



# STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Effective February 16, 2010

for the  
City of SeaTac Maintenance Facility  
located at  
2000 South 136th Street  
SeaTac, WA 98188

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## 1. INTRODUCTION

The City of SeaTac has developed this stormwater pollution prevention plan for its Maintenance Facility located at 2000 South 136<sup>th</sup> Street in compliance with the Western Washington (NPDES) Phase II Municipal Stormwater Permit. This plan shall be used as a guidance document and tool to reduce and/or prevent water quality impacts to stormwater from the day to day operation of this facility. This document will be updated annually to ensure its accuracy and effectiveness.

## 2. OBJECTIVES

The following outlines the objectives of this Stormwater Pollution Prevention Plan (SWPPP):

- To implement and comply with the requirements of the Western Washington (NPDES) Phase II Municipal Stormwater Permit
- To implement and maintain Best management Practices (BMPs) in order to identify, reduce, eliminate, and/or prevent the discharge of stormwater pollutants;
- To prevent violations of surface water quality, ground water quality, or sediment management standards;
- To prevent impacts to receiving waters by controlling peak rates and volumes of stormwater runoff; and,

## 3. POLLUTION PREVENTION TEAM

A Pollution Prevention Team has been established for the SeaTac Maintenance Facility SWPPP. Each team members' responsibilities are outlined for the development, implementation, periodic review, and maintenance of the SWPPP. In addition to the duties listed below, any team member may be called on to conduct training of new staff on the BMPs listed in this document.

<b>Team Position</b>	<b>Title</b>	<b>Contact Information</b>
Sean Clark (Lead)	Maintenance Supervisor	Off: 206.973.4771 Cell: 206.786.4815
Duties: Implement the SWPPP and conduct necessary inspections. Annually update materials storage lists and track spills and leaks.		
Greg Brower	Maintenance Worker II	Cell: 206.786.4809
Duties: Assist in the implementation of the SWPPP and conduct necessary inspections.		
Don Robinett	Stormwater Compliance Manager	Off: 206.973.4422 Cell: 206.659.2019
Duties: Develop and annually update the SWPPP.		
Adam McFayden	Water Quality Technician	Off: 206.973.4753 Cell: 206.786.4792
Duties: Assist in the implementation and update of the SWPPP.		

#### 4. SITE DESCRIPTION

a) The site is located along the western boundary of the Green/Duwamish Watershed in the Gilliam Creek sub-basin. Site maps of the Maintenance Facility **on the following page** indicate the location of the structures, heavy equipment storage areas, material storage areas, and the fueling area. Stormwater runoff at the facility is conveyed by the stormwater infrastructure indicated on the map. The stormwater from the material and heavy equipment storage areas is ultimately conveyed to the bio-infiltration/detention facility (pond) located on the southern end of the property.

The Maintenance Facility is a city complex utilized by the Public Works, Facilities and Parks Departments. The Maintenance Facility complex consists of the following:


- Four buildings;
- A fueling station;
- Outside material storage areas;
- Outside vehicle parking; and
- Stormwater treatment and detention facilities.












b) The following surfaces have the potential of generating pollutants that could impact stormwater runoff:

- All asphalt paving and concrete surfaces (impervious)
- Material storage areas (impervious)
- Grass (pervious)
- Landscaped areas (pervious)

The primary potential pollutant generating surfaces on the site are the outside material storage area located in the northwest corner of the site, the fueling area, and all asphalt and concrete surfaces. [**Note:** All heavy equipment is stored in covered parking areas located in Buildings 2 & 3. Building 4 – the covered car wash bays drain to an oil water separator and which is tied directly to the sanitary sewer system.]

