

4.1.1.1 Vacuum Sweep Paved Surfaces

The Facility vacuums paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) regularly to remove accumulated sediment and debris that could contaminate stormwater. In addition, the Facility sweeps paved areas with an on-site mechanical sweeper, on an as needed basis. Areas with high potential for dust generation, such as the paved areas listed in Section 4.1.1.2, will be mechanically swept at least weekly during active operations, especially when the pavement is wet.

Dockside sediment control (e.g., sweeper truck, shoveling, sweeping, wash down) is performed weekly, at a minimum, or more frequently as site conditions warrant, to avoid the tracking of sediment by vehicles and personnel and to generally maintain a clean site. This includes the dock, transload area, and the haul routes.

4.1.1.2 Dust Control

Accumulated dust on the property is controlled by regular sweeping; sweeper type and frequency of sweeping is discussed in Section 4.1.1.1 and will occur as needed to control fugitive dust. Areas where bulk materials are handled, such as loading and unloading areas, will be monitored for fugitive dust on a regular basis. Misting with water will be deployed as necessary for dust suppression and control.

Areas of the Facility with the potential for dust generation are as follows:

- The Upland Soil area
- The rail loading area outside the Upland Soil area inside the OCA
- The rail operations area where material loading occurs
- Dredge processing areas where amendments are applied

4.1.1.3 Dumpsters

Dumpsters containing refuse and recyclables are kept under cover or fitted with a lid that must remain closed when not in use. Scrap metal bins are kept covered or under cover when not in use.

In addition to the above, the following good housekeeping BMPs are practiced by the Facility:

- Cleaning and maintaining operational areas during the day.
- Using solid absorbents (e.g., oil absorbent pads and rags) for cleanup of liquid spills/leaks and properly disposing of absorbent media.

- Conducting visual inspections of containerized media storage units for leaks or punctures daily, and documented weekly, as part of the solid waste handling Facility inspection. If tears or leaks are found, performing cleanup in accordance with Section 4.1.3 for spills outside the OCA.
- Recycling of materials, such as oils and solvents, to the maximum extent possible.

4.1.2 Preventive Maintenance

The Facility uses source control to prevent contaminants from reaching the storm drainage system. Proper maintenance of stormwater grates, catch basins, and catch basin filters are necessary to ensure they serve their intended function. Without adequate maintenance, sediment and other debris can clog grates, basins, conveyance lines, and catch basin filters, reducing their functionality. Contaminated water and sediments removed during the cleaning operations are treated through the pretreatment system prior to discharge to the sanitary sewer. The following preventive maintenance BMPs are practiced by the Facility.

4.1.2.1 Maintenance of Stormwater System

The following maintenance BMPs are practiced by the Facility since ATS installation:

- The stormwater line in CB 70 from CB 80, 81, and 82 is tied into the force main and is conveyed to the ATS.
- All operative catch basins outside of the OCA have sediment filters installed in them. The CleanWay inserts installed as part of the Phase I of the Engineering Report were removed once the ATS became fully operational. The catch basin turn-down elbows, which were originally removed with the City of Seattle's approval to facilitate installation of the CleanWay filters, were reinstalled.
- Catch basin sumps are cleaned on an annual basis, or more frequently as needed.
- Catch basins, sumps, drains, and filter inserts are maintained in accordance with the Stormwater Management Manual of Western Washington. Frequency of activities is described in Table 4-4.
- Equipment and vehicles will be inspected during monthly site inspections for leaking fluids, such as oil and antifreeze. Leaking equipment and vehicles will be taken out of service and repaired to prevent leaks from spilling on the ground. Drip pans will be deployed, and absorbent materials placed to contain or clean up drips or leaks.
- Spills and leaks are immediately cleaned up (e.g., using absorbents or vacuuming) to prevent the discharge of pollutants. Refer to the Spill Prevention and Emergency Cleanup Plan (Section 4.1.5) for detailed spill cleanup procedures.
- Any deterioration threatening the structural integrity of the infrastructure will be repaired promptly, including replacement of catch basin lids or cracked catch basin sumps, risers, or pipes.

Past significant maintenance activities to the stormwater system include the following:

- Accumulated solids from the storm drain lines controlled by the Duwamish Reload Facility (Permittee) were removed in July 2016 and in August 2017. The Permittee

conducted the line cleaning operations (e.g., jetting, vacuuming, removal, loading, storage, and transport) using BMPs to prevent discharges of storm drain solids to surface waters of the state. Removed storm drain solids and liquids were disposed of in accordance with applicable laws and regulations and documented in the SWPPP.

- Per the permit, the Permittee also sampled and analyzed storm drain system solids in accordance with Table 4-1 in October 2017. As per Administrative Order #13649, the Facility conducted storm drain solids sampling and analyses in October 2017. Storm drain solids were collected/sampled from several catch basins within the storm drain system that corresponded to the discharge point where Total Suspended Solids (TSS) samples were collected per Condition S6.C.

Storm system maintenance records are shown in Appendix C or filed with the site SWPPP records.

Table 4-1. Sampling and Analytical Procedures for Storm Drain Solids (Table 8 from 2020 Industrial Stormwater General Permit)

Analyte	Method in Sediment	Quantitation Level[(1)]
Conventional Parameters		
Percent total solids	SM 2540G, or ASTM Method D 2216	Not Applicable
Total organic carbon	PSEP 1997, or EPA 9060	0.1%
Grain Size	(ASTM 1997), ASTM F312-97, ASTMD422 or PSEP 1986/2003	Not Applicable
Metals		
Antimony, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw
Arsenic, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	0.1 mg/kg dw
Beryllium, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw
Cadmium, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw
Chromium, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	0.5 mg/kg dw
Copper, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw
Lead, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw
Mercury, Total	EPA Method 1631E, or EPA Method 7471B	0.005 mg/kg dw
Nickel, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	0.1 mg/kg dw
Selenium, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	0.5 mg/kg dw
Silver, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	0.1 mg/kg dw
Thallium, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw
Zinc, Total	EPA Method 200.8 (ICP/MS), EPA Method 6010 or EPA Method 6020	5.0 mg/kg dw
Organics		

Analyte	Method in Sediment	Quantitation Level[1]
PAH compounds[2]	EPA Method 8270 D	70 µg/kg dw
PCBs (Aroclors), Total[3]	EPA Method 8082	10 µg/kg dw
Petroleum Hydrocarbons		
NWTPH-Dx	NWTPH-Dx	25.0-100.0 mg/kg dw

NOTES:
[1]The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the sediment monitoring report. All results shall be reported. For values below the QL, or where a QL is not specified, report results at the method detection level (MDL) from the lab and the qualifier of "U" for undetected at that concentration. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific MDL and QL on the DMR.
[2]PAH compounds include: 1-methylnaphthalene, 2-methylnaphthalene, 2-chloronaphthalene, acenaphthylene, acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b,k)fluoranthene, benzo(ghi)perylene, dibenzo(a,h)anthracene, dibenzofuran, carbazole, chrysene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene.
[3]Total = sum of PCB Aroclors 1016+1221+1232+1242+1248+1254+1260.

µg/kg = micrograms per kilogram
ASTM = Ecology Method Sieve and Pipette
dw = dry weight
Ecology = Washington State Department of Ecology
EPA = US Environmental Protection Agency
mg/kg = milligrams per kilogram
NWTPH = Northwest Total Petroleum Hydrocarbon
PAH = polycyclic aromatic hydrocarbon
PCB = polychlorinated biphenyl
PSEP = Puget Sound Estuary Protocols
SM = Standard Method

4.1.2.2 Illicit Discharge Prevention Best Management Practices

The following illicit discharge prevention BMPs are practiced by the Facility:

- Observations made at stormwater sampling locations and areas where stormwater associated with industrial activity is discharged to the LDW.
- Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, and odor in the stormwater discharges.
- Observations for the presence of illicit discharges, such as domestic wastewater and process wastewater, including water that may be coming from the wheel wash or on-site water pretreatment facility.
- Observations made along aboveground conveyance piping for the on-site water pretreatment system for leaks that have the potential to discharge outside the OCA.
- No discharge of process wastewater to the storm system occurs at the site, including process wastewater, domestic wastewater, noncontact cooling water, or other discharge(s) to the storm system. All process water approved for discharge to the Publicly Owned Treatment Works is treated and discharged via the on-site water pretreatment facility.
- All indoor plumbing discharges to the sanitary sewer.
- No equipment washing is performed outside the OCA.
- No NHBL are discharged to surface waters, and spills or drips are cleaned up according to the BMPs outlined in Section 4.1.

4.1.2.3 Additional Preventive Maintenance Best Management Practices

The following additional preventative maintenance BMPs are practiced by the Facility:

- Storing potential stormwater pollutant materials inside a building, in a storage container or under a cover, where practicable.
- Preventing the discharge of unpermitted liquid or solid waste and sewage to ground or surface water, or to storm drains which discharge to surface water.
- Conducting all pressure washing of equipment or containers inside OCA.
- For the storage of liquids, using steel or plastic containers that are rigid, durable, nonabsorbent, rodent-proof, resistant to corrosion, and have a close-fitting cover.

4.1.3 Barge, OTR Tanker, Rail Tanker Loading/Unloading—Non-Containerized/Containerized Materials, Non-Dredge Materials

The following BMPs are to be used to manage non-containerized and containerized material and prevent contact with stormwater:

- Barges/vessels will be properly secured and will be moored in compliance with applicable Coast Guard regulations.
- Analytical data for accepted non-hazardous contaminated materials will be available electronically or on-site in the Facility operating record file in the office trailer.
- If necessary, additional BMPs or control measures will be implemented for pollution prevention and updates will be made to the SWPPP to reflect these changes.
- Operators unloading material will perform a visually check all container units prior to unloading and during the transfer process to identify potential for spills. Continual observations by the equipment operator will occur during the unloading process to monitor for spilled material. If spilled material is observed, the Facility, or subcontractors, will take action to clean up the material. Any spilled material is cleaned up immediately on the conveyance. Torn sacks are repaired by covering holes with heavy plastic and/or mending with tape to eliminate further spills (if possible) or, if unrepairable, torn non-rigid containerized media (super sacks), including remaining contents, will be loaded into new sacks or an intermodal container on the conveyance prior to offloading. The containerized media non-rigid inspection log is included as Appendix D.
- If a super sacks unit tears or spills outside the conveyance or OCA, the spill will be immediately cleaned up and handled as described above. The affected area will be swept until visually clean. If necessary, additional inspections will occur to identify possible failing units.
- If spills occur on the transportation unit, the unit is swept, mechanically or manually, where the spill occurred. Any collected material is deposited in a container on the transportation unit before offloading.
- Any spills that occur during handling are cleaned up and placed in an appropriate container and stored in the OCA prior to disposal.
- Catch basins within the OCA are drained by the pretreatment system catch basin pumping system. Standing water not adequately drained by the pretreatment system

will be pumped to the on-site water pretreatment system for processing and discharged to the municipal sewer system or shipped off-site to a permitted facility.

- Detected spills are addressed immediately to minimize ground contact.
- Super sack units will be stored inside the OCA prior to being loaded into rail cars or trucks for transport to the disposal site.
- Containerized media units storage areas are inspected daily for leaks, spills, and damage to containers.
- Contaminated materials will not be left on pavement areas outside the OCA. Subcontractors, such as barge operators unloading super sacks, will be trained on Facility storage and handling requirements, such as reporting any non-rigid containers that rip during handling.

An inspection log (Appendix D) will be maintained for each conveyance that lists the torn non-rigid containers by number with its location at the Facility and the corrective action taken to contain and clean up the spilled material.

4.1.3.1 Barge, OTR Tanker, Rail Tanker Loading/Unloading of NHBL

The following BMPs are to be used to prevent spills of non-hazardous liquid and potential contact with stormwater:

- Perform NHBL transfers only in areas designated on Figure 2. Transfers onto rail will occur within the OCA.
- Use valves or dry disconnect fittings at hose connection points that prevent liquid spills when disconnected.
- Use drip pans under all transfer piping connection points. Absorbent pads may be used in conjunction with drip pans.
- Use dry cleanup methods for spills or leaks such as absorbent pads, booms, and loose absorbent material such as “oil dry” will be deployed as necessary to contain and absorb any spilled “wet” materials.
- Apply absorbents materials to drips or spills and dispose of properly.
- Continuously monitor the NHBL transferred process for leaks or drips.
- All spills will be immediately cleaned up. Fixed spill kits are available in all NHBL transfer areas, as designated on Figure 2, as well as on all vactor trucks used for transfer operations.
- Inspect all hoses, valves, and liquid transfer equipment prior to use and do not use broken or leaky equipment.
- Monitor tanks or tanker truck levels when performing a NHBL transfer and do not top off tanks to prevent over-filling and spills. Keep spill kits in close proximity to the transfer area during NHBL transfer operations.

- In the unlikely event that a spill occurs, which cannot be cleaned up with dry clean-up methods, on-site vactor trucks or a third party vendor employing vacuuming or other related services will be utilized.
- Employees will be trained on proper liquids transferring techniques.
- If a spill enters the storm drain or surface waters, report the spill in accordance with the Section 4.2.
- Plug catch basins in the vicinity of NHBL transfer operations (CB-21 and CB-22, or CB-40 and CB51) using an insertable mechanical plug or equivalent.

The roles and responsibilities for personnel engaging in NHBL transfer are as follows:

- Person-in-Charge (PIC; this is the vacuum truck driver), the PIC shall:
  - Ensure that all requirements for transfer (33 CFR 126.15(o) and 33 CFR 156.120) are met before, beginning, and during the transfer operation, and that the procedures given in the Operations Plan are followed.
  - Prior to making transfer connections, ensure that all fixed drip and discharge collections are properly drained to ensure required capacity and place portable drip and discharge collection (as required) under each transfer hose connection.
  - Make (or disconnect) all transfer connections.
  - Make regular checks of the vessel's moorings and the transfer hose, being especially watchful for excessive strain or leakage.
  - Remain immediately available at the transfer location, throughout the transfer operation, unless relieved by another qualified and designated PIC, who shall sign both copies of the declaration of inspection to indicate relief after consulting with the vessel's PIC.
  - Maintain continual communications with the vessel's PIC throughout the transfer operation using radios provided in the truck or cell phone.
  - Immediately notify the Waste Management Sustainability Services (WMSS) Project Manager or dispatcher of any emergency or oil spill at or affecting the transfer location.
- PIC Assistant or Qualified Individual (QI), the QI shall:
  - Oversee the transfer operation and continually check all connections from the vacuum truck to the vessel.
  - Maintain continuous communications with the PIC in order to communicate spills, leaks, or other issues which would require shut down of the operation.
  - Confirm that all spill containment equipment is properly installed at all connections.
- Vessel PIC, the vessel PIC shall:
  - Maintain vessel security during the transfer operation.

- Oversee the transfer operation and continually check all connections from the vessel to the vacuum truck.
- Maintain continuous communications with the vacuum truck PIC in order to communicate spills, leaks, or other issues which would require shut down of the operation.
- Confirm that all spill containment equipment is properly installed at all connections on the vessel.

- Duwamish Reload Facility PIC shall:
  - Confirm that all PICs, PIC Assistants and QIs have been trained on the safety rules and operating procedures of the facility.
  - Confirm that they all have the appropriate personal protective equipment for their assigned tasks.
  - Confirm that all spill equipment is installed properly and that additional supplies are readily available.
  - Oversee the transfer operation, insuring that all personnel are performing their assignments properly.
  - Maintain continuous communications with the PIC in order to communicate spills, leaks, or other issues which would require shut down of the operation.
- Other: to be determined (as required).

Prior to initiating NHBL transfer operations the transfer operator shall inspect and confirm the following:

1. The transfer system and valve alignment to ensure that all is ready for liquid transfer.
2. That all parts of the transfer system not to be used during the transfer are securely blanked.
3. Hoses and loading arms are long enough to allow movement to the limits without placing strain on the hose, loading arm, or transfer piping system.
4. Each hose is supported to prevent kinking or other damage to the hose and strain on its coupling.
5. The end of each hose and loading arm that is not connected for the transfer of material, are blanked off using appropriate closure devices.
6. All transfer hoses are free of defects, which would permit the discharge of material through the hose material or cause the hose to fail under normal operating conditions.
7. All connections in the transfer system are leak free.
8. The discharge containment equipment is readily accessible or deployed as applicable and is in place and periodically drained to provide the required capacity.

9. The transfer operator must maintain visual contact with connection and overflow devices during the entire transfer operation, and the emergency means of shutdown is in position and operable.
10. For transfer operations between vessels, trucks, or rail cars from sunset to sunrise, adequate lighting is provided.

For transfers from/to moored marine vessels, the transfer operator shall check the mooring of the vessel to ensure proper alignment of transfer connections with minimum surge of the vessel.

For transfers from/to a truck or rail car, the transfer operator shall ensure the brakes are set and wheel chocks are placed as appropriate to ensure proper alignment of transfer connections.

The transfer operator shall have a pre-transfer conference with other individuals involved to ensure each person assisting with the transfer understands the details of the transfer operation. The attendees of the pre-transfer conference will be recorded on the NHBL pre-transfer conference log and retained in the SWPPP as Appendix L. Topics for discussion as are follows:

1. The type material being transferred.
2. The sequence of transfer operations.
3. The expected transfer rate.
4. The name and location of each person participating in the transfer operation.
5. Details of the transferring and receiving systems, including procedures to ensure that the transfer pressure does not exceed the maximum allowable working pressure for each hose assembly, loading arm, and transfer pipe system.
6. Emergency procedures.
7. Discharge containment procedures.
8. Discharge reporting procedures.
9. Transfer shutdown procedures.
10. If the transfer operations personnel use radios a predetermined frequency for communications during the transfer agreed upon.

4.1.4 Wheel Wash System Operation BMPs

The following BMPs are to be used to prevent potential pollutant contact with stormwater:

- The wheel wash is located in the OCA so that all runoff water is collected in the OCA drain system for pretreatment and discharge to the municipal sewer system. A rumble plate or similar feature takes drip-off/drag-out from vehicles as the exit the wheel wash before exiting the OCA.
- Drivers entering the OCA will be made aware that they must always use wheel wash upon exiting the OCA and never drive over berms/curbing without first driving through the wheel wash.
- Inspect wheel wash system equipment for leaks.
- Use dry cleanup methods for spills and leaks.

- Monitor particulate and floatable oil accumulations retained by the system. Remove accumulations on a routine basis and ensure proper disposal.
- Excess process water not cleaned and recirculated is contained, treated, and discharged to the sanitary sewer via the on-site water pretreatment system.
- If there is evidence of drips or drag-out from the wheel wash or operating area, dry absorbent or vacuuming will occur to prevent commingling of process water with stormwater.
- The wheel wash is located inside of the OCA. Upon exiting the wash unit, the vehicle will travel approximately 200 feet within the OCA before it exits the OCA. Drippings are expected to be captured inside the OCA. No soil or sediment will be stored in the exit lane area as to not recontaminate the vehicle. All traffic operating in the OCA, including site mobile equipment, will be directed to use the wheel wash when exiting the OCA, unless decontaminated by pressure washer, or other suitable means. Signs are posted at all ramps directing traffic within the OCA to the one exit, so all vehicular traffic exits through the wheel wash. Additionally, Facility personnel will communicate with truck drivers through the use of CB radios to direct truck traffic. All facility personnel will attend the stormwater training as prescribed in section 4.2.7, which includes procedures for exiting the OCA and decontaminating equipment.

4.1.5 Facility Permanent Closure Procedures

At the time the Facility is permanently closed, as described in WAC 173-304-100, the following tasks will be performed:

- All materials shall be removed and managed at a disposal facility authorized to accept the materials. WM will develop, keep, and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the methods of removing waste.
- The OCA will be thoroughly swept and cleaned.
- Debris will be removed from stormwater drains, sumps, and catch basins.
- Litter around the Facility will be removed.
- The fence and gate will be left intact, and unauthorized persons will be prevented from entering by means of a gate and signs.
- Regulatory agencies will be notified as required by applicable laws, regulations, and permits.

The Facility may be converted to other uses in accordance with applicable leases, contracts, permits, and regulations.

At some future date, the Facility will undergo planned cleanup and remediation activities. While these activities are occurring, certain operations may be temporarily discontinued, modified, or relocated.

4.1.6 Dredge Material Liquids Transfer

Prior to unloading dredge material from a barge, any visible free liquids will be pumped out of the barge. If sediment conditions are favorable, water may be added to the barge and sediment to create a slurry, which will then be pumped off the barge. The pump in the barge will be attached to a hose with secondary containment to prevent spillage into the river. The water pumped out of the barge will be transferred to the on-site wastewater pretreatment system. Offloading of dredge sediments will be completed using an excavator or a slurry and pump technique depending on the type of sediment received. Initial size classification and scalping operation will be performed to manually remove large debris.

Mechanical Dewatering Facility may include, but is not limited to:

- Centrifuges
- Belt/Plate presses
- Shaker screens/Grizzles
- Conveyors
- Mix tanks
- Dissolved air flotation units.

Water Treatment:

- Dissolved air floatation units
- CESF system with granular-activated carbon filtration to remove contaminants
- Recovery of solids from clarification and filtration backwash at weir tank

The following BMPs are to be used to prevent spills from dredge liquids transfer:

- Perform dredge liquids transfers routed only through the secondary containment area and OCA.
- Use valves or dry disconnect fittings at hose connection points that prevent liquid spills when disconnected.
- Continuously monitor for leaks and drips when dredge liquids transfers is being conducted.
- Inspect all hoses, valves, and liquid transfer equipment prior to use and replace broken, damaged or leaky equipment.

4.1.7 Bulk Clean Soils Stormwater Management Area

The Facility will use the following BMPs to contain stormwater and contaminants:

- Tarps, silt fences, hay bales, and straw waddles will be employed as needed to reduce the stormwater contaminant loading to the catch basins in the area.
- A wheel wash will be used for trucks leaving the site from the storage areas.

- Sediment control (e.g., sweeper truck, shoveling, sweeping, wash down) is performed weekly, at a minimum, or more frequently as site conditions warrant, to avoid the tracking of sediment by vehicles and personnel and to generally maintain a clean site. This includes the storage and transload areas, and the haul routes.

The District Manager and Operations Manager are responsible for ensuring that all BMPs are maintained and effective during Facility operations.

4.2 SPILL PREVENTION AND EMERGENCY CLEANUP PLAN

The Facility stores small quantities, less than 1,320 gallons, of petroleum products used to maintain operational equipment (e.g., engine oil, fluids, and hydraulic oils). Therefore, a Spill Prevention Control and Countermeasure plan required by 40 CFR 112 is not required at the Facility.

Due to the nature of the industrial activities occurring on-site there is a potential for spills to occur of both contaminated materials and petroleum products in all drainage areas. This Spill Prevention and Emergency Cleanup Plan (SPECP) has been developed to include BMPs to prevent spills for materials handled or stored on-site that can contaminate stormwater. The SPECP specifies BMPs for storage requirements, cleanup equipment and procedures, and spill logs. Petroleum spill kits are located throughout the site as noted on Figure 2. Additional petroleum spill absorbent material is kept with the kits and in the equipment storage conex box on-site. Spill cleanup of all stormwater contaminants will be implemented immediately upon the discovery of a spill. The following measures are enacted to prevent spills and prepare for emergency cleanup in the event that a spill should occur.

