

## Stormwater Pollution Prevention Plan (SWPPP)

**for:**

Kettle Falls Generating Station  
1151 Highway 395 North  
Kettle Falls, WA 99141  
509-738-2449

**SWPPP Contact(s):**

Avista Corporation  
Janna Loepky  
P.O. Box 3727  
Spokane, WA 99220-3727  
509-495-8809  
janna.loepky@avistacorp.com

**SWPPP Preparation Date:**

11/2021

## Contents

---

<b>Section 1.</b>	<b>Introduction, Facility Description and Contact Information.....</b>	<b>1</b>
1.1	Facility Information .....	1
1.2.	Contact Information/Responsible Parties .....	2
1.3.	General Location Map (Optional) .....	2
1.4.	Site Map .....	3
1.5.	Stormwater Pollution Prevention Team .....	4
<b>Section 2.</b>	<b>Facility Assessment .....</b>	<b>8</b>
2.1.	Facility Description .....	8
2.2.	Industrial Activity, Materials Inventory, and Associated Pollutants .....	10
2.3.	Spills and Leaks .....	12
<b>Section 3.</b>	<b>Best Management Practices (BMPs).....</b>	<b>13</b>
3.1	Operational Source Control BMP .....	13
3.2.	Structural Source Control BMPs.....	27
3.3.	Treatment BMPs .....	31
3.5.	Erosion and Sediment Control BMPs .....	33
<b>Section 4.</b>	<b>Stormwater Observation Plan.....</b>	<b>35</b>
<b>Section 5.</b>	<b>SWPPP Certification.....</b>	<b>37</b>

## Appendices

<b>Appendix A.</b>	<b>General Location Map</b>
<b>Appendix B.</b>	<b>Site Map</b>
<b>Appendix C.</b>	<b>Worksheets for Development of the SWPPP</b>
<b>Appendix D.</b>	<b>SWPPP Certification Form</b>
<b>Appendix E.</b>	<b>BMPs Applicable to the Kettle Falls Generating Station</b>
<b>Appendix F.</b>	<b>Stormwater Monthly Inspection Report</b>

## Section 1. Introduction, Facility Description and Contact Information

This stormwater pollution prevention plan has been developed to comply with the specific requirements identified in NPDES Waste Discharge Permit No. WA0045217 issued to Avista Corporation's Kettle Falls Generating Station on October 17, 2019, effective December 1, 2019, and expiring November 30, 2024.

### 1.1 Facility Information

**Instructions:**

- Detailed information on determining your site's latitude and longitude can be found at [www.epa.gov/npdes/stormwater/latlong](http://www.epa.gov/npdes/stormwater/latlong).
- Use this link to enter your address to determine your site's latitude and longitude: <http://www.mashupsoft.com/maps/latlonlocator>

#### Facility Information

Name of Facility: Kettle Falls Generating Station

Street: 1151 Highway 395 North

City: Kettle Falls

State: WA ZIP Code: 99141

County: Stevens

Permit Number: WA0045217

Latitude/Longitude - Use **one** of three possible formats, and specify method (Optional)

Latitude:

1. 48 ° 37 ' 11" N (degrees, minutes, seconds)

Longitude:

1. 118 ° 06 ' 32" W (degrees, minutes, seconds)

Estimated area of industrial activity at site exposed to stormwater: 46 (acres)

#### Discharge Information

Does this facility discharge stormwater into surface waters?  Yes  No

Does this facility discharge stormwater into a municipal storm water conveyance system?  Yes  No

SIC Code(s): 4911

## 1.2. Contact Information/Responsible Parties

**Instructions:**

- List the facility operator(s), facility owner, and 24 hour emergency contact. Indicate respective responsibilities, where appropriate.

**Facility Operator(s):**

Name: Gregg Wiggins  
Address: 1151 Highway 395 North  
City, State, Zip Code: Kettle Falls, WA 99141  
Telephone Number: 509-738-1505  
Email address: Gregory.Wiggins@avistacorp.com

**Facility Owner(s):**

Name: Avista Corporation  
Address: P.O. Box 3727  
City, State, Zip Code: Spokane, WA 99220-3727  
Telephone Number: 509-495-8809  
Email address: Janna.Loepky@avistacorp.com

**SWPPP Contact:**

Name: Janna Loepky  
Telephone number: 509-495-8809  
Email address: Janna.Loepky@avistacorp.com

## 1.3. General Location Map (Optional)

**Instructions:**

- Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of your facility and all receiving waters for your stormwater discharges (Appendix A).

Include a copy of the general location map for this facility in Appendix A.

## 1.4. Site Map

**Instructions (see S9.B.1. pg. 23 of the NPDES Waste Discharge Permit No. WA0045217):**

The SWPPP must contain a site map which must identify:

- a) The scale or include relative distances between significant structures and
- b) drainage systems.
- c) Significant features.
- d) The stormwater drainage and discharge structures and identify, by name,
- e) any other party other than the Permittee that owns any stormwater
- f) drainage or discharge structures.
- g) The stormwater drainage areas for each stormwater discharge point offsite
- h) (including discharges to ground water) and assign a unique identifying
- i) number for each discharge point.
- j) Each sampling location by unique identifying number.
- k) Paved areas and buildings.
- l) Areas of pollutant contact (actual or potential) associated with specific
- m) industrial activities.
- n) If required, surface water locations (including wetlands and drainage
- o) ditches).
- p) Areas of existing and potential soil erosion (in a significant amount).
- q) Vehicle maintenance areas.
- r) Lands and waters adjacent to the site that may be helpful in identifying discharge points or drainage routes.

Include a copy of the site map for this facility in Appendix B.

## 1.5. Stormwater Pollution Prevention Team

**Instructions (S9.B.3. pg.25 of the NPDES Waste Discharge Permit No. WA0045217):**

- The SWPPP must identify specific individuals by name or by title within the
- organization (pollution prevention team) whose responsibilities include:

**SWPPP development, implementation, maintenance, and modification.**

Staff Names and/or Title	Individual Responsibilities
Corporate Environmental Scientist	<ul style="list-style-type: none"> <li>• Ensure that stormwater pollution prevention at the Kettle Falls Generating Station receives appropriate management attention.</li> <li>• Ascertain that the operations of the Generating Station comply with the requirements of the applicable regulations governing stormwater pollution prevention.</li> <li>• Be responsible for determining if a spill or release requires notification of federal, state or local agencies.</li> <li>• Make all required federal, state and local notifications for spills of oil, petroleum products or hazardous substances.</li> <li>• Ascertain that Avista Corporation employees receive appropriate training.</li> </ul>
KFGS Environmental Scientist	<ul style="list-style-type: none"> <li>• Participate in the development of safety inspections and inspection logs with the Corporate Environmental Scientist.</li> <li>• Initiate SWPPP amendments whenever there is a change in design, construction, operation, or maintenance at the facility that significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged (S9.A.4.b.).</li> <li>• Initiate SWPPP amendments if the owner or operator or the applicable local or state regulatory authority determines during inspections or investigations that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. The SWPPP will be modified as necessary to include additional or modified BMPs designed to correct problems identified and to correct the deficiencies identified in writing from Ecology within 30 days of notice (S9.A.4.a.i.-ii.). Initiate SWPPP amendments whenever there is a change in design,</li> </ul>

construction, operation, or maintenance at the facility that significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged.

- Ensure that the provisions of any SWPPP amendments are implemented in a timely manner.
- Act as the site Emergency Coordinator.
- Inform the Corporate Environmental Scientist if a spill or release has occurred.
- Maintain a detailed log of all events during cleanup operations.
- Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason for spill; date/time clean-up completed, notifications made and staff involved [S9.B.4.b.i.4)i)].
- Prepare and submit final reports on minor spills to the Corporate Environmental Scientist.
- Maintain regular contact with the Corporate Environmental Scientist concerning inspections of material storage and handling facilities, emergency spill response, regulatory interpretation and problem resolution.
- Coordinate the procurement of equipment for spill containment and emergency response with the Corporate Environmental Scientist and the Supply Chain Management.
- Participate in the development of safety inspections and inspection logs with the Corporate Environmental Scientist.
- Be responsible for performing monthly visual inspections of designated equipment, stormwater discharges, and spill response equipment.

	<ul style="list-style-type: none"><li>• Notify the Corporate Environmental Scientist if the owner or operator or the applicable local or state regulatory authority determines during inspections or investigations that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site.</li><li>• Maintain the operational copy of the facility SWPPP.</li><li>• Keep the original copy of all amendments to the SWPPP, and note such amendments on the Amendments and Revisions page at the front of the plan.</li><li>• Distribute copies of SWPPP amendments to all Avista Corporation personnel that have been provided with a copy of the plan.</li><li>• Retain the original copies of SWPPP-related inspection records, preventive maintenance records and training records.</li><li>• Maintain records of discharges from spill containment sumps.</li></ul>
KFGS Assistant Plant Manager	<ul style="list-style-type: none"><li>• Upon request, assist the Corporate Environmental Scientist with personnel and equipment for responding to major on-site and off-site emergencies.</li><li>• Have the authority to dedicate site resources in order to respond to an emergency.</li><li>• Initiate actions to correct deficiencies found during inspections.</li></ul>
Control Operator	<ul style="list-style-type: none"><li>• Notify the KFGS Environmental Scientist of any spills or releases.</li><li>• During an emergency response, provide services as required under the direction of the Corporate Environmental Scientist and the site Emergency Brigade.</li><li>• During an emergency or an emergency response drill, relocate emergency response equipment as directed by the Corporate Environmental Scientist or KFGS Environmental Scientist.</li></ul>

Auxiliary Operators & Fuel Equipment Operators	<ul style="list-style-type: none"><li>• Drain spill containment sumps.</li><li>• Contain spills and releases and provide services as required under the direction of the Environmental Scientist.</li><li>• Report spills and releases to the Control Operator.</li><li>• Conduct regular surveillance inspections of storage and transfer facilities for oil and hazardous substances and initiate corrective measures as necessary.</li><li>• Inspect security systems such as access controls, locked storage areas, lighting, fences and traffic controls to ensure that spills do not occur as a result of vandalism or unauthorized entry.</li></ul>
Supply Chain Management	<ul style="list-style-type: none"><li>• Coordinate the procurement of equipment for spill containment and emergency response with the Environmental Compliance Coordinator assigned to the station and the local Environmental Coordinator.</li><li>• Maintain a current inventory of emergency response equipment.</li></ul>

A Stormwater Pollution Prevention Team has been formed by Avista Corporation for the Generating Station in Kettle Falls. The individuals on the team are responsible for developing, implementing, maintaining and modifying the SWPPP.

## Section 2. Facility Assessment

**Instructions (see S9.B.2.a.- c. pg. 24-25 of the NPDES Waste Discharge Permit No. WA0045217).**

The facility assessment must include a description of the facility, an inventory of facility activities and equipment that contribute to or have the potential to contribute any pollutants to stormwater; and, an inventory of materials that contribute to or have the potential to contribute pollutants to stormwater.

### 2.1. Facility Description

**Instructions (see S9.B.2.a. pg. 24 of the NPDES).**

The facility description must describe:

- The industrial activities conducted at the site.
- Regular business hours and seasonal variations in business hours or industrial activities.
- The general layout of the facility including buildings and storage of raw materials, and the flow of goods and materials through the facility.

**Industrial Activity:** The Kettle Falls Generating Station is a wood-waste fired steam-electric power plant operated by Avista Corporation. Constructed in 1983, this station burns about 500,000 tons of Hog Fuel each year, and can produce up to 50 megawatts of electric power. In addition, the station has a small gas turbine and heat recovery system which can run in tandem or independent of the main boiler.

