

READ THIS FIRST

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It is important that every paragraph be numbered to allow for easy referencing. If you use the document’s built in styles and formatting your outline should be fine. Most paragraphs can be promoted (Shift) or demoted (Shift-Tab).

You should not have to manually enter extra spaces, carriage returns or outline characters such as A, B, C, or 1.01, 1.02; the formatting will do this for you. The entire document is 11 pt. Arial. If you paste items in, you may need to ‘format paint’ to reapply the format.

PART 1 GENERAL

1.01 SUMMARY

- A. This section consists of planning for and implementing the temporary measures indicated herein, shown on the Contract Documents, or as ordered by the Engineer to prevent pollution of soil and water, and control, respond to, and dispose of potential pollutants or hazardous materials during the life of the Contract.
- B. This work shall apply to all areas associated with Work including, but not limited to the following work areas:
 - 1. Jobsite
 - 2. Equipment and material storage areas
 - 3. Staging/Laydown areas
 - 4. Stockpiles

1.02 DESCRIPTION OF WORK

- A. In order to comply with this specification the Contractor shall:
 - 1. Develop and submit a site-specific Pollution Prevention Plan
 - 2. Revise the Pollution Prevention Plan during the life of the Contract
 - 3. Install, maintain, and remove all spill prevention, containment, countermeasures, and pollution prevention Best Management Practices during the life of the Contract
 - 4. Contain, cleanup and dispose of all hazardous materials or potential pollutants
 - 5. Perform other work shown on the Contract Documents or as directed by the Engineer
 - 6. Maintain any required Contractor pollution liability insurance including insurance liability for the transportation of hazardous materials for the duration of the Contract

7. Maintain a proper Hazardous Material Endorsement for any driver that is transporting hazardous material in a vehicle that requires the driver to maintain a valid and current Commercial Driver's License in the State of Washington

1.03 POLLUTION PREVENTION PLAN

- A. The Contractor shall develop and submit to the Port a site-specific Pollution Prevention Plan. The Pollution Prevention Plan must be a site-specific document that outlines the administrative, operational, and structural Best Management Practices that will be implemented on the project. Approved BMPs may be found in the Stormwater Management Manual for Western Washington, Department of Ecology, July 2019, or current edition.
- B. The Pollution Prevention Plan must, at a minimum, include the following:
 1. Site specific description and drawings
 2. Contractor pollution prevention contact personnel
 3. Known or potential hazardous materials inventory list
 4. Safety Data Sheets (SDSs) for hazardous materials identified on the inventory list
 5. Hazardous material containers labeling system
 6. Hazardous material container storage and handling procedures
 7. Hazardous material spill prevention planning and execution
 8. Hazardous material spill control and response planning and execution
 9. Hazardous material cleanup and disposal planning and execution
 10. Subcontractor's acknowledgment

1.04 SUBMITTALS

- A. As part of the required Preconstruction Submittals, Section 01 32 19 - Preconstruction Submittals, and before Notice to Proceed is issued, the Contractor shall submit the following information:
 1. Pollution Prevention Plan and the required contents
 2. Insurance Endorsements verifying liability coverage for job-site work and any transportation of hazardous materials to or away from the jobsite.
 3. Copy of a completed MCS-90 Certificate if required under the Motor Carrier Act of 1980 for transportation of hazardous material which verifies compliance with the financial responsibility requirements of the Act;
 4. A list of all drivers who will be hauling hazardous material in a vehicle that requires the driver to maintain a Commercial Driver's License in the State of Washington under RCW 46.25.080. These drivers must show evidence of a proper Hazardous Material Endorsement in accordance with Washington RCW 46.25.070 and 46.25.085.