# SeaTac Maintenance Facility Site Map

CITY OF SEATAC 

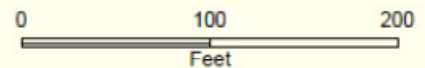
-  CB Type 1
-  CB Type 2
-  MH
-  Yard Drain
-  Flow Splitter Control Structure
-  Pond Outlet Control Structure
-  Storm Main
-  Bioswale
-  10ft Index Contours
-  2ft Contours
-  2ft Depression Contours

## MAP NOTES

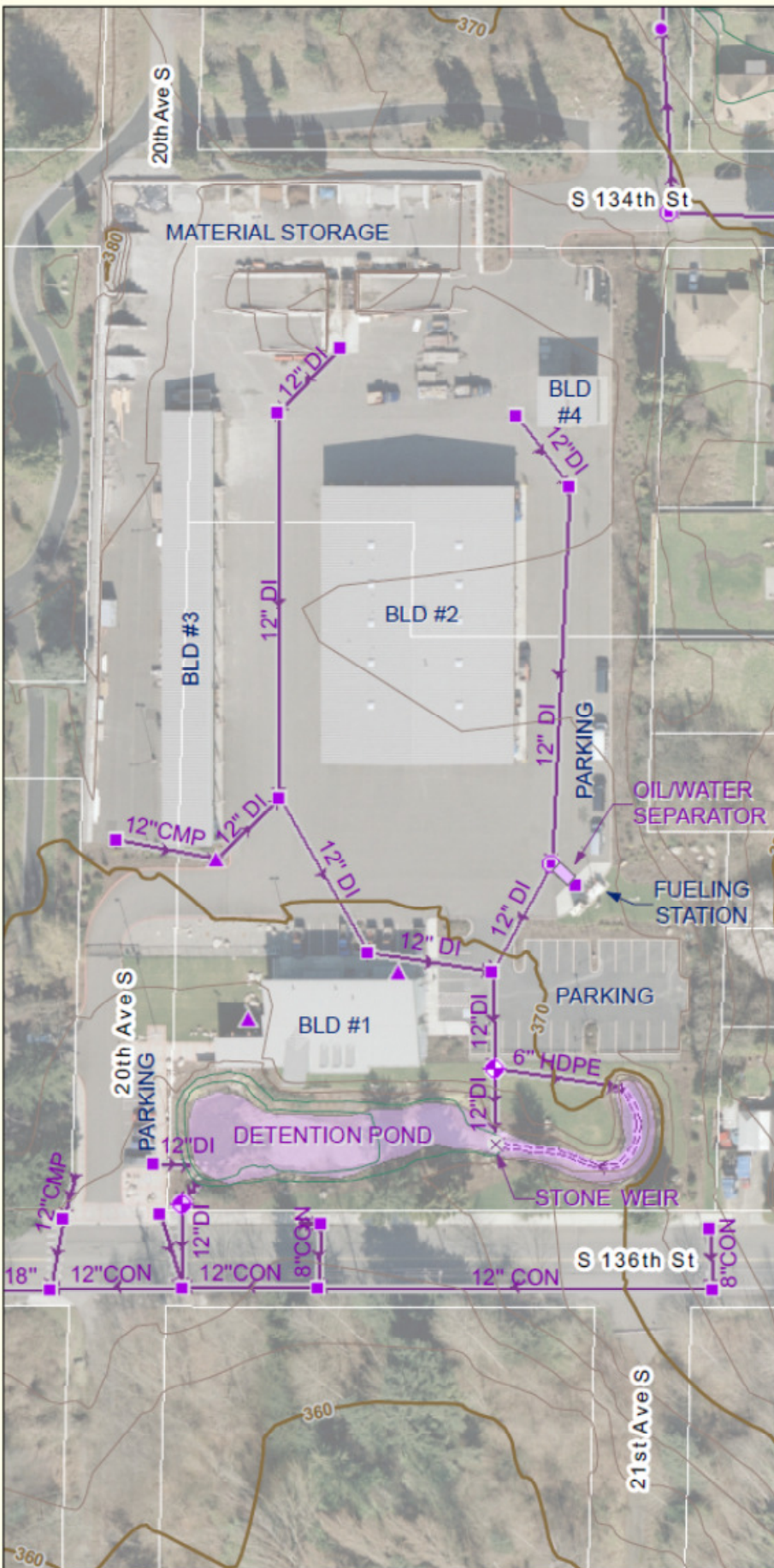
- BLD #1 Office
- BLD #2 Equipment Maint.,  
Material Storage  
& Heavy Equipment
- BLD #3 Heavy Equipment,  
Material Storage
- BLD #4 Vehicle Wash Bays



1 inch = 100 feet



Date Prepared: Dec 23, 2009



## 5. MATERIAL INVENTORY

A comprehensive Material Inventory (located in Appendix A) has been prepared for all significant materials handled, treated, stored, or disposed of that may be exposed to stormwater or snowmelt. Significant materials include but are not limited to: raw materials, fuels, solvents, detergents, finished materials, fertilizers, pesticides, waste products, or hazardous substances.