4.2.1 Chemical Liquids, Fluids, and Petroleum Products

All chemical liquids, fluids, and petroleum products are stored inside conex boxes with secondary containment that is capable of containing 110 percent of the volume contained in the largest tank.

Materials, equipment, and activities are located so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas).

Standard spill response procedures apply to these materials, if spilled; notification requirements are dependent on the volume of the spill. Regulated quantities of petroleum products (approx. 42 gallons) require immediate notification. Notification for regulated qualities of petroleum will comply with applicable federal spill reporting requirements. Should a spill occur, or to determine if a spill is a substance of a reportable quantity, the Ecology regional office will be called, and an oil spill operations or hazardous waste specialist will be consulted (Northwest Region 425-649-7000). Ecology also requires that oil spills be reported to the National Response Center 800-424-8802 and Ecology 800-258-5990 or 800-OILS-911 as well as the City of Seattle Spill Response line at 206-386-1800.

See Section 4.2.6 for general spill clean-up BMPs.

4.2.2 Bulk Non-Hazardous Contaminated Material

The following sections discuss handling bulk non-hazardous contaminated material.

4.2.2.1 Bulk Materials Barge to Shore Operations

Dredge and other bulk soil material unloading operations occur at the dedicated slip 2. This dedicated area contains a spill containment area and a spill apron. The spill containment zone is located between the barge berthing area and the sediment processing area, where the barge offloading bucket moves back and forth when offloading barges. This area is asphalt-lined with an asphalt berm that is sloped away from the water to a small basin to allow accumulated water to be pumped to the wastewater treatment system. This provides containment for liquids and minimizes the potential for spillage into the LDW. During active unloading operations, the barge unloading containment area will be cleaned daily, at a minimum, or more frequently as site conditions warrant. All asphalt paving in the OCA and the spill containment zone is sealed to prevent potential leakage of contaminated water. OCA integrity is inspected monthly during the Facility inspection. In the event that issues are identified, corrective actions are taken (i.e., resealing or replacing asphalt, etc.).

The spill apron is fixed at the edge of the dock such that the apron edge overhangs into the area where the barge is moored. The spill apron is fitted with a tarp type bib that will extend into the barge prior to beginning the unloading process and will be anchored on the shore-side of the apron. Therefore, any drips or spills of material landing on the apron will be conveyed by the bib back into the barge.

Barge unloading activities using the excavator with the environmental bucket will occur in a fashion to minimize splash of material from the barge unloading equipment's environmental bucket. Bulk materials in the environmental bucket being transferred from the barge to the shore will transition over the barge and then over the spill apron and will be deposited into the sediment processing equipment for processing. Prior to the barge moving away from the dock, the spill apron will be retracted by the excavator, up and over the spill shield, with the tail end placed on and over the bin wall. This will leave the apron in an orientation where it will be draped over the containment area with the side exposed (contaminated side) to offloading face down. In orientation, the apron can be decontaminated, and rinse water will be collected in containment.

The barge offload excavator will in most cases remain positioned next to the spill containment area. Barges will be moved using a set of barge positioning winches to allow excavator to access bulk materials within the barge without relocating.

During bulk material handling operations, the Facility handles and stores large quantities of non-hazardous contaminated media inside the OCA. The OCA is the primary structural control to manage stormwater contamination. Stormwater is collected within the OCA and sent to the water pretreatment system for discharge to the sanitary sewer.

Equipment used in material movement activities within the OCA must be decontaminated before leaving the OCA, either by a pressure washer or equivalent process. All washed water used for decontamination will be treated by the wastewater pretreatment system and discharged to the King County sanitary sewer.

Should a spill of non-hazardous contaminated media have an imminent potential to contaminate the LDW or groundwater, follow spill containment procedures in Section 4.2 and notify Ecology immediately at 800-424-8802 and 800-OILS-911.

4.2.2.2 Non-Dredge Bulk Materials Operations

Barges are received and moored in one of three Slips on the LDW. The following is a general description of barge offloading practices for each slip at the facility.

4.2.2.2.1 Slip One and Three Operations

Barges moored at both Slip One and Three are typically loaded with low moisture bulk soils, rigid and non-rigid containerized materials, equipment, intermodal containers, or bulk liquids. Upon spotting of the barge at the dock, WM crews will coordinate with the pilots to have the barge spotted at a location where a dock ramp can be lowered onto the barge. Depending on how the individual barge is loaded, bulk soils and non-rigid containerized materials will be offloaded using equipment on-shore or on the barge into on or off-road dump type transport vehicles. The transport vehicle will be positioned initially on the Slip ramp or on the barge. Materials being offloaded will be swung over the barge onto the transport vehicle eliminating the probability of spills to the LDW or on shore. Bulk and non-rigid containerized materials offloaded from the barge will be placed in either the upland soils or the dredge storage and containment area. Intermodal containers and equipment will be stored either in the various storage areas across the site or moved off-site.

4.2.2.2.2 Slip Two Operations

Barges moored at Slip Two are typically loaded with high moisture Dredge or Bulk soil-like materials. The barge is moored to the dock which positions it close enough to the concrete dock so that the spill plate will reach to the barge under normal tidal conditions on the LDW. If there is an extreme tidal fluctuation, such that the spill plate cannot divert the excess sediment water back to the barge, the barge offloading operation will be ceased until the tide changes to allow proper function of the spill plate. The barges are towed by independent operators under contract to others, and all barge movement on the LDW will be conducted in accordance with Federal Navigation Regulations.

The track-mounted barge offloader is controlled by an operator located within a climate-controlled cabin on the machine. Electricity is supplied via insulated cables from a generator or electric panels at the Facility. The barge offloader has the capability to traverse along the pier during barge offloading operations; however, unloading will always occur over the spill plate. Efforts will be made to minimize the potential for spills. In the unlikely event of accidental spillage of contaminated dredge materials into the LDW during offloading operations, immediate cleanup of the spilled materials will be conducted, and the spill will immediately be reported to both King County Public Health and Ecology. See the Facility Stormwater Pollution Prevention Plan (SWPPP most current version on site) for spill prevention and control procedures.

Based on sediment characteristics, the material may be unloaded differently. Each of these methods are described in the sections below.

Non-Free Draining Sediments

Non-Free Draining sediments are offloaded from barges using a slurry pumping system or the track-mounted barge offloader bucket. Slurry pumping transfer adds process water to the sediments at the pump. The slurried sediments are pumped to mixing tanks in the sediment processing area inside the OCA. Slurried sediments are pumped from the mixing tanks to the dewatering equipment. Once the sediment has been sufficiently dewatered, the sediment will be

transferred to a storage pile on the asphalt within the OCA. From there, it will be transferred to truck or rail for off-site disposal. All materials offloaded with the track mounted barge offloader bucket traverse over the spill apron into the OCA.

Free Draining Sediments

Prior to offloading free-draining sediments, accumulated water in the barge is removed via a portable pump and transferred into the water pre-treatment system with discharge of pre-treated water to the sanitary sewer. Free draining sediments and debris are moved from the barge using the track-mounted barge offloader. The barge offloader transfers sediments to the sediment processing area over the spill apron. The sediment processing area is located adjacent to the barge berthing area. During track-mounted offloader operations, a spotter is positioned on the dock to monitor for spillage from the environmental bucket before transferring materials from the barge over the apron. The barge offloader swing radius allows the environmental bucket to empty into the sediment processing area grizzly screen.

Should a spill of non-hazardous bulk or containerized contaminated media have an imminent potential to contaminate the LDW, or groundwater, follow spill containment procedures in Section 4.2 and notify Ecology immediately at 800-424-8802 and 800-OILS-911.

4.2.3 Containerized Non-Hazardous Contaminated Media

Non-hazardous contaminated media is handled in both ridged and non-rigid Department of Transportation-approved containers both inside and outside of the OCA. Rigid containers are offloaded handled and stored in all areas of the Facility. Super sacks are offloaded and handled in all areas of the Facility and stored inside the OCA until being loaded for transport off-site.

Should a spill of non-hazardous containerized contaminated media have an imminent potential to contaminate the LDW, or groundwater, follow spill containment procedures in Section 4.2 and notify Ecology immediately at 800-424-8802 and 800-OILS-911.

4.2.4 Non-Hazardous Bulk Liquids

NHBL are offloaded, transferred, and loaded only in designated areas of the Facility. The Facility handles and temporarily stores NHBL as discussed in Section 2.3.

Portable, folding containment cells are carried by each mobile WM facility, to be placed under each transfer connection. Each transfer connection must be wrapped with absorbent oil pads if a portable containment unit cannot be utilized. The containment units are 34-gallon capacity “folding duck ponds” manufactured by various manufacturers. Additionally, absorbent pads are also stored in each WMSS mobile facility for quick response containment in the event of a small leak or spill during transfer.

- All drip and discharge collections are to be completely drained prior to any transfer operation.
- All drip and discharge collections are to be in place, under each transfer connection, prior to hookup. These will remain in place until after disconnecting.
- If the portable containment requires draining after the transfer operation is started, the container may be replaced without stopping the transfer, and the full container will be drained into the nearest product tank available (either the mobile waste management facility [vacuum truck] or vessel product tank involved in the transfer

operation). At each of the mobile facility operating locations, WMSS will have a minimum of 200 feet of "oil only" polypropylene boom to supplement the mobile spill kit. As part of the response training for WMSS personnel, each crew member will be trained in the proper deployment of boom material and other spill kit items (33 CFR 154.1040[d]).

BMPs regarding NHBL transfer and storage are discussed in Section 4.1.3.1. Should a spill of non-hazardous bulk liquids have an imminent potential to contaminate the LDW, or groundwater, follow spill containment procedures in Section 4.2 and notify Ecology immediately at 800-424-8802 and 800-OILS-911.

4.2.5 Equipment Fueling Operations

Fueling operations occur, as needed, based on consumption, by a third-party vendor at the designated mobile fueling locations, noted on Figure 2.

- Fueling operations shall be conducted in such a way as to limit spills entering the stormwater system or surface water.
- Spill and overflow protection shall be used in areas where mobile fueling is occurring as shown in Figure 2. Fueling will occur inside the OCA or under cover whenever possible which minimize the risk of potential spills.
- Materials and equipment are parked so potential leaks are contained in the OCA whenever possible. Materials and equipment outside the OCA are parked in areas where potential leaks are contained, or parked under the metal canopy, if possible, when not in use.
- Fueling nozzles will not be locked in the open position. Do not "top off" tanks being refueled.
- The area between the fuel truck and equipment is paved to prevent small spills from being released to the underlying ground and/or subsurface.
- Run-on of stormwater into the fueling area shall be minimized by directing stormwater runoff away from fueling areas. Where possible place fuel in covered areas.
- Dry cleanup methods shall be used in the fuel area.
- A designated person will be on call at all times to respond to fueling spills.
- Soil, gravel and pavement areas are inspected visually for drips and leaks during the monthly inspection. If any stained soil is noted, it is removed and sampled, as required, for proper disposal.
- Drip pans and absorbents are placed under or around leaky vehicles and equipment.
- Drip pans shall be deployed when making or breaking connections, and drip pans and their contents shall be removed once the work is complete.
- Spill kits will be located within 25 feet of fueling activities, and additional spill kits are included on mobile fueling trucks.

- Catch basins within 25 feet of fueling activities will be fitted with a temporary catch basin cover during all fueling activities to prevent any potentially spilled fuel from entering the storm drain system.
- Drums containing lubricants and fluids for use in equipment are stored within the southeast conex box on the Upland Soil area inside the OCA. The drums are under cover and prevented from contact with stormwater. The conex box is sealed and remains closed when not in use. This area is inspected upon access to the conex and at least monthly during the monthly inspection. There is no petroleum storage tanks kept on-site; no tank inspections are required.

Should a spill of petroleum have an imminent potential to contaminate the LDW, or groundwater, follow spill containment procedures in Section 4.2 and notify Ecology immediately at 800-424-8802 and 800-OILS-911.

4.2.6 General Spill BMPs

The following are a list of general BMP's for certain operations at the Facility. Reportable spills will be documented on the Incident Report Form (Appendix M) or similar documentation.

4.2.6.1 Prevent Precipitation from Accumulating in Containment Areas

Stormwater accumulating within the OCA is conveyed to the on-site water pretreatment system to be discharged to the municipal sewer system. Inspections are performed during rain events to ensure the OCA is not reaching capacity. Pumping discrete areas that may be ponding toward the water pretreatment system sump may be required during extremely heavy rain events. Pumps are available on-site for this purpose.

4.2.6.2 Spill Kits and Fueling Locations

A spill kit is located near the fueling location. Spill kit locations are outlined in Figure 2. Supplies are replaced after they are used. This kit is appropriate for the materials being handled and the size of the potential spill. At a minimum, spill kits contain the following.

The spill kit contains the following:

- Oil absorbents capable of absorbing 15 gallons of fuel
- A storm drain plug or cover kit
- A non-water containment boom, a minimum of 10 feet in length with a 12-gallon absorbent capacity
- A nonmetallic shovel
- Two 5-gallon buckets with lids

Mobile Spill Kit Contents (on fueling trucks):

- 95-gallon Poly #Ultra OP Plus 0580: 1 each
- Leak & Spill litter: 2 bags
- Spill pads (18"x 18" grey): 100 each
- Spill pads (18"x 18" white): 100 each

- DuPont Tyvek Tychem 2C6 suits: 2 each
- 3”x8” spill socks US-0815: 10 each
- Nitrile Gloves GNDR-XL-1M: 2 pair
- Drain Protector Cover 3E WR 6: 1 each
- Broom: 1 each

4.2.6.3 Spill Log

The Facility maintains a spill log that includes the following information for spills (See Appendix M):

- Date
- Time
- Approximate volume and location of spill
- Material type spilled
- Cause of spill
- Date/time cleanup completed
- Notifications made
- Staff notified

All personnel are instructed to report spills immediately according to the Facility SPECP.

4.2.6.4 Spill Prevention and Cleanup Best Management Practices

The following spill prevention and cleanup BMPs are practiced by the Facility:

- Immediately upon discovery of a spill, stopping, containing, and cleaning up spills.
- On-site spill kits containing absorbent material and spill cleanup supplies are readily accessible and located at various locations around site identified on Figure 2.
- If the spill impacts a storm drain or has the imminent potential to contaminate groundwater, or surface water, notify Ecology immediately. Notification will comply with applicable federal spill reporting requirements. If a spill occurs or to determine if a spill is a substance of a reportable quantity, the Ecology regional office will be called and an oil spill operations or hazardous waste specialist will be consulted (Northwest Region 425-649-7000). Ecology requires that oil spills be reported to the National Response Center 800-424-8802 and Ecology 800-258-5990 or 800-OILS-911 as well as the City of Seattle Spill Response line at 206-386-1800. All non-oil spills are to be reported at 425-649-7000. If the spill has reached or may reach a sanitary or storm sewer, Ecology and the local sewer authority will be immediately notified. **IMMEDIATELY NOTIFY THE AREA ENVIRONMENTAL PROTECTION MANAGER IF A SPILL OCCURS TO PROVIDE ASSISTANCE WITH AGENCY NOTIFICATION AND RESPONSE ACTION.**

- Not flushing absorbent materials or other spill cleanup materials to a storm drain; collecting the contaminated absorbent material as a solid and placing in appropriate disposal containers.
- Rail cars are inspected upon arrival to ensure that there is no damage that could create a leak. If such damage is observed, this rail car will be lined with a plastic liner to ensure that contaminated material will not leak on the site or during transit to the disposal facility. Rail cars will be loaded to allow sufficient freeboard to prevent spillage while in transportation.

4.2.7 Employee Training

The training content includes information contained in the SWPPP and spill response procedures. Stormwater safety is covered as needed at safety meetings.

Employees are trained, initially as new hires and within the first 90 days of employment, on all OSHA required programs and the SWPPP. Employees also receive annual OSHA and Environmental refresher trainings at monthly safety meetings. Ongoing training for the SWPPP includes the following, if applicable:

- The SWPPP, BMPs, and the SPECP are reviewed with new employees as part of their orientation.
- Employees will be trained whenever the SWPPP is updated. This training will specifically address the changes made in the update to the SWPPP. This training time will be used as a refresher for BMPs that were changed in the plan update.
- This SWPPP is reviewed annually with employees at the Facility to ensure continued familiarity, as well as to evaluate progress and success in implementing the SWPPP. As part of this annual review and evaluation, staff is encouraged to provide input to the training facilitator on recommended changes. Particular attention is devoted to spill response procedures, good housekeeping, maintenance requirements, and material handling procedures.
- WMNS retains records that identify the employee, dates of training, and training topics for at least 5 years from the date of training.

A record of the Employee Training Log is included in Appendix E.

4.2.8 Inspections and Record Keeping

The Facility's inspection program is intended to verify the accuracy of information in the SWPPP, verify compliance with permit requirements for inspections and record keeping, and assess how well the BMPs identified in this section are functioning. Results from monthly inspections are discussed at the PPT meetings.

The inspection program includes monthly Facility inspections by a member of the PPT. The PPT Lead will review the stormwater records file annually to determine if conditions of the Permit are being met.

4.2.8.1 Inspection Report or Check List

The Monthly Inspection Report and Field Data Sheet are used to conduct the inspection. The Monthly Inspection Reports along with Field Data Sheets are included in Appendix F or filed with the site records. The results of the inspection are documented on the form. The inspection components include the following:

- Observations made at stormwater sampling location and areas where stormwater associated with industrial activity is discharged off the site or discharged to waters of the state or to a storm sewer system that drains to waters of the state.
- Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in the stormwater discharge(s).
- Observations for the presence of illicit discharges, such as domestic wastewater, noncontact cooling water, or process wastewater (including leachate).
- Inspection of perimeter containment of OCA.
- Verification that the descriptions of potential pollutant sources required under this permit is accurate.
- Verification that the site map in the SWPPP reflects current conditions.
- Assessment of all BMPs that have been implemented, noting all of the following:
  - Effectiveness of BMPs inspected.
  - Locations of BMPs that need maintenance.
  - Reason maintenance is needed and a schedule for maintenance.
  - Locations where additional or different BMPs are needed and the rationale for the additional or different BMPs.
- The inspector will review the monthly inspection with Facility personnel. Follow-up actions will occur as soon as practicable and will be documented on the monthly inspection form by adding a completion date for each action.
  - The template and completed inspection forms are included in Appendix F.
- Completed monthly inspections will be signed and certified by the individual conducting the inspection and certified by the Senior District Manager, District Manager or Environmental Protection Manager that, in his/her judgement, the Facility is in or out of compliance with the SWPPP and Permit; if non-compliance is recognized, it will be identified on the monthly inspection report and the following procedures will be followed:
  - Initiate immediate action to eliminate the non-compliance and correct the problem or minimize the contamination.
  - Notify Ecology of the non-compliance, pursuant to permit Section S9.E.
  - Submit a written report to Ecology within 5 days (or earlier if requested by Ecology), containing a description of the non-compliance and the exact dates and times. The report will indicate if the non-compliance has been corrected and, if

not, the anticipated time it will continue and the steps taken or planned to eliminate and prevent reoccurrence of the non-compliance.

- The Facility conducts weekly inspection, in compliance with the Plan of Operations, that looks at the following items:
  - Are effective litter control practices in place?
  - Are effective dust control practices in place? Is there any visible track out or dust emissions?
  - Are effective pest control practices in place?
  - Are effective odor control practices in place?
  - Are effective wheel tracking control practices in place?
  - Is the Operations Containment Area functioning properly? Inspect the integrity of the berms and asphalt.
  - Is the on-site storm/process water pretreatment system functioning properly? Check the integrity of the storm/process water conveyance lines.

4.2.8.2 Tracking and Follow-up Procedure

Based on the outcome of the inspection, maintenance and/or corrective action may be required. The PPT will implement any necessary actions. In the event that the Facility is unable to comply with the terms and conditions of the Permit, or the Facility experiences a bypass or event which causes exceedance of any effluent limitation in the permit, the Facility will do the following:

- Immediately implement its Spill Response Plan (if not already done) and otherwise stop the noncompliance event and correct the problem.
- Immediately notify the appropriate regional Ecology office.
- Submit a detailed report within 5 days of discovery of the failure to comply.

4.2.8.3 Signature Requirements and Records Retention

The PPT Lead will sign all documents needed to comply with the Permit. If the PPT Lead is unavailable, the Environmental Protection Manager will sign the documents.

The documents will be stored on-site in the office trailer. Documents, plans, and records will be made available to Ecology within 14 days of written request.

Table 4-2 Document Storage

Document, Record, or Plan	Minimum Storage Term
Discharge monitoring reports	5 years
Annual reports	5 years
Copy of permit	5 years
Copy of permit coverage letter	5 years
Records of sampling information	5 years
Inspection reports	5 years
BMP maintenance records	5 years
Copies of laboratory reports	5 years
Stormwater maintenance/corrective action summary	5 years
Document of compliance with permit requirements	5 years
On-site spills of oil or hazardous substances in greater reportable quantities	5 years
Employee training records	5 years
Employee training materials	5 years
Maintenance material use and disposal	5 years
Maintenance performed	5 years

Each monthly Industrial Stormwater General Permit (ISGP) compliance inspection report will include a certificate, signed by the PPT Lead stating the following; "In my opinion, the site is in/out of compliance with the terms and conditions of this SWPPP and the Permit." This certificate and the inspection report will be kept with the Permit and be made available for review by Ecology (Appendix G).

WMNS maintains an updated copy of its SWPPP at the Facility**.** Additionally, per the Permit requirements, records of monitoring, laboratory reports, inspection reports, calibration reports, maintenance reports, records of data, copies of reports, and documentation that indicates compliance with the Permit requirements will also be maintained at the Facility or electronically.

For every sample collected, the information presented in Table 4-3 will be recorded.

Table 4-3 Summary of Permit Required Information

Permit Required Information	Location of Information
Date	Field Data Sheet
Time	Field Data Sheet
Exact sampling location	Field Data Sheet
Method	Laboratory report
Individual who performed sampling	Field Data Sheet
Dates analysis was performed	Laboratory Report
Individual who performed analysis	Laboratory Report
Analytical techniques or methods used	Laboratory Report
Results of analyses	Laboratory Report

4.3 STRUCTURAL SOURCE CONTROL BEST MANAGEMENT PRACTICES

The Facility implements the structural source control BMPs described below for future and current industrial activities.

4.3.1 Covered Areas

One covered area is located on the Facility, the "metal canopy", in drainage basin 6. To the extent practicable, equipment maintenance will occur under cover or in the OCA. These areas are also used as storage of equipment when not in use. The metal canopy will also serve as the covered area designated for truck traffic que and staging.

4.3.2 Grading, Berming, or Curbing

The Facility has two bermed containment structures, the OCA and the barge unloading spill containment area.

The OCA will have at a minimum at least a 6-inch continuous perimeter curbing or 6-inch asphalt ramps in place to control water run-on and runoff and contain decant water and contaminated stormwater. The perimeter curbing will be seal coated for further protection. The OCA integrity is inspected monthly during the Facility inspection. In the event that issues are identified, corrective actions are taken (i.e., resealing or replacing asphalt, etc.).

Asphalt in the OCA has been seal coated to mitigate subsurface migration. Monitoring wells that are located in the OCA have also been sealed to prevent migration of stormwater into the subsurface. All berms, asphalt paving, monitoring wells, and seal-coat integrity will be inspected as a part of the weekly Facility inspection and corrective actions taken should a problem be noted (e.g., damaged or degraded surfaces, cracking/alligatoring of previously sealed areas; new locations exhibiting cracking/alligatoring).