**Regular Business Hours:** The Kettle Falls Generating Station operates 24 hours a day, seven days a week.

#### **General Layout:**

The waste Hog Fuel arrives at the site in trucks from sawmills located within a 200-mile radius of the plant. Receiving equipment weighs and unloads the trucks into a receiving hopper. A conveyor belt, equipped with a self-cleaning magnet and metal detector, transfers the fuel to a disc screen/wood hog for size sorting and reducing.

The facility then uses a traveling 'tripper' conveyor along with a swinging boom to transfer the fuel onto live or longer-term storage piles. A bulldozer is used to re-distribute the fuel in the storage pile area. The facility uses an over-the-pile reclaimer to move the fuel from the live storage pile onto a fixed conveyor and then into the plant boiler housed in a seven-story-high fluidized bed boiler.

The facility source of process water is three onsite groundwater wells located adjacent to the Generating Station site (west of Peachcrest Road) as well as make-up water from the City of Kettle Falls. The Generating Station requires process water for the reverse osmosis/electro-deionization systems, ash handling system, the steam cycle, and other miscellaneous uses. The City of Kettle Falls supplies the water for the domestic needs of the Generating Station. The facility uses a circulating water system to meet the Generating Station's cooling needs. This system includes a conventional mechanical draft cooling tower.

The Generating Station's wastewater treatment system includes two settling basins, a retention basin, and a mixing tank. The settling basins receive the boiler blowdown and miscellaneous flows from the main building sump, RO reject, and any settled solids from the mixing tank. A 474,000-gallon concrete retention basin receives the settling basins overflow and cooling water blowdown. This basin allows retention time for mixing, cooling, and reduction of residual free chlorine levels from the cooling tower blowdown. The mixing tank provides additional settling of solids and a recirculation capacity to the retention pond. Recirculation through the mixing tank continues until temperature, pH, and chlorine meet effluent limits, the flow is then diverted from the mixing tank to the outfall into Lake Roosevelt approximately 125 feet from the shoreline at a normal low water elevation of 1208 feet above mean sea level.

Stormwater from the plant site flows through separate oil/water separators into one of two locations (north and south outfalls). These outfalls both discharge the treated stormwater to a roadside ditch (Peachcrest Road) west of the facility on Avista property. A culvert underneath the road then directs the drainage adjacent to a railway line. For the Hog fuel pile, the facility collects all runoff and applies this water back onto the fuel storage pile.

About 110 tons of fly and bottom ash are generated on a daily basis. The facility trucks this ash offsite for disposal in an Avista-operated solid waste landfill. No stormwater discharges occur from the fly and bottom ash handling systems. The Generating Station periodically removes sediment from the settling, retention, and cooling tower basins which are disposed of in the Stevens County Landfill.

A new truck dumper and conveyor system with associated truck driving lanes is currently under construction east of the fuel pile. The new truck dumper and conveyor system is not expected to be operational until 2022. A diesel fuel tank trailer for fueling the bulldozers is located in a newly constructed fueling shed located between the fuel pile and the Service Building. Once the fueling shed is fully operational, diesel fuel will be dispensed from a 20,000 gallon above ground fuel tank situated in a secondary containment sump within the fueling shed.

A groundwater treatment system was installed in 2014 to address a diesel release from an underground fuel line. A groundwater treatment building is located south of the facility process water treatment building and additional infrastructure associated with groundwater treatment is located in the subsurface beneath the Hog Fuel storage pile. The groundwater treatment system collects and treats diesel impacted groundwater, and recirculates the treated groundwater, through a series of underground pipes, in a closed loop system.

## 2.2. Industrial Activity, Materials Inventory, and Associated Pollutants

### Instructions (S9.B.2.b.i.- viii. pg. 24-25 of the NPDES Waste Discharge Permit No. WA0045217):

In this section, identify all areas associated with **industrial activities** that have been or may potentially be sources of pollutants, including, but not limited to, the following:

- Loading and unloading of dry bulk materials or liquids.
- Outdoor storage of materials or products.
- Outdoor manufacturing and processing.
- On-site dust or particulate generating processes.
- On-site waste treatment, storage, or disposal.
- Vehicle and equipment fueling, maintenance, and/or cleaning (includes washing).
- Roofs or other surfaces exposed to air emissions from a manufacturing building or a process area
- Roofs or other surfaces composed of materials that may be mobilized by stormwater (e.g., galvanized roofs, galvanized fences, etc.).

Also, identify the types of materials handled at the site that potentially may be exposed to precipitation or runoff and could result in stormwater pollution.

For each **industrial activity** or **exposed material** listed, provide a short narrative (in the **Associated Pollutant** column) describing the potential of pollutant(s) to be present in stormwater discharges. For example:

- Structures and materials with galvanized metal would be a potential source of zinc.  
See *Suggested Practices to Reduce Zinc Concentrations in Industrial Stormwater Discharges*:  
<http://www.ecy.wa.gov/biblio/0810025.html>
- Fueling/vehicle maintenance areas would be a potential source of petroleum and other pollutants.
- Yards surfaced with crushed rock or gravel would be a potential source of sediment, turbidity, and other pollutants depending on industrial activity.

The Permittee must update this narrative if/when data become available to verify the presence or absence of these pollutants.

Include a narrative description of any potential sources of pollutants from past activities, materials and spills that were previously handled, treated, stored, or disposed of in a manner to allow ongoing exposure to stormwater. For example,

- A material handling area that has been subject to fertilizer spills would be a potential source of phosphorus, nitrogen and other pollutants.  
Include the method and location of on-site storage or disposal. List significant spills and significant leaks of toxic or hazardous pollutants.

Hog Fuel transported to the site by truck is unloaded by two truck dumpers to a belt conveyor, which moves roughly 300 tons of Hog Fuel per hour past a self-cleaning magnet and metal detector to a disc screen. The magnet and metal detector remove any tramp iron from the wood, and the disc screen separates the wood according to size. Oversize material is routed to a hammer mill.

The Generating Station uses two stack out systems. The first system uses a traveling tripper conveyor to distribute Hog Fuel to the fuel storage pile, where a bulldozer pushes the fuel into the storage area. The second system employs a swinging boom to distribute the fuel onto the live storage pile. From the live storage pile, an over-the-pile reclaimer moves the fuel onto a conveyor for transport into the power plant. The outside storage area is uncovered and provides 90 days of storage capacity.

In the powerhouse, a drag-chain conveyor system carries the Hog Fuel to six fuel-feeder bins mounted on the plant boiler. Excess fuel is returned to the wood storage area.

Ash from combustion of Hog Fuel is collected in a two-stage control system. Cyclone separators capture the large ash particles and char. An electrostatic precipitator collects smaller particulate. After passing through the two stages of this control system, flue gas is dispersed from a 180-foot-high stack. The ash is removed to a single transfer conveyor and routed to a covered bunker for eventual disposal at a solid waste landfill operated by Avista Corporation. The ash (both bottom ash and fly ash) is transported by dump truck to the Avista operated solid waste landfill, approximately 1.5 miles away.

The remainder of the yard is used for storage of miscellaneous large equipment. Vehicle and equipment washing is performed occasionally outside the Maintenance Shop, which is located in the northeast corner of the Maintenance and Administration Building.

Much of the traffic areas within the facility are paved but there are sections of road around the perimeter of the facility that are unpaved. Some of these sections are treated with lignon sulfonate to control the generation of fugitive dust.

Industrial Activity / Exposed Materials	Associated Pollutants
Delivery Truck Dumping / wood waste	Wood chips/fines, hydraulic oil
Hammer Mill Operation / ground wood	Wood chips/fines, hydraulic oil
Fuel Pile Storage and Handling	Wood chips and fines
Fuel Conveying To/From Boiler Building	Wood chips/fines, hydraulic oil
Diesel Storage/Fueling Stations	Diesel
Groundwater Remediation System	Oil products/ Nitrate solution
Water treatment chemicals unloading	Sulfuric acid/Caustic
Electrical Oil-Filled Equipment	Transformer Cooling Oil
Mobile Equipment Operations & Maintenance	Lubricating oils and fuel
Unpaved Roads	Dust and sediment
Ash Management	Hog Fuel ash

## 2.3. Spills and Leaks

### Instructions

- Include the following in this section:
  - **Potential spills and leaks:** A description of where potential spills and leaks could occur at your site that could contribute pollutants to your stormwater discharge, and specify which outfall(s) are likely to be affected by such spills and leaks.
  - **Past spills and leaks (Use Worksheet #4):** A description of significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance.
- *Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602.*

### Areas of Site Where Potential Spills/Leaks Could Occur

Location	Outfalls
Truck dumper/wood screening	SW-South
Fuel conveyors	SW-South
Water treatment chemicals unloading	SW-South
Diesel fuel storage/dispensing	SW-South
Groundwater Remediation System chemicals unloading	SW-South
Facility substation	SW-North
Facility switchyard	SW-North
Ash sump	SW-North

## Section 3. Best Management Practices (BMPs)

### Instructions (See S9.B.4. pg 25 of the NPDES Waste Discharge Permit No. WA0045217):

You must describe each Best Management Practice (BMP) selected to eliminate or reduce the potential to contaminate *stormwater* and prevent violations of *water quality standards*.

- By December 31, 2022, you must include and implement each of the mandatory BMPs listed in the permit, including the BMPs from the 2019 Stormwater Management Manual for Eastern Washington or equivalent manuals, listed as “applicable” to certain industrial activities/facilities.
- Appendix E of this Template contains the BMPs from the Stormwater Management Manuals that are applicable to certain industrial activities or facilities. “Cut” each applicable BMP that pertains to your type industrial activity/facility from Appendix E, and “paste” them into the appropriate section(s).
- The Permittee may omit individual (mandatory or applicable) BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP. For example:
  - The permit requirement to have a spill kit located within 25’ of fueling areas would not be necessary at a facility that does not have on-site fueling. The SWPPP should state that the spill kit BMP has been omitted from the SWPPP because it is unnecessary.

### 3.1 Operational Source Control BMP

#### Instructions (see S9.B.4.b.i.2 Good Housekeeping pg. 26 of the NPDES Waste Discharge Permit No. WA0045217):

Describe BMPs implemented for ongoing maintenance and cleanup of areas which may contribute pollutants to stormwater discharges. The SWPPP must include the schedule/frequency for completing each housekeeping task, based upon industrial activity, sampling results and/or observations made during inspections. At a minimum, following Good Housekeeping BMPs are mandatory. The Permittee may omit individual “mandatory” BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP.

#### Mandatory Operational Source Control Good Housekeeping BMPs Required by Condition S9. of the Permit:

Good Housekeeping:

- Vacuum paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated pollutants once per quarter.
- Identify and control all on-site sources of dust to minimize stormwater contamination from the deposition of dust on areas exposed to precipitation.
- Keep all dumpsters under cover or fit with a lid that must remain closed when not in use.

Operational Source Control BMPs for Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots:

- Sprinkle or wet down soil or dust with water as long as it does not result in runoff.
- Use only dust suppressant chemicals that are approved by the local jurisdiction and/or state government, such as those listed in *Methods for Dust Control* (Ecology, 2016c).
- Avoid excessive and repeated applications of dust suppressant chemicals. Time the application of dust suppressants to avoid or minimize their wash-off by rainfall or human activity, such as irrigation.
- Apply stormwater containment to prevent the conveyance of sediment into storm drains or receiving waters.
- Protect inlets/catch basins during application of dust suppressants.
- Ecology prohibits the use of motor oil for dust control. Take care when using lignin derivatives and other chemicals with a high biochemical oxygen demand in areas susceptible to contamination of surface water or ground water.