The Material Inventory (Outdoor) – **Worksheet #1** identifies only significant amounts of material that are handled, stored, disposed of, or treated that can be exposed to stormwater and result in pollution. For the purposes of this document significant amount means - those levels of pollutants that have the potential to cause or contribute to a violation of surface water quality or sediment management standards. The information provided on the list includes: material description; purpose; location; quantities; and method of storage, handling, treatment or disposal.

The Material Inventory (Indoor) – **Worksheet #2** lists all materials handled indoors or undercover that could be tracked outdoors by equipment, people or employees that have the potential to cause or contribute to a violation of surface water quality or sediment management standards.

## 6. LISTS OF SPILLS AND LEAKS

**Worksheet # 3** (located in Appendix A) will list all known spills and leaks of toxic or hazardous pollutants -including smaller "repeated" spills and leaks that could constitute a potential source of stormwater contamination since the creation of this SWPPP. Releases include any spilling, leaking, pumping, pouring, emitting, emptying, discharging, escaping, leaching, dumping or disposing into the environment. Reportable spills and leaks include, but are not limited to, releases of oil or hazardous substances quantities requiring a response action (i.e. application of absorbent material).

## 7. MONITORING/FACILITY INSPECTIONS

Regular inspections of the facility will ensure that all elements of the SWPPP are in place and working properly to prevent stormwater contamination. The facility will be inspected by members of the Pollution Prevention Team according to the following schedule:

- Monthly visual inspections will be made of the facility to evaluate the effectiveness of all BMPs to ensure that pollutant reduction controls are being implemented, maintained, and functioning adequately. Inspections will be recorded on **Worksheet # 4A** (located in Appendix A).
- Visual inspection of the detention pond and outfall control structure will also be conducted monthly and after significant rainfall (10 year – 24 hour) events. Inspection observations will be recorded on **Worksheet # 4B** (located in Appendix A).

[**Note:** An annual inspection of all stormwater treatment and flow control facilities on site will be performed to determine maintenance needs pursuant to Section S5.C5.b of the Western Washington (NPDES) Phase II Municipal Stormwater Permit. This inspection will be recorded outside of this document on the SDR (Stormwater Detention Residential) /Public Facilities Inspection Tracking Form.]

## **8. MINIMUM BMP IDENTIFICATION**

Best Management Practices (BMPs) are handling and safety procedures, prohibition of practices, maintenance procedures, and structural and/or managerial practices, that when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State. Facility BMPs fall into the following four general categories:

1. Good Housekeeping
2. Preventive Maintenance
3. Source Controls
4. Spill Prevention and Response

### **Good Housekeeping**

Good housekeeping is an ongoing approach to improve and maintain a clean and orderly work environment and includes the following BMPs:

- Promptly contain and clean up solid and liquid pollutant leaks and spills including oils, solvents, fuels, and dust from operation on-site that have the potential to become exposed to stormwater.
- Sweep all paved areas used for material handling and/or storage regularly or as needed to collect and dispose of dust and debris that could contaminate stormwater. *Do not hose down pollutants from any area to the ground, storm drain, conveyance ditch, or receiving water unless necessary for dust control purposes to meet air quality regulations and unless the pollutants are conveyed to a treatment system approved by the local jurisdiction.*
- Clean oils, debris, sludge, etc. from all BMP systems regularly, including catch basins, sedimentation basins, oil/water separators, boomed areas, and conveyance systems, to prevent the contamination of stormwater.
- Promptly repair or replace all substantially cracked or otherwise damaged paved, secondary containment, high-intensity parking, and any other drainage areas, which are subjected to pollutant material leaks or spills.
- Promptly repair or replace all leaking connections, pipes, hoses, valves, etc., which can contaminate stormwater.
- Use solid absorbents (clay and peat absorbents and rags) for cleanup of liquid spills/leaks, where practicable. Dispose of contaminated absorbent materials appropriately.