Additionally, the barge unloading spill containment area will have a minimum 6- continuous berm to allow accumulated water to be pumped to the on-site storm/process water pretreatment system. The current configuration of the dock area within the barge unloading spill containment area slopes away from the water, which will be serviced by a dead-end sump that feeds fixed piping from the sump pump in the spill containment area to the on-site storm/process water pretreatment system runs within both of the containment areas.

4.3.3 Wash Water

Cleaning operations are performed in the OCA such that stormwater runoff is prevented and overspray is captured.

The wheel wash will be located inside the OCA to prevent potential contaminated water from reaching the stormwater conveyance system. There is a rumble grate at the end of the wheel wash ramp to keep as much drip-off/drag-out as possible inside the OCA. The wheel wash is discussed further in Section 2.4.7.

4.3.4 Outdoor Storage of Materials

Bulk contaminated material will be stored and handled inside the OCA where the contaminated process water and stormwater are treated and discharged to the municipal sewer system. Storage of equipment and vehicles can contribute to the accumulation of visible oil sheen, metals, and suspended solids at the Facility. In order to address these potential sources of pollutants, the following BMPs have been implemented:

- Sediment filter inserts are currently installed in Facility catch basins to enhance particulate retention.

- Materials stored outside of the OCA that contain potential stormwater pollutants will be covered with tarps or stored in enclosed containers.

4.3.5 Additional Structural Source Control Best Management Practices

The Facility also uses the structural source control BMPs described below:

- Conducting maintenance and repair of equipment in a building, under cover, or within the OCA.
- Storing damaged equipment and equipment parts inside a building or under cover until all liquids are removed, where practicable.
- Conveying contaminated stormwater runoff from maintenance areas to the on-site storm/process water pretreatment system to be discharged to the municipal sewer system.
- Using plastic-lined spill apron in the spilled containment zone, which is in the travel area of the environmental bucket, while unloading contaminated soil/sediment from barges into the OCA.
- Using an environmental excavator bucket for unloading contaminated soil/sediment from barge.
- Using double walled piping from the barge dewatering pump to the water pre-treatment system.

4.4 TREATMENT BEST MANAGEMENT PRACTICES

The Facility uses the treatment BMPs described below. Some treatment BMPs are required when operational and source control BMPs are not adequate to reduce pollutants below a significant amount and maintain compliance with water quality standards.

4.4.1 Advanced Treatment System

Consistent with the Phase II Engineering Report (Landau 2016) approved by Ecology (Ecology, 2018), the Facility installed a permanent ATS in January 2019. The ATS is equipped with chitosan-enhanced sand filtration (CESF). CESF is a process that uses chitosan (a biopolymer derived from crustacean shells in a 1 percent chitosan acetate form) in conjunction with pressurized sand filtration to remove suspended solids and other contaminates, including metals that adhere to the suspended sediment. Beginning in the third quarter 2019, the ATS will operate at a higher pH level to better precipitate out metals (e.g., copper). The operational change is being performed as a Level 1 response to the June 2019 total copper analytical results. The adjustment to the pH was first initiated in August 2019. The pH of the stormwater active treatment system (ATS) was further refined/optimized (higher pH). The pH adjustment may have been effective over time as more water was treated by the ATS. This is supported by the October 2019 copper result below benchmark. The operational change is being implemented as a Level 1 response to the September 2019 total copper analytical results.

Discharges below the design flow rate of 500 gallons per minute (Landau 2016) are treated through the ATS. Any water that cannot be captured by the pumps, discharges untreated via two overflow structures installed in lift stations A and B.

Ongoing operation and maintenance procedures are discussed in the O&M Manual (Clear Water Services 2019).

4.4.2 Catch Basins and Catch Basin Inserts

Catch basin fabric filters that are installed and maintained in catch basins .

4.4.3 Oil/Water Separators

The Facility does not have any oil/water separators.

4.4.4 Additional Treatment BMPs

During OCA operational periods when contaminated materials are being stored or processed, stormwater that falls within the OCA is handled as process water, conveyed to the on-site wastewater pretreatment system and discharged to the municipal sewer system, pursuant to Wastewater Discharge Authorization No.7928-02.

4.5 STORMWATER PEAK RUNOFF RATE AND VOLUME CONTROL BEST MANAGEMENT PRACTICES

If being redeveloped or adding new developments, the Facility will evaluate whether flow control BMPs are necessary to satisfy the state's All Known, Available, and Reasonable methods of prevention, control, and treatment requirements, and prevent violations of water quality standards. If flow control BMPs are required then they shall be selected according to Permit Section S3.A.3.

4.6 EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES

The majority of the Facility is paved with asphalt or concrete. The amount of unpaved area is relatively small; there is minimal risk that soil erosion on the Facility could significantly impact the stormwater. Current erosion and sediment control BMPs include the practices listed below.

4.6.1 Filtration Best Management Practices

As part of Phase II of the Engineering Report approved by Ecology (Ecology 2018), catch basin sediment filters will remain in all catch basins outside of the OCA; however, the CleanWay inserts and MetalZorb filter media will be removed. Catch basins 80, 81, 82, and 70 in drainage area 6, have been reconnected to the stormwater conveyance and will be treated by the ATS prior to discharge to the LDW.

4.6.2 Additional Erosion and Sediment Control Best Management Practices

The Facility sweeps paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated pollutants a minimum of once per quarter. Areas with high potential for dust generation, such as the paved areas listed in Section 4.1.1.2, will be mechanically swept at least weekly during active operations, especially when the pavement is wet. Stormwater conveyance system line jetting/cleaning is performed at least annually. Sweeping is discussed further in Section 4.

4.7 SPECIFIC BEST MANAGEMENT PRACTICES FOR TARGET AREAS

4.7.1 Maintenance and Repair of Vehicles and Equipment

The following BMPs are practiced by the Facility:

- Inspecting for leaks on all vehicles, parts, and equipment stored temporarily outside and monitoring vehicles entering the site. If leaks are discovered they are repaired and immediately contained and cleaned up.
- Using drip pans or containers under parts or vehicles that drip or may be likely to drip liquids.
- Not pouring/conveying wash water, liquid waste, or other pollutants into storm drains or to surface water; checking with the local sanitary sewer authority for approval for sanitary sewer disposal.
- Storing damaged equipment and equipment parts inside a building or other covered containment until all liquids are removed.
- Avoiding hosing down work areas; using dry methods for cleaning leaked fluids.
- Cleaning parts with aqueous detergent-based solutions and choosing cleaning agents that are non-hazardous and can be recycled.

If leaks are discovered during daily yard checks, the leaks are immediately repaired or swept up (soaked up and then swept up). If the leak cannot be immediately repaired, the leaking material is drained or if it is a minor leak, soaked up with spill material until it can be repaired.

4.7.2 Loading and Unloading Areas

The Facility unloading area BMPs are discussed in Section 4.1.3.

4.7.3 Equipment Storage and Parking Areas

The following BMPs are practiced in storage and parking areas:

- Inspect vehicles and equipment for leaks and use drip pans or absorbents if necessary to contain leaks.
- Take leaky equipment out of service until leaks can be repaired, where practicable.

Additional BMPs for parking and storage areas are discussed in Section 4.1.6.

4.8 BMP MAINTENANCE FREQUENCY

Table 4-4 BMP Maintenance Frequency

Selected BMPs	Implementation Date/Maintained
Good Housekeeping	
Cover or store materials in a manner which does not expose them to stormwater.	Ongoing/Monthly
Immediately wipe up spills or drips.	Ongoing
Remove waste materials in a timely manner to prevent overflow of containers.	Ongoing
Select low to nontoxic landscaping, cleaning, and maintenance materials.	Ongoing
Perform stormwater conveyance line jetting.	Annually
Vacuum paved surfaces with a vacuum sweeper.	Minimum of once per quarter
Mechanically sweep with a power broom.	Daily/as needed

Selected BMPs	Implementation Date/Maintained
Mechanically sweep areas with high potential for dust generation, listed in Section 4.1.1, during active operations, especially when the pavement is wet.	At least weekly
Identify and control Facility sources of dust to minimize stormwater contamination from the deposition of dust on areas exposed to precipitation.	Ongoing
Keep refuse-containing dumpsters under cover or fit with a lid that remains closed when not in use. Cover scrap metal bins when not in use.	Ongoing
Perform employee training.	Ongoing
Inspect rail cars upon arrival to ensure there are no damages.	Upon rail car arrival
Recycle materials, such as oils and solvents, to the maximum extent possible.	Ongoing
Preventative Maintenance	
Place all equipment identified as potential stormwater pollutant source on the schedule for inspection.	Monthly
Inspect catch basin inserts.	Monthly
Clean catch basin sumps. Clean catch basins when the depth of debris reaches 60 percent of the sump depth or the debris surface is within 6 inches of the outlet pipe.	Annually/as needed
Maintain stormwater runoff system.	Monthly
Perform Spill Prevention and Emergency Clean Up (Section 4.1.5).	As Needed
Use drip pans or containers under parts or vehicles that drip or may be likely to drip liquids.	Ongoing
Implement spill response procedures.	Ongoing
Select and train a spill response team and coordinator.	Ongoing
Ensure adequate supply of spill containment devices near drains or locations where activities which could result in stormwater pollution have been identified.	Ongoing
Implement the use of drip pans and tarps into the maintenance procedures.	Ongoing
Inspect equipment and vehicles during monthly site inspections for leaking fluids, such as oil and antifreeze.	Monthly
Maintain catch basins, sumps, drains, filter inserts and other stormwater drainage/treatment facilities in accordance with the Maintenance Standards set forth in the applicable Stormwater Management Manual, other guidance documents or manuals approved in accordance with ISGP S3.A.3.c, demonstrably equivalent BMPs per S.3.A.3.d., or an Operations and Maintenance manual submitted to Ecology in accordance with S8.D.	Ongoing
Promptly repair any deterioration threatening the structural integrity of the infrastructure, including replacement of catch basin lids or cracked catch basin sumps, risers, or pipes.	Ongoing
Implement Illicit Discharge Prevention BMPs listed in Section 4.1.2.2.	Ongoing
Barge Unloading	
Retain electronic or hard copy analytical data for accepted material on-site.	Ongoing
Inspect containerized media non-rigid storage units for tears and spills on the barge.	Ongoing during unloading process
Visually inspect (performed by operators unloading material) all containerized media units and identify any potential for spills.	Prior to unloading and during the transfer process
Clean up any spilled material from containerized media units as described in Section 4.1.3.	Ongoing

Selected BMPs	Implementation Date/Maintained
Repair torn non-ridged container units by covering holes with heavy plastic and/or mending tape to eliminate further spills (if possible) or, if unrepairable, torn units including any remaining contents, must be deposited by loader into an intermodal container on the barge for transportation to Columbia Ridge Landfill for disposal.	Ongoing during unloading process
Sweep barge mechanically or manually when spills occurs and after unloading is complete.	Ongoing during unloading process
Plug catch basins on the route from the barge to the OCA.	During handling
Pump standing water in OCA to the on-site storm/process water pretreatment system.	As necessary
Store non-rigid containerized media units inside the OCA prior to being loaded into rail cars or trucks.	Ongoing during loading process
Inspect storage area to detect spills presence.	Daily
Prevent spills of non-hazardous liquid and spillage contact with stormwater (Section 4.1.3.1).	Ongoing during barge unloading of non-hazardous liquids
Wheel Wash	
Perform washing over paved areas constructed as a spill containment pad to prevent the run-on of stormwater from adjacent areas.	Ongoing
Inspect wheel wash system equipment for leaks.	Ongoing
Instruct drivers to always use wheel wash when exiting the OCA.	Ongoing
Use dry cleanup methods for spills and leaks.	As needed
Visually inspect CB 24 for evidence of wheel wash fluids.	Daily during wheel washing activities
Inspections (Future and Current schedule)	
Implement maintenance inspection schedule and procedure.	Completed/Ongoing
Conducting visual inspections of containerized media non-rigid storage units for leaks or punctures prior to barge unloading.	During the Barge unloading and transfer activities
Inspect rail cars upon arrival to ensure there is no damage that could create a leak or cause spillage.	Ongoing
Structural Source Control (Future and Current Schedule)	
Place and maintain spill containment devices near drains or locations where activities which could result in stormwater pollution have been identified.	Completed
Locate wheel wash inside the OCA.	Completed
Erosion and Sediment Control.	Completed
Use erosion control methods for minor construction activities as they occur.	Ongoing
Conduct all maintenance and repair of equipment in a building, under cover, or within the OCA.	Ongoing
Storing damaged vehicles inside a building or under cover until all liquids are removed, where practicable.	Ongoing
Conveying all contaminated stormwater runoff from maintenance areas to the on-site water pretreatment system to be discharged to the municipal sewer system.	Ongoing

5.0 SAMPLING PLAN

With the installation of the ATS the Facility performs quarterly stormwater monitoring under the Permit requirements, concurrent with Phase II of the Engineering Report. Outfall A (ATS Effluent) sampling will be conducted at that frequency pending adequate rainfall during regular business hours of 7 AM to 5 PM Monday through Friday.

The monitoring/reporting will be performed as described in the remainder of this section and in accordance with the Permit and Ecology guidelines.

5.1 SAMPLE LOCATION

The stormwater drainage system conveys stormwater from the five drainage areas outside of the OCA to the ATS via a single force main as shown in Figures 2and 3. Treated stormwater (ATS Effluent) is collected from a sample port just prior to discharge to the LDW via Outfall A. The stormwater may be exposed to potential pollutants. Potential pollutants in the stormwater and probable sources are described in Table 5-1.

5.1.1 Influent/Performance Sampling

Influent (performance) samples may be collected concurrently with quarterly monitoring event. Influent monitoring is not a permit requirement however it provides a valuable dataset for gauging treatment system performance. Treatability and percent removal of stormwater pollutants is calculable when influent and effluent results are compared. Those results are then used to further optimize the treatment system.

The influent samples are collected from a sample port on the force main just prior to the weir tank. The influent sample is a comingled raw stormwater sample representative of the condition of untreated stormwater collected from all 5 drainage areas of the facility. The influent samples are analyzed for the parameters listed in Table 5-2 and will be designated at “ATS Influent”. Influent samples monitoring results are not reported to the agency and are collected for informational purposes only.

Influent samples collected from the force main are representative of the untreated stormwater collected across the facility. In the event a storm results in overflow discharge from the two overflow structures (see Figure 3) additional influent samples or samples from the overflow may be collected. If overflow samples are elected to be collected, this sampling will only be done during an overflow discharge event during normal facility operational hours. The influent samples are representative of the water quality discharged via the overflow structures. The influent or overflow samples used to characterize overflow are analyzed for the parameters listed in Table 5-2. Influent or overflow samples monitoring results are not reported to the agency and are collected for informational purposes only.

Table 5-1 Drainage Areas and Potential Pollutants

Drainage Area	Approximate Area square feet	Likely Pollutants (Future and Current)	Possible Source(s) of Pollutants (Future and Current)

Drainage Areas 1, 2, 4, 5, and 6	566,610	Turbidity	Unpaved areas, track on from off-site, atmospheric deposition, soils and sediment handled on-site
		Copper	Brake wear of vehicles, surface runoff, metal components
		Zinc	Tire tread, atmospheric deposition, and galvanized fencing surface runoff
		Various	Contaminated soils and sediments; non-hazardous bulk liquids. Analytical data for handled contaminated materials will be kept on-site

NOTE:
Outfall 3- discharge to the LDW blocked, all accumulated liquids are processed through the pretreatment system for discharge to the sanitary sewer.

5.2 SAMPLING PERSONNEL

The WMNS staff will oversee stormwater sampling and monitoring activities and act as the duly authorized individual by Ecology and will certify the condition of the Facility.

5.3 SAMPLING AND HANDLING PROCEDURES

Stormwater will be sampled according to the instructions below. Sampling of stormwater will be conducted as follows:

- All samples will be a representative grab sample taken within the first 12 hours of stormwater discharge.
- All samples will be collected from the sampling port on the ATS outfall pipe (Outfall A Monitoring Location).
- Samples will be collected of the first flush season storm event after September 1 each year that creates discharge at the Facility.
- Samples will be collected in bottles obtained from the laboratory.
- The contract laboratory will use analytical methods defined by the Permit and US Environmental Protection Agency (EPA) to perform the analysis.

Additional handling guidelines include:

- Wear disposable powder-free gloves.
- Do not touch the openings of the collection bottles.
- Keep the bottle lids clean and free from contamination.
- Collect samples directly from the source using the collection bottles supplied by the laboratory when collecting grab samples of stormwater (do not transfer samples from container to container).
- Sample with the opening of the collection bottle facing upstream so that water will directly enter the bottle.

- Collect turbulent water so that the sample is well mixed and provides a representative sample of stormwater from the Facility.
- Sample from the central part of flow and avoid touching the bottoms or sides of pipes to prevent entrainment of solid particles into the stormwater.
- Do not rinse bottles because rinsing may remove preservatives needed for accurate sample analysis.
- Do not overfill the bottles because overfilling may remove preservatives needed for accurate sample analysis.
- Sample for total mercury using the guidance of EPA Method 1669, "clean hands, dirty hands."

5.4 SAMPLE TRANSPORTATION TO LABORATORY

Stormwater samples from the Facility will be analyzed by a certified laboratory. The samples will be delivered to the laboratory as soon as possible within range of hold times where feasible but typically no later than 48 hours after sampling. Chain-of-custody forms, provided by the laboratory, will accompany the samples to the laboratory.

- The samples will be kept in a cooler on ice following the sampling event and during transport to the laboratory. Expected temperature to follow within method requirements is 3 to 6 degrees Celsius.
- The sampling equipment (excluding bottles provided by the laboratory) will be washed with detergent and rinsed thoroughly before the sampling effort, if applicable.
- Laboratory reports are included in Appendix H.
- The sample identification on the chain-of-custody form will match the sampling identification of the sampling container. Samples collected at the Facility will be identified according to the following protocol or similar identification, DRF-A-YYMMDD, where:
  - DRF = Facility name, Duwamish Reload Facility
  - OutA = Outfall A
  - YYMMDD = year, month, day, where year is designated by the last two digits of the year
  - For example, a sample collected at location DRF-OutA on March 8, 2015, would be labeled DRF-OutA-150308.

5.4.1 Laboratory Quantitation Levels and Analytical Methods

Laboratory quantitation levels are specified below in Table 5-2. An approved laboratory will be used to do the analysis and complete the laboratory reports. Analytical methods will comply with recommendations in the permit and Ecology and EPA guidelines.

5.5 ANALYSIS PARAMETERS

Stormwater will be sampled for the parameters provided in Table 5-2 below. The Facility may suspend stormwater sampling and analysis for the parameters identified in Table 5-2 based on consistent attainment of benchmark values. Consistent attainment is defined as eight consecutive quarters (any quarter with no stormwater discharge is not counted) where the reported value for each parameter is

equal to or less than the benchmark values. For pH, equal to or less than the benchmark values means that the pH did not exceed 9 and was not less than 5. Once consistent attainment is achieved, the Permittee may suspend sampling for a period of 3 years, regardless of expiration of 2015 ISGP (Industrial Stormwater General Permit) or effective date of 2020 ISGP.

An annual sample must be collected during the fourth quarter for all required parameters even if consistent attainment has been previously met. A facility may average the annual sample with other samples collected in the fourth quarter. If the annual fourth quarter sample (i.e., the average for multiple samples, if applicable) is above the benchmark during consistent attainment, then the facility can longer claim consistent attainment and the Permittee must begin sampling in accordance with S4.B of the ISGP.

Table 5-2 Site-Specific Monitoring Requirements for Duwamish Reload Facility

Parameter	Units	Analytical Method	Benchmark Value	Laboratory Quantitation Level	Sampling Frequency
Turbidity	NTU	EPA 180.1	25 NTU	0.5	Quarterly
pH	Standard units	SM 4500-H+B	5–9 Standard units	+/-0.5	Quarterly
Oil sheen	Yes/No	N/A	No visible oil sheen	Not Applicable	Quarterly
Copper, total	µg/L	EPA 200.8	14 µg/L	0.5	Quarterly
Zinc, total	µg/L	EPA 200.8	117 µg/L	5.0	Quarterly
Additional Quarterly Requirements[1][2]					
Antimony, total	µg/L	EPA 200.8	--[2]	1.0	Quarterly
Arsenic, total	µg/L	EPA 200.8	--[2]	0.5	Quarterly
Cadmium, total	µg/L	EPA 200.8	--[2]	0.25	Quarterly
Chromium, total	µg/L	EPA 200.8	--[2]	1.0	Quarterly
Lead, total	µg/L	EPA 200.8	--[2]	0.5	Quarterly
Mercury, total	µg/L	EPA 1631 E	--[2]	0.0005	Quarterly
Nickel, total	µg/L	EPA 200.8	--[2]	0.5	Quarterly
Silver, total	µg/L	EPA 200.8	--[2]	0.2	Quarterly
Thallium, total	µg/L	EPA 200.8	--[2]	0.36	Quarterly
PAHs[3]	µg/L	EPA 8270D/SIM	--[2]	0.01	Quarterly
PCBs Aroclors[4]	µg/L	EPA 8082	--[2]	0.01	Quarterly
Petroleum Hydrocarbons-Diesel Fraction	mg/L	NWTPH-Dx	--[2]	0.01	Quarterly

NOTES:

[1]Additional monitoring required under Admin Order # 12830 dated September 3, 2015. See Appendix K.

[2]Benchmark values not applicable at this time; additional monitoring required under Admin Order # 12830 dated September 3, 2015.

[3]PAHs include the following: 1-methylnaphthalene, 2-methylnaphthalene, 2-chloronaphthalene, acenaphthene, acenaphthylene, fluorene, naphthalene, dibenzofuran, carbazole, phenanthrene, benzo(a)anthracene, benzo(a)pyrene, benzo(ghi)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, and pyrene.

[4]PCB Aroclors include Aroclor 1016,1221, 1232, 1242, 1248, 1254, 1260.

-- = not applicable NWTPH = Northwest Total Petroleum Hydrocarbon

µg/L = micrograms per liter
mg/L = milligrams per liter
EPA = US Environmental Protection Agency
N/A = not applicable
NTU = Nephelometric turbidity unit
PAH = polyaromatic hydrocarbon
PCB = polychlorinated biphenyl
SM = Standard Method

Field parameters including pH, turbidity, and oil sheen presence will be collected and recorded on field sheets.

5.5.1 Total Suspended Solids

The Facility discharges to a 303(d) listed water and therefore additional sampling is required; the effluent limit is shown in Table 5-4. Permittees discharging to a Puget Sound Sediment Cleanup Site, either directly or indirectly through a stormwater drainage system, shall comply with this section:

- Permittees shall sample the discharge for TSS in accordance with Table 5-4.
- If the waterbody is listed within Category 5 (sediment medium) where the outfall discharges to the waterbody, the discharge is subject to the TSS numeric effluent limit in S6.C.1.c and Table 5-3.
- Puget Sound Sediment Cleanup Site means: Category 4B (Sediment) portions of Budd Inlet (Inner), Commencement Bay (Inner), Commencement Bay (Outer), Dalco Passage and East Passage, Duwamish Waterway (including East and West Waterway), Eagle Harbor, Elliot Bay, Hood Canal (North), Liberty Bay, Rosario Strait, Sinclair Inlet, and Thea Foss Waterway; Category 5 (Sediment) portions of the Duwamish Waterway (including East and West Waterway), and Port Gardner and Inner Everett Harbor; and the Port Angeles Harbor sediment cleanup area, as mapped on Ecology's ISGP website. All references to Category 4B and 5 pertain to the 2012 EPA approved Water Quality Assessment.