Consult with the Washington State Department of Ecology and the local permitting authority on discharge permit requirements if the dust suppression process results in a discharge to the ground, ground water, storm drain, or surface water.

- Street gutters, sidewalks, driveways, and other paved surfaces in the immediate area of industrial activity must be swept regularly to collect and properly dispose of loose debris and garbage.
- Install catch basin filter socks on site and in surrounding catch basins to collect sediment and debris. Maintain the filters regularly to prevent plugging.

Operational Source Control BMPs for Fueling At Dedicated Stations:

- Prepare a spill prevention control and countermeasures (SPCC) plan.
- Train employees on the proper use of fuel dispensers and on the spill plan.
- Have designated trained person(s) available either on-site or on call at all times to promptly and properly implement the spill plan and immediately cleanup all spills.
- If the fueling station is unattended by a trained person during operating hours, the spill plan must be visible to all customers and untrained employees using the station, and the spill kit must also be accessible and fully stocked at all times.
- The person conducting the fuel transfer must be present at the fueling pump during fuel transfer, particularly at unattended or self-serve stations.
- Keep suitable cleanup materials, such as dry adsorbent materials, on-site to allow prompt cleanup of a spill.
- Do not use dispersants to clean up spills or sheens.
- Post signs in accordance with the Uniform Fire Code (UFC) or International Fire Code (IFC). For example, post "No Topping Off" signs (topping off gas tanks causes spillage and vents gas fumes to the air).
- Make sure that the automatic shut-off on the fuel nozzle is functioning properly.

Operational Source Control BMPs for Landscaping and Lawn/Vegetation Management:

Landscaping:

- Install engineered soil/landscape systems to improve the infiltration and regulation of stormwater in landscaped areas.
- Do not dispose of collected vegetation into waterways or storm drainage systems.

Pesticides:

- The facility performs herbicide treatment of substations. No herbicides are stored at the facility. The facility contracts the services of a licensed pest control contractor for the remainder of its pest control needs.

Operational Source Control BMPs for Loading and Unloading Areas for Liquid or Solid Material:

All Loading/Unloading Areas:

- A significant amount of debris can accumulate at outside, uncovered loading/unloading areas. Sweep these surfaces frequently to remove material that could otherwise be washed off by stormwater. Sweep outside areas that are covered for a period of time by containers, logs, or other material after the areas are cleared.
- Place drip pans, or other appropriate temporary containment device, at locations where leaks or spills may occur such as hose connections, hose reels and filler nozzles. Drip pans shall always be used when making and breaking connections (see Figure 2.2). Check loading/unloading equipment such as valves, pumps, flanges, and connections regularly for leaks and repair as needed.

Tanker Truck to Above -ground Storage Tanks:

- To minimize the risk of accidental spillage, prepare an "Operations Plan" that describes procedures for loading/unloading (see Spill Prevention Control and Countermeasures plan). Train the employees, especially fork lift operators, in its execution and post it or otherwise have it readily available to employees.
- Report spills of reportable quantities to Ecology (refer to Section 2.1 for telephone numbers of Ecology Regional Offices) as per the Spill Control Plan.
- Prepare and implement an Emergency Spill Cleanup Plan for the facility (BMP Spills of Oil and Hazardous Substances) which includes the following BMPs (See Spill Control Plan):
  - Ensure the clean up of liquid/solid spills in the loading/ unloading area immediately, if a significant spill occurs, and, upon completion of the loading/unloading activity, or, at the end of the working day.
  - Retain and maintain an appropriate oil spill cleanup kit on-site for rapid cleanup of material spills. (See BMP Spills of Oil and Hazardous Substances).
  - Ensure that an employee trained in spill containment and cleanup is present during loading/unloading.

Operational Source Control BMPs for Maintenance and Repair of Vehicles and Equipment:

- Inspect for leaks all incoming vehicles, parts, and equipment stored temporarily outside.
- Use drip pans or containers under parts or vehicles that drip or that are likely to drip liquids, such as during dismantling of liquid containing parts or removal or transfer of liquids.

- Remove batteries and liquids from vehicles and equipment in designated areas designed to prevent stormwater contamination. Store cracked batteries in a covered non-leaking secondary containment system.
- Remove liquids from vehicles retired for scrap.
- Empty oil and fuel filters before disposal. Provide for proper disposal of waste oil and fuel.
- Do not pour/convey washwater, liquid waste, or other pollutant into storm drains or to surface water. Check with the local sanitary sewer authority for approval to convey to a sanitary sewer.
- Do not connect maintenance and repair shop floor drains to storm drains or to surface water.
- To allow for snowmelt during the winter, a drainage trench with a sump for particulate collection can be installed and used only for draining the snowmelt and not for discharging any vehicular or shop pollutants.

Operational Source Control BMPs for Maintenance of Public and Private Utility Corridors and Facilities:

- Minimize the amount of herbicides and other pesticides used to maintain access roads and facilities. When water or sediments are removed from electric transformer vaults, determine whether contaminants might be present before disposing of the water and sediments. This includes inspecting for the presence of oil or sheen, and determining from records or testing if the transformers contain PCBs. If records or tests indicate that the sediment or water are contaminated above applicable levels, manage these media in accordance with applicable federal and state regulations, including the federal PCB rules (40 CFR 761) and the state MTCA cleanup regulations (Chapter 173-340 WAC). Water removed from the vaults can be discharged in accordance with the federal 40 CFR 761.79, and state regulations (Chapter 173-201A WAC and Chapter 173-200 WAC), or via the sanitary sewer if the requirements, including applicable permits, for such a discharge are met.
- Stabilize access roads or areas of bare ground with gravel, crushed rock, or another method to prevent erosion. Use and manage vegetation to minimize bare ground/soils that may be susceptible to erosion.
- Provide maintenance practices to prevent stormwater from accumulating and draining across and/or onto roadways. Convey stormwater through roadside ditches and culverts. The road should be crowned, sloped outward, water barred, or otherwise left in a condition not conducive to erosion. Appropriately maintaining grassy roadside ditches discharging to surface waters is an effective way of removing some pollutants associated with sediments carried by stormwater.

Maintain ditches and culverts at an appropriate frequency to ensure that plugging and flooding across the roadbed, with resulting overflow erosion, does not occur.

Operational Source Control BMPs for Maintenance of Roadside Ditches:

- Inspect roadside ditches regularly, as needed, to identify sediment accumulations and localized erosion.
- Clean ditches on a regular basis, as needed. Ditches should be kept free of rubbish and debris.
- Vegetation in ditches often prevents erosion and cleanses runoff waters. Remove vegetation only when flow is blocked or excess sediments have accumulated. Conduct ditch maintenance (seeding, fertilizer application, harvesting) in late spring and/or early fall, where possible. This allows vegetative cover to be re-established by the next wet season thereby minimizing erosion of the ditch as well as making the ditch effective as a biofilter.

- Do not apply fertilizer unless needed to maintain vegetative growth.
- In the area between the edge of the pavement and the bottom of the ditch, commonly known as the “bare earth zone”, use grass vegetation, wherever possible. Vegetation should be established from the edge of the pavement if possible, or at least from the top of the slope of the ditch.
- Maintain diversion ditches on top of cut slopes that are constructed to prevent slope erosion by intercepting surface drainage to retain their diversion shape and capability.
- Use temporary erosion and sediment control measures or revegetate as necessary to prevent erosion during ditch reshaping. Do not leave ditch cleanings on the roadway surfaces. Sweep, collect, and dispose of dirt and debris remaining on the pavement at the completion of ditch cleaning operations.
- Consider screening roadside ditch cleanings, not contaminated by spills or other releases and not associated with a runoff treatment BMP such as a biofiltration swale, to remove litter. Separate screenings into soil and vegetative matter (leaves, grass, needles, branches, etc.) categories. Compost or dispose of the vegetative matter in a municipal waste landfill. Consult with the jurisdictional health department to discuss use or disposal options for the soil portion.
- Roadside ditch cleanings contaminated by spills or other releases known or suspected, to contain dangerous waste must be handled following the Dangerous Waste Regulations (Chapter 173-303 WAC). If testing determines materials are not dangerous waste but contaminants are present, consult with the jurisdictional health department for disposal options.
- Examine culverts on a regular basis for scour or sedimentation at the inlet and outlet, and repair as necessary. Give priority to those culverts conveying perennial and/or salmon bearing streams and culverts near streams in areas of high sediment load, such as those near subdivisions during construction. Maintain trash racks to avoid damage, blockage, or erosion of culverts.

Operational Source Control BMPs for Maintenance of Stormwater Drainage and Treatment Systems:

- Inspect and clean treatment BMPs, conveyance systems, and catch basins as needed, and determine whether improvements in O & M are needed.
- Promptly repair any deterioration threatening the structural integrity of the facilities. These include replacement of clean-out gates, catch basin lids, and rock in emergency spillways.
- Ensure that storm sewer capacities are not exceeded and that heavy sediment discharges to the sewer system are prevented.
- Regularly remove debris and sludge from BMPs used for peak-rate control, treatment, etc., and truck to a disposal site that is approved by the local jurisdiction or state government.
- Clean catch basins when the depth of deposits reaches 60% of the sump depth as measured from the bottom of basin to the invert of the lowest pipe into or out of the basin. However, in no case should there be < 6 inches clearance from the debris surface to the invert of the lowest pipe. Some catch basins (e.g., Washington State Department of Transportation Type 1L basins) may have as little as 12 inches sediment storage below the invert. These catch basins need frequent inspection and cleaning to prevent scouring. Where these catch basins are part of a drainage system, the system owner/operator may choose to concentrate maintenance efforts on downstream control devices as part of a systems approach. Clean woody debris in a catch basin as frequently as needed to ensure proper operation of the catch basin.

- Post warning signs; "Dump No Waste - Drains to Ground Water," "Streams," "Lakes," or emboss on or adjacent to all storm drain inlets where practical.
- Disposal of sediments and liquids from the catch basins must comply with "Recommendations for Management of Street Wastes" described in Appendix IV-G of this volume.

Operational Source Control BMPs for Painting/Finishing/ Coating of Vehicles/Boats/ Buildings/ Equipment:

- Train employees in the careful application of paints, finishes, and coatings to reduce misuse and over spray. Use drop cloths underneath outdoor painting, scraping, sandblasting work, and properly clean and temporarily store collected debris daily.
- Wipe up spills with rags and other absorbent materials immediately. Do not hose down the area to a storm drain, receiving water, or conveyance ditch.
- Use a catch basin cover, filter sock, or other effective runoff control device if dust, grit, washwater, or other pollutants may escape the work area and enter a catch basin. The containment device(s) must be in place at the beginning of the workday. Collect contaminated runoff and solids and properly dispose of such wastes before removing the containment device(s) at the end of the workday.
- Use a ground cloth, pail, drum, drip pan, tarpaulin, or other protective device for activities such as outdoor paint mixing and tool cleaning or where spills can contaminate stormwater.
- Properly dispose of all wastes and prevent all uncontrolled releases to the air, ground, or water.
- Clean paintbrushes and tools covered with water-based paints in sinks connected to sanitary sewers.
- Clean brushes and tools covered with non-water-based paints, finishes, or other materials in a manner that allows collection of used solvents (e.g., paint thinner, turpentine, and xylol) for recycling or proper disposal.
- Store toxic materials under cover (e.g., tarpaulin) during precipitation events and when not in use to prevent contact with stormwater.

Operational Source Control BMPs for Parking and Storage of Vehicles and Equipment:

- If a parking lot must be washed, discharge the washwater to a sanitary sewer, if allowed by the local sewer authority or other approved wastewater treatment system, or collect washwater for off-site disposal.
- Do not hose down the area to a storm drain or receiving water. Vacuum sweep parking lots, storage areas, and driveways regularly to collect dirt, waste, and debris.
- Clean up vehicle and equipment fluid drips and spills immediately.
- Place drip pans below inoperative or leaking vehicles and equipment in a manner that catches leaks or spills, including employee vehicles.