1.05 DEFINITIONS

DIVISION 1 - GENERAL REQUIREMENTS**Section 01 57 23 - Pollution Prevention, Planning and Execution**

- A. Absorbent: Any material capable of absorbing oils, water-based materials, solvents, acids, and other hazardous materials. Absorbent materials include: pads, kitty litter, floor dry, and other commercially available materials.
- B. Best Management Practice (BMP): The variety of administrative, operational, and structural measures that will be implemented to prevent and reduce the amount of contaminants in stormwater and the environment. (Example: Providing secondary containment for liquid storage is a BMP).
- C. Container: Any portable device, in which a material is stored, transported, treated, disposed of, or otherwise handled.
- D. Dangerous Waste: Solid wastes designated by the State of Washington Under Chapter 173-303 WAC and regulated as Dangerous Waste, Extremely Hazardous Waste, or Mixed Waste. (The State of Washington is authorized to implement Federal Hazardous Waste Regulations - see also Hazardous Waste Definition)
- E. Hazardous Material: A substance or material, including a hazardous substance, hazardous waste, marine pollutant, including but not limited to: diesel, gasoline, petroleum products, solvents, paints, acids, lubricants, curing compounds, form release agents, adhesives, sealants, and epoxies. (See also Hazardous Waste definition)
- F. Hazardous Material Storage Area: The area used by the Contractor to store hazardous material.
- G. Hazardous Material Container Labeling System: The system used by the Contractor for identifying the secondary containers used to store hazardous materials or wastes. Acceptable methods include: Department of Transportation (DOT), Hazardous Material Information System (HMIS); National Fire Protection Association Fire Diamond (NFPA Hazard Rating).
- H. Hazardous Waste: Solid wastes designated by 40 CFR Part 261, and regulated as hazardous or mixed waste by the United States EPA.
- I. Safety Data Sheet (SDSs): Written or printed material available for each chemical that includes information on: the physical properties, hazards to personnel, fire and explosion potential, safe handling recommendations, health effects, fire-fighting techniques, and reactivity and disposal.
- J. Secondary Container: Any container, other than the original container that is used for transferring, holding, storing or otherwise containing hazardous materials or wastes.
- K. Secondary Containment: A device designed, installed, or operated to prevent any migration of wastes or accumulated liquid to the soil, ground water, or surface water. The device must, at minimum, hold 110 percent of the volume of the largest container being stored. The device must have the strength to contain a spill and be made of materials that will not be degraded by the wastes or accumulated liquids it is intended to contain.
- L. Sorbent: A material used to soak up free liquids by either adsorption or absorption, or both.
- M. Storm Drainage System (SDS): Consists of any drain, inlet, catch basin, slot drain, pipe, gully, fissure, ditch, or other form of conveyance that collects and transports stormwater.

1.06 REFERENCES

- A. The following rules, requirements and regulations specified may apply to this work:
1. Washington State Dangerous Waste Regulations: Chapter 173-303 WAC, February 1998 Edition.
 2. National Pollution Discharge Elimination System Waste Discharge Permit No. []
 3. Part C - Hazardous Communication: Chapter 296-62-054 WAC, "Right to Know"
 4. Puget Sound Stormwater Management Plan, Puget Sound Water Quality Action Team; 1998.
 5. Title 40 Code of Federal Regulation Subchapter I - Solid Wastes 261, 262, 263, 265, 268, 273, 279, 370 (Federal Hazardous Waste Regulations)
 6. Stormwater Management Manual for Western Washington, Department of Ecology; July 2019 (or current edition)
 7. Surface Water Design Manual, King County Public Works, September 1998
 8. City of Seattle Stormwater Code: SMC 22.800 – 22.808, January 2016 (or current edition)
 9. City of Seattle Stormwater Manual, August 2017 (or current edition)
 10. WAC 173-201 A, Water Quality Standards of the State of Washington.
 11. Revised Code of Washington - 46.25.085, 46.25.080, 46.25.070, 46.48.170, 4.24.314

1.07 PERMITS

- A. [Non-AV: Coordinate with PM and POS ENV – add/edit/delete as applicable] Work shall be conducted in accordance with all applicable NPDES permit(s) including but not limited to the Port of Seattle's Phase 1 Municipal Permit.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.01 SITE DESCRIPTION AND DRAWINGS

- A. A written site description shall be included in the Pollution Prevention Plan that addresses the following:
1. Physical description and location of the construction site and staging areas;
 2. Construction activities that will involve the use of hazardous materials or generate hazardous waste;
 3. Location of material storage areas and project staging areas;
 4. Designated fueling areas;
 5. Proximity to any natural or manmade drainage conveyance including ditches, catch basins, ponds, wetlands, and pipes;
 6. Public areas relating to construction project;