Table 5-3 Site-Specific Monitoring Requirements:
Puget Sound Sediment Cleanup Requirements for Duwamish Reload Facility

Parameter	Units	Effluent Limit	Analytical Method	Laboratory Quantitation Level[(1)]	Minimum Sampling Frequency[(2)]
TSS	mg/L	30	SM2540-0D	5	quarterly

NOTES:
[(1)] The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the DMR. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific method detection level (MDL) and QL on the DMR.
[(2)] 1/quarter means at least one sample taken each quarter, year-round.
CFR = Code of Federal Regulations
DMR = discharge monitoring report
mg/L = milligrams per liter
TSS = total suspended solids

5.6 RESPONSE TO MONITORING RESULTS OVER BENCHMARK VALUES

5.6.1 Quarterly Sampling Measurements

In the event the average of the sampling results during a quarter exceed a benchmark value, the following actions are required.

5.6.2 Level One Corrective Action—Operational Source Control BMPs

If the average of a quarter's sampling results exceed a benchmark in Table 5-2 for any parameter, the Permittee shall complete a Level 1 Corrective Action for each parameter exceeded in accordance with the following:

- Within 14 days of receipt of sampling results that indicate a benchmark exceedance for a given quarter; or, for a parameter other than pH or visible oil sheen, the end of the quarter, whichever is later.
- Conduct an inspection to investigate the cause.
- Review the SWPPP and ensuring that it fully complies with Permit Condition S3, and contains the correct BMPs from the applicable stormwater management manual; doing a site inspection to identify sources of pollution.
- Make appropriate revisions to the SWPPP to include additional operational source control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.
- Summarize the Level 1 Corrective Actions in the annual report.

Level 1 deadline: The Permittee shall sign/certify and fully implement the revised SWPPP as soon as possible, but no later than the discharge monitoring report (DMR) due date, for the quarter the benchmark was exceeded.

5.6.3 Level Two Corrective Action—Structural Source Control BMPs

If the average of a quarter's monthly sampling results for that quarter exceed an applicable benchmark value (for a single parameter) for any two quarters during a calendar year, the Facility will complete a Level 2 Corrective Action in accordance with the following:

- Reviewing the SWPPP and ensuring that it fully complies with Permit Condition S3.
- Making appropriate revisions to the SWPPP to include additional structural source control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.
- Summarizing the Level 2 Corrective Actions (planned or taken) in the annual report.
- Level 2 deadline: The Permittee must sign/certify and fully implement the revised SWPPP as soon as possible, but no later than August 31 of the following year.
- If installation of necessary structural source control BMPs is not feasible by the deadline, Ecology may approve additional time, by approving a modification of permit coverage.
- If installation of structural source control BMPs is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, Ecology may waive the requirement for additional Structural Source Control BMPs by approving a modification of permit coverage.
- To request a time extension or waiver, a permittee should submit a detailed explanation of why they are making the request (technical basis), and a Modification of Coverage Form to Ecology in accordance with Condition S2.B, by May 15 before

Level 2 deadline. Ecology will approve or deny the request within 60 days of receipt of a complete Modification of Coverage Form request.

- While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.
- For the year following the calendar year the Permittee triggered a Level 2 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

5.6.4 Level 3 Corrective Action—Treatment BMPs

If the average of a quarter's sampling results for that quarter exceed an applicable benchmark value (for a single parameter) for any three quarters during a calendar year, the Facility will complete a Level 3 Corrective Action in accordance with the following:

- Reviewing the SWPPP and ensuring that it fully complies with Permit Condition S3.
- Making appropriate revisions to the SWPPP to include additional treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. The Permittee will sign and certify the revised SWPPP. Revisions shall include additional operational and/or structural source control BMPs if necessary for proper performance and maintenance of Treatment BMPs.
- A Qualified Industrial Stormwater Professional shall review the revised SWPPP, sign the SWPPP Certification Form (Appendix G), and certify that it is reasonably expected to meet the Permit benchmarks upon implementation. Upon written request Ecology may, one time during the Permit cycle, waive this requirement on a case-by-case basis if a Permittee demonstrates to Ecology's satisfaction that the proposed Level 3 treatment BMPs are reasonably expected to meet the Permit benchmarks upon implementation.
- Before installing treatment BMPs that require the site-specific design or sizing of structures, equipment, or processes to collect, convey, treat, reclaim, or dispose of industrial stormwater, the Permittee shall submit an engineering report to Ecology for review.
- The engineering report must include:
  - Brief summary of the treatment alternatives considered and why the proposed option was selected.
  - The basic design data and sizing calculations of the treatment units.
  - A description and kind of chemicals used in the treatment process, if any. Note: Use of stormwater treatment chemicals requires submittal of Request for Chemical Treatment Form.
  - Results to be expected from the treatment process including the predicted stormwater discharge characteristics.

- A statement, expressing sound engineering justification through the use of pilot plant data, results from similar installations, and/or scientific evidence that the proposed treatment is reasonably expected to meet the permit benchmarks.
- Certification by a licensed professional engineer.

- The engineering report shall be submitted no later than the May 15 prior to the Level 3 deadline, unless an alternative due date is specified in an order.
- An Operations and Maintenance Manual shall be submitted to Ecology no later than 30 days after construction/installation, is complete; unless an alternate due date is specified in an order.
- Summarizing the Level 3 Corrective Actions (planned or taken) in the annual report.
- Level 3 deadline: The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable stormwater management manual as soon as possible, but no later than September 30 of the following year.
- If installation of necessary treatment BMPs is not feasible by the Level 3 deadline, Ecology may approve additional time by approving a modification of permit coverage.
- If installation of treatment BMPs is not feasible or not necessary to prevent discharges that may cause or contribute to violation of a water quality standard, Ecology may waive the requirement for treatment BMPs by approving a modification of permit coverage.
- To request a time extension or waiver, a permittee will submit a detailed explanation of why the request is being made (technical basis), and a Modification of Coverage Form to Ecology in accordance with Condition S2.B, by May 15 before the Level 3 deadline. Ecology will approve or deny the request within 60 days of receipt of a complete Modification of Coverage Form request.
- While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.
- For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

5.7 SUBMITTING REPORTS TO ECOLOGY

The Facility will follow the procedures below for submitting DMRs to Ecology:

- Submitting documents completed by the qualified person to Ecology.
- Submitting sampling data obtained during each reporting period on a DMR Form provided or a Solids Monitoring Report (SMR), or otherwise approved, by Ecology.
- Ensuring that DMRs received by Ecology by the DMR due dates below:
  - 1st period, January to March, by May 15
  - 2nd period, April to June, by August 15
  - 3rd period, July to September, by November 15

- 4th period, October to December, by February 15

- DMRs and SMRs shall be submitted electronically using Ecology's Water Quality Permitting Portal.
- If no stormwater sample was obtained from the site during a given reporting period, submitting the DMR Form indicating "no sample obtained," or "no discharge during the quarter," as applicable.
- If the Facility has suspended sampling for a parameter due to consistent attainment, submitting a DMR and indicating that it has achieved Consistent Attainment for that parameter(s).
- Completed DMRs are contained in Appendix I.
- Submit Annual Reports by May 15 of each year. This report will include corrective action documentation and related implementation schedule if those actions have not yet been completed. Annual Reports are contained in Appendix J.
- Completed Level 1 corrective action tracking forms are contained in Appendix J.

6.0 IMPLEMENTATION SCHEDULE

In accordance with the Permit, if the Facility changes, self-inspection reveals necessary action, the existing BMPs are deemed less effective for any reason, or Ecology notifies WMNS that additional BMPs are required because stormwater runoff is not in compliance with the Permit, WMNS will update the SWPPP to include revised or additional BMPs. In addition to revision of the SWPPP, the revised or additional BMPs will also be implemented at the Facility to minimize the potential for pollutants to enter stormwater and to achieve compliance with the Permit.

7.0 BIBLIOGRAPHY

Clear Water Services. 2019. *Operations and Maintenance Manual, Waste Management Duwamish Reload Facility, 500 GPM Chitosan-Enhanced Sand filtration Stormwater Treatment System.* March.

Landau Associates. 2016. *WMNS Stormwater Engineering Report Phase 2*.

Washington State Department of Ecology (Ecology). 2004. *Guidance Manual for Preparing/Updating a Stormwater Pollution Prevention Plan for Industrial Facilities*. Publication #04-10-030. April.

_____. 2007. *Environment Education Guide: Protecting Washington's Waters from Stormwater Pollution*. Publication #07-10-058. July.

_____. 2019. 2019 *Stormwater Management Manual for Western Washington*.

Landau. 2018. *Stormwater Treatment System Design Engineering Report Phase II Approval, Duwamish Reload Facility, 7400 8th Avenue South, Seattle, WA, 98108*. August 7.

Waste Management of Washington, Inc. (WM). 2017. *Plan of Operation. WM-8th Avenue South Reload Facility*. August.

FIGURES

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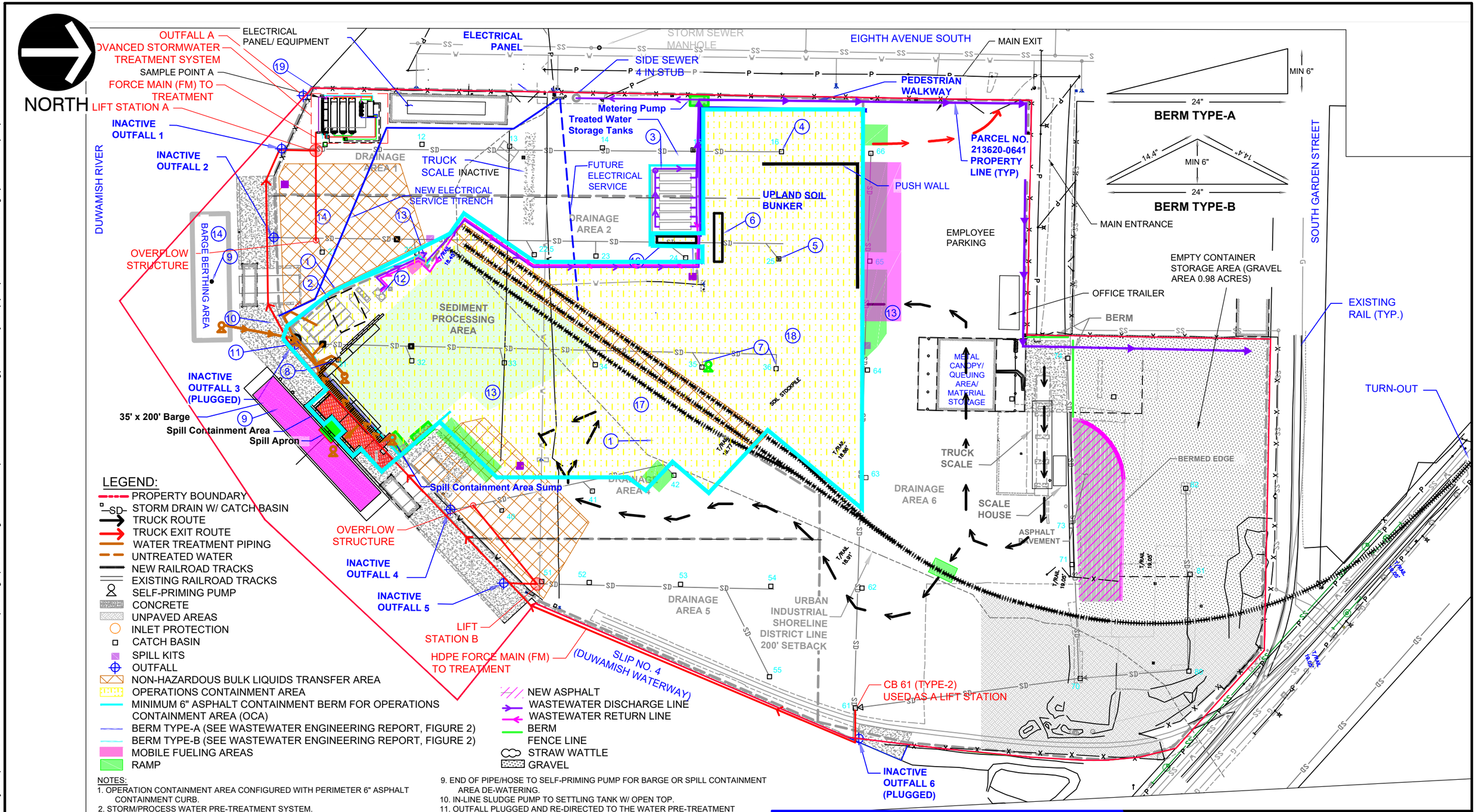
Civil & Environmental Consultants, Inc.
4045 NW 64th Street · Suite 415 · Oklahoma City, OK 73116
Ph: 405.246.9411
www.cecinc.com

WASTE MANAGEMENT
DUWAMISH RELOAD FACILITY

SITE LOCATION MAP

DRAWN BY:	CMH	CHECKED BY:	AND	APPROVED BY:	JS	FIGURE NO.:	1
DATE:	01/27/2020	DWG SCALE:	SEE SHEET	PROJECT NO:	196-659		



NOTES:

1. OPERATION CONTAINMENT AREA CONFIGURED WITH PERIMETER 6" ASPHALT CONTAINMENT CURB.
2. STORM/PROCESS WATER PRE-TREATMENT SYSTEM.
3. TREATED WATER STORAGE SYSTEM. 23,000 GAL. CURBED CONTAINMENT, WITH DRAIN VALVE NORMALLY CLOSED.
4. STORMWATER CATCH BASIN MODIFIED BY INSTALLING A MECHANICAL PLUG IN DOWNSTREAM PIPE TO PREVENT FLOW INTO MAIN TRUNK LINE.
5. INSTALL MECHANICAL PLUG OVER THE INLET TO TEMPORARILY PREVENT FLOW TO DUWAMISH RIVER.
6. WHEEL WASH - ALL VEHICULAR TRAFFIC LEAVING SOIL STOCK PILE AREA AND RAIL LOADING AREA WILL PASS THROUGH WHEEL WASH UPON EXITING.
7. SEDIMENT TRAP PLACED WITHIN CATCH BASIN.
8. SELF-PRIMING PUMPS AT CATCH BASIN TO DIRECT TO WATER PRE-TREATMENT SYSTEM.
9. END OF PIPE/HOSE TO SELF-PRIMING PUMP FOR BARGE OR SPILL CONTAINMENT AREA DE-WATERING.
10. IN-LINE SLUDGE PUMP TO SETTLING TANK W/ OPEN TOP.
11. OUTFALL PLUGGED AND RE-DIRECTED TO THE WATER PRE-TREATMENT SYSTEM.
12. GRANULAR ACTIVATED CARBON VESSELS.
13. MOBILE FUELING AREAS.
14. CONTAINERIZED MEDIA TRANSFER AREA.
15. RIGID CONTAINERIZED MEDIA STORED THROUGHOUT SITE.
16. WHEEL WASH WATER TANK.
17. LIQUIDS TRUCK DUMPING AREA. WASTEWATER DRAINED TO PRETREATMENT SYSTEM VIA CB#34.
18. VAC TRUCK SOLIDS TRUCK DUMPING AREA.
19. ADVANCED STORMWATER TREATMENT SYSTEM.

Civil & Environmental Consultants, Inc.
4045 NW 64th Street · Suite 415 · Oklahoma City, OK 73116
Ph: 405.246.9411
www.cecinc.com

WASTE MANAGEMENT
DUWAMISH RELOAD FACILITY

OVERALL SITE PLAN

DRAWN BY:	CWS	CHECKED BY:		APPROVED BY:		FIGURE NO.:
DATE:	05/09/2023	DWG SCALE:	SEE SHEET	PROJECT NO:	196-659	2

4/1/2019

OUTFALL A

ADVANCED STORMWATER TREATMENT SYSTEM FORCE MAIN (FM) TO TREATMENT

LIFT STATION A

INACTIVE OUTFALL 1

INACTIVE OUTFALL 2

DUWAMISH RIVER

BARGE BERTHING AREA

OVERFLOW STRUCTURE

INACTIVE OUTFALL 3 (PLUGGED)

EIGHTH AVENUE SOUTH

DRAINAGE AREA 1

DRAINAGE AREA 2

DRAINAGE AREA 3

DRAINAGE AREA 4

DRAINAGE AREA 5

DRAINAGE AREA 6

OVERFLOW STRUCTURE

INACTIVE OUTFALL 4

INACTIVE OUTFALL 5

LIFT STATION B

HDPE FORCE MAIN (FM) TO TREATMENT

SLIP NO. 4 (DUWAMISH WATERWAY)

CB 61 (TYPE-2) TO BE USED AS A LIFT STATION

INACTIVE OUTFALL 6 (PLUGGED)

N

0 50 100

APPROXIMATE SCALE IN FEET

LEGEND:

- SD STORM DRAIN W/ CATCH BASIN INLET PROTECTION
- CATCH BASIN
- OUTFALL
- DRAINAGE AREA 1
- DRAINAGE AREA 2
- DRAINAGE AREA 3
- DRAINAGE AREA 4
- DRAINAGE AREA 5
- DRAINAGE AREA 6

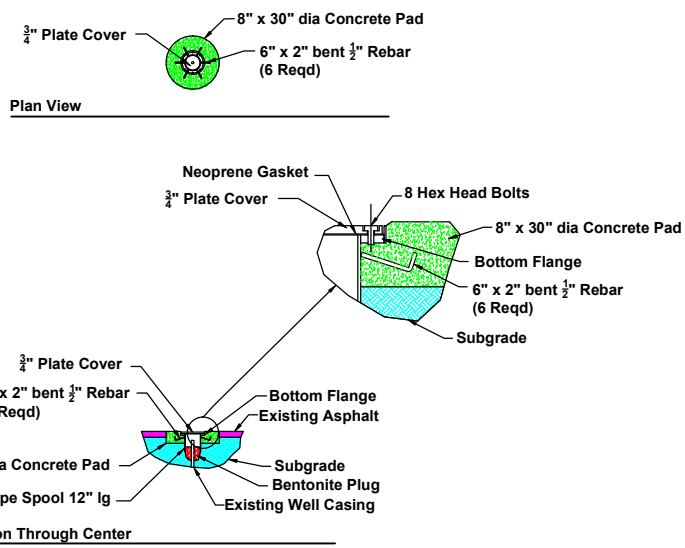
SoundEarth Strategies

WWW.SOUNDEARTHINC.COM

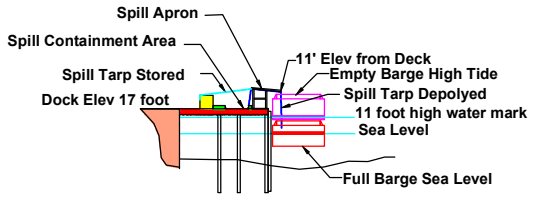
DUWAMISH RELOAD FACILITY
7400 8TH AVENUE SOUTH
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #0659-027

FIGURE 3
DRAINAGE MAP

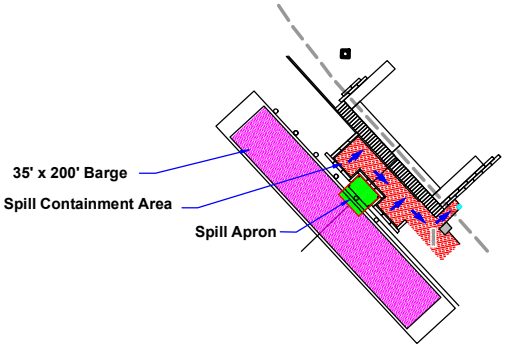
P:\0659 WASTE MANAGEMENT\0659-027 DUWAMISH RELOAD FACILITY\TECHNICAL\CAD\20190659-027_2019_DR.DWG



DETAIL 1: MONITORING WELL PROTECTIVE CAP



DETAIL 2: ELEVATION MAP



DETAIL 3: SPILL CONTAINMENT AREA

SoundEarth Strategies
WWW.SOUNDEARTHINC.COM

DUWAMISH RELOAD FACILITY
7400 8TH AVENUE SOUTH
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT : 0659-027

FIGURE 4
DETAILS

APPENDIX A
CURRENT ECOLOGY INDUSTRIAL STORMWATER GENERAL PERMIT (EFFECTIVE JANUARY 1, 2020)

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

December 30, 2019

WAR302034

John Borghese
Waste Management National Services, Inc.
7400 8th Ave S
Seattle, WA 98108-3460

Alaska Logistics LLC
7400 8th Ave S
Seattle, WA 98108

RE: Reissuance of the Industrial Stormwater General Permit

Dear John Borghese:

On November 20, 2019, the Department of Ecology (Ecology) reissued the Industrial Stormwater National Pollutant Discharge Elimination System and State Waste Discharge General Permit (permit). The permit becomes effective on January 1, 2020, and expires on December 31, 2024. A mobile friendly copy of the permit, permit forms, and information related to your permit can be viewed and downloaded at www.ecology.wa.gov/ISGPeCoverage-packet. **Retain this letter with your permit and Stormwater Pollution Prevention Plan. It is the official record of permit coverage for your facility.**

Permit Overview: The new permit has a number of changes. The changes are summarized in the fact sheet. You can find more information on Ecology's website at: https://ecology.wa.gov/industrialstormwaterpermit. Please contact Ecology if you have any questions.

Site Specific Monitoring Requirements: Your monitoring requirements may be viewed by logging in to WebDMR and viewing your first DMR. If you believe there is a discrepancy between what the permit requires and the DMR, please contact Ecology immediately. In the case of a difference between the permit as applied to your facility and the DMR, the permit requirements take precedence.

Copies of the Permit: You may download copies of the final permit, Fact Sheet, Response to Comments, and other supporting documents online at https://ecology.wa.gov/industrialstormwaterpermit.You may also request copies from Dena Jaskar at (360) 407-6401 or by email at dena.jaskar@ecy.wa.gov.

Appeal of Permit Coverage

You have a right to appeal coverage under the general permit to the Pollution Control Hearings Board (PCHB). Appeals must be filed within 30 days of the date of receipt of this letter. Any appeal is limited to the general permit's applicability or non-applicability to a specific discharge. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

Included is a Focus Sheet describing where and how to appeal this permit coverage. The Focus Sheet may also be accessed at https://fortress.wa.gov/ecy/publications/SummaryPages/1710007.html.

For Additional Information or Assistance

Ecology is committed to providing assistance to you. Please review our web page at https://ecology.wa.gov/industrialstormwaterpermit. For questions about transfers, terminations, and other administrative issues, please contact Josh Klimek at jokl461@ecy.wa.gov or (360) 407-7451.

If you have questions regarding stormwater management issues at your site, please contact Ben Billick at bbil461@ecy.wa.gov or (425) 649-7059.

Questions

If you have questions regarding the permit, please contact Travis Porter at (360) 407-6127, or Travis.Porter@ecy.wa.gov.