Operational Source Control BMPs for Soil Erosion and Sediment Control at Industrial Sites:

- Limit the exposure of erodible soil.
- Stabilize entrances/exits to prevent track-out. See BMP C105E: Stabilized Construction Access.
- Stabilize or cover erodible soil to prevent erosion. Cover practice options include the following:

- Use of vegetative cover such as grass, trees, or shrubs on erodible soil areas.
- Coverage with mats such as clear plastic, jute, or synthetic fiber.
- Preservation of natural vegetation including grass, trees, shrubs, and vines when possible.
- If stabilizing or covering the erodible soil is not possible, then structural controls must be implemented. Structural practice options include the following:
  - Vegetated swale
  - Sedimentation basin
  - Proper grading

Operational Source Control BMPs for Spills of Oil and Hazardous Substances:

The following BMPs are met by implementation of the Spill Prevention, Control, and Countermeasures Plan.

- Prepare an Emergency Spill Control Plan (SCP), which includes the following:
  - A description of the facility including the owner's name and address;
  - The nature of the activity at the facility;
  - The general types of chemicals used or stored at the facility;
  - A site plan showing the location of storage areas for chemicals, the locations of storm drains, the areas draining to them, and the location and description of any devices to stop spills from leaving the site such as positive control valves;
  - Cleanup procedures;
  - Notification procedures to be used in the event of a spill, such as notifying key personnel. Agencies such as Ecology, local fire department, Washington State Patrol, and the local Sewer Authority, shall be notified;
  - The name of the designated person with overall spill cleanup and notification responsibility;
- Train key personnel in the implementation of the Emergency SCP. Prepare a summary of the plan and post it at appropriate points in the building, identifying the spill cleanup coordinators, location of cleanup kits, and phone numbers of regulatory agencies to be contacted in the event of a spill;
- Update the SCP regularly;
- Immediately notify Ecology and the local Sewer Authority if a spill may reach sanitary or storm sewers, ground water, or surface water, in accordance with federal and Ecology spill reporting requirements;
- Immediately clean up spills. Do not use emulsifiers for cleanup unless an appropriate disposal method for the resulting oily wastewater is implemented. Absorbent material shall not be washed down a floor drain or storm sewer; and,
- Locate emergency spill containment and cleanup kit(s) in high potential spill areas. The contents of the kit shall be appropriate for the type and quantities of chemical liquids stored at the facility.

Operational Source Control BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers:

The following BMPs are addressed in the Avista Hazardous Waste Management Plan.

- Place tight-fitting lids on all containers.
- Label all containers with their contents, accumulation start date, and owner information.
- Place drip pans beneath all mounted container taps and at all potential drip and spill locations during filling and unloading of containers.
- Inspect container storage areas regularly for corrosion, structural failure, spills, leaks, overfills, and failure of piping systems. Check containers daily for leaks/spills. Replace containers, and replace and tighten bungs in drums as needed.
- Businesses accumulating Dangerous Wastes that do not contain free liquids need only to store these wastes in a sloped designated area with the containers elevated or otherwise protected from storm water runoff.
- Drums stored in an area where unauthorized persons may gain access must be secured in a manner that prevents accidental spillage, pilferage, or any unauthorized use.
- If the material is a Dangerous Waste, the business owner must comply with any additional Ecology requirements as required.
- Storage of reactive, ignitable, or flammable liquids must comply with the Uniform Fire Code.
- Provide spill kits or cleanup materials near container storage areas.
- Clean up all spills immediately.
- Cover dumpsters, or keep them under cover such as a lean-to, to prevent the entry of stormwater. Replace or repair leaking garbage dumpsters.
- Drain dumpsters and/or dumpster pads to sanitary sewer. Keep dumpster lids closed. Install waterproof liners.

Operational Source Control BMPs for Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products:

- Do not hose down the contained stockpile area to a storm drain or a conveyance to a storm drain or to a receiving water.
- Do not discharge stormwater runoff from the Hog Fuel pile storage area into surface waters of the State. Runoff water must be collected and redirected back onto the fuel pile.
- Have fire hydrant flushing coincide with storm drain flushing to make the best use of water.
- If possible, design flushing to convey accumulated material to strategic locations, such as to the sanitary sewer or to a runoff treatment BMP; thus, preventing resuspension and overflow of a portion of the solids during storm events.
- If possible, conduct flushing and tank maintenance activities on non-rainy days and during the time of year that poses the least risk to aquatic biota.

Operational Source Control BMPs for Labeling Storm Drain Inlets:

- Label storm drain inlets in areas where contributions or dumping to storm drains is likely.
- Stencil or apply storm drain markers adjacent to storm drains to help prevent the improper disposal of pollutants. Or, use a storm drain grate stamped with warnings against polluting.
- Place the marker in clear sight facing toward anyone approaching the inlet from either side.
- Use a brief statement and/or graphical icons to discourage illegal dumping. Examples:
  - "No Dumping – Drains to Stream"
  - "Dump No Waste – Drains to Lake"
- Check with your local jurisdiction to find out if they have approved specific signage and / or storm drain message placards for use. Consult the local jurisdiction to determine specific requirements for placard types and methods of application.
- Maintain the legibility of markers and signs. Signage on top of curbs tends to weather and fade. Signage on face of curbs tends to be worn by contact with vehicle tires and sweeper brooms.
- When painting stencils or installing markers, temporarily block the storm drain inlet so that no pollutants are discharged from the labeling activities.

**Instructions (see S9.B.4.b.i.3 Preventative Maintenance pg. 26 of the NPDES Waste Discharge Permit No. WA0045217):**

Describe BMPs to inspect and maintain the stormwater drainage, source controls and treatment systems, and plant equipment and systems that could fail and result in contamination of stormwater. The SWPPP shall include the schedule/frequency for completing each maintenance task.

**Preventive Maintenance:**

- Clean catch basins on an as needed basis, but no longer than once every two years.
- Inspect all equipment and vehicles during monthly site inspections for leaking fluids such as oil, antifreeze, etc. Take leaking equipment and vehicles out of service or prevent leaks from spilling on the ground until repaired.
- Immediately clean up spills and leaks (e.g., using absorbents, vacuuming, etc.) to prevent the discharge of pollutants.

### Spill Prevention and Emergency Cleanup:

**Instructions (see S9.B.4.b.i.4 Spill Prevention and Emergency Cleanup Plan pg. 27 of the NPDES Waste Discharge Permit No. WA0045217):**

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

- Describe any BMPs or procedures used to minimize the potential for leaks, spills, and other releases.
- Describe where each BMP is to be located or where applicable procedures will be implemented (pg 17-18, S3.B.4.b.i.4.a-i) at your site.
- Note: Some facilities may be required to develop a Spill Prevention Control and Countermeasure (SPCC) plan under a separate regulatory program (40 CFR 112). If you are required to develop an SPCC plan, or you already have one, you should include references to the relevant requirements from your plan. Such a plan may be included by reference if it contains these necessary elements.)

### Spill Prevention and Emergency Cleanup:

All BMPs under this heading are addressed in the Spill Control Plan.

- Store all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater.
- Prevent precipitation from accumulating in containment areas with a roof or equivalent structure or include a written plan on how it will manage and dispose of accumulated water if a containment area cover is not practical.
- Locate spill kits within 25 feet of all stationary fueling stations, fuel transfer stations, and mobile fueling units. At a minimum, spill kits shall include:
  - 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.
- Do not lock shut-off fueling nozzles in the open position. Do not “topoff” tanks being refueled.
- Block, plug or cover storm drains that receive runoff from areas where fueling, during fueling.
- Use drip pans or equivalent containment measures during all petroleum transfer operations.

- Locate materials, equipment, and activities 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).
- Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible. Drain fluids from equipment and vehicles prior to on-site storage or disposal.
- Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason for spill; date/time clean-up completed, notifications made and staff involved.

## Employee Training

**Instructions (see S3.B.4.b.i.5 Employee Training) pg. 18 of the NPDES Waste Discharge Permit No. WA0045217):**

- Describe BMPs for training the employees who work in areas of industrial activities subject to the Permit, including all members of your Pollution Prevention Team.

Be sure to address the following items in this section:

- The content of the training:
  - An overview of what is in the SWPPP.
  - How employees make a difference in complying with the SWPPP and preventing contamination of stormwater.
  - Spill response procedures, good housekeeping, maintenance requirements, and material management practices.
- How the Permittee will conduct training.
- The frequency/schedule of training. The Permittee shall train employees annually, at a minimum.
- A log of the dates on which specific employees received training.

## TRAINING PLAN FOR KFGS PERSONNEL

Employee training is essential to the effective implementation of the SWPPP. The purpose of the employee training program is to inform personnel at all levels of responsibility of the objectives and goals of the SWPPP. Employee training will therefore address each component of the SWPPP, especially operational and source control BMPs. Training topics will also include good housekeeping and material management practices, as well as spill prevention and response. As deemed necessary, facility operators will also receive training in the pollution control laws and regulations, this SWPPP, and the specific features of the facility which are intended to prevent releases of oil and petroleum products.

KFGS has meeting rooms in the Administration building that will be used for training. Training will be conducted by the Environmental Scientist with participation by Site management and supervisory personnel.

Training of personnel will be conducted annually and a record of the training will be documented on dated sign-in sheets.

## Inspections and Recordkeeping

### Instructions (see S9.B.4.b.i.6 Inspections and Recordkeeping pg. 28 of the NPDES Waste Discharge Permit No. WA0045217):

- The Permittee must conduct and document visual inspections of the site each month.
- The Permittee must ensure that inspections are conducted by qualified personnel.
- Definition: *Qualified Personnel* means people who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and evaluate the effectiveness of best management practices required by this permit.
- Describe the documentation procedures for inspections and recordkeeping below. Documentation of monthly inspections must be kept on-site available for Ecology inspection (use Inspection Report Form in Appendix F).

The SWPPP must include documentation of procedures to ensure compliance with permit requirements for inspections and recordkeeping.

- Identify facility personnel who will inspect designated equipment and facility areas as required in Permit Condition S10. See Section 1.5 of this plan.
- Contain a visual inspection report or check list that includes all items required by Permit Condition S10.C.
- Provide a tracking or follow-up procedure to ensure that a report is prepared and any appropriate action taken in response to visual inspections.
- Define how the Permittee will comply with signature requirements and records retention identified in Special Condition S9, Reporting and Recordkeeping Requirements.
- Include a certification of compliance with the SWPPP and permit for each inspection using the language in S10.C.1.c.

## INSPECTIONS AND RECORDKEEPING PLAN

### INSPECTIONS

#### A. Inspection Frequency and Personnel

1. Visual inspections of the site will be conducted and documented each month.
2. The inspections will be conducted by *qualified personnel (KFGS Environmental Scientist)*.

#### B. Inspection Components

Each inspection will include:

1. Observations made at *stormwater* observation locations and areas where *stormwater* associated with *industrial activity* is discharged off-site; or discharged to *waters of the state*, or to a *storm sewer* system that drains to *waters of the state*.
2. Observations for the presence of floating materials, visible oil sheen, discoloration, *turbidity*, odor, etc. in the *storm water* discharge(s).