7. Proximity to other construction sites;
 - B. Drawings shall be included in the Pollution Prevention Plan that show the construction site(s), location of fueling areas, equipment storage areas, catch basins and other man-made and natural drainage conveyances within the work area and storage areas. The drawings may be hand drawn sketches but must include the appropriate spatial information.
- 3.02 CONTRACTOR POLLUTION PREVENTION CONTACT PERSONNEL
- A. The Contractor shall identify in the Pollution Prevention Plan at least one project personnel that will be available 24 hours a day to administer and respond to hazardous materials management requirement of the Contract and provide the following information:
 1. Contact Name
 2. Contact Phone Number
 3. Contact E-mail Address
 4. Contact Fax Number
 5. Contact Address
 - B. Duties
 1. Maintain permit file on site at all times which includes the Pollution Prevention Plan, Contractor Erosion and Sediment Control Plan and any associated permits and plans;
 2. Direct BMP installation, inspection, maintenance, modification and removal;
 3. Available 24 hours per day, 7 days per week by telephone;
 4. Update all drawings with changes made to the Pollution Prevention Plan;
 5. Maintain daily logs;
 6. Immediately notify the fire department (911) of any hazardous material spill.
 7. Inspect for Pollution Prevention Plan requirements including BMPs as required to ensure adequacy, facilitate, participate in, and take corrective actions resulting from inspections performed by outside agencies, Port employees and Port consultants.
 - C. Qualifications
 1. The Pollution Prevention Plan Inspector shall have the following experience:
 - a. Prevention, control and clean-up of construction caused pollution from petroleum, hazardous materials and construction wastes.
 - b. Knowledge of basic hazard and risk assessment techniques.
 - c. An understanding of basic hazardous materials terms.
 - d. Ability to perform basic control, containment or confinement operations within the capabilities of the resources and personnel protective equipment available.

- e. Installation, inspection, maintenance and removal of Pollution Prevention BMPs.

3.03 HAZARDOUS MATERIAL INVENTORY LIST

- A. A complete list of all known or potential hazardous materials or waste to be used or generated during all phases of the construction project shall be included in the Pollution Prevention Plan.

3.04 SAFETY DATA SHEETS (SDSs)

- A. SDSs shall be included in the Pollution Prevention Plan for all materials on the Hazardous Material Inventory List.
- B. For all hazardous materials not submitted in the original Hazardous Material Inventory List, the Contractor shall provide SDSs prior to bringing the material on site and submit a revised inventory list (or plan if required) within 7 days.
 - 1. Hazardous materials shall be permitted on the work site only with prior written acknowledgement of receipt of SDSs by the Engineer.

3.05 HAZARDOUS MATERIAL CONTAINERS LABELING SYSTEM

- A. The Pollution Prevention Plan shall address and the Contractor shall implement the following:
 - 1. Identification of container with a legible label containing the materials product name, as was written on the material's original container label.
 - 2. Include the name of the material's manufacturer, as was written on the chemicals original container label.
 - 3. Include appropriate hazard warnings, which identify the chemicals associated risks to health, flammability, or reactivity.
 - 4. Contractor shall mark each container with the Contract project number and company owner of the container.
 - 5. The mark shall be permanent, easily identifiable and placed with care to prevent defacing of the marker through abrasion, chemical reaction, or other means that would hinder marker identification.
 - 6. At all times during the Work, the Contractor shall assure that proper and identifiable labels are attached to all hazardous materials and secondary containment

3.06 HAZARDOUS MATERIAL CONTAINER STORAGE AND HANDLING

- A. Solid Chemicals, chemical solutions, paints, petroleum products, solvents, acids, caustics solutions, and any waste materials, including used batteries, shall be stored in a manner that will prevent the inadvertent entry of these materials into waters of the state, including groundwater. Storage shall be in a manner that will prevent spills due to overfilling, tipping, or rupture. In addition, the Pollution Prevention Plan shall address and the Contractor shall implement the following specific requirements:
 - 1. All liquid products must be stored on durable, impervious surfaces and within a berm or other means of secondary containment capable of containing 110% of the largest single container volume in the storage area.