Sincerely,

Vincent McGowan, P.E., Manager

Program Development Services Section
Water Quality Program

APPENDIX B
KING COUNTY INDUSTRIAL WASTE DISCHARGE PERMIT

King County
Wastewater Treatment Division
Industrial Waste Program
Department of Natural Resources and Parks
201 South Jackson Street, Suite 513
Seattle, WA 98104-3855
206-477-5300 Fax 206-263-3001
TTY Relay: 711

March 9, 2020

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

John Borghes
Waste Management Inc.
7400 8th Ave South
Seattle, WA 98108

Issuance of revised Wastewater Discharge Permit No. 7928-03 to Waste Management Inc. by the King County Department of Natural Resources and Parks

Dear Mr. Borghes:

The King County Industrial Waste Program (KCIW) has reviewed and processed your application for issuance of an industrial wastewater discharge permit in accordance with Chapter 90.48 RCW as Amended, Public Law 92-500, and King County Code 28.84.060.

The enclosed issued Permit No. 7928-03 covers the wastewater discharge from the Waste Management National Services - Duwamish Reload Facility operation located at 7400 8th Avenue S., Seattle, Washington. All discharges from this facility, and actions and reports relating thereto, shall be in accordance with the terms and conditions of this permit.

The enclosed Permit No. 7928-03 supersedes and cancels Permit No. 7928-02 effective March 20, 2020.

King County Code 28.84 authorizes a fee for each Permit issued by the King County Department of Natural Resources and Parks. The current fee for issuance of a revised Permit in Level C is $6,000. King County will send you an invoice for this amount.

The main changes to this revised permit are:

1. Facility name has been changed from Waste Management National Services – 8th Avenue South Reload Facility to Waste Management National Services – Duwamish Reload Facility

2. Updated KCIW Contacts and phone numbers (S1)
3. Requirement to schedule pre-operative inspection before discharge to the Markey Machinery private sewer line begins (S3.A)
4. Revised acceptance criteria for four parameters in Table 1: Contaminated Dredged Material and Upland Soil Acceptance Criteria (S3.C.4)
5. Revised Waste information submittal requirements (S3.C.5)
6. Requirement to submit updated Determination of authorized 24-hour composite sample collection methods plan (S3.E)
7. Requirement to submit updated Slug/Spill Control Plan (S3.G)
8. Requirement to submit updated Wastewater Treatment System Operations and Maintenance (O&M) Manual (S3.J)
9. Requirement to submit Sample Site Relocation Feasibility Evaluation (S3.K)
10. Increase permit daily discharge volume to 846,000 gallons per day
11. Revised self-monitoring requirements and discharge limitations for once discharge to Markey Machinery private sewer line begins (S4.A.2)

If you have any questions about this permit or your wastewater discharge, please call Ryan Salem at 206-477-5476 or email him at Ryan.Salem@kingcounty.gov. You may also wish to visit our program's Internet pages at: www.kingcounty.gov/industrialwaste.

Thank you for helping support our mission to protect public health and enhance the environment.

Sincerely,

Mark Henley
Program Manager

Enclosures

cc: Maia Hoffman, Washington State Department of Ecology
Julie Howell, Seattle Public Utilities

Permit No.: 7928-03
Revision #2 Issuance Date: March 9, 2020
Revision #2 Effective Date: March 20, 2020
Expiration Date: August 14, 2021

King County

WASTE DISCHARGE PERMIT

Department of Natural Resources and Parks
Industrial Waste Program
201 S. Jackson Street, Suite 513
Seattle, WA 98104-3855

In accordance with the provisions of Chapter 90.48 RCW as amended, Public Law 92-500, and King County Code 28.84.060, a Waste Discharge Permit is issued to:

Waste Management National Services – Duwamish Reload Facility

Facility location:	7400 Eighth Ave. S. Seattle, WA 98108
Business hours phone:	206-694-0588
Emergency (24-hour) phone:	425-354-0763
Mailing address:	7400 Eighth Ave. S. Seattle, WA 98108

Permission is hereby granted to discharge industrial wastewater from the above-identified facility into the King County sewerage system in accordance with the effluent limitations and monitoring requirements set forth in this permit.

This permit is based on information provided in the permit application, which together with the following conditions and requirements are considered part of the permit. All requirements and ordinances of King County pertaining to the discharge of wastes into the King County sewerage system are hereby made a condition of this permit. All discharges and activities authorized herein shall be consistent with the terms and conditions of this permit.

This permit is not transferable without authorization from the King County Industrial Waste Program (KCIW). Failure to provide advance notice of a transfer renders this waste discharge permit voidable on the date of facility transfer.

By _____
Mark Henley, Industrial Waste Program Manager

TABLE OF CONTENTS

S1. EMERGENCY CONTACTS

KING COUNTY

Industrial Waste Program (8 a.m. – 5 p.m., weekdays):	206-477-5300
Ryan Salem, Industrial Waste Compliance Investigator:	206-477-5476
Mark Henley, Industrial Waste Program Manager:	206-263-6994

Your emergency contact after 5 p.m. weekdays and on weekends is:

West Point Treatment Plant:	206-263-3801

If unable to reach anyone at this number call:

South Treatment Plant:	206-263-1760

WASHINGTON STATE DEPARTMENT OF ECOLOGY

24-Hour emergency spill phone number:	425-649-7000

S2. PERMIT SUMMARY AND COMPANY IDENTIFICATION

A. Summary Information

The following industrial waste discharge sites have been identified for this facility:

Sample Site No.	*Limit Type*	*Daily Maximum Discharge Volume (gpd)*	*Description*
IW1215A	King County Local Limits	144,000 / 846,000 (*)	Sample tap on treatment system discharge pipe
IW1215A	King County Local Limits	NA	Flow meter on discharge pipe to SPU sewer on 8th Ave. S.
IW1215A	King County Local Limits	NA	Flow meter on discharge pipe to Markey Machinery private sewer line

(*) Maximum daily discharge volume is 144,000 gpd until discharge to Markey Machinery private side sewer on S. Garden Street is approved. Once KCIW approves the discharge to the S. Garden Street side sewer, the maximum daily discharge volume will be 846,000 gpd (see S3.A and S4.A of this permit)

Effluent limitations and self-monitoring requirements for this sample site are detailed in S4.A of this permit.

B. Reports

Report Name	*Section(s)*	*Due Date*
Updated Determination of authorized 24-hour composite sample collection methods	S3.E	September 1, 2020
Updated Slug/Spill Control Plan	S3.G S6.A	September 1, 2020
Updated Wastewater Treatment System Operations and Maintenance (O&M) Manual	S3.J	September 1, 2020
Contingency Sample Site Evaluation and Sample Site Relocation Assessment	S3.K	September 1, 2020
Monthly self-monitoring reports	S4.A	15th day of each month
14-Day Report: Discharge or permit violation	S4.D	Within 14 days after a discharge or permit violation becomes known
5-Day Report: Slug discharge or spill	S6.A	Within five days after a slug discharge or spill
Installation/Upgrade of Pretreatment System Report	S6.C	Prior to installation or upgrade
Hazardous waste discharge notification	S6.D	Within 90 days after waste is identified through RCRA
Washington State Department of Ecology Dangerous Waste Reports	S6.D	As requested by KCIW

C. Major Changes in the Revised Permit

This revised permit contains the following major changes since last issuance:

1. Facility name has been changed from Waste Management National Services – 8th Avenue South Reload Facility to Waste Management National Services – Duwamish Reload Facility

2. Updated KCIW Contacts and phone numbers (S1)

3. Requirement to schedule pre-operative inspection before discharge to the Markey Machinery private sewer line begins (S3.A)

4. Revised acceptance criteria for four parameters in Table 1: Contaminated Dredged Material and Upland Soil Acceptance Criteria (S3.C.4)

5. Revised Waste information submittal requirements (S3.C.5)

6. Requirement to submit updated Determination of authorized 24-hour composite sample collection methods plan (S3.E)

7. Requirement to submit updated Slug/Spill Control Plan (S3.G)

8. Requirement to submit updated Wastewater Treatment System Operations and Maintenance (O&M) Manual (S3.J)

9. Requirement to submit Sample Site Relocation Feasibility Evaluation (S3.K)

10. Increase permit daily discharge volume to 846,000 gallons per day

11. Revised self-monitoring requirements and discharge limitations for once discharge to Markey Machinery private sewer line begins (S4.A.2)

D. Company Identification

SIC Code No.:	4212
Hazardous Waste Generator No.:	NA
Industry Type:	Waste Material Transfer Facility

S3. SPECIAL CONDITIONS OR COMPLIANCE SCHEDULE

A. Pre-Operative Inspection

Discharge to the sanitary sewer through the Markey Machinery private sewer line on South Garden Street shall not begin until KCIW has conducted a preoperative inspection of the pretreatment facilities and has sent written notification (email is sufficient) to the permittee that discharges may begin. Prerequisites for scheduling the site inspection include finalizing curb modification to increase OCA boundary expansion, upgrades to the wastewater pretreatment system, sample site configuration and plumbing revisions.

B. Approved Waste Streams

This authorization grants the discharge of limited amounts of industrial wastewater and contaminated stormwater from the following waste streams:

1. Wastewater generated on-site during the transloading (transferring) of contaminated dredged sediments and contaminated upland soils, including:

    a. Contaminated stormwater from operational areas within the bermed area
    b. Pressure washing of equipment for decontamination
    c. Truck wash water
    d. Incidental dewatering of dredged material and soils during transloading activities

2. Wastewater generated by the processing of the following off-site non-hazardous wastes provided that these wastes do not meet categorical standards as outlined in S3.C.1 of this permit:

    a. Stormwater catch basins and systems clean-out
    b. Groundwater well drilling and development slurries and liquids
    c. Construction related slurries (i.e. jet grout)
    d. Construction site wastewater and stormwater
    e. Pond clean-outs and maintenance
    f. Boiler Maintenance
    g. Others, with prior approval from KCIW

Wastes or contaminants from sources other than permitted herein shall not be discharged to the sanitary sewer without prior approval from KCIW.

C. Waste Material Acceptance Conditions, Prohibitions and Records Retention

1. The Waste Management National Services – Duwamish Reload Facility (Waste Management) shall not accept off site metal, oily and organic wastes,

as defined in 40 CFR Part 437, for the primary purpose of treatment or recovery and disposal to the sanitary sewer.

2. Waste Management shall not accept off site wastes that designate as dangerous (hazardous) waste as per WAC 173-303, radioactive wastes and polychlorinated biphenyls (PCBs) wastes regulated under the Toxic Substances Control Act (TSCA).

3. Waste Management shall develop, implement, and maintain a waste profiling and evaluation program that requires waste generators to submit a signed Waste Profile form for each dredged sediment and upland contaminated soil stream brought on site. Waste profiling records required by the permit shall be retained on site for a period of three years and shall be available for review at reasonable times by authorized representatives of KCIW.

4. Waste Management is authorized to accept contaminated dredged sediments and upland contaminated soils without prior notification to KCIW provided that the waste material profile does not exceed the Acceptance Criteria specified in Table 1 below:

Table 1: Contaminated Dredged Material and Upland Soil Acceptance Criteria

Parameter	CAS-RN	Sediment or Soil (mg/kg)
Metals		
Arsenic	7440-38-2	2,100
Cadmium	7440-43-9	42
Chromium, Total	7440-47-3	810
Copper	7440-50-8	3,900
Lead	7439-92-1	3,600
Mercury (inorganic)	7439-97-6	10
Nickel	7440-02-0	330
Silver	7440-22-4	25
Zinc	7440-66-6	11,400
Organometallics		
Tributyltin (oxide)	56-35-9	0.25
PAH		
Total LPAH		
Napthalene	91-20-3	7.2
Acenaphthylene	208-96-8	3.9
Acenaphthene	83-32-9	6.0
Fluorene	86-73-7	11
Phenanthrene	85-01-8	63
Anthracene	120-12-7	39
2-Methylnaphthalene	91-57-6	5.7

Parameter	CAS-RN	Sediment or Soil (mg/kg)
Total HPAH		
Fluoranthene	206-44-0	90
Pyrene	129-00-0	48
Benzo(g,h,i)perylene	191-24-2	9.6
cPAH		
Benzo(a)pyrene	50-32-8	33
Benzo(a)anthracene	56-55-3	53
Benzo(b)fluoranthene	205-99-2	15
Benzo(k)fluoranthene	207-08-9	18
Chrysene	208-01-9	63
Dibenz(a,h)anthracene	53-70-3	6.6
Indeno(1,2,3-cd)pyrene	193-39-5	19
Benzo(a)pyrene (as TEQ)	50-32-8	44
Phthalates		
Bis(2-ethylhexyl)phthalate	117-81-7	25
Butylbenzyl phthalate	85-68-7	7.5
Diethyl phthalate	84-66-2	3.6
Dimethyl phthalate	131-11-3	4.2
Di-n-butyl phthalate	84-74-2	15
Di-n-octyl phthalate	117-84-0	19
Pesticides / PCBs		
Chlordane	57-74-9	0.60
Dieldrin	60-57-1	5.1
DDT	50-29-3	0.21
Endrin	72-20-8	0.40
Heptachlor	76-44-8	0.81
Total PCBs	-	49
Petroleum Hydrocarbons		
Total Petroleum Hydrocarbons (TPH):	-	
- Gasoline Range Organics (GRO)	-	2,000
- Diesel Range Organics (DRO)	-	15,500
- Oil Range Organics (ORO)	-	29,000
Phenols		
2,4-Dimethylphenol	105-67-9	0.63
2-Methylphenol (o-Cresol)	95-48-7	0.23
4-Methylphenol (p-Cresol)	106-44-5	11
Pentachlorophenol	87-86-5	2.1
Phenol	108-95-2	3.6
Dioxins / Furans		
Total TEQ (Dioxins/Furans)		0.000170
Other Organics		
Benzene	71-43-2	10.0

Parameter	CAS-RN	Sediment or Soil (mg/kg)
Benzoic Acid	65-85-0	4.5
Benzyl Alcohol	100-51-6	2.6
Dibenzofuran	132-64-9	5.1
1,2-Dichlorobenzene	95-50-1	0.50
1,4-Dichlorobenzene	106-46-7	1.4
Ethylbenzene	100-41-4	8.3
Ethylene Dibromide (EDB)	106-93-4	0.005
Hexachlorobenzene	118-74-1	0.69
Hexachlorobutadiene	87-68-3	0.81
Methylene Chloride	75-09-2	0.020
MTBE	1634-04-4	0.10
N-nitrosodiphenylamine	86-30-6	0.39
Tetrachloroethylene	127-18-4	14.0
Toluene	108-88-3	7.2
1,2,4-Trichlorobenzene	120-82-1	0.19
1,1,1-Trichloroethane	71-55-6	2.0
Trichloroethylene	79-01-6	10.0
Total Xylenes	1330-20-7	32

5. Prior to accepting, for transloading purposes, contaminated dredged sediments and upland soils that exceed the Acceptance Criteria outlined in Table 1 in S3.C.4 of this permit, Waste Management must first obtain written approval (email is sufficient) from KCIW. For each proposed waste stream that exceeds the acceptance criteria, Waste Management shall submit for KCIW review and approval the following information at least 30 days before accepting the waste onto the site:

   a. Generator/source

   b. Waste profile form signed by the generator or authorized agent

   c. Analytical results summarized in table form

   d. Volume of material to be processed

   e. Projected dates material will be processed

   f. Disposal destination

   Upon receipt and review of the waste profile information KCIW reserves the authority to revise the conditions of this permit.

D. Granulated Activated Carbon (GAC) Vessels Breakthrough Monitoring Requirements

1. Waste Management shall collect weekly samples between the lead and lag GAC vessels (mid GAC) to check for breakthrough and have samples run on a

48-hour turn around or shorter. Samples must be analyzed for PCBs with a method detection limit not to exceed 0.1 µg/L.

2. The mid GAC sample results required by the permit shall be retained on site for a period of three years and shall be available for review at reasonable times by authorized representatives of KCIW

3. If PCBs (per aroclor, see S4.A.1 footnote) are detected in the effluent of the lead GAC unit at concentrations exceeding the established discharge limit (see S4.A.1), the permittee shall cease treatment and discharge to the sanitary sewer system until GAC change out of the lead unit is performed.

E. 24-Hour Composite Sampling Collection Method Plan

By no later than September 1, 2020, Waste Management shall submit an updated plan for KCIW review and approval to implement flow-proportional composite sampling or a justification to continue to collect time-proportional samples.

1. For flow proportional samples this plan shall include the following elements:

   a. Description of equipment to be used, such as flow meter(s) and sampling equipment types, manufacturers and models, including specifications;

   b. Schematic flow diagram indicating location of sample site and proposed metering and sampling equipment;

   c. Sampling equipment settings.

   d. Coordination with KCIW that the proposed sampling equipment and associated devices of the permittee will be compatible with the KCIW discharge compliance monitoring equipment.

2. To continue to collect time proportional samples, the justification must describe the methods that will be used to collect time proportional samples and demonstrate that collection of time proportional composite samples is representative of the discharge. At a minimum, the justification must consider:

   a. Flow volumes from various processes and batch discharges;
   b. The variability of these flows and the pollutant levels anticipated in each waste stream;
   c. The treatment systems employed;
   d. Discharge mode (continuous vs. batch, gravity vs. pumped);
   e. The variability observed in wastewater quality to date; and
   f. Any available comparisons between time and flow-proportional samples from this or similar sites.

3. Until KCIW approves a composite sampling collection method (time vs. flow based), the permittee may collect time-proportional composite samples.

4. If it is determined that flow-proportional composite sampling must be implemented, the permittee must begin collecting flow-proportional composite sampling in accordance with the KCIW approved method within 90 days from KCIW's approval.

F. Flow Meter Calibration and Calibration Verification Language for Permits

The following are requirements for the calibration and calibration verification of flow meters.

1. Waste Management must use calibrated flow meters to measure discharge volume and follow the manufacturer's specification for calibration.

2. At least annually, Waste Management shall verify the calibration of the flow meter(s) used to calculate the discharge volume from the industrial wastewater treatment systems.

    a. The verification must be performed by qualified staff. This could be either permittee's employee or third party.
    b. The verification may be performed on site or at a vendor site.
    c. At a minimum flow meter verification must be conducted, either a) by discharge to or from a vessel of known volume, b) by use of another flow meter that is calibrated by an independent third party, or c) by recalibration by the original manufacturer or another vendor.
    d. The acceptance limit for calibration verification is 90% -110% of the reference measurement. The permittee must re-calibrate the flow meter(s) per manufacturer's specifications if the verification fails. All self-monitoring data taken with flow meters that fail verification must be noted on self-monitoring reports until the subject flow meter is back within acceptance limits.

3. Flow meter calibration and verification must be documented and records must be obtained and be maintained on site for a minimum of three years.

G. Slug Discharge Control Plan

By no later than September 1, 2020, Waste Management shall submit an updated Slug Discharge Control Plan. The purpose of the Slug Discharge Control Plan is to minimize the potential for slug discharges into the sanitary sewer system. The U.S. Environmental Protection Agency (EPA) defines a slug discharge as "any discharge of a non-routine, episodic nature, including but not limited to, an accidental spill or a non-customary batch discharge, which has a reasonable potential to cause interference or pass through, or in any way violate the POTW's [publicly owned treatment works] regulations, local limits, or permit conditions."

At a minimum, your plan must include the following elements:

1. General company information:

    a. Company name
    b. Address
    c. Contact person(s)
    d. Phone number(s)
    e. Emergency 24-hour phone number(s)
    f. Operating schedule (days of week, hours)
    g. Describe nature of business

2. Facility layout flow diagrams (The information submitted with your KCIW permit application can be attached to this plan.)

3. Inventory of process tanks and new and waste chemicals stored on site (include location, chemicals and concentration, container type, average stored volume, total container volume, and special provisions taken to prevent slug discharges)

4. Description of discharge practices, including non-routine batch discharges

5. Procedures for immediately notifying KCIW of spills or slug discharges and for follow-up written notification within five days

6. Inventory of spill and leak prevention equipment

7. Operation and preventative maintenance measures used to prevent a spill or slug discharge

8. Description of previous slug or spill discharges that have occurred at your facility and corrective actions implemented to prevent recurrence

H. Sedimentation Tanks Maintenance

The permittee shall properly operate and maintain all wastewater treatment units to ensure compliance with established discharge limits. Solids accumulation in tanks used for solids settling shall not exceed 25 percent of the tank's working hydraulic capacity. Each tank's working hydraulic capacity is based on the water column height as measured from the bottom of the tank to either the invert elevation of the tank's outlet pipe (gravity discharges) or discharge pump intake (pumped discharges).

I. Organic Compound Screening Levels and Reporting Requirements

1. Discharges that exceed the following screening levels have the potential to cause health hazards in the sewage collection system or indicate that treatment has not been sufficient enough to remove hazardous waste characteristics.

Compound	CAS Number	Wastewater Screening Level (µg/L)
Benzene	71-43-2	70
Ethylbenzene	100-41-4	1,700
Tetrachloroethylene (PCE)	127-18-4	240
Toluene	108-88-3	1,400
Total Xylenes	1330-20-7	2,200
1,1,2 Trichloroethylene (TCE)	79-01-6	500

2. For each exceedance of the screening levels, the permittee shall:

   a. Notify KCIW within 24 hours of learning of the exceedance

   b. Collect a sample and submit new data to KCIW within 14 days of becoming aware of the exceedance (or the next time discharge occurs if greater than 14 days)

   c. Submit a written report within 14 days of learning of the exceedance (*14-Day Report*)

   d. The report should explain the cause of the exceedance and corrective actions taken to respond to the exceedance and ensure ongoing compliance

3. Whenever KCIW's monitoring or the permittee's self-monitoring results exceed the screening level for three out of four consecutive sampling events, the permittee shall submit a plan indicating the steps that will be taken to ensure that organic compound discharges do not exceed screening levels. The report:

   a. Shall be submitted within 30 days of the third self-monitoring result that shows organic compound discharges that exceed screening levels

   b. Shall indicate the steps that will be taken to reduce organic chemical concentrations so that they remain consistently below screening levels within 60 days

   c. May be used by the permittee or KCIW to evaluate the adequacy of your pretreatment system and other best management practices in order to identify whether additional waste characterization needs to be performed;

or additional operational and structural upgrades are needed that will enable you to consistently meet King County organic compound screening levels

J. Wastewater Treatment System Operations and Maintenance Manual

By no later than September 1, 2020, Waste Management shall submit an updated Wastewater Treatment System O&M Manual. The purpose of the manual is to present technical guidance and regulatory requirements to the operator(s) to enhance operation under both normal and emergency conditions. The operation and maintenance manual shall include the following topics:

1. The names and phone numbers of the responsible individuals
2. A description of plant type, flow pattern, operation, and efficiency expected
3. The principal design criteria
4. A process description of each plant unit, that includes function, relationship to other plant units, and schematic diagrams
5. An explanation of the operational objectives for the various wastewater parameters
6. A discussion of the detailed operation of each unit and a description of various controls, recommended settings, fail-safe features, etc.
7. A discussion of how the facilities are to be operated during anticipated startups and shutdowns, maintenance procedures, and less than design loading conditions, so as to maintain efficient treatment
8. A section on laboratory procedures that includes sampling techniques, monitoring requirements, and sample analysis
9. Recordkeeping procedures and sample forms to be used
10. A maintenance schedule that incorporates manufacturer's recommendations, preventative maintenance and housekeeping schedules, and special tools and equipment usage
11. A section on safety
12. A section that contains the spare parts inventory, address of local suppliers, equipment warranties, and appropriate equipment catalogues
13. Emergency plans and procedures

K. Contingency Sample Site Evaluation and Sample Site Relocation Assessment

By no later than September 1, 2020, Waste Management shall submit an evaluation of autosampler performance under discharge conditions at the contingency sampling location prior to the split for the 8th Avenue and Garden Street discharges and report on the feasibility of relocating the official effluent sampling spigots for sample site A1215A to this location. The process flow diagram entitled Operations Containment Area Water Pretreatment System (Figure 3) provided with the December 6, 2019 engineering report identifies the location of the WM and KCIW sampling ports on the effluent discharge pipe to the Markey Machinery private sewer line (Garden Street discharge). Unless there are demonstrated reasons that it is not feasible to collect representative samples, KCIW's preferred location is identified as "Contingency auto-sampler ports" on Figure 3. This preferred location is on the effluent discharge pipe, but before it splits into the two discharge pipes to the SPU sewer line on 8th Avenue South and the effluent discharge pipe to the Markey Machinery private sewer line.