3. Observations for the presence of *illicit discharges* such as *domestic wastewater, noncontact cooling water, or process wastewater* (including *leachate*).
  - a. If an *illicit discharge* is discovered, *Ecology* will be notified within seven days.
  - b. KFGS will eliminate the *illicit discharge* within 30 days.
4. A verification that the descriptions of potential *pollutant* sources required under this permit are accurate.
5. A verification that the site map in the SWPPP reflects current conditions.
6. An assessment of all BMPs that have been implemented, noting all of the following:
  - a. Effectiveness of BMPs inspected.
  - b. Locations of BMPs that need maintenance.
  - c. Reason maintenance is needed and a schedule for maintenance.
  - d. Locations where additional or different BMPs are needed and the rationale for the additional or different BMPs.

### C. Inspection Results

1. The results of each inspection will be recorded in an inspection report or checklist and be kept on-site for *Ecology* review. Each inspection report will document the observations, verifications and assessments required in S10.B, including:
  - a. Time and date of the inspection.
  - b. Locations inspected.
  - c. Statements that, in the judgment of 1) the person conducting the site inspection, and 2) the person described in Condition G2., the site is either in compliance or out of compliance with the terms and conditions of the SWPPP and this Permit.
  - d. A summary report and a schedule of implementation of the remedial actions that are planned if the site inspection indicates that the site is out of compliance. The remedial actions taken will meet the requirements of the SWPPP and the Permit.
  - e. Name, title, and signature of the person conducting site inspection; and the following statement: "I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."
  - f. Certification and signature of the person described in Permit Condition G1.a, first bullet, or a duly authorized representative of the facility, in accordance with Permit Condition G.1.a, second bullet.

### D. Reports of Non-Compliance

Reports of non-compliance identified during an inspection will be prepared in accordance with the requirements of Permit Condition S3.F.

**REPORTING AND RECORDKEEPING** (see S3.C on page 14 and S3.H. on page 16 of the NPDES Waste Discharge Permit No. WA0045217)

### A. Records Retention

The Permittee must retain records of all monitoring information for a **minimum of three years**. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by the Permit, and records of all data used to complete the application for the Permit. The Permittee must extend this period of retention during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology. The Permittee must keep a copy of the Permit at the facility and make it available upon request to Ecology inspectors.

### Illicit Discharges

**Instructions (see S9.B.4.b.i.7. pg. 29 of the NPDES Waste Discharge Permit No. WA0045217):**

- The SWPPP must include measures to identify and eliminate the discharge of process wastewater, domestic wastewater, noncontact cooling water, and other illicit discharges, to stormwater sewers, or to surface waters and ground waters of the state.
- The Permittee can find BMPs to identify and eliminate illicit discharges in Volume IV of Ecology's SWMM for Western Washington and Chapter 8 of the 2019 SWMM for Eastern Washington: Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater. The Permittee must not allow this process wastewater to comeingle with stormwater or enter storm drains; and must collect in a tank for off-site disposal, or discharge it to a sanitary sewer, with written approval from the local sewage authority.
- The following text would be an acceptable way to address this permit condition and should be retained or modified, as appropriate.

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

During each monthly inspection, look for signs of illicit discharges, especially during dry weather when stormwater isn't discharging from the site. Each semi-annual site inspection will include:

- Observations made at stormwater observation locations (Outfall SW-N and Outfall SW-S) and areas where stormwater associated with industrial activity is discharged off-site; or discharged to waters of the state, or to a storm sewer system that drains to waters of the state.
- 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).
  - If an illicit discharge is discovered, the Permittee shall notify Ecology within seven days.
  - The Permittee shall eliminate the illicit discharge within 30 days.

### 3.2. Structural Source Control BMPs

**Instructions (see S9.B.4.ii. Structural Source Control pg. 19 of the NPDES Waste Discharge Permit No. WA0045217):**

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

The SWPPP must include the Structural Source Control BMPs listed as “applicable” in Ecology’s SWMMs, or other guidance documents or manuals approved in accordance with S9.A.3.c.

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

**Mandatory Structural Source Control BMPs Required by Condition S3. of the Industrial Stormwater General Permit:**

- Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas.
- Perform all cleaning operations indoors, under cover, or in bermed areas that prevent stormwater runoff and run-on and also that capture any overspray.
- Ensure that all washwater drains to a collection system that directs the washwater to further treatment or storage and not to the stormwater drainage system.

**Structural Source Control BMPs for Fueling At Dedicated Stations:**

- Design the fueling island to:
  - Minimize stormwater contamination,
  - Control spills (dead-end sump or spill control separator in compliance with the UFC or IFC), and
  - Collect stormwater and/or wastewater and direct it to an appropriate treatment system.
- Slope the concrete containment pad around the fueling island toward drains; either trench drains, catch basins and/or a dead-end sump. The slope of the drains shall not be < 1% (Section 7901.8 of the UFC or Section 5703.6.8 of the IFC).
- Drains to runoff treatment BMPs must have a normally closed shutoff valve, which must be closed in the event of a spill. The spill control sump must be sized in compliance with Section 7901.8 of the UFC or Section 5703.6.8 of the IFC.
- Design the fueling island as a spill containment pad with a sill or berm raised to a minimum of 4 inches (Section 7901.8 of the UFC or Section 5703.6.8 of the IFC) to prevent the runoff of spilled liquids and to

prevent run-on of stormwater from the surrounding area. Raised sills are not required at the open-grate trenches that connect to an approved drainage-control system.

- The fueling pad must be paved with Portland cement concrete, or equivalent. Ecology does not consider asphalt an equivalent material.
- The fueling island must have a roof or canopy to prevent the direct entry of precipitation onto the spill containment pad. The roof or canopy should, at a minimum, cover the spill containment pad (within the grade break or fuel dispensing area) and preferably extend 3 feet on each side for roofs and canopies  $\leq 10$  feet in height and 5 feet on each side for roofs and canopies  $> 10$  feet in height. Overhangs reduce the introduction of windblown rain. Measure the overhang relative to the berm or other hydraulic grade break for the spill containment pad.
- Convey all roof drains to storm drains outside the fueling containment area.
- Convey stormwater collected on the fuel island containment pad to a sanitary sewer system if approved by the sanitary authority, or to an approved runoff treatment BMP such as an oil and water separator and a basic treatment BMP.
- Discharges from runoff treatment BMPs to storm drains or surface water or to the ground must not display ongoing or recurring visible sheen and must not contain oil and grease (O&G).
- Alternatively, collect stormwater from the fuel island containment pad and hold for proper offsite disposal.
- Transfer the fuel from the delivery tank trucks to the fuel storage tank in impervious contained areas and ensure that appropriate overflow protection is used. Alternatively, cover nearby storm drains during the filling process and use drip pans under all hose connections.

Structural Source Control BMPs for Loading and Unloading Areas for Liquid or Solid Material:

All Loading/ Unloading Areas:

Storage of flammable, ignitable, and reactive chemicals and materials must comply with the stricter of the local zoning codes, the local fire codes, the Uniform Fire Code (UFC), the UFC standards, or the National Electric Code. Consistent with UFC requirements and to the extent practicable, conduct unloading or loading of solids and liquids in a manufacturing building or under a roof, lean-to, or other appropriate cover.

- Berm, dike, and/or slope the loading/unloading area to prevent run-on of stormwater and to prevent the runoff or loss of any spilled material from the area.
- Place curbs along the edge of the loading/unloading areas or slope the edge such that the stormwater can flow to an internal drainage system that leads to an approved runoff treatment BMP. Avoid draining directly to the surface water from loading/unloading areas.
- Pave and slope loading/unloading areas to prevent the pooling of water. Minimize the use of catch basins and drain lines within the interior of the paved area or place catch basins in designated "alleyways" that are not covered by material, containers, or equipment.

Retain on-site the necessary materials for rapid cleanup of spills.

Loading and Unloading Docks:

- Install/maintain overhangs or door skirts that enclose the trailer end to prevent contact with rainwater.
- Design the loading/unloading area with berms, sloping, etc., to prevent the run-on of stormwater.

Tanker Truck Transfer Areas to Above/Below-Ground Storage Tanks:

- Pave the area on which the transfer takes place. If any transferred liquid, such as gasoline, is reactive with asphalt pave the area with Portland cement concrete.
- Slope, berm, or dike the transfer area to a dead-end sump, spill containment sump, an oil/water separator, or other spill control device. The minimum spill retention time should be 15 minutes at the greater flow rate of the highest fuel dispenser nozzle through-put rate, or the peak flow rate of the 6-month, 24-hour storm event over the surface of the containment pad, whichever is greater. The capacity of the spill containment sump should be a minimum of 50 gallons with additional capacity provided for grit sedimentation.

Structural Source Control BMPs for Maintenance and Repair of Vehicles and Equipment:

- Conduct all maintenance and repair of vehicles and equipment in a building, or other covered impervious containment area that is sloped to prevent run-on of uncontaminated stormwater and runoff of contaminated stormwater.
- Park large mobile equipment in a designated contained area.
- The Structural Source Control BMPs for the following are also required: Fueling at Dedicated Stations; Loading and Unloading Areas for Liquid or Solid Material; Storage of Liquids in Permanent Above-Ground Tanks; Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products; Spills of Oil and Hazardous Substances.

Structural Source Control BMPs for Painting/Finishing/ Coating of Vehicles/Boats/ Buildings/ Equipment:

- Enclose and/or contain all work while using a spray gun or conducting sand blasting and in compliance with applicable air pollution control, Occupational Safety and Health Administration (OSHA), and Washington Industrial Safety and Health Act (WISHA) requirements.
- Do not conduct outside spraying, grit blasting, or sanding activities during windy conditions that render containment ineffective.

Structural Source Control BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers:

These BMPs are addressed in the Avista Hazardous Waste Management Plan.

- Keep containers with Dangerous Waste, food waste, or other potential pollutant liquids inside a building unless this is impracticable due to site constraints or Uniform Fire Code requirements.
- Store containers in a designated area, which is covered, bermed or diked, paved and impervious in order to contain leaks and spills. The secondary containment shall be sloped to drain into a dead-end sump for the collection of leaks and small spills.
- For liquid wastes, surround the containers with a dike. The dike must be of sufficient height to provide a volume of either 10 percent of the total enclosed container volume or 110 percent of the volume contained in the largest container, whichever is greater, or, if a single container, 110 percent of the volume of that container.

- Where material is temporarily stored in drums, a containment system can be used, in lieu of the above system.
- Place containers mounted for direct removal of a liquid chemical for use by employees inside a containment area as described above. Use a drip pan during liquid transfer.

Structural Source Control BMPs for Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products:

- Pave the area and install a drainage system. Place curbs or berms along the perimeter of the area to prevent the run-on of uncontaminated stormwater and to collect and convey runoff to treatment. Slope the paved area in a manner that minimizes the contact between stormwater (e.g., pooling) and leachable materials in compost, logs, bark, wood chips, etc.

For large uncovered stockpiles, implement containment practices at the perimeter of the site and at any catch basins as needed to prevent erosion and discharge of the stockpiled material off-site or to a storm drain. Ensure that no direct discharge of contaminated stormwater to catch basins exists without conveying runoff through an appropriate runoff treatment BMP.

Structural Source Control BMPs for Washing and Steam Cleaning Vehicles/ Equipment/ Building Structures:

Conduct vehicle/equipment washing in one of the following locations:

- At a commercial washing facility in which the washing occurs in an enclosure and drains to the sanitary sewer.
- In a building constructed specifically for washing of vehicles and equipment, which drains to a sanitary sewer.