2. Waste liquids shall be stored under cover, such as tarps or roofed structures, in addition to secondary containment. Any waste storage areas, whether for waste oil or hazardous waste, shall be clearly designated as such and kept segregated from products to be used on the site.
3. In the event that the Contract Document Drawings designate a hazardous material storage area, the Contractor shall be restricted to storing hazardous materials or waste specific to the Project work to the area designated in the Contract Document Drawings.
4. All hazardous materials and waste containers shall be stored with the container lid secured, to prevent spills or leaking.
5. Upon completion of a specific task for which hazardous material(s) were used, the Contractor shall document in the Daily Report (Form CM03), the amount of hazardous material removed from the site, and the product and manufacturer name(s) of such material(s).

3.07 HAZARDOUS MATERIAL SPILL PREVENTION

- A. The Pollution Prevention Plan shall address and the Contractor shall implement the following:
 1. Hazardous Material Transfer
 - a. All hazardous materials shall be transferred from primary to secondary containers using secondary containment with spill kits in close proximity.
 2. Vehicle and Equipment Fueling-
 - a. All equipment fueling operations shall utilize pumps and funnels and absorbent pads and / or drip pans;
 - b. Fueling shall not take place within 100 feet of any natural or manmade drainage conveyance including ditches, catch basins, ponds, wetlands, and pipes;
 - c. Fueling shall be restricted to designated fueling areas as shown on the Contract Documents or as submitted and accepted by the Engineer as a part of the Pollution Prevention Plan;
 - d. A spill kit will be located within 100 feet of the fueling operation.
 - e. Vehicle and Equipment Maintenance
 - f. Engine, transmission, and hydraulic oil may be added, as needed utilizing funnels and drip pans;
 - g. Absorbent pads shall be placed to prevent fluid contact with soil;
 - h. No fresh or used engine fluids will be stored on the project site;
 - i. No vehicle maintenance other than emergency repair shall be performed on the project site.
 3. Small Engine Fueling and Maintenance
 - a. All small engine fueling operations shall utilize funnels.
 - b. Absorbent pads shall be placed to prevent fluid contact with soil.

- c. Fueling shall not take place within 100 feet of any natural or manmade drainage area.
 - d. Contractor shall not drain and replace engine fluids on Port property.
 - e. These fluids may be added, as needed utilizing funnels.
 - f. Fluid addition shall be done over drip pans.
 - g. Absorbent pads shall be placed to prevent fluid contact with soil.
- 4. Equipment Storage
 - a. Drip pans and absorbent pads shall be placed under all equipment that is unused for more than 4 hours, overnights, weekends, and holidays.
- 5. Spill Response Kits
 - a. Spill kits shall be stored at designated locations on the project site and at the hazardous material storage areas and in close proximity to any fueling operation.
 - b. Spill Kits shall, at a minimum, contain the following:
 - (1) 1-spill response procedures sheet
 - (2) 12-oil absorbent pads
 - (3) 12-water-based absorbent pads
 - (4) 1-roll of plastic sheeting
 - (5) 5-gallons of loose absorbent material i.e. kitty litter or floor sweep
 - (6) 24-heavy duty garbage bags
 - (7) 1-shovel
 - (8) 1-broom
 - (9) 10-copies spill report form

3.08 HAZARDOUS MATERIAL SPILL CONTROL AND RESPONSE

- A. The Plan shall contain information on how the Contractor shall control and respond to hazardous material spills. At a minimum, the Contractor's employee responsible for the spill must take appropriate immediate action to protect human health and the environment (e.g., diking to prevent contamination of state waters).
 - 1. Hazard Assessment - assess the source, extent, and quantity of the spill.
 - 2. Containment and personal protection - If the spill cannot be safely and effectively controlled, then evacuate the area and immediately notify outside response services (go to Step 5). If the spill can be safely and effectively controlled, secure the area and proceed immediately with spill control (impacts to waters of the state should be given the highest priority after human health and safety)
 - 3. Containment and elimination of Source - Contain the spill with absorbent materials or a soil berm around the affected area. Eliminate the source of

the spill by closing valves, sealing leaks, providing containment, or deactivating pumps.

- a. Spill control measures may include damming the spill, covering floor drains, catch basins, or preventing the contaminant from entering water systems. Contaminants include turbidity as well as chemicals.
4. Cleanup - when containment is complete, clean or remove the spill with absorbents or by pumping and containerizing the material for off-site disposal.
5. Notification - Report all spills immediately to the Fire Department by calling 911:
 - a. Provide the Following Information:
 - (1) Time spill occurred or was discovered
 - (2) Location of the spill and equipment involved
 - (3) Estimated amount of spill
 - (4) Measures taken to contain the spill and secure the area
 - b. Report all spills immediately to the Engineer.