### **Preventive Maintenance**

Our preventive maintenance program includes inspection and maintenance of stormwater management devices (BMPs) and drainage systems, and routine inspections of industrial facility operations including vehicle maintenance. Equipment such as tanks, containers (drums), and outside piping, pumps, and process equipment should be checked regularly for signs of deterioration. The following are additional preventive BMPs are also applicable at this facility:

- Prevent the discharge of unpermitted liquid or solid wastes, process wastewater, and sewage to ground or surface water or to storm drains, which discharge, to surface water or to the ground. Ensure that floor drains in potential pollutant source areas are not connected to storm drains, surface water, or to the ground. If any systems are found to be connected to a storm drain system, eliminate illicit non-stormwater discharges immediately.

- Conduct all pressure washing of equipment or containers in the vehicle/car wash bays (Building #4). Site drains for this structure are tied to sanitary sewer.
- Construct impervious areas that are compatible with the materials handled.
- Use drip pans to collect leaks and spills from equipment such as industrial related parts, trucks, and other vehicles that are stored outside. Empty drip pan immediately after a spill or leak is collected in an uncovered area.
- Drain oil from fuel filters before disposal. Discard empty oil and fuel filters, oily rags, and other oily solid waste into appropriately closed and properly labeled containers and in compliance with the Uniform Fire Code.
- For the storage of liquids use containers, such as steel and plastic drums, that are rigid and durable, corrosion resistant to the weather and fluid content, non-absorbent, water tight, rodent-proof, and equipped with a close fitting cover.
- For the temporary storage of solid wastes contaminated with liquids or other potential pollutant materials use dumpsters, garbage cans, drums and comparable containers that are durable, corrosion resistant, non-absorbent, non-leaking, and equipped with either a solid cover or screen cover to prevent littering.
- Where exposed to stormwater, use containers, piping, tubing, pumps, fittings, and valves that are appropriate for their intended use and for the contained liquid.

### **Source Controls**

Source Control BMPs are those designed to prevent pollutants from entering stormwater. Source control BMP's used at the maintenance facility include:

- Promptly covering stockpiles of erodible materials at the end of each day and prior to rainfall events.
- Washing vehicles in the designated car wash bays which drain to an oil/water separator which is tied to the sanitary sewer system.
- Dust control at storage, loading/unloading areas
- Limit fueling to the dedicated fueling area located in the southeast corner of the site.

### **Spill Prevention and Response**

This program involves the following elements:

- Performance of monthly visual inspections to identify areas for potential leaks or spills.
- Maintain training of staff on the City's established Spill Response Plan and clean up procedures.
- Ensure that procedures for notification and tracking of spills are adhered to.
- Ensure that necessary spill response equipment is readily available on-site.

In addition to the above described BMP's, the City has adopted the 2008 King County Stormwater Pollution Prevention Manual by reference (effective date) February 15, 2010. This BMP Manual will be used supplement the BMPs identified above.

## **9. SCHEDULE OF BMP IMPLEMENTATION**

Existing site practices and BMPs were reviewed for effectiveness as a part of the development of this SWPPP document. While the majority of the site practices and BMPs appeared to be



functioning correctly, staff noted that the following modifications to practices could be made to improve source control and good housekeeping BMPs in the material storage area. These included providing plastic cover of erodible materials and sweeping adjacent to the sand and gravel material storage areas after use. These BMPs have been adopted and implemented prior to the effective date of this SWPPP.

#### **10. EMPLOYEE TRAINING**

Employee training is essential to the success of the SWPPP. It is recognized that properly trained personnel are more capable of: preventing spills; responding safely and effectively to an accident; and recognizing situations that could lead to stormwater contamination.

City of SeaTac employees working full or part time at the Maintenance Facility will receive training informing them of SWPPP goals. Training will be provided annually, and at the time of employment for new employees, and will be documented on Worksheet #5 (located in Appendix A). The training will include the following:

- Good Housekeeping
- Preventive Maintenance Practices
- Spill Prevention and Response

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# **Appendix A**

## **(Worksheets)**