Conduct outside washing operation in a designated wash area with the following features:

- In a paved area, construct a spill containment pad to prevent the run-on of stormwater from adjacent areas. Slope the spill containment area to collect washwater in a containment pad.
- drain system with perimeter drains, trench drains, or catchment drains. Size the containment pad to extend out a minimum of 4 feet on all sides of the washed vehicles and/or equipment.
- Convey the washwater to a sump (like a grit separator) and then to a sanitary sewer (if allowed by the local sewer authority), or other appropriate wastewater treatment or recycle system. The containment sump must have a positive control outlet valve for spill control with live containment volume and oil and water separation. Size the minimum live storage volume to contain the maximum expected daily washwater flow plus the sludge storage volume below the outlet pipe. Shut the outlet valve during the washing cycle to collect the washwater in the sump. The valve should remain shut for  $\geq 2$  hours following the washing operation to allow the oil and solids to separate before discharge to a sanitary sewer.
- Close the inlet valve in the discharge pipe when washing is not occurring, thereby preventing the entry of uncontaminated stormwater into the pretreatment/treatment system. The stormwater can then drain into the conveyance/discharge system outside of the wash pad (essentially bypassing the sanitary sewer or recycle system). Post signs to inform people of the operation and purpose of the valve. Clean the concrete pad thoroughly until there is no foam or visible sheen in the

washwater prior to closing the inlet valve and allowing uncontaminated stormwater to overflow and drain off the pad (see Figure 8.16: Uncovered Wash Area).

**Note:** The purpose of the valve is to convey only washwater and contaminated stormwater to a treatment system.

- Collect the washwater from building structures and convey it to appropriate treatment, such as a sanitary sewer system if it contains oils, soaps, or detergents. If the washwater does not contain oils, soaps, or detergents (in this case only a low-pressure, clean, cold water rinse is allowed) then it could drain to soils that have sufficient natural attenuation capacity for dust and sediment.
- Sweep surfaces prior to cleaning/washing to remove excess sediment and other pollutants.
- If roof equipment or hood vents are cleaned, ensure that no washwater or process water is discharged to the roof drains or drainage systems.
- Label all mobile cleaning equipment as follows: "Properly dispose of all wastewater. Do not discharge to an inlet/catch basin, ditch, stream, or on the ground."

### 3.3. Treatment BMPs

**Instructions:** The previously listed operational and structural source control BMPs are designed to prevent the contact of stormwater with pollutants. Contamination of stormwater can still occur in spite of source control BMPs. Develop a list of treatment BMPs to address this residual pollution, including the Mandatory BMPs in the Permit, and "Applicable BMPs" from the Stormwater Management Manuals. Include any existing stormwater controls at the site (e.g., oil/water separators, vaults, catch basins, swales, etc.) and discuss their effectiveness at reducing contamination of discharges.

Treatment BMPs include all BMPs that are intended to remove pollutants from stormwater. Some treatment BMPs only address certain pollutant types (e.g., sediment, petroleum hydrocarbons, metals, etc.); some address combinations of pollutant types. Examples of treatment BMPs include, but are not limited to:

- Detention or retention basins and vaults
- Oil/water separators
- Infiltration basins or trenches
- Bio-filtration (or Bio-infiltration) swales
- Media (e.g. compost, etc.) filters, including downspout media filters and catch basin media filters
- Sand Filters
- Advanced chemical treatment structures including chitosan enhanced sand filtration systems, and electro-coagulation systems (need prior approval by Ecology).

For each treatment BMP or structure at your facility, fill out a copy of the following table with the appropriate information (cut/paste additional tables, if necessary). Additional treatment BMPs added over time (e.g., Level 3 corrective actions) need to be included in this section.

Structure: Oil Separator #1

Date of Implementation: 1983

Discharge Point: SW-North

Area(s) Treated: North half of facility

Pollutants Removed: Oil

Maintenance Requirement(s): Cleanout of structure and waste oil tank

Frequency: Annually

Structure: Oil Separator #2

Date of Implementation: 1983

Discharge Point: SW-South

Area(s) Treated: South half of facility

Pollutants Removed: Oil

Maintenance Requirement(s): Cleanout of structure and waste oil tank

Frequency: Annually

**Mandatory Treatment BMPs Required by Condition S9. of the NPDES Waste Discharge Permit No. WA0045217 (See Condition S9.B.4.b.iii of the permit (Page 29-30) for more information):**

- Use Treatment BMPs consistent with the applicable documents referenced in Permit Condition S9.A.3.
- Employ oil/water separators, booms, skimmers or other methods to eliminate or minimize oil and grease contamination of stormwater discharges.
  - Many “off the shelf” oil removal BMPs are available (Absorptive booms, skimmers, pads, etc.)
  - If an oil/water separator needs to be designed and installed, refer to:
    - 2019 Stormwater Management Manual for Eastern WA (Chapter 5.10)  
<http://www.ecy.wa.gov/pubs/0410076.pdf>
- Obtain Ecology approval before beginning construction/installation of all treatment BMPs that include the addition of chemicals to provide treatment (e.g., polymer enhanced sand-filter systems, electro-coagulation systems, etc.)

**Applicable Treatment BMPs from Ecology's 2019 Stormwater Management Manual for Eastern Washington**

**Treatment BMPs for Maintenance and Repair of Vehicles and Equipment:**

Convey contaminated stormwater runoff from vehicle staging and maintenance areas to a sanitary sewer, if allowed by the local sewer authority, or to an American Petroleum Institute or coalescing plate oil and water separator followed by a basic treatment BMP, applicable filter, or other equivalent oil treatment system.

**Treatment BMPs for Storage of Vehicles and Equipment:**

- The KFGS facility is not a high use site. Oil control BMPs are in use at the facility.

**Treatment BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers:**

- For contaminated stormwater in the containment area, connect the sump outlet to a sanitary sewer, if approved by the local sewer authority, or to appropriate treatment, such as an American Petroleum Institute or coalescing plate oil and water separator or other appropriate system (see Chapter 5 - Runoff Treatment BMP Design). Equip the sump outlet with a normally closed valve to prevent the release of spilled or leaked liquids, especially flammables (compliance with fire codes), and dangerous liquids. Open this valve only for the conveyance of contaminated stormwater to treatment.
- Another option for discharge of contaminated stormwater is to pump it from a dead-end sump or catchment to a tank truck or other appropriate vehicle for off-site treatment and/or disposal.

**Treatment BMPs for Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products**

Convey contaminated stormwater from the stockpile area to the following:

- Settling basin
- Other appropriate runoff treatment BMP depending on the contamination

### **3.4. Stormwater Peak Runoff Rate and Volume Control BMPs**

Refer to Permit Condition (see S9.B.4.b.iv. pg. 320 of the NPDES Waste Discharge Permit No. WA0045217):

Facilities with new development or redevelopment must evaluate whether flow control BMPs are necessary to satisfy the state's AKART requirements, and prevent violations of water quality standards.

If flow control BMPs are required, they must be selected according to Permit Condition S9.A.3. ***Proper Selection and Use of Stormwater Management Manuals (SWMM)***.

Refer to Permit Condition (see S9.B.4.b.vv. pg. 30 of the NPDES Waste Discharge Permit No. WA0045217):

- 1) The SWPPP must describe the erosion and sediment control BMPs necessary to prevent the erosion of soils and other earthen materials (crushed rock/gravel, etc.) and prevent off-site sedimentation and violations of water quality standards. The Permittee must implement and maintain: Sediment control BMPs such as detention or retention ponds or traps, vegetated filter strips, bioswales, or other permanent sediment control BMPs (vegetated ditches) to minimize sediment loads in stormwater discharges.
- 2) Filtration BMPs to remove solids from catch basins, sumps or other stormwater collection and conveyance system components (filter socks, modular canisters, sand filtration, centrifugal separators, etc.).

Definition: Erosion and Sediment Control BMPs means BMPs that are intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, and sediment traps and ponds.

Instructions: Develop a list of BMPs used to prevent the erosion of earthen materials (soil, sand, gravel, etc.) that can cause off-site sedimentation and turbidity. Include any existing BMPs at the site and discuss their effectiveness at reducing contamination erosion and sediment. Typical practices include:

- Areas that are not paved are covered with landscaping or well maintained vegetation that prevents soil erosion.
- Runoff is routed to a detention or retention basin
- Catch basin inserts (filter socks) are installed in catch basin
- Impervious areas are not curbed to promote sheet flow onto vegetated areas
- A bioswale, sandfilter or other treatment structures is used to treat runoff.

For each treatment BMP or structure at your facility, fill out a copy of the following table with the appropriate information (cut/paste additional tables, if necessary).

#### Erosion and Sediment Control BMPs

- 1) Unpaved slopes are vegetated and maintained to prevent erosion
- 2) Paved areas are not curbed to allow sheet flow to vegetated areas
- 3) Paved and unpaved areas are surrounded by unlined ditches with high infiltration soils that slow flow and help control sediment migration
- 4) All of the above BMPs are maintained on an as-needed basis (determined by periodic inspection) and at least annually in early fall.

## Section 4. Stormwater Observation Plan

- 1) **Discharge Location(s).** Identify all points of *discharge* to surface water, *storm sewers*, or discrete *ground water* infiltration locations, such as dry wells or *detention* ponds. Or use Table below.

Discharge ID	Common description	Latitude (optional)	Longitude (optional)	Discharge Type	Comments
SW-N (North)	Outfall at northwest corner of Switchyard (outside edge of access road).			Overland (surface water)	
SW-S (South)	Outfall north of oil/water separator west of retention basin.			Overland (surface water)	

- 2) Identify each sampling location by its unique identifying number such as A1, A2, etc. Include these sampling locations on site map. or use Table Below

**Note:** When identifying sampling locations, follow these permit conditions:

- The Permittee shall designate sampling location(s) at the point(s) where it discharges *stormwater* associated with *industrial activity* off-site.
- The Permittee is not required to sample on-site discharges to ground (e.g., infiltration, etc.) or *sanitary sewer* discharges, unless specifically required by *Ecology* (Condition G12).

Discharge ID	Common description	Latitude (optional)	Longitude (optional)	Discharge Type	Comments
SW-N (North)	Outfall at northwest corner of Switchyard (outside edge of access road).			Overland (surface water)	Discharge from Oil Separator 1
SW-S (South)	Outfall north of oil/water separator west of retention basin.			Overland (surface water)	Discharge from Oil Separator 2

- 3) **Substantially identical outfall exception** (if applicable)

NOT APPLICABLE

- 4) **Staff Responsible for Stormwater Observations.** Identify the staff responsible for conducting *stormwater* observations.

The facility Environmental Scientist is responsible for conducting stormwater observations.

5) **Stormwater Observations.** Specify the procedures for stormwater observations.

Monthly observations of stormwater discharge from SW-N and SW-S will be observed from the respective outfalls as they discharge. Observations will be made for the presence of floating materials, visible oil sheen, discoloration, **turbidity**, odor, etc. in the **stormwater** discharge(s).


When observing the stormwater for evidence of oil sheen the point of observation should be prior to entering the discharge culvert. Due to pipe configuration this is not possible at KFGS and so all visual observations will be at discharge from culvert.

6) **Submitting Observations Results to Ecology.**

- The observation data obtained during each reporting period will be kept on file at the facility and at Avista's corporate headquarters. Copies of sampling data results will be submitted to *Ecology* upon request. Sampling data obtained during previous sampling events will be kept for a minimum of 3 years.
- Observation results will be submitted by mail to the following address upon request:  

Mr. Pat Hallinan  
Water Quality Program  
Department of Ecology  
Eastern Regional Office  
4601 North Monroe Street  
Spokane, Washington 99205-1295
- If discharge(s) occurred during normal working hours, and during safe conditions; but no observation was made during the entire monthly period, the SWPPP inspection form will indicate "no observations made" and will be kept on file. If no discharge(s) occurred during the entire monthly period or the discharges during the monthly period occurred outside normal working hours or during unsafe conditions, an observationform indicating "no discharge" will be completed and kept on file.