S4. EFFLUENT LIMITATIONS & SELF-MONITORING REQUIREMENTS

A. Effluent Limitations and Self-Monitoring Requirements:

1. **Until discharge to the Markey Machinery private sewer line begins**, the permittee shall comply with the following discharge limits and monitor its discharges to the King County sewerage system as specified below.

Sample Site No.	***Limit Type***	***Sample Site Description***
IW1215A	King County Local Limits	Sample tap on treatment system discharge pipe

Parameter	***Daily Average (mg/L)***	***Instantaneous Maximum (mg/L)***	***Maximum Loading[1] (lbs/day)***	***Sampling Frequency***	***Sample Type***
Arsenic, Total[2]	1.0	4.0	0.39	Weekly	Composite
Cadmium, Total	0.5	0.6	0.16	Weekly	Composite
Chromium, Total	2.75	5.0	2.74	Weekly	Composite
Copper, Total	3.0	8.0	3.60	Weekly	Composite
Lead, Total	2.0	4.0	0.57	Weekly	Composite
Mercury, Total	0.1	0.2	0.06	Weekly	Composite
Nickel, Total	2.5	5.0	2.60	Weekly	Composite
Silver, Total	1.0	3.0	0.27	Weekly	Composite
Zinc, Total	5.0	10.0	6.00	Weekly	Composite
Cyanide, Amenable	2.0	3.0	NA	NA	NA
Nonpolar FOG	100	NA	NA	Weekly	Composite
Settleable Solids, Volumetric	NA	7 ml/L	NA	Daily	Grab
PCBs per Aroclor[3]	0.17 µg/L	NA	NA	Weekly	Composite
BNAs	NA			Weekly	Composite
Benzo(a)pyrene	6.9 µg/L	NA	NA	Weekly	Composite
Pentachlorophenol	6.9 µg/L	NA	NA	Weekly	Composite
VOAs	NA			Weekly	Composite
Benzene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Ethylbenzene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Tetrachloroethylene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Toluene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Total Xylenes	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Trichloroethylene	See S3.I. for screening levels and reporting requirements			Weekly	Composite

pH (s.u.)	***Daily Minimum***	***Minimum***	***Maximum***	Daily	Grab
	5.5	5.0	12.0		

Daily Maximum Discharge Volume (gpd)	144,000	Continuous (In-line meter)	Meter Reading
Maximum Flow Rate (gpm)	100	Daily (In-line meter)	Meter Reading

[1] Applicable poundage limit for copper and zinc equals the daily average concentration in mg/L, multiplied by the flow in million gallons per day, multiplied by 8.34. Applicable poundage limit for arsenic, cadmium, chromium, lead, mercury, nickel and silver have been adjusted to prevent significant increase of pollutants at King County's West Point Treatment Plant influent.

[2] For the determination of total metals (which are equivalent to total recoverable metals) the sample is not filtered before processing.

[3] Discharge limit is for each Aroclor (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, and Aroclor 1260)

2. **Once discharge to the Markey Machinery private sewer line is approved by KCIW**, the permittee shall comply with the following discharge limits and monitor its discharges to the King County sewerage system as specified below.

Sample Site No.	***Limit Type***	***Sample Site Description***
IW1215A	King County Local Limits	Sample tap on treatment system discharge pipe

Parameter	***Daily Average (mg/L)***	***Instantaneous Maximum (mg/L)***	***Maximum Loading[1] (lbs/day)***	***Sampling Frequency***	***Sample Type***
Arsenic, Total[2]	1.0	4.0	0.39	Weekly	Composite
Cadmium, Total	0.5	0.6	0.16	Weekly	Composite
Chromium, Total	2.75	5.0	2.74	Weekly	Composite
Copper, Total	3.0	8.0	5.08	Weekly	Composite
Lead, Total	2.0	4.0	0.57	Weekly	Composite
Mercury, Total	0.1	0.2	0.06	Weekly	Composite
Nickel, Total	2.5	5.0	2.60	Weekly	Composite
Silver, Total	1.0	3.0	0.27	Weekly	Composite
Zinc, Total	5.0	10.0	9.11	Weekly	Composite
Cyanide, Amenable	2.0	3.0	NA	NA	NA
Nonpolar FOG	100	NA	NA	Weekly	Composite
Settleable Solids, Volumetric	NA	7 ml/L	NA	Daily	Grab
PCBs per Aroclor[3]	0.1 µg/L	NA	0.000408	Weekly	Composite
BNAs	NA			Weekly	Composite
Benzo(a)pyrene	2.4 µg/L	NA	NA	Weekly	Composite
Pentachlorophenol	2.4 µg/L	NA	NA	Weekly	Composite
VOAs	NA			Weekly	Composite
Benzene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Ethylbenzene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Tetrachloroethylene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Toluene	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Total Xylenes	See S3.I. for screening levels and reporting requirements			Weekly	Composite
Trichloroethylene	See S3.I. for screening levels and reporting requirements			Weekly	Composite

pH (s.u.)	***Daily Minimum***	***Minimum***	***Maximum***	Daily	Grab
	5.5	5.0	12.0		

Daily Maximum Discharge Volume (gpd)	846,000	Continuous (In-line meter)	Meter Reading

[1] Applicable poundage limit for arsenic, cadmium, chromium, copper, lead, mercury, nickel and silver and zinc have been adjusted to prevent significant increase of pollutants at King County's West Point Treatment Plant influent.
[2] For the determination of total metals (which are equivalent to total recoverable metals) the sample is not filtered before processing.
[3] Discharge limit is for each Aroclor (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, and Aroclor 1260)

Sample Site No.	*Limit Type*	*Sample Site Description*	
IW1215B	King County Local Limits	Flow meter on discharge pipe to SPU sewer on 8th Ave. S.	
Parameter	***Maximum (gpm)***	***Sampling Frequency***	***Sample Type***
Flow Rate	100	Daily (In-line meter)	Meter Reading

Sample Site No.	*Limit Type*	*Sample Site Description*	
IW1215C	King County Local Limits	Flow meter on discharge pipe to Markey Machinery private sewer line	
Parameter	***Maximum (gpm)***	***Sampling Frequency***	***Sample Type***
Flow Rate	572	Daily (In-line meter)	Meter Reading

3. A self-monitoring report of all required and nonrequired sampling must be filed no later than the 15th day of the time period following the reporting period (i.e., the 15th day of the following month for monthly reports). The permittee shall use the KCIW self-monitoring form to submit results unless an alternate form is approved by KCIW. If no discharge has occurred during the sampling period, the report shall be submitted notifying KCIW that no discharge has occurred.

4. The total volume discharged for any processing day shall be calculated by reading the volume passing through a KCIW approved meter or shall be estimated using another KCIW approved method. The total volume for each processing day on which metal samples are collected shall be reported on self-monitoring reports. The total monthly discharge volume shall be reported on self-monitoring reports.

5. Volume and waste type from all batch discharges shall be recorded on the self-monitoring form.

6. For self-monitoring, the permittee shall collect composite samples in accordance with the following methods:

    a. Heavy metals and organics parameters (other than volatile organics):

        i. If time-proportioned composite sampling is authorized, a composite sample shall consist of four or more grab samples of equal volume collected at least 15 minutes apart and no more than two hours apart throughout the processing day from a well-mixed effluent chamber.

ii. A flow-proportioned composite sample shall mean a sample composed of grab samples collected continuously or discretely, by hand or machine, in proportion to the flow at the time of collection or to the total flow since collection of the previous grab sample. The grab sample volume or frequency of grab collection may be varied in proportion to flow.

b. A cyanide composite sample shall consist of four grab samples of equal volume collected at least 15 minutes apart and no more than two hours apart from a well-mixed effluent chamber. Each aliquot shall be collected, treated, and preserved in the field in accordance with 40 CFR 136 and 403 appendix E. Treated aliquots may be collected into a single container and analyzed as one sample.

c. For volatile organic analysis (VOA), a composite sample shall consist of four grab samples of equal volume collected at least 15 minutes apart and no more than two hours apart from a well-mixed effluent chamber. Each aliquot shall be collected and preserved in the field in accordance with 40 CFR 136. The individual grab samples may be composited (at the laboratory) prior to analysis.

d. The three nonpolar fats, oils, and grease (FOG) grab samples shall be of equal volume, collected at least five minutes apart, and analyzed separately. When using U.S. EPA approved protocols specified in 40 CFR Part 136, the individual grab samples may be composited (at the laboratory) prior to analysis. The result of the composite sample or the average of the concentrations of the three grab samples may be reported as Total FOG unless the value is 100 mg/L or greater, in which case the concentration of nonpolar FOG must be reported.

e. For situations where the only discharge for the 24-hour period is of short duration (e.g., batch discharge), resulting in the inability to collect composite samples that meet the definitions described in Number 5.a-c above, the permittee shall collect grab samples every 15 minutes during the duration of the discharge. Regardless of the number of aliquots making up this sample, it will be used to evaluate compliance with daily average limits.

7. Discharges of greater than pH 12 are prohibited unless the permittee obtains written approval (email is sufficient) from KCIW prior to discharge and is subject to special conditions to protect worker safety, the collection system and treatment works.

8. Should an automatic pH recording system fail (if required by permit or compliance order), the permittee shall manually check the pH at least four

times per hour. Any discharge without a pH record shall be considered a violation of this permit.

B. Non-required Self-Monitoring

All sampling data collected by the permittee and analyzed using procedures approved by 40 CFR 136 or approved alternatives shall be submitted to KCIW whether required as part of this permit or done voluntarily by the permittee.

C. Violation Criteria

1. Wastewater from regulated processes shall comply with the effluent limitations prior to dilution with other wastewaters unless a fixed alternative discharge limit is approved by KCIW. (See Section S8.C.4 for further information about dilution.)

2. A review of any violation will include consideration of testing accuracy prior to enforcement action.

3. The more restrictive limitation (concentration or mass) shall prevail for determining violations.

4. Daily average and maximum monthly average limits apply to composite samples and to grab samples from short-term batch discharges.

5. Instantaneous maximum limits apply to grab samples, with the exception of grab samples from short-term batch discharges.

6. The instantaneous minimum pH limit is violated whenever any single grab sample or any instantaneous recording is less than pH 5. The daily minimum pH limit is violated whenever any continuous recording of 15 minutes or longer remains below pH 5.5 or when each pH value of four consecutive grab samples collected at 15-minute intervals or longer within a 24-hour period remains below pH 5.5.

7. The limit for nonpolar FOG (mineral origin) is violated when the arithmetic mean of the concentration of three grab samples (taken no more frequently than in five minute intervals), or when the result of a composite sample exceeds 100 mg/L.

D. Response when Violations are Detected

1. When monitoring data shows a violation, the permittee shall:

   a. Take immediate action to stop the violation and notify KCIW within 24 hours of learning of the violation.

b. Collect a sample and submit new data to KCIW within 14 days of becoming aware of the violation.

c. Submit a written report within 14 days of learning of the violation (*14-Day Report*). The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance.

2. In the event the permittee is unable to comply with any of the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature, the permittee shall:

   a. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem.

   b. Immediately notify KCIW and, if after 5 p.m. weekdays and on weekends, call the emergency King County treatment plant phone number in Section S1 so steps can be taken to prevent damage to the sewerage system.

   c. Submit a written report within 14 days of the event (*14-Day Report*) describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent a recurrence.

3. Whenever an effluent check shows a pH violation, as defined in King County Code 28.84.060.N "Violations," the permittee shall take immediate steps to bring the discharge back into compliance. If this is not possible, the permittee shall cease discharge.

4. Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

E. Limitations Applicable to All Sites

1. General

   The permittee's discharge shall not interfere with the operation of the King County sewerage system, cause King County to exceed its NPDES permit limits, or endanger local utility or King County sewer workers.

   The permittee's discharge shall not violate any discharge standard, limitation, or specific prohibition of King County Code 28.84.060 or local discharge

limits applicable on the date of discharge. (See Section 28.84.060.D-F of King County Code.)

Prohibitions previously referenced include, but are not limited to, substances causing fire or explosion hazard, flow obstruction, excess oxygen demand, and toxic vapors.

Limitations listed in Section S4 include, but are not limited to, restrictions on settleable solids, organic compounds, hydrogen sulfide, and polar FOG.

2. Organic compounds

   No person shall discharge any organic pollutants that result in the presence of toxic gases, vapors, or fumes within a public or private sewer or treatment works in a quantity that may cause acute worker health and safety problems.

   Organic pollutants subject to this restriction include, but are not limited to any organic compound listed in 40 CFR 433.11 (e) Total Toxic Organics (TTO) definition, acetone, 2-butanone (MEK), 4-methyl-2-pentanone (MIBK), and xylenes.

   Dischargers are required to implement good "housekeeping" and best management practices in order to prevent the discharge of a concentrated form of any of the preceding organic pollutants.

3. Lower explosive limit (LEL)

   At no time shall two successive readings on an explosive hazard meter at the point of discharge into the King County sewerage system (or at any point in the system) be more than 5 percent of the LEL. No single reading shall exceed 10 percent of the LEL.

4. Closed cup flashpoint

   Discharges shall not have a closed cup flashpoint of less than 140^{o} Fahrenheit or 60^{o} Centigrade using test methods specified in 40 CFR 261.21.

5. Settleable Solids

   Discharge shall not have a settleable solids volume greater than 7 ml/L.

F. Responsibility for Compliance

It is the responsibility of the permittee to ensure that all effluent limitations of this permit are met whether or not self-monitoring for the parameter is required.

S5. SAMPLE SITE ACCESS AND IDENTIFICATION

A. Unobstructed access to sample sites shall be available to authorized KCIW personnel during normal operating hours. The permittee shall be responsible for providing alternate sample sites in the event of obstruction of access or upon evidence of tampering with the monitoring equipment.

B. The permittee shall allow KCIW to permanently label the sample sites used to collect wastewater samples.

C. The permittee shall, at all reasonable times, allow authorized representatives of KCIW to enter, inspect, and sample as specified in King County Code 28.84.060.L, "Inspection and Sampling of Industrial Users."

S6. NOTIFICATION REQUIREMENTS

A. Spills and Slug Discharges

1. The permittee shall notify KCIW immediately in the event of a spill or slug discharge to the sanitary sewer. A written report regarding the cause of the spill and/or slug discharge shall be submitted to KCIW within five days of the date of occurrence. The report should explain the cause of the violation and corrective actions taken to respond to the violation and ensure ongoing compliance. (See Section S8.B for spill and slug discharge control procedures.)

2. Following a spill and/or slug discharge, KCIW may require the submission or modification of a spill/slug control plan.

B. Changes in Discharge Characteristics

The permittee shall inform KCIW prior to any facility or manufacturing changes that will result in:

1. Introduction of new wastewater pollutants

2. Significant alteration in the volume (greater than 20 percent increase from permit application) or character of the pollutants discharged to the King County sewerage system

3. Discharge of waste streams not listed in the permit application

4. Addition of a new point of discharge or a new chemical, process, product, manufacturing line, or waste processing activity

5. Changes in the potential for spill or slug discharges

No change shall be made until plans have been approved and either written permission or a new or modified permit has been received. In no case are any changes permitted that will cause violation of the effluent limitations specified herein.

C. Installation/Upgrade of Pretreatment System

A Professional Engineer's report per WAC 173-240 must be approved prior to installation or upgrade of pretreatment system.

D. Hazardous Wastes

1. Within 180 days following commencement of discharge or permit issuance, whichever is later, the permittee must notify KCIW, the U.S. EPA, and the Washington State Department of Ecology of any discharge of a listed or characteristic RCRA hazardous waste. Identifying the listed or characteristic RCRA hazardous wastes on the permittee's wastewater discharge permit application serves as notice to KCIW. This is a one-time notification requirement. The contents of the notification may vary according to the quantity of waste discharged. (See "Notification of the Discharge of Hazardous Wastes" in King County Code 28.84.060.)

2. Whenever the U.S. EPA publishes new RCRA rules identifying additional hazardous wastes or new characteristics of hazardous wastes, the permittee must notify KCIW, the U.S. EPA, and the Washington State Department of Ecology if any of these wastes are discharged to the King County sewerage system. Notification must occur within 90 days of the effective date of the published regulation.

E. Continuing Discharge after Permit Expiration Date

This permit does not authorize discharge after its expiration date. If the permittee wishes to continue discharge after the expiration date, an application must be filed for reissuance of this permit at least 180 days prior to the expiration date. If the permittee submits its re-application in the time specified herein, the permittee shall be deemed to have an effective waste discharge permit or authorization until KCIW issues or denies the new waste discharge permit. If the permittee fails to file its re-application in the time period specified herein, the permittee will be deemed to be discharging without a discharge permit after the current permit's expiration date.

S7. MONITORING AND RECORD KEEPING

A. Record Keeping and Retention

1. The permittee shall maintain records relating to all permitted discharges to the King County sewerage system including routine maintenance, waste disposal dates, manifests, self-monitoring reports, analytical lab results, pH monitoring records, and flow records.

2. All records required by the permit shall be available for review at reasonable times by authorized representatives of KCIW.

3. Records of all such testing shall be retained for a period of three years unless litigation or the direction of KCIW requires an extension of that time.

B. Recording of Results

For each measurement or sample taken to comply with this permit, the permittee shall record the following information:

1. Date, exact place, and time of sampling

2. Dates the analyses were performed

3. Person who performed the analyses

4. Analytical techniques or methods used

5. Results of all analyses

C. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and nature of the monitored discharge.

D. Test Procedures

All analyses shall be performed in accordance with procedures established by the administrator of the U.S. EPA pursuant to Section 304(g) of the federal Clean Water Act and contained in 40 CFR Part 136 and amendments thereto or with any other test procedure approved in writing by the U.S. EPA administrator, and/or KCIW. In all cases, except total dissolved sulfide, the detection limit shall be well below the discharge limit. Where 40 CFR Part 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analysis shall be performed in accordance with the procedures set forth in the U.S. EPA

publication entitled *Sampling and Analysis Procedures for Screening of Industrial Effluents or Priority Pollutants*, April 1977 or *Standard Methods*, latest edition and amendments thereto, or with any other sampling and analytical procedures approved by the U.S. EPA.

E. Lab Accreditation

All self-monitoring data submitted to KCIW that required a laboratory analysis must have been performed by a laboratory accredited by the Washington State Department of Ecology for each parameter tested. This does not apply to field measurements performed by the permittee such as pH, temperature, flow, atmospheric hydrogen sulfide, total dissolved sulfides, settleable solids by Imhoff cone, or process control information.

F. Falsifying Information

The act of knowingly falsifying, tampering with, or knowingly rendering inaccurate any monitoring device, report, or method required pursuant to the federal pretreatment standards, King County Code 28.84.060, or special conditions of this permit shall constitute a violation of this permit, and shall be subject to the legal remedies available under "Revocation of Permit or Authorization" and "Penalties and Enforcements" in King County Code 28.84.060.

G. Toxicity Testing

If KCIW is required by the Washington State Department of Ecology to determine the source of a pattern of acute toxicity pursuant to its treatment plant NPDES permit, the permittee may be required to test its effluent for toxicity according to procedures to be determined by KCIW.

H. Signatory Requirements for Industrial User Reports

Any report required by this permit shall meet the signatory and certification requirements listed in King County Code 28.84.060 and King County Code 28.82.

S8. OPERATIONS AND MAINTENANCE

The permittee shall use waste preventative practices to reduce or eliminate contaminant loading to the King County sewerage system. These practices shall include proper chemical storage, spill prevention and notification, and maintenance and operation of any required pretreatment equipment.

A. Chemical Storage

Chemical solutions, solid chemicals, waste materials, oils, and solvents shall be stored in a manner that will prevent the entry of these materials into the King County sewerage system.

1. Non-compatible chemicals shall be segregated and securely stored in separate containment areas that prevent mixing of incompatible or reactive materials.

2. The permittee shall install shut-off devices to all drains in any hazardous waste storage areas.

3. Chemicals shall be dispensed only in roofed and bermed areas that eliminate potential spills to the King County sewerage system.

4. All empty barrels that have not been cleaned (steam-cleaned or triple-rinsed) shall be adequately stoppered and stored in an upright position.

5. Process tanks shall be located in a bermed, roofed, secured area capable of containing 110 percent of the volume of the largest tank. The permittee shall ensure that process solutions are used and stored in such a manner as to minimize spills of concentrated solutions to the sanitary sewer.

B. Spill or Slug Discharge Control Procedures (See Section S6.A)

1. In the event of a concentrated solution spill such as a tank failure, the permittee shall not discharge any spilled solution to the metropolitan sewer system unless laboratory test results indicate that the substance meets the conditions of this permit and the permittee receives approval from KCIW.

2. Concentrated waste or spilled chemicals that do not meet, or are not treated to meet, the discharge conditions of this permit shall be transported off site for disposal at a facility approved by the Washington State Department of Ecology or appropriate county health department.

3. The permittee shall maintain and inspect all process solution tanks on a regular basis. Any leaks shall be repaired promptly.

4. The permittee shall use spill prevention practices to preclude the discharge of liquids, solids, or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion.

5. All process tanks and chemical storage containers shall be accurately labeled. Emergency phone numbers of King County, the fire department, the permittee's 24-hour corporate contact, and Washington State Department of Ecology shall be posted at all sites that KCIW requires.

6. The permittee shall ensure that concentrated waste from process tank filters and other equipment is prevented from entering the sanitary sewer unless it is treated to meet the discharge conditions of this permit.

7. The permittee shall maintain and use product recovery options such as drag-out rinses for each plating bath or process as required to meet the discharge conditions of this permit. Recovered materials shall not be discharged to the sanitary sewer unless they are treated to meet the discharge conditions of this permit.

C. Pretreatment Equipment Maintenance and Operations

1. All pretreatment systems used to bring the permittee's discharge into compliance with King County's discharge limitations shall be maintained continuously in satisfactory and effective operations by the permittee at the permittee's expense, and shall be subject to periodic inspections by authorized KCIW personnel. These systems shall be attended at all times during discharge to the King County sewerage system. In the event that such equipment fails, the permittee must notify KCIW immediately and take spill prevention precautions.

2. The permittee shall not initiate construction or modification of a pretreatment system prior to receiving KCIW approval of plans and specifications per WAC 173-240. In addition, KCIW may require an engineering report and an operations and maintenance manual.

3. KCIW shall be contacted before the beginning of any limited experimental modifications or new equipment testing that could reasonably be expected to affect effluent quality or quantity. This experimental work shall proceed only after securing written approval from KCIW and following the permittee's adherence to any applicable special conditions.