3.09 HAZARDOUS MATERIAL CLEANUP AND DISPOSAL

- A. The Plan shall contain information on how the Contractor shall characterize, cleanup and remove all hazardous material and waste generated from Contractor operations. At a minimum, the Plan shall include or communicate the following:
 1. For the purposes of this section, clean shall be defined as the Work site being free of all hazardous material(s), waste(s) container(s), containment device(s), scrap material(s), used spill pads or absorbent pads, or any other hazardous material debris resulting from the Contractor activities.
 2. The Port of Seattle will retain title to all hazardous waste presently on site, encountered during demolition, removal, and excavation. This does not include hazardous materials generated by the Contractor, such as used motor oils, paints, lubricants, cleaners, spilled materials, etc. Contractor will be the generator and owner of these wastes and shall clean and dispose of such waste according to the Contract Documents and follow local, State, and Federal regulations. The Port of Seattle will be shown as the hazardous waste generator and will sign all hazardous waste manifests for non-Contractor generated hazardous wastes. Nothing contained within these Contract Documents shall be construed or interpreted as requiring the Contractor to assume the status of owner or generator of hazardous waste substances for non-Contractor generated hazardous wastes.
 3. Hazardous material(s) and waste(s) shall be disposed in a fully permitted disposal facility with the approvals necessary to accept the waste materials that are disposed. Use of the Port of Seattle's EPA Identification Number for disposal purposes must be coordinated with the Engineer and all documentation such as manifests, land disposal restriction forms, and profiles must be delivered to the Engineer if the Port of Seattle's EPA Identification number is being used for disposal on the project.

4. Handling of any contaminated soils shall be coordinated with the Engineer. Contaminated soil stockpiles must be on a plastic liner, covered with plastic and labeled. Unknown contaminated soils must be characterized. Contaminated materials, such as absorbent materials, rags, containers, gloves, shall be collected and placed into labeled containers.
5. Any unanticipated hazardous materials, waste, or contaminated soils encountered during construction that are not generated by the Contractor shall be immediately brought to the Engineer's attention for determination of appropriate action. Contractor shall not disturb such hazardous materials or contaminated soils until directed by the Engineer.

3.10 SUBCONTRACTOR ACKNOWLEDGEMENT

- A. The requirements of the Pollution Prevention Plan are the responsibility of the Contractor and compliance must be communicated at all tiers of the Contract. The Contractor must provide a written acknowledgement from all subcontractors that they have read, understand, and will comply with the requirements of the Pollution Prevention Plan. This written acknowledgement must be included in the Pollution Prevention Plan as part of the preconstruction submittal. The subcontractor acknowledgement section of the Pollution Prevention Plan must be updated as needed throughout the life of the Contract.

3.11 EDUCATION

- A. The Contractor shall provide narrative in the Pollution Prevention Plan on how they will educate all personnel including subcontractors. At a minimum, the Contractor shall train staff through regularly scheduled meetings to discuss environmental protection subjects as related to this project. This may be added to any existing weekly meetings (such as safety meetings). Training content shall emphasize sensitive areas, emergency response, spill prevention and inspections. Keep minutes of the meetings detailing attendees and subjects discussed. Submit the minutes to the Engineer monthly.

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

Based upon unit cost Bid Item "Pollution Prevention Planning and Execution", payments will be made as follows:

- A. Upon receipt of the Pollution Prevention Plan 25%
- B. After NTP and before Substantial Completion, 50% will be pro rated and paid monthly for compliance with the Pollution Prevention Plan. Non-compliance will result in withholding of payment for the month of non-compliance.
- C. After Substantial Completion, 25% for completion of work onsite.

[OR]

- A. No separate measurement or payment will be made for the work required by this Section. The cost for this portion of the Work will be considered incidental to, and included in, the payments made for the applicable bid items in the Lump Sum price bid for the Project.

DIVISION 1 - GENERAL REQUIREMENTS

Section 01 57 23 - Pollution Prevention, Planning and Execution

End of Section