## Section 5. SWPPP Certification

**Instructions:**

- A SWPPP certification form needs to be completed and attached to all SWPPPs.
- Sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S9 and S10 of the NPDES Permit.
- The Permittee must sign and certify all SWPPPs in accordance with General Condition G1, each time it revises or modifies a SWPPP to comply with Condition S9.A.4 (Update of the SWPPP).

See Appendix D.

## SWPPP Appendices

Attach the following documentation to the SWPPP:

**Appendix A** – General Location Map

**Appendix B** – Site Map

**Appendix C** – Worksheets for Development of the SWPPP

**Appendix D** – SWPPP Certification or Recertification Form (for Level 1, 2, or 3 Corrective Action(s))

**Appendix E** – BMPs Applicable to the Kettle Falls Generating Station

**Appendix F** – Stormwater Monthly Inspection Report

## Appendix A – General Location Map

G:\Projects\236\058\090\F01\GeneralLocationMap.mxd 12/13/2021 NAD 1983 StatePlane Washington North FIPS 4601 Feet



Data Source: Esri 2012

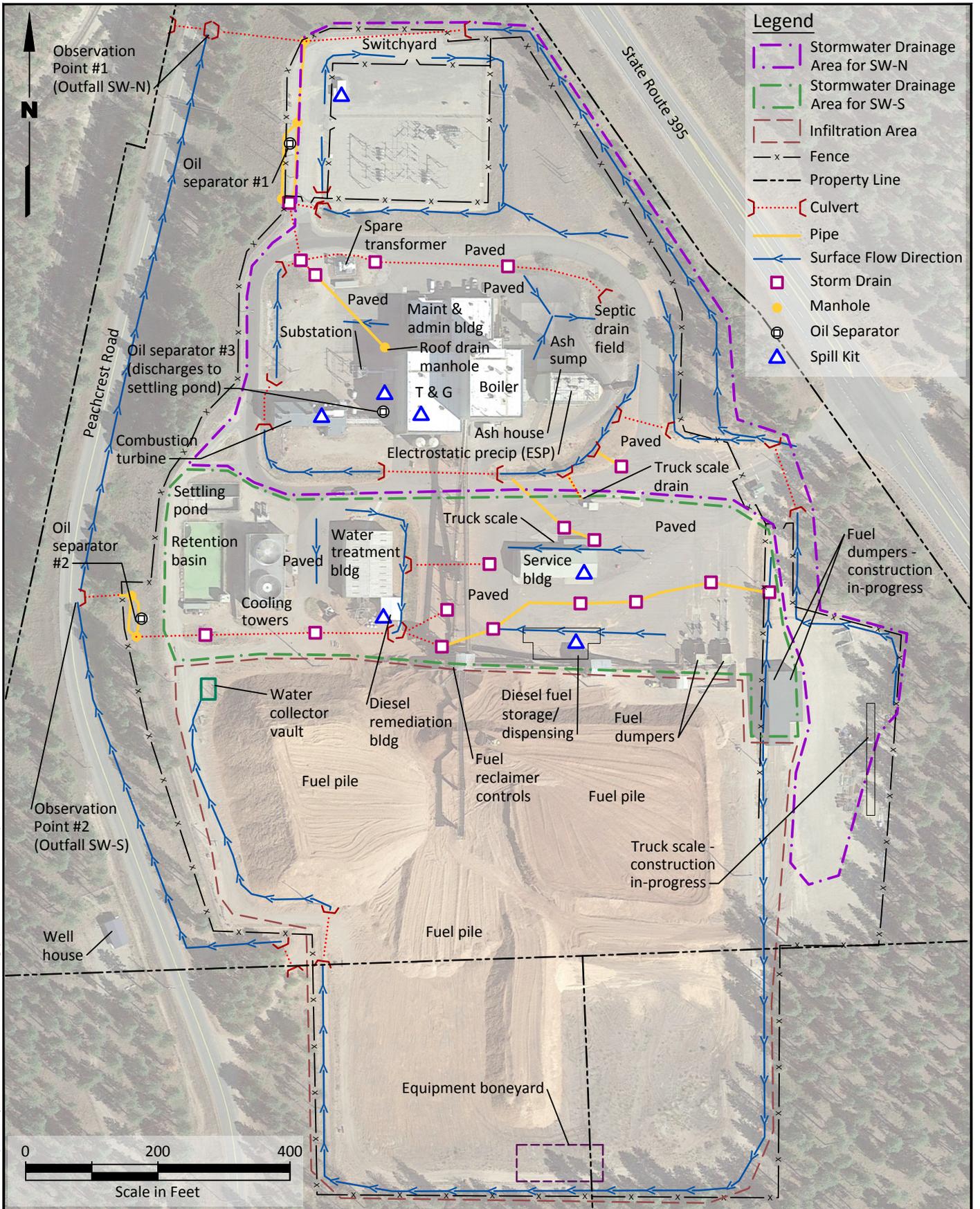


Kettle Falls  
 Generating Station  
 Avista Utilities  
 Kettle Falls, Washington

### General Location Map

Figure  
**1**

## Appendix B – Site Map



Landau Associates | G:\Projects\236\058\090\SWPPP.dwg | 10/26/2021 7:09 PM | ezick

Source: Hydrometrics, Inc. 2014. © Google Earth Pro

Map Date: 10/26/2021



Kettle Falls  
Generating Station  
Avista Utilities  
Kettle Falls, Washington

**SWPPP Map**

Figure  
**1**

## Appendix C. Blank Worksheets for Development of the SWPPP

Note: Use these forms or create your own.

Pollution Prevention Team	Worksheet #1 Completed by: <u>Josh LaPorte</u> Title: <u>Environmental Scientist</u> Date: <u>November 2021</u>
<p>Responsible Official: <u>Greg Wiggins</u> Title: <u>Plant Manager</u></p> <p>Team Leader: <u>Josh LaPorte</u> Office Phone: <u>(509) 738-1510</u></p> <p>Responsibilities: <u>Inspections, sampling, reporting, and training</u> _____ _____ _____ _____</p>	
<p>(1) <u>Patrick Lutskas</u> Title: <u>Assistant Plant Manager</u></p> <p>Office phone <u>(509) 738-1523</u> Cell phone <u>(509) 595-0392</u> Office Phone: _____</p> <p>Responsibilities: <u>Planner for Electrical and Mechanical Maintenance at Kettle Falls Generating Station.</u> _____ _____ _____ _____</p>	

(2) LaDonna Jensen Title: Plant Materials Person

Office phone (509) 738-4431 Cell phone \_\_\_\_\_  
Office Phone:

Responsibilities:

.Procurement of materials and supplies to support BMP installation and maintenance.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_









List of Significant Spills and Leaks	Worksheet #4 _____ Completed by: <u>Antonio Chavez</u> Title: <u>Consultant, (Hydrometrics, Inc.)</u> Date: <u>July 2014</u>
--------------------------------------	---

List all spills and leaks (as indicated on Worksheet #2) of toxic or hazardous pollutants that were significant. Significant spills and leaks include but are not limited to, release of oil or hazardous substances in excess of reportable quantities (see chapter 2 of text). Although not required, we suggest you list spills and leaks of non-hazardous materials.

Date (month/day/year)	Location (as indicated on site map)	Description				Response Procedure		Preventive Measure Taken
		Type of Material	Quantity	Source, If Known	Reason for Spill/Leak	Amount of Material Recovered	Material No longer exposed to Storm-water (Yes/No)	
12/24/2013	Reclaimer	Diesel	10K gallons	Fuel line	Corrosion	In progress	None	Removed fueling station

	Worksheet #4A _____
--	---------------------





BMP Identification	Worksheet #8 _____ Completed by: <u>Antonio Chavez</u> Title: <u>Consultant (Hydrometrics, Inc.)</u> Date: <u>July 2014</u>
--------------------	--

Describe the BMPs that are needed for the facility to address existing and potential pollutant sources identified in Worksheets #3, 4, and 5.

BMPs	Brief Description of Activities or Improvements
Good Housekeeping	See Section 3
Preventive Maintenance	See Section 3
Spill Prevention and Emergency Cleanup	See Section 3

BMPs	Brief Description of Activities or Improvements
Inspections	See Section 3
Source / Operational Control BMPs	See Section 3
Erosion and Sediment Control BMPs	See Section 3

<b>Additional BMP Identification</b>	Worksheet #8A _____ Completed by: _____ Title: _____ Date: _____
--------------------------------------	---

Describe any treatment and innovative BMPs that are required to address existing and potential pollutant sources identified in Worksheet 3, 4, and 5. These are BMPs needed to prevent the discharge of significant amounts of pollutants despite implementation of operational and source control BMPs.

BMPs	Brief Description of Activities or Improvements
Treatment BMPs	See Section 3
Emerging technologies	None
Flow Control BMPs	

BMP Implementation	Worksheet #9 _____ Completed by: <u>Antonio Chavez</u> Title: <u>Consultant (Hydrometrics, Inc.)</u> Date: <u>July 2014</u>
--------------------	--

Develop a plan for implementing each BMP. Describe the steps necessary to implement the BMP (i.e., any construction or design), the schedule for completing those steps (list dates) and the person(s) responsible for implementation.

BMPs	Description of Action(s) Required for Implementation	Schedule Milestone and Completion Date(s)	Person Responsible for Action
Good Housekeeping	1. Review BMPs with affected department heads		
	2. Schedule implementation if not already practiced		
Preventive Maintenance	1. See Actions under Good Housekeeping		
	2.		
	3.		
	4.		
Spill Prevention and Emergency Cleanup	1. See Actions under Good Housekeeping		
	2.		
	3.		
Inspections	1. See Actions under Good Housekeeping		
	2.		
	3.		

BMPs	Description of Action(s) Required for Implementation	Schedule Milestone and Completion Date(s)	Person Responsible for Action
Source Control BMPs	1. See Actions under Good Housekeeping		
	2.		
	3.		
Operational Control BMPs	4.		
	5.		
	6.		
	7.		
	8.		
Erosion and Sediment Control	1. See Actions under Good Housekeeping		
	2.		
	3.		
	4.		
Treatment BMPs	1. See Actions under Good Housekeeping		
	2.		
	3.		
	4.		

## Appendix D. SWPPP Certification Form

## Appendix D. 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 S9 and S10 of the NPDES Permit.

- The Permittee must sign and certify all SWPPPs in accordance with General Condition G1, each time it revises or modifies a SWPPP to comply with Condition S9.A.4 (Update of the SWPPP).