4. The effluent limitations specified in this permit are to be met by treatment of the wastes for pollutant removal. The use of municipal water, groundwater, seawater, stormwater, or other materials, including waste products, for the purpose of diluting a waste to achieve those limitations is prohibited.

5. The permittee shall adequately maintain and efficiently operate all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

D. Water/Sewer Meter Requirements

The permittee shall obtain or maintain access to a water or sewer meter that can provide accurate information regarding industrial process wastewater and cooling water discharge to the sewer. Another method of volume determination may be used only upon approval by KCIW.

E. Solid Waste

1. The permittee shall handle and dispose of all solid waste material (as defined in WAC 173-304-100) not otherwise authorized by this permit in such a manner as to prevent its entry into the King County sewerage system.

2. All covers, screening devices, sumps, hoppers, conveyors, and other facilities provided for the recovery and handling of solid wastes are to be maintained in an efficient operating condition.

F. Stormwater

Stormwater, surface water, groundwater, and roof runoff shall be excluded, except where specifically authorized by this permit or King County Code 28.84.060, from the King County sewerage system.

S9. GENERAL CONDITIONS

A. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Whenever the permittee refuses to take corrective action or continues the violating condition, the imposition of civil penalties including fines up to $10,000 for each violation per day and/or termination of this permit may result. Termination of this permit may require disposal of the industrial waste in some manner other than into the public sewer, private sewer, or side sewer tributary to the King County sewerage system at the expense of the person holding the permit. Any person causing damage to a public sewer or treatment facility by discharges in violation of the terms and conditions of this permit shall be liable for any such damage incurred by King County as a result of such damage or discharge. Where criminal enforcement action is considered in a particular case, that case may be referred to state or federal authorities.

B. The diversion or bypass of any discharge from any pretreatment facility utilized by the permittee to maintain compliance with the terms of this permit is prohibited except where unavoidable to prevent loss of life or severe property damage. The procedure outlined in Section S4.D shall be followed in case of such a diversion or bypass.

C. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its terms for those causes cited in King County Code 28.84.060.

D. If a toxic standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the federal Clean Water Act for a toxic pollutant, which is present in the discharge authorized herein, and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, this permit will be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee shall be so notified. Section 307(a) requires that the administrator of the U.S. EPA shall promulgate effluent standards (or prohibitions) for toxic pollutants that he or she has listed as such.

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

F. All requirements and ordinances of the U.S. EPA and the Washington State Department of Ecology pertaining to hazardous and toxic wastes, disposal facilities, and discharge of wastes into the King County sewerage system, are hereby made a condition of this permit.

S10. WASHINGTON STATE DEPARTMENT OF ECOLOGY CONDITIONS

This permit does not constitute authority for discharge into waters of the state. Any such discharge is subject to enforcement action by the Washington State Department of Ecology.

Upon issuance of this permit, the permittee assumes the responsibility to abide by the following environmental requirements and any other appropriate regulations stipulated by the Department of Ecology. **The Department of Ecology retains authority to enforce these permit conditions (RCW 70.105 and RCW 90.48).**

A. Conditions to Protect Ground and Surface Waters

1. Contaminated waters or wastes shall not be discharged to state waters.

2. Boiler blow down and water shall not be discharged to state waters.

3. Solid chemicals, chemical solutions, waste materials, oils, and solvents shall be stored in a manner that will prevent the entry of these materials into state, ground, or surface waters, and in a manner that will prevent spillage by overfilling, tipping, or rupture.

4. The permittee shall handle and dispose of all solid waste material in such a manner as to not cause any adverse effect on ground or surface water quality.

5. Filtered solids or sludge shall be stored in such a manner that drainage from this material is prevented from either draining across public rights-of-way or entering the local storm drain system or the groundwater.

6. No emulsifiers or dispersants are to be used on waters of the state without approval from the Department of Ecology.

7. If corrosive processing solutions are used, the processing/plating floor shall be sealed with corrosion resistant material that prevents leakage. This coating shall be repaired or replaced as needed.

Questions regarding the implementation of conditions outlined in Section S10 should be directed to the regulatory authority, the Washington State Department of Ecology, at 425-649-7000 (Northwest Regional Office, 3190 160th Avenue SE, Bellevue, Washington 98008-5452).

King County

Industrial Waste Program
Company Fact Sheet – For Revision Within Permit Cycle

March 9, 2020

COMPANY INFORMATION

Company/Agency name:	Waste Management National Services - Duwamish Reload Facility
Facility address:	7400 8th Avenue S. Seattle, WA 98108
Mailing address:	7400 8th Ave South Seattle, WA 98108
Treatment plant:	West Point
Corp. contact & phone:	John Borghes, 801-347-5126
Site contact & phone:	Jasper Boas, 206-694-0588
Company/Agency type:	Solid Waste - Transfer Facility
Days operating:	365
SIC number:	4212
EPA ID number:	NA
Compliance investigator:	Ryan Salem

PERMIT INFORMATION

Permit number: 7928-03

Original Permit Information

Issuance date:	August 2, 2016
Effective date:	August 15, 2016
First revision date:	June 1, 2017
Expiration date:	August 14, 2021

Permit Revision #2 Information

Revision #2 Issuance Date:	March 9, 2020
Revision #2 Effective Date:	March 20, 2020

Description of sample sites, limit types, and discharge volumes:

Sample Site No.	Description	Limit Type	Maximum Discharge Volume (gallons per day)
IW1215A	Sample tap on treatment system discharge pipe	King County Local Limits	144,000 846,000 (*)

(*) Maximum daily discharge volume is 144,000 gpd until discharge to Markey Machinery private side sewer on S. Garden Street is approved. Once KCIW approves discharge to the S. Garden Street side sewer, the maximum daily discharge volume will be 846,000 gpd

MONITORING FEE PARAMETER

Compliance Monitoring & Administration (CM&A) Fee

Category: NON-CATEGORICAL
Tier: 4 / 5 (*)

(*) Waste Management Duwamish Reload facility will remain at the Tier 4 level of the Non-Categorical category (existing maximum daily discharge volume of 144,000 gallons per day (gpd)) until the facility is authorized to discharge to the South Garden Street Markey Machinery private sewer. Once the Waste Management Duwamish Reload facility is authorized to discharge to the South Garden Street Markey Machinery private sewer at the maximum daily discharge volume of 846,000 gpd, the facility will then be subject to Tier 5 CM&A fees associated with the Non-Categorical category.

Waste Management Duwamish Reload facility is a significant industrial user (SIU) with one regulated sample site. KCIW collects composite effluent samples for field parameters, trace organics (VOAs, BNAs & PCBs), fats, oil and grease (HEM) and trace metals. KCIW has determined that once the facility is authorized to discharge 846,000 gpd, KCIW will increase oversight and collect, at a minimum, quarterly effluent compliance samples. The basis for this determination is the extremely large permitted daily discharge volume coupled with other site specific considerations, such as the complexity and variability with the pollutants of concern that can be expected to be present at the site, based on the nature of the operation. Based on these factors, and in accordance with KCIW's CM&A fees criteria, Waste Management Duwamish Reload facility will be assigned to the CM&A fees Non-categorical category, Tier 5 once the permitted daily discharge volume is set at 846,000 gpd.

PERMIT REVISION PROCESSING

Permit number: 7928-03

Action	Date
Application due	NA
Application received	August 05, 2019
Application sent to local sewer agency	August 06, 2019
Inspection date	August 20, 2019
Final publication date	July 5, 2019
Published volume	846,000 gallons per day
Draft revision #2 issued	February 11, 2020
Final revision #2 issued	March 9, 2020

PERMIT REVISION COMMENTS

This permit fact sheet primarily discusses the revisions made to the original permit. The fact sheet accompanying the original permit No. 7928-01 issued on August 2, 2016 includes detailed information about the company's nature of business, sources of wastewater, treatment systems, compliance history, trends in pollutants concentrations, self-monitoring requirements, King County Industrial Waste Program (KCIW) monitoring, special conditions, applicable limitations and other site information.

This is the second permit revision initiated by Waste Management in the current permit cycle. On June 1, 2017, KCIW issued permit 7928-02 (e.g. Revision #1) in response to Waste Management's request to accept storm drain clean-out wastes and other non-hazardous and non-categorical wastes at Waste Management.

This permit revision (e.g. Revision #2) was initiated at Waste Management's request. The primary driver for this revision is a request for an increase in the daily discharge volume and discharge practices. Discharge from the Waste Management (WM) site has historically been to a Seattle Public Utilities (SPU) sewer line on 8th Avenue South. SPU placed a flow rate restriction of 100 gpm on the WM industrial waste discharge at that location. Based on discharge needs, WM has been seeking alternative discharge route(s) to accommodate increased flow rates. WM entered into an agreement with Markey Machinery, a winch fabrication and servicing operation located on the East side of the WM site, to discharge industrial wastewater into the company's South Garden Street private sewer line. Markey Machinery's private sewer line connects to King County's Henderson Interceptor, upstream of maintenance hole WE*HNDRSON.E-19. WM contracted Landau Associates to conduct a hydraulic capacity analysis of the South Garden Street sanitary main. The analysis conducted in January 2019 indicated that the Markey Machinery South Garden Street private sewer line had up to 572 gpm available capacity. WM's permit revision request proposes to discharge into both the existing SPU sewer line on 8th Avenue South and the Markey Machinery private sewer line on South Garden Street. To accommodate the additional volume and discharge practices, WM submitted an engineering report dated December 6, 2019 describing proposed modifications to the wastewater pretreatment system, sample site and discharge lines configuration. KCIW reviewed the report and on January 22, 2020, conditionally approved the proposed modifications to the pretreatment system. To date, the modifications to the wastewater pretreatment system, sample site and discharge lines configuration have not been completed.

Permit Revision #2 addresses WM's recent requests for modifications. In summary, the permit contains the following major changes since last issuance:

1. **Facility name**: The facility name on this permit has been changed from Waste Management National Services – 8th Avenue South Reload Facility to Waste Management National Services – Duwamish Reload Facility. This change reflects WM's change in naming convention for the facility.

2. **Section S1**: KCIW Contact names and phone numbers have been revised to reflect personnel changes.

3. **Special Condition S3.A**: This condition was revised to require that the permittee contact KCIW to schedule a preoperative inspection before discharge to the Markey Machinery private sewer line begins. The purpose of this condition is verify that KCIW-approved modifications to the wastewater pretreatment system, sample site and discharge lines configuration have been completed.

4. **Special Condition S3.C.4:** KCIW revised (increased) acceptance criteria values for selected parameters in *Table 1 Contaminated Dredged Material and Upland Soil Acceptance Criteria* to reflect changes KCIW made to the waste discharge permit of a similar type of operation in 2019 and following an evaluation of waste acceptance requests made by sediment transload operations in King County's wastewater service areas.

Parameter	Old Value	New Value
Gasoline Range Organics (GRO)	830 mg/kg	2,000 mg/kg
Benzene	0.30 mg/kg	10.0 mg/kg
Tetrachloroethylene	0.09 mg/kg	14.0 mg/kg
Trichloroethylene	0.15 mg/kg	10 mg/kg

5. **Special Condition S3.C.5**: This condition has been revised to clarify submittal requirements for requests to KCIW to accept contaminated dredged sediments and upland soils for transloading purposes that exceed the Acceptance Criteria. The purpose of the revised language is to provide clear submittal requirements to facilitate and expedite KCIW's review of submittals.

6. **Special Condition S3.E**: This condition requires submittal of an updated determination of authorized 24-hour composite sample collection methods plan. KCIW has determined that proposed changes to the effluent sample site and discharge practices warrant a re-evaluation of composite sampling method.

7. **Special Condition S3.G**: This condition requires submittal of an updated Slug/Spill Control Plan. KCIW has determined that proposed changes to the pretreatment system, operation containment area (OCA), KCIW and WM contacts as well as discharge practices warrant a re-submittal of the facility's Slug/Spill Control Plan.

8. **Special Condition S3.J**: This condition requires submittal of an updated Wastewater Treatment System Operations and Maintenance (O&M) Manual. KCIW has determined that proposed changes to the pretreatment system, sample site and discharge practices warrant a re-submittal of the facility's O&M Manual.

9. **Special Condition S3.K**: This new condition requires that WM submit an evaluation of autosampler performance under discharge conditions at the contingency sampling location prior to the split for the 8th Avenue S. and S. Garden Street discharges and report on the feasibility of relocating the official effluent sampling spigots for sample site A1215A to this location. WM's engineering report proposed installation of the effluent sample site on the

discharge pipe to the S. Garden Street. KCIW's preferred sample site location is on the discharge pipe, before it splits into the two discharge pipes.

10. **Effluent Limitations and Self-Monitoring Requirement S4.A**: Added a table (S4.A.2) listing effluent limitations and self-monitoring requirement to become effective at sample site IW1215A once KCIW approves discharge to the S. Garden St discharge pipe with increased daily discharge volume. Changes include:

    a. Maximum daily discharge volume limit has been increased from 144,000 gpd to 846,000 gpd
    b. Mass-based limits for copper and zinc have been revised to account for the increased discharge volume and to prevent significant increase of pollutants at King County's West Point Treatment Plant influent.
    c. Concentration-based limits for organic compounds PCBs, pentachlorophenol and benzo(a)pyrene have been adjusted to account for increased permitted discharge volume. The concentration-based limits were developed following a mass allocation which used the established KCIW allocation spreadsheets for PCB Aroclors and for pentachlorophenol/benzo(a)pyrene. Because of the high permitted volume of the discharge, which can accommodate discharges under the rare occurrence of a 100-year return storm, detection limit challenges were encountered for these discharge parameters. Therefore, KCIW decided to use a hybrid approach for this site using both concentration and mass-based limits. Upon review of the allocation capacity within the West Point Treatment Plant service area, KCIW added the mass equivalent of an additional industrial user for both the PCB Aroclors and for benzo(a)pyrene/pentachlorophenol allocations. Also, because of the detection limit challenges, the routine PCB Aroclor screening level limit of 0.10 µg/L (per Aroclor) is being used as it is a level achievable by local analytical laboratories and is within the detection and reporting capabilities of EPA Method 608.3.
    d. Mass-based limit for PCBs was added to accommodate the increased permitted discharge volume, PCB method detection limit and treatment plant allocation needs.

    e. Added additional tables to include effluent limitations (flow rate) and self-monitoring requirement at newly created sample sites IW1215B and IW1215C, which are defined as the flow meters on the discharge pipe to SPU sewer on 8th Ave. S. and Markey Machinery private sewer line on S. Garden Street, respectively. The purpose of these two new sample site is to establish flow rate limitations and self-monitoring requirements for these two distinct discharge pipes.

Draft Permit Revision #2 Comments

Seattle Public Utilities did not provide comments.

Waste Management sent an e-mail dated March 3, 2020 commenting that the proposed due date (May 1, 2020) for required submittals in the draft permit would not be feasible. These required submittals include:

1. Updated slug/spill control plan
2. Updated O&M Manual
3. Contingency sample site evaluation

Waste Management explained that "upgrades to the treatment system will likely not be fully completed by May 1, 2020 and therefore discharge to the new Garden Street sewer connection is likely not set to occur before this date". Waste Management rationalized that it will take some time after modification to the treatment system and discharge practices are implemented before some of the required submittals can be submitted to KCIW. Waste Management requested that KCIW extend the required submittals due date to "120 days after the upgraded system begins discharging to the new sewer connection". KCIW evaluated Waste Management's request and determined that it was appropriate to extend the due date for all subject submittals from May 1, 2020 to September 1, 2020.

In its e-mail dated March 3, 2020, Waste Management did not request an extension for submittal of the Updated Determination of authorized 24-hour composite sample collection methods (S3.E.). While Waste Management did not specifically request an extension for submittal of this report, KCIW has extended the due date for this report to September 1, 2020, like other reports. KCIW made this decision since the reasoning for granting an extension for the other three reports also applies to this submittal.

If needed, Waste Management can request additional extensions for report(s) submittal, provided that the request is made in writing and submitted to KCIW at least one calendar week before each report due date.

Industrial Waste Program Monthly Self-Monitoring Report

King County

Send to: King County Industrial Waste Program
201 S. Jackson Street, Suite 513
Seattle, WA 98104-3855
Phone 206-477-5300 / FAX 206-263-3001
Email: info.KCIW@kingcounty.gov

Company Name: Waste Management National Services - Duwamish Reload Facility **Sample Site No.** IW1215A **Permit No.:** 7928-03

Please Specify Month & Year: **Month:** _____ **20**____ **This form is available at www.kingcounty.gov/industrialwaste.**

All units are mg/l unless otherwise noted. Note: For cyanide, circle test performed - amenable or total ▼

Sample Date (circle)	**Sample Type** C (Composite) G (grab) BC (batch)	pH (su) Min	pH (su) Max	Arsenic, As	Cadmium, Cd	Chromium, Cr	Copper, Cu	Lead, Pb	Mercury, Hg	Nickel, Ni	Silver, Ag	Zinc, Zn	Settleable Solids (ml/L)	NP Fats, Oils, and Grease	Daily Discharge Volume (GPD)	Flow Rate (gpm) **Circle maximum**	)
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
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31																	

Monthly Min pH _____ & Date _____ Total Monthly Flow (gallons) _____

Monthly Max pH _____ & Date _____ Maximum Daily Flow _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the 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. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Signature of Principal Executive or Authorized Agent Date

& Date _____

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: **Monthly report is due by the 15th each month.**

King County

Industrial Waste Program Monthly Self-Monitoring Report

Send to: King County Industrial Waste Program
201 S. Jackson Street, Suite 513
Seattle, WA 98104-3855
Phone 206-477-5300 / FAX 206-263-3001
Email: info.KCIW@kingcounty.gov

Company Name: Waste Management National Services - Duwamish Reload Facility **Sample Site No.** IW1215A **Permit No.:** 7928-03

Please Specify Month & Year: **Month:** _____ **20**____

This form is available at www.kingcounty.gov/industrialwaste.

All units are µg/l unless otherwise noted.

Sample Date (circle)	**Sample Type** C (Composite) G (grab)	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Benzene	Benzo(a)pyrene	Ethylbenzene	Pentachlorophenol	Tetrachloroethylene	Toluene	Total Xylenes	Trichloroethylene	Comments / Notes
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
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30																	
31																	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the 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. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Signature of Principal Executive or Authorized Agent Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: **Monthly report is due by the 15th each month.**

APPENDIX C
STORM SYSTEM MAINTENANCE RECORDS
(OR FILED WITH THE SITE'S RECORDS)

APPENDIX D
CONTAINERIZED MEDIA NON-RIGID UNIT INSPECTION LOG

SUPER SACK INSPECTION LOG

Project Name:______________________ Date:________

Date	Bag No	Flat Number	Location	Damage	Solution	Date

APPENDIX E
EMPLOYEE TRAINING LOG

EMPLOYEE TRAINING PROGRAM OUTLINE The program should, at a minimum, address spill prevention and response, good housekeeping, and material management practices. A complete list of those employees who attend various training sessions is maintained in the facility's employee training files.	**Completed by:** _____ **Title:** _____ **Date:**

Training Topics	**Brief Description of Training**
SWPPP	• An overview of what is in the SWPPP.
Spill Prevention and Response	• Identifying potential spill areas and drainage routes • Actions to take in case of a spill, including a review of spill kit contents, location of spill kits, and use • Familiarizing employees with past spill events, and lessons learned, as applicable, and • Discussing pollution prevention measures during mobile fueling, or transferring fuels and bulk liquids into trucks, tanks, or equipment (i.e. no topping off, must be attended, etc.)
Good Housekeeping	• Reviewing basic expectations about cleanliness and cleanup procedures • Reminding employees that liquids must be stored in closed containers, meaning that drums must be closed when not in use, and buckets or pitchers containing waste fluids such as motor oil must be emptied promptly and not left unattended • Identifying proper methods for storing and managing significant materials such as solid waste, recyclables, automotive fluids, paints and solvents, and soaps, and • Ensuring that employees know where spill cleanup equipment is stored and how to keep spill kits stocked
Maintenance Requirements	• Overview of applicable operational source control BMPs
Material Management Practices	• Identifying hazardous materials and where they are stored • Making sure containers are labeled and in good condition • Instructing employees to use the oldest materials first and minimize wastes generated, and • Explaining recycling practices
Other Topics	• How employees make a difference in complying with SWPPP and preventing stormwater contamination

APPENDIX F
BLANK AND COMPLETED MONTHLY INSPECTION FORMS
AND FIELD DATA SHEETS
(OR FILED WITH THE SITE'S RECORDS)

Month (circle): Jan Feb Mar Apr May June July Aug Sep Oct Nov Dec

INDUSTRIAL STORMWATER MONTHLY INSPECTION REPORT

WM Duwamish Reload Facility – 7400 8th Avenue South, Seattle, WA

Waste Management Monthly Inspection Scope of Work (frequency is once a month):

☐ Inspect outfalls ☐ Inspect industrial activities ☐ Check integrity of associated BMPs
☐ Summarize general comments ☐ Detail specific corrective actions ☐ Debrief with facility representative

Note: The inspector is to make a copy of the monthly inspection report – one copy is to be retained onsite with the SWPPP. Monthly Inspection reports shall be retained onsite for a minimum of 5 years after the date of inspection.

Inspector Name: **Inspector Title:**	**Facility Name: Duwamish Reload Facility** **Inspection Time:** **Date:**

I. DOCUMENT REVIEW AND RECORD KEEPING EVALUATION

- Is the SWPPP inventory of activities, materials and products current (review with WM representative)? ☐ **Yes** ☐ **No**

  Comments:_____
- Is the site map in the SWPPP reflective of current conditions and SWPPP narrative? ☐ **Yes** ☐ **No**

  Comments:_____

II. OBSERVATIONS AND INDUSTRIAL ACTIVITY INSPECTION

- Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.): _____
- Were any potential or confirmed illicit discharges found? ☐ **Yes** ☐ **No**

  If an illicit discharge potentially exists it should be confirmed or denied ASAP. If an illicit discharge is confirmed it must be reported to Ecology within seven (7) days.
- Was stormwater flowing at outfalls and/or discharge areas shown on the Site Map during the inspection: ☐ **Yes** ☐ **No**

  Comments_____

Sampling Location Observations

The selected features listed below must be observed during each monthly inspection. Observations will be made for detecting visible or readily apparent water quality degradation (i.e. floating materials, visible oil sheen, discoloration, turbidity, odor, etc.) of discharge.

Feature/Outfall ID (site map ID)	**Degradation Present? (Y/N)**	**Water quality degradation parameter (if possible, use qualitative descriptions)** Example: turbidity (high), odor (strong organic), etc.
Outfall A		

Industrial Activity Inspection

Industrial activities that are a part of the facility operations shall be attributed to pollution prevention procedures identified in the SWPPP. Various activities should have specific procedures in place for managing stormwater exposure or reducing water quality impact. These procedures should be followed throughout the normal course of business operations. Deviations from pollution prevention procedures or activities that are out of compliance are prohibited.

Activity	**Activity Observed? (Y/N)**	**Briefly describe aspects of the activity out of compliance (if any)** Example: material trackout, discharging wash water to storm, etc.
Equipment maintenance		
Vehicle and equipment storage and parking		

Activity	Activity Observed? (Y/N)	Briefly describe aspects of the activity out of compliance (if any) Example: material trackout, discharging wash water to storm, etc.
Fueling Activities		
Reloading Activities		
Container Storage		

III. BEST MANAGEMENT PRACTICES (BMP) INSPECTION

	Yes	No	Findings and Remedial Action Documentation:
Equipment cleaning: Is equipment washed and/or cleaned only in designated areas? ▪ Observe washing: Is all wash water captured and properly disposed of? ***Equipment fueling:*** ▪ Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills? ▪ Are structures in place to prevent precipitation from accumulating in containment areas? o If not, is there any water or other fluids accumulated within the containment area? o Note: If containment areas are not covered to prevent water from accumulating, the SWPPP must include a plan describing how accumulated water will be managed and disposed of. ***Equipment maintenance:*** ▪ Are maintenance tools, equipment and materials stored under shelter, elevated and covered? ▪ Are all drums and containers of fluids stored with proper cover and containment? ▪ Are exteriors of containers kept outside free of deposits? ▪ Are any vehicles and/or equipment leaking fluids? Identify leaking equipment. ▪ Is there evidence of leaks or spills since last inspection? Identify and address. ▪ Are materials, equipment, and activities located so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas)?			

Liquid Material Storage Containers:	Yes	No	Findings and Remedial Action Documentation:
▪ Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater?			
▪ Secondary containment statement true for hydraulic oil?			
▪ Secondary containment statement true for waste oil?			
▪ Visually inspect any aboveground pipes and tanks for signs of deterioration or discharge.			
▪ Fill out SPCC inspection sheet, if applicable.			
Add any **additional site-specific BMPs** noted: _____ _____ _____ _____			

IV. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION				
Good Housekeeping BMPs:	Yes	No	NA	Findings and Remedial Action Documentation:
1. Are paved surfaces free of accumulated dust/sediment and debris?				
▪ Date of last quarterly vacuum/sweep _____				
▪ Are there areas of erosion or sediment/dust sources that discharge to storm drains?				
▪ Is there any track out of accumulated dust/sediment or debris out of the Operations Containment Area?				
2. Are all waste receptacles located outdoors:				
▪ In good condition?				
▪ Not leaking contaminants?				
▪ Closed when is not being accessed?				
▪ External surfaces and area free of excessive contaminant buildup?				
3. Are the following areas free of accumulated dust/sediment, debris, contaminants, and/or spills/leaks of fluids?				
▪ External dock areas				
▪ Pallet, bin, and drum storage areas				
▪ Maintenance shop(s)				
▪ Equipment staging areas (loaders, tractors, trailers, forklifts, etc)				
▪ Around bag-house(s)				
▪ Around bone yards				
▪ Other areas of industrial activity: _____ _____ _____ _____ _____ _____ _____ _____				

Spill Response and Equipment:	**Yes**	**No**	**NA**	**Findings and Remedial Action Documentation:**
Are spill kits available, in the following locations? ▪ Fueling stations ▪ Transfer and mobile fueling units ▪ Vehicle and equipment maintenance areas Do the spill kits contain all the permit required items? ▪ Oil absorbents capable of absorbing 15 gallons of fuel. ▪ A storm drain plug or cover kit. ▪ A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity. ▪ A non-metallic shovel. ▪ Two five-gallon buckets with lids. Are contaminated absorbent materials properly disposed of?				

V. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION				
General Material Storage Areas: ▪ Are damaged materials stored inside a building or another type of storm resistance shelter? ▪ Are all uncontained material piles stored in a manner that does not allow discharge of impacted stormwater? ▪ Are scrap metal bins covered? ▪ Are outdoor containers covered?	**Yes**	**No**	**NA**	**Findings and Remedial Action Documentation:**
Stormwater BMPs and Treatment Structures: Visually inspect all stormwater BMPs and treatment structures devices, discharge areas infiltration and outfalls shown on the Site Map. ▪ Are BMPs and treatment structures in good repair and operational? ▪ Are BMPs and treatment structures free from debris buildup that may impair function? ▪ The permit requires Permittees to clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe. Based on this, do catch basins need to be cleaned? ▪ Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition?	**Yes**	**No**	**NA**	**Findings and Remedial Action Documentation:**
Observation of Stormwater Discharges: ▪ Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? ▪ Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater and is not allowed to comingle with stormwater or enter storm drains. Is process water comingling with stormwater or entering storm drains? ▪ Illicit discharges include domestic wastewater, noncontact cooling water, or process wastewater (including leachate). Were any illicit discharges observed during the inspection?	**Yes**	**No**	**NA**	**Findings and Remedial Action Documentation:** **(Note: Monthly observations of stormwater discharge is documented with the treatment system operating records).**

VI. CORRECTIVE ACTION AND SWPPP MODIFICATIONS DESCRIPTIONS: Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs. Please take supplemental photographs if possible.

VII. CERTIFICATION STATEMENTS AND SIGNATURES:

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

☐ The facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit.

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

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

Inspector's Name – Printed	**Inspector's Signature**	**Inspector's Title**	**Date**

Permittee – Certification:

☐ The facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit.

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

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

PRINTED NAME of person with **Signature Authority** (permit condition G2.A) or a **Duly Authorized Representative**[1]	SIGNATURE of person with **Signature Authority** (permit condition G2.A) or a **Duly Authorized Representative**[1]	**DATE**

[1]A person is duly authorized representative only if 1) the authorization is made in writing by a person described in Permit Condition G2.A and submitted to Ecology, and 2) the authorization 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.

WASTE MANAGEMENT

Waste Management -- Duwamish
Stormwater Sampling Field Data Sheet
7400 8th Ave S
Seattle, WA 98108

Date: _____

Personnel: _____

Reason for visit: _____

Contact: Shawn Reiersgaard - Cell: 206.795.7739

FIELD NOTES

Description of weather (current):

Calibration Log		
	pH meter - Calibrated by:	**Date:**
	Turbidity meter - Calibrated by:	**Date:**

					Field Parameters		
Discharge Location (Using SWPPP Identifying Name)	**Sample Type (circle)**	**Flow Rate (circle)**	**Qualitative Description**	**Time**	**pH**	**Tubidity**	**Field Sheen**
	Grab or Time/Flow Proportional	Low / Med / High					
	Grab or Time/Flow Proportional	Low / Med / High					
	Grab or Time/Flow Proportional	Low / Med / High					
	Grab or Time/Flow Proportional	Low / Med / High					
	Grab or Time/Flow Proportional	Low / Med / High					
	Grab or Time/Flow Proportional	Low / Med / High					

☐ **Samples were collected within the first 12 hours of stormwater discharge.**
If outside this timeframe, include justification below:

NOTES: Include changes to site, potential water quality problems, etc.

N/A = No analysis required/not applicable
NM= Not measured (i.e., no sample taken)

APPENDIX G

STORMWATER POLLUTION PREVENTION PLAN

CERTIFICATION FORM

SWPPP CERTIFICATION FORM

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

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

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

If Yes:

- Type of Corrective Action?: ☐ Level 1 ☐ Level 2 Level 3
- Date SWPPP update/revision completed: _____

If a Level 3 Corrective Action was performed, did a licensed professional engineer, hydrogeologist, or certified professional in Stormwater Quality design and oversee the treatment corrective action process?

If yes, the licensed or certified professional shall certify the revised SWPPP in accordance with S3.A.6.

_____ _____

Licensed or Certified Professional Printed Name **Title**

_____ _____

Licensed or Certified Professional Signature **Date**

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

Zach Jenkins
Operator's Printed Name

Title: District Manager


Operator's Signature

Date 5/10/2023

APPENDIX H
LABORATORY ANALYTICAL REPORTS
(OR FILED WITH THE SITE'S RECORDS)

APPENDIX I

COMPLETED DISCHARGE MONITORING REPORTS

(OR FILED WITH THE SITE'S RECORDS)

APPENDIX J
ANNUAL REPORTS AND CORRECTIVE ACTION DOCUMENTATION
(OR FILED WITH THE SITE'S RECORDS)

APPENDIX K

IMMEDIATE ACTION ORDER

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

Mr. Nick Harbert
Waste Management National Services
7400 8th Avenue South
Seattle, WA 98108

Order Docket No.	12830
Site Location	7400 8th Avenue South, Seattle, WA 98108

Re: Immediate Action Order

Dear Mr. Harbert:

The Department of Ecology (Ecology) has issued the enclosed Immediate Action Order (Order) requiring Waste Management National Services (Waste Management) to comply with:

- Chapter 90.48.080 Revised Code of Washington (RCW) – Water Pollution Control.
- National Pollutant Discharge Elimination System (NPDES), Industrial Stormwater General Permit Number WAR302034.

If you have questions, please contact Robert Wright at (425) 649-7060 or rowr461@ecy.wa.gov.

Sincerely,

Kevin C. Fitzpatrick
Water Quality Section Manager
Northwest Regional Office

Enclosures: Immediate Action Order Docket No. 12830

By Certified Mail No.: 7008 1140 0000 2359 9494

cc: Robert Wright, Senior Stormwater Inspector, Ecology
Alex White, Stormwater Inspector, Ecology
Biniam Zelelow, Enforcement Coordinator, Ecology
Central Files, 8th Avenue General Storage Area, Permit No WAR302034, WQ 6.4

ecc: Yolanda Pon, King County Environmental Health Services Division
Arnaud Girard, King County Industrial Waste Program
Beth Schmoyer, Seattle Public Utilities

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF AN IMMEDIATE ACTION ORDER AGAINST Mr. Nick Harbert Waste Management National Services	)))))	IMMEDIATE ACTION ORDER DOCKET NO. 12830

To: Mr. Nick Harbert
Waste Management National Services
7400 8th Avenue South
Seattle, WA 98108

Order Docket No.	12830
Site Location	7400 8th Avenue South, Seattle, WA 98108

The Department of Ecology (Ecology) has issued this Immediate Action Order (Order) requiring Waste Management National Services (Waste Management) to comply with:

- Chapter 90.48.080 Revised Code of Washington (RCW) – Water Pollution Control.
- National Pollutant Discharge Elimination System (NPDES), Industrial Stormwater General Permit Number WAR302034.

RCW 90.48.120(2) authorizes Ecology to issue this Immediate Action Administrative Order to accomplish the purposes of Chapter 90.48 RCW (Water Pollution Control).

RCW 90.48.120(2) states:

(2) Whenever the department deems immediate action is necessary to accomplish the purposes of this chapter or chapter 90.56 RCW, it may issue such order or directive, as appropriate under the circumstances, without first issuing a notice or determination pursuant to subsection (1) of this section. An order or directive issued pursuant to this subsection shall be served by registered mail or personally upon any person to whom it is directed.

RCW 90.48.080 Discharge of polluting matter in waters prohibited

It shall be unlawful for any person to throw, drain, run, or otherwise discharge into any of the waters of this state, or to cause, permit or suffer to be thrown, run, drained, allowed to seep or otherwise discharged into such waters any organic or inorganic matter that shall cause or tend to cause pollution of such waters according to the determination of the department, as provided for in this chapter.

Industrial Stormwater General Permit, Special Conditions S3.A and S3.B list the general and specific requirements for Stormwater Pollution Prevention Plan (SWPPP).

This Order is issued pursuant to the authority vested in Ecology by the Federal Water Pollution Control Act (FWPCA), 33 U.S.C. sec 1311, et seq. and Chapter 90.48 RCW.

RCW 90.48.030 allows Ecology to have the jurisdiction to control and prevent the pollution of streams, lakes, rivers, ponds, inland waters, salt waters, water courses, other surface and underground waters of the state of Washington. "Other surface waters" includes wetlands and marshes.

DETERMINATION OF VIOLATION(s) AND ORDER TO COMPLY

Ecology's determination that a violation/violations has/have occurred is based on the violations listed below.

Violation(s) and associated corrective action(s):

Violation(s) description:

On August 6, 2015, Robert Wright, Stormwater Inspector with Ecology, visited the 8th Avenue General Storage Area facility in Seattle, WA, owned and operated by Waste Management. Mr. Wright observed that Waste Management was transloading "Super Sacks" of contaminated soils at their 8th Avenue site. The analytical data for the soils, later provided by Mr. Harbert of Waste Management, indicated that most of the contamination was petroleum based but approximately 6 sacks or about 23 cubic yards were contaminated by polychlorinated biphenyls (PCBs).

Many Super Sacks containing contaminated soils were being stored outside of the containment bunker. Mr. Harbert explained that most of the Super Sacks of contaminated soil were transferred from the barge to the containment bunker but the overflow were stored outside of it. Mr. Wright estimated that more than 200 sacks were stored outside of the containment bunker.

Many of the Super Sacks were split or torn, and contaminated dirt was observed on the flats and the pavement. It was not known whether the 2 storm drains under the piles of Super Sacks were plugged or not. Mr. Harbert could not produce a Stormwater Pollution Prevention Plan (SWPPP) that addresses the transfer, storage, and handling of Super Sacks. The sacks were being scooped up by a front loader and then dumped into unlined open-topped rail cars.

Mr. Wright had warned Waste Management verbally on several occasions to not engage in industrial activities that were not clearly addressed in a thorough and complete SWPPP. This constitutes a violation of RCW 90.48.080 and also permit conditions S3.A & S3.B (SWPPP General and Specific Requirements) of the Industrial Stormwater General Permit. Mr. Wright expressed his concerns about the contaminated soil's potential to be washed off to storm drains as there was a forecast for rain following the day of inspection. Mr. Wright strongly recommended that the site be secured prior to any rain events. Mr. Harbert said he would have all the sacks loaded into railcars or placed into the containment bunker by Saturday (August 8, 2015). Weather data shows it rained a trace on August 8, 2015, and 0.3 inches on August 12, 2015, with heavy rains for an hour or two during midday.

Mr. Harbert agreed to provide Ecology with an updated SWPPP as soon as possible. On Friday, August 7, 2015, Mr. Harbert emailed Ecology a draft SWPPP, however Ecology determined that the SWPPP was incomplete and inadequate. Several dozen comments were provided to Waste Management that needed to be addressed in order to develop a permit-compliant SWPPP.

Mr. Wright again stopped back at the facility on August 12, 2015, to check on the status of the Super Sacks. Mr. Harbert had indicated on Thursday, August 6, 2015, that the sacks would be secured by August 8, 2015. Alex White, Ecology Stormwater Inspector, and Mike Jeffers with Seattle Public Utilities (SPU) were also in attendance and took photos. The inspectors observed that many of the Super Sacks were still outside of containment where they were the previous week. Mr. Harbert was not available on-site during this inspection.

However, crewmembers at the facility told the Ecology inspectors that a rack of sacks had tipped over, spilling contaminated dirt onto the pavement. A front loader was attempting to scrape up the dirt and load into rail cars. No sweeper was on-site at that time.

In November 2014, an inspection report and a warning letter were issued to Waste Management directing the company not to engage in industrial activities, at the 8th Avenue site, that were not clearly and accurately reflected in a permit-compliant SWPPP. Hence, Ecology has determined that this is a repeat violation.

Corrective actions required:

For these reasons and in accordance with RCW 90.48.120(2), it is Ordered that Waste Management take the following actions at their facility known as 8th Avenue General Storage Area located at 7400 8th Avenue South, Seattle, WA 98108:

1. Do not engage in industrial activities on-site unless adequately addressed in a detailed and permit-compliant SWPPP, as determined by Ecology.
2. Store all Super Sacks of contaminated soils within the designated containment area where there is no discharge to surface waters.
3. Beginning the fourth quarter of 2015, conduct the additional stormwater monitoring for all discharge outfalls in accordance with Table 1, shown below.
4. Modify the site's sampling plan to include NWTPH-Dx, Priority Pollutant Metals, PAHs, and PCBs as per Table 1, shown below.
5. All monitoring and reporting shall be in accordance with the requirements of NPDES Industrial Stormwater General Permit No. WAR302034.
6. Jet and vacuum out all storm drain catch basins and conveyance lines on-site within 30 days upon the receipt of this Order and analyze the solids removed from the 4 catch basins in close proximity to the contaminated soil spill that occurred between August 6 and August 12 for the list of parameters in Table 8 of the permit.
7. Within 30 days upon the receipt of this Order, submit an accurate and detailed drainage map showing all catch basins, oil/water separators, pipes, outfalls, plugs, containment structures, pumps, drainage rerouting, etc.
8. Submit an engineering report for providing treatment for all stormwater discharges from the facility within 90 days upon the receipt of this Order. The Engineering Report must include:
    - A brief summary of the treatment alternatives considered and why the proposed option was selected. Include cost estimates of ongoing operation and maintenance, including disposal of any spent media;
    - The basic design data, including characterization of stormwater influent, and sizing calculations of the treatment units;
    - A description of the treatment process and operation, including a flow diagram;
    - The amount and kind of chemicals used in the treatment process, if any. Note: Use of stormwater treatment chemicals requires submittal of Request for Chemical Treatment Form;
    - Results to be expected from the treatment process including the predicted stormwater discharge characteristics;

- A statement, expressing sound engineering justification through the use of pilot plant data, results from similar installations, and/or scientific evidence that the proposed treatment is reasonably expected to meet the permit benchmarks; and
- Certification by a licensed professional engineer.

An Operation and Maintenance Manual (O&M Manual) shall be submitted to Ecology no later than 30 days after construction/installation is complete.

9. Before handling, storing, or transloading contaminated soils and/or sediments, at the facility, have current analytical data on-site and available at all times for each shipment.
10. Submit a change of information form officially renaming the facility "Waste Management Duwamish Reload Facility."
11. Submit an updated permit-compliant SWPPP for Ecology's review within 30 days upon the receipt of this Order that has been signed and dated by proper officials certifying that it meets all permit requirements.
12. Within 90 days upon the receipt of this Order, Waste Management shall submit a complete permit application (EPA Forms 1 and 2F) to seek coverage under an individual NPDES permit for the Waste Management Duwamish Reload Facility (8th Avenue General Storage Area). The web link below is to download EPA Forms 1 and 2F. http://www.ecy.wa.gov/programs/wq/permits/forms.html

Table 1: Required Additional Monitoring

Pollutant	Analytical Method	Minimum Laboratory QL [b]	Sample Type [a]	Frequency
Antimony, Total (µg/L)	EPA 200.8	1.0	Grab or Composite	Quarterly
Arsenic, Total (µg/L)	EPA 200.8	0.5	Grab or Composite	Quarterly
Cadmium, Total (µg/L)	EPA 200.8	0.25	Grab or Composite	Quarterly
Chromium, Total (µg/L)	EPA 200.8	1.0	Grab or Composite	Quarterly
Lead, Total (µg/L)	EPA 200.8	0.5	Grab or Composite	Quarterly
Mercury, Total (µg/L)	EPA 1631E	0.0005	Grab or Composite	Quarterly
Nickel, Total (µg/L)	EPA 200.8	0.5	Grab or Composite	Quarterly
Silver, Total (µg/L)	EPA 200.8	0.2	Grab or Composite	Quarterly
Thallium, Total (µg/L)	EPA 200.8	0.36	Grab or Composite	Quarterly
PAHs (µg/L) [c]	EPA 8270D/SIM	0.01	Grab or Composite	Quarterly
PCB Aroclors (µg/L) [d]	EPA 8082	0.01	Grab or Composite	Quarterly
Petroleum Hydrocarbons-Diesel Fraction (mg/L)	NWTPH-Dx	0.01	Grab or Composite	Quarterly

[a] Sample could be grab or composite. If composite sampling is deployed, at least 10 discrete samples need to be collected covering at least 75% of the hydrograph.

[b] QL means quantitation limit. This is the same as PQL (practical quantitation level) or MRL (method reporting limit) as reported by different labs. This is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points.

[c] PAHs include the following: 1-methylnaphthalene, 2-methylnaphthalene, 2-chloronaphthalene, acenaphthene, acenaphthylene, anthracene, fluorene, naphthalene, dibenzofuran, carbazole, phenanthrene, benzo(a)anthracene, benzo(a)pyrene, benzo(g,h,i)perylene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, and pyrene.

[d] PCB Aroclors include Aroclor 1016, 1221, 1232, 1242, 1248, 1254, and 1260.

FAILURE TO COMPLY WITH THIS ORDER

Failure to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

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

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

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320.

ADDRESS AND LOCATION INFORMATION

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

CONTACT INFORMATION

Please direct all questions about this Order to:

Robert Wright
Senior Stormwater Inspector
Department of Ecology, Water Quality Program
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452
Phone: (425) 649-7060
Email: Rowr461@ecy.wa.gov

MORE INFORMATION

- Pollution Control Hearings Board Website: www.eho.wa.gov/Boards_PCHB.aspx
- Chapter 43.21B RCW - Environmental and Land Use Hearings Office – Pollution Control Hearings Board: http://app.leg.wa.gov/RCW/default.aspx?cite=43.21B
- **Chapter 371-08 WAC – Practice And Procedure**
  http://app.leg.wa.gov/WAC/default.aspx?cite=371-08
- **Chapter 34.05 RCW – Administrative Procedure Act**
  http://app.leg.wa.gov/RCW/default.aspx?cite=34.05
- **Laws:** www.ecy.wa.gov/laws-rules/ecyrcw.html
- **Rules:** www.ecy.wa.gov/laws-rules/ecywac.html

SIGNATURE

Kevin C. Fitzpatrick
Water Quality Section Manager
Northwest Regional Office

September 3, 20
Date

APPENDIX L

NON-HAZARDOUS BULK LIQUIDS PRE-TRANSFER CONFERENCE LOG

DUWAMISH RELOAD FACILITY
NON-HAZARDOUS BULK LIQUIDS PRE-TRANSFER CONFERENCE LOG

Conference Date / Time	Transfer Job Name	Conference Attendees		
		Personnel	Printed Name	Signature
		PIC (Person In Charge)		
		PIC Assistant		
		Vessel Representative		
		DRF Representative		
		Other		
		PIC (Person In Charge)		
		PIC Assistant		
		Vessel Representative		
		DRF Representative		
		Other		
		PIC (Person In Charge)		
		PIC Assistant		
		Vessel Representative		
		DRF Representative		
		Other		
		PIC (Person In Charge)		
		PIC Assistant		
		Vessel Representative		
		DRF Representative		
		Other		
		PIC (Person In Charge)		
		PIC Assistant		
		Vessel Representative		
		DRF Representative		
		Other		
		PIC (Person In Charge)		
		PIC Assistant		
		Vessel Representative		
		DRF Representative		
		Other		
		PIC (Person In Charge)		
		PIC Assistant		
		Vessel Representative		
		DRF Representative		
		Other		
		PIC (Person In Charge)		
		PIC Assistant		
		Vessel Representative		
		DRF Representative		
		Other		
		PIC (Person In Charge)		
		PIC Assistant		
		Vessel Representative		
		DRF Representative		
		Other		

APPENDIX M

INCIDENT REPORT FORM (SPILL LOG)

INCIDENT REPORT FORM

Facility	
Report number	
Date, Time	
Person completing Form	
Signature	
Date, time and duration of release	
Source and total volume of release	
Names of personnel who discovered and/or participated in the spill remediation/clean up	
Spill clean-up procedures	
Equipment used during clean up	
Waste disposal method and location	
Unusual events, injuries, if any	
Agencies that observed or inspected clean up	
Agency notification(s) and report number(s)	
Name of outside vendors used to aid cleanup, if any	
Cost of cleanup	
Comments:	

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

Attachment C

WM Resumes

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

Attachment D

Barge Displacement & Measurement

A. Barge Displacement Measurement

B. Barge Displacement Tonnage Charts

C. Cubic Box Product Data

D. Bench Scale Product Data

E. Bench Scale Certificate