"I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

\_\_\_\_\_  
Operator's Printed Name \* Title \_\_\_\_\_

\_\_\_\_\_  
Operator's Signature \* Date \_\_\_\_\_

\* Federal regulations require this document to be signed as follows:

For a corporation, by a principal executive officer of at least the level of vice president;

For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

This document shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

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

## **Appendix E. List of Applicable Industry-Specific Source Control BMPs**

**2019 Stormwater Management Manual for Eastern Washington (Chapter 8)  
Best Management Practices (BMPs) for Industrial Activities in Washington State and  
Applicability to Avista Corporation, Kettle Falls Generating Station  
Kettle Falls, Washington**

Best Management Practices (BMPs) by Industrial Activity	Applicability to this Facility	Comments
BMPs for the Building, Repair, and Maintenance of Boats and Ships	Does not apply	Kettle Falls Generating Station (KFGS) does not build, repair, or maintain boats and/or ships.
BMPs for Commercial Animal Handling Areas	Does not apply	KFGS does not handle animals.
BMPs for Commercial Composting	Does not apply	KFGS is not a composting facility.
BMPs for Commercial Printing Operations	Does not apply	KFGS is not a commercial printing facility.
BMPs for Deicing and Anti-Icing Operations for Airports	Does not apply	KFGS is not an airport.
BMPs for Deicing and Anti-Icing Operations for Streets and Highways	Does not apply	KFGS does not apply deicing materials to streets or highways.
BMPs for Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots	Applies to this Facility	The Facility is partly paved. There are unpaved roadways and land areas at the Facility.
BMPs for Dust Control at Manufacturing Areas	Does not apply	No manufacturing processes that generate dust are currently ongoing at the Facility.
BMPs for Fueling at Dedicated Stations	Applies to this Facility	KFGS conducts fueling in a newly constructed fueling shed from a temporary diesel fuel tank trailer.
BMPs for Illicit Connections to Storm Drains	Applies to this Facility	KFGS has no known illicit connections to storm drains.
BMPs for Landscaping and Lawn/Vegetation Management	Applies to this Facility	KFGS maintains minimal landscaping or lawn/vegetation.
BMPs for Loading and Unloading Areas for Liquid or Solid Material	Applies to this Facility	KFGS is an active industrial facility and therefore loading and unloading operations take place at the Facility
BMPs for Log Sorting and Handling	Does not apply	KFGS does not maintain a log yard.
BMPs for Maintenance and Repair of Vehicles and Equipment	Applies to this Facility	KFGS performs maintenance of bulldozers and other equipment at the Facility.
BMPs for Maintenance of Public and Private Utility Corridors and Facilities	Applies to this Facility	KFGS maintains utility corridors at the Facility.
BMPs for Maintenance of Roadside Ditches	Applies to this Facility	The Facility maintains roadside ditches.

**2019 Stormwater Management Manual for Eastern Washington (Chapter 8)  
Best Management Practices (BMPs) for Industrial Activities in Washington State and  
Applicability to Avista Corporation, Kettle Falls Generating Station  
Kettle Falls, Washington**

Best Management Practices (BMPs) by Industrial Activity	Applicability to this Facility	Comments
BMPs for Maintenance of Drainage Systems and Runoff Treatment BMPs	Applies to this Facility	The Facility maintains two independent stormwater drainage and treatment systems (SW-North and SW-South) and collects runoff from the fuel pile and applies this water back onto the fuel storage pile.
BMPs for Manufacturing Activities – Outside	Does not apply	KFGS does not conduct any manufacturing or processing activities outside.
BMPs for Mobile Fueling of Vehicles and Heavy Equipment	Does not apply	KFGS does not conduct mobile fueling at the site.
BMPs for Painting/Finishing/Coating of Vehicles/Boats/Buildings/Equipment	Applies to this Facility	KFGS performs minimal painting, finishing or coating of vehicles, buildings or equipment at the Facility.
BMPs for Parking and Storage of Vehicles and Equipment	Applies to this Facility	KFGS maintains vehicle and equipment parking areas.
BMPs for Railroad Yards	Does not apply	KFGS does not perform maintenance of railcars.
BMPs for Recyclers and Scrap Yards	Does not apply	KFGS is not a recycling or scrap yard Facility.
BMPs for Roof/Building Drains at Manufacturing and Commercial Buildings	Does not apply	The Facility does not have manufacturing or commercial buildings.
BMPs for Soil Erosion and Sediment Control at Industrial Sites	Applies to this Facility	The Facility is an industrial site.
BMPs for Spills of Oil and Hazardous Substances	Applies to this Facility	KFGS has a diesel fuel tank trailer and stores water treatment chemicals. BMPs are met by implementation of the SPCC Plan.
BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers	Applies to this Facility	BMPs are addressed in the Avista Hazardous Waste Management Plan.
BMPs for Storage of Liquids in Permanent Aboveground Tanks	Does not apply	KFGS does not currently store liquids in permanent aboveground tanks outdoors.
BMPs for Storage or Transfer (Outside) of Solid Raw Materials, By-products, or Finished Products	Applies to this Facility	KFGS accepts wood waste as fuel delivered by truck and stored at the facility wood waste fuel pile.
BMPs for Urban Streets	Does not apply	Urban streets are outside of the KFGS property.
BMPs for Washing and Steam Cleaning Vehicles/Equipment/Building Structures	Applies to this Facility	KFGS occasionally performs washing of vehicles and equipment outside the Maintenance Shop.

**2019 Stormwater Management Manual for Eastern Washington (Chapter 8)  
Best Management Practices (BMPs) for Industrial Activities in Washington State and  
Applicability to Avista Corporation, Kettle Falls Generating Station  
Kettle Falls, Washington**

Best Management Practices (BMPs) by Industrial Activity	Applicability to this Facility	Comments
BMPs for Wood Treatment Areas	Does not apply	KFGS does not perform wood treatment.
BMPs for Pools, Spas, Hot Tubs, and Fountains	Does not apply	KFGS does not operate any of these features at the Facility.
BMPs for Dock Washing	Does not apply	KFGS does not conduct dock washing.
BMPs for Pesticides and an Integrated Pest Management Program	Applies to this Facility	KFGS contracts pest control services to a licensed pest control contractor.
BMPs for Color Events	Does not apply	KFGS does not conduct color events.
BMPs for Construction Demolition	Does not apply	KFGS does not conduct construction demolition activities at the Facility.
BMPs for In-Water and Over-Water Fueling	Does not apply	KFGS does not conduct in-water or over-water fueling.
BMPs for Pet Waste	Does not apply	KFGS does not have outdoor pet areas.
BMPs for Potable Water Line Flushing, Water Tank Maintenance, and Hydrant Testing	Some BMPs apply	KFGS occasionally conducts hydrant testing.
BMPs for Labeling Storm Drain Inlets	Applies to this Facility	KFGS maintains several storm drain inlets.
BMPs for Fertilizer Application	Does not apply	KFGS does not apply fertilizer to the site.
BMPs for the Storage of Dry Pesticides and Fertilizers	Does not apply	KFGS does not store dry pesticides or fertilizers.
BMPs for Temporary Fruit Storage	Does not apply	KFGS does not temporarily store fruit.
BMPs for Well, Utility, Directional, and Geotechnical Drilling	Does not apply	KFGS does not conduct well, utility, directional or geotechnical drilling.
BMPs for Roof Vents	Does not apply	No roof vents are used at the Facility (See Section 2.1.1)
BMPs for Nurseries and Greenhouses	Does not apply	KFGS is not a commercial container plant, greenhouse grown, or cut foliage production facility.

**2019 Stormwater Management Manual for Eastern Washington (Chapter 8)  
Best Management Practices (BMPs) for Industrial Activities in Washington State and  
Applicability to Avista Corporation, Kettle Falls Generating Station  
Kettle Falls, Washington**

Best Management Practices (BMPs) by Industrial Activity	Applicability to this Facility	Comments
BMPs for Irrigation	Does not apply	KFGS does not irrigate the site.
BMPs for Building, Repair, Remodeling, Painting and Construction	Does not apply	KFGS does not construct new buildings, remodel existing buildings, or conduct general exterior building repair work.
BMPs for Goose Waste	Does not apply	The Facility does not attract geese.

## **Appendix F. Industrial Stormwater Monthly Inspection Report**

## Stormwater Monthly Inspection Report

Inspections must be conducted by a person with the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and evaluate the effectiveness of best management practices required by this permit. Retain a copy of the completed and signed form in accordance with Permit Condition S10.C.

<b>FACILITY NAME:</b>	<b>INSPECTION TIME:</b>	<b>DATE:</b>		
<b>WEATHER INFORMATION:</b> <ul style="list-style-type: none"> <li>• Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.): _____</li> <li>• Was stormwater (e.g., runoff from rain or snowmelt) flowing at outfalls and/or discharge areas shown on the Site Map during the inspection: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Comments: _____</li> </ul>				
<b>I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION</b>				
<b>SWPPP and Site Map</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Findings and Remedial Action Documentation</b>
Is the Site Map current and accurate?				
Is the SWPPP inventory of activities, materials and products current?				
Are the descriptions of potential pollutant sources required under this Permit accurate?				
<b>Vehicle/Equipment Areas</b>				
<i>Equipment fueling: Check N/A if not performed on-site. Skip section.</i>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Findings and Remedial Action Documentation</b>
Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills?				
Are storm drains that receive runoff from areas where fueling, during fueling blocked, plugged or covered?				
Are drip pans or equivalent containment measures used during all petroleum transfer operations?				

<i>Equipment Maintenance</i>	Yes	No	N/A	Findings and Remedial Action Documentation
Are maintenance tools, equipment, and materials properly stored?				
Are all drums and containers of fluids stored with proper cover and containment?				
Are any vehicles and/or equipment leaking fluids such as oil, antifreeze, etc.? Identify leaking equipment. If so, take leaking equipment out of service or prevent leaks from spilling on the ground until repaired.				
Is there evidence of leaks or spills since last inspection? Identify and clean up spills and leaks (e.g., using absorbents, vacuuming, etc.) to prevent discharge of pollutants.				
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)?				
Add any additional site-specific BMPs: _____ _____ _____ _____				

**I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION**

<b>Good Housekeeping BMPs</b>	Yes	No	N/A	Findings and Remedial Action Documentation
<b>1.</b> Are paved surfaces free of accumulated dust/sediment and debris?				
Has the site been vacuumed/swept this quarter?				
<b>2.</b> Are there areas of erosion or sediment/dust sources that discharge to storm drains? Are all waste receptacles located outdoors free of leaks and in good condition?				
<b>3.</b> Are the following areas free of accumulated dust/sediment, debris, contaminants, and/or spills/leaks of fluids?	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Findings and Remedial Action Documentation</b>
Pallet, bin, and drum storage areas				
Equipment staging areas (loaders, tractors, trailers, forklifts, etc.)				
Around ash house				
Around air pollution control equipment				
Around bone yards				
Other areas of industrial activity: _____ _____ _____ _____				

<b>Spill Response and Equipment</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Findings and Remedial Action Documentation</b>
<i>Are spill kits available, at:</i>				
Fueling stations				
Vehicle and equipment maintenance areas				
Are all chemicals and petroleum products stored properly in containment?				
Are structures in place to prevent precipitation from accumulating in containment areas?				
<i>Do the spill kits contain all the permit required items?</i>				
Oil absorbents capable of absorbing 15 gallons of fuel or potential fuel spills.				
A storm drain plug or cover kit.				
A non-water containment boom.				
Spill cleanup containers with minimum ten gallons capacity.				
Are contaminated absorbent materials properly disposed of?				
<b>I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION</b>				
<b>General Material Storage Areas</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Findings and Remedial Action Documentation</b>
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 dumpsters covered?				
<b>Stormwater BMPs and Treatment Structures</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Findings and Remedial Action Documentation</b>
Are BMPs and treatment structures in good repair and operational?				
Are BMPs and treatment structures free from debris buildup that may impair function?				
Are the depth of catch basins less than 6 in. below the outlet pipe or is the depth of debris in the catch basins greater than 60% of the sump depth?				
Are berms, curbing and swales in good condition?				



### III. 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 NPDES 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."*

--	--	--	--

<b>Inspector's Name – Printed</b>	<b>Inspector's Signature</b>	<b>Inspector's Title</b>	<b>Date</b>
-----------------------------------	------------------------------	--------------------------	-------------

**Permittee – Certification**

- The facility is in compliance with the terms and conditions of the SWPPP and the NPDES 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."*

--	--	--

<b>PRINTED NAME</b> of person with <b>Signature Authority</b> (permit condition G2.A) or a <b>Duly Authorized Representative</b> <sup>1</sup>	<b>SIGNATURE</b> of person with <b>Signature Authority</b> (permit condition G2.A) or a <b>Duly Authorized Representative</b> <sup>1</sup>	<b>DATE</b>
---	--	-------------

<sup>1</sup>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.