Attachment G
Shoreline Management Area

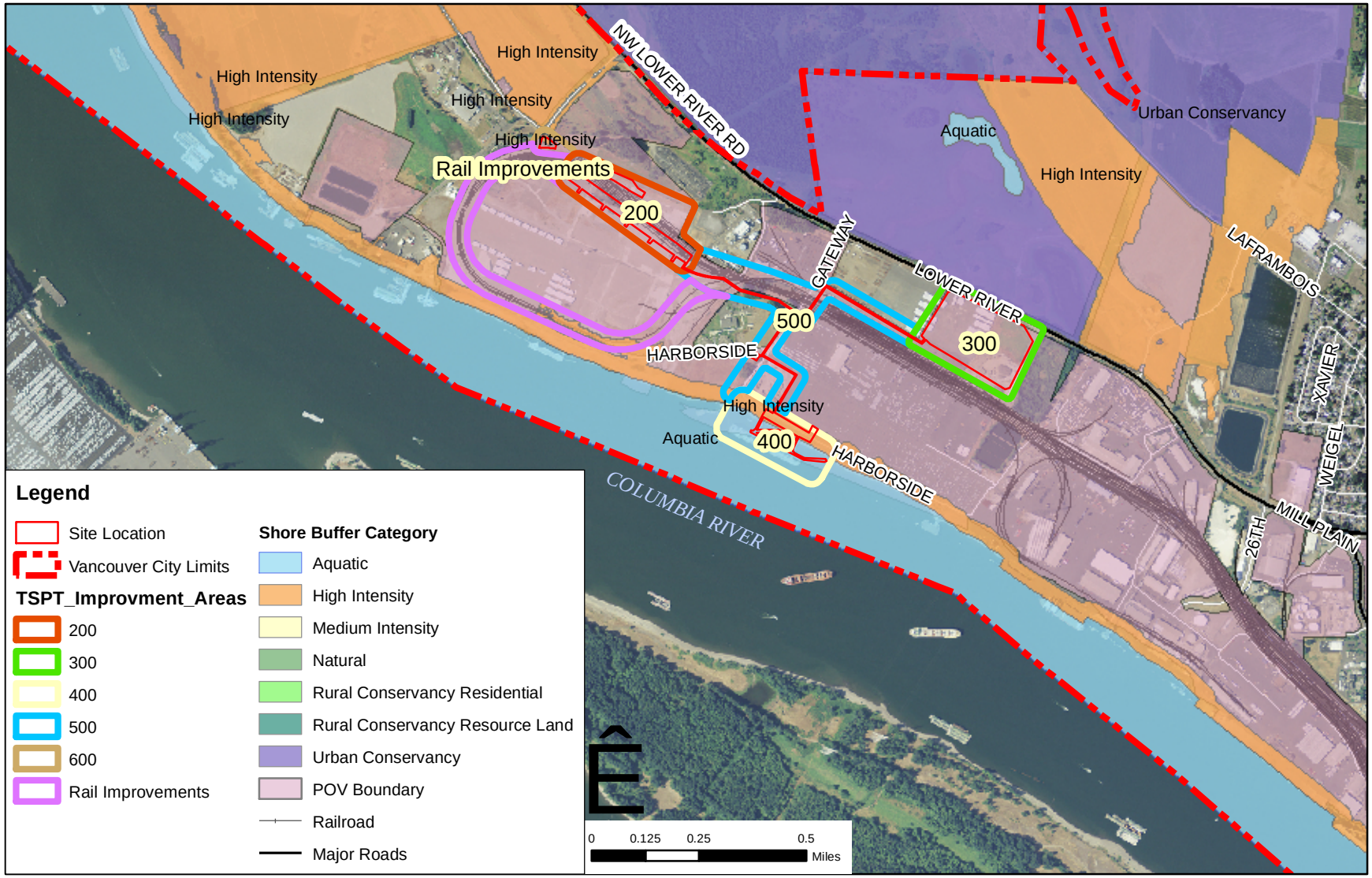


Figure x.x-: Shoreline Management Area

Q:\Vancouver\2013\A13.0267\Planning\EFSEC APPLICATION\Graphics\GIS\Shoreline Management.mxd

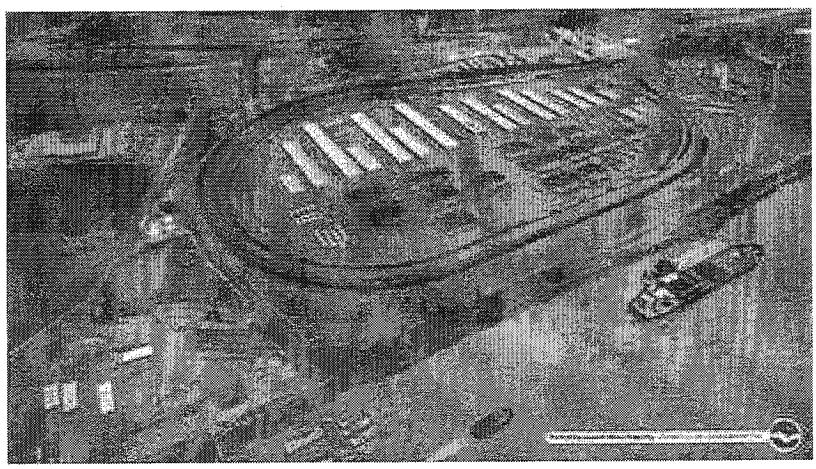
Attachment H
Terminal 5 Expansion Hydrologic and Hydraulic Analysis Report

West Vancouver Freight Access

Terminal 5 Expansion (4000A and SPL)

Final Hydrologic and Hydraulic Analysis Report

Case Number ENG2012-00016
Project PRJ2012-00414



Revision 1: May 3rd, 2012

PORT OF VANCOUVER U.S.A.

Prepared by:
HDR Engineering, Inc.
1001 SW Fifth Ave, Suite 1800, Portland, Oregon 97204

HDR

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

1.0 PROJECT OVERVIEW 2

1.1 Site Description 2

1.2 Existing Conditions 2

1.3 Proposed Design 2

1.3.1 Full Build-Out 3

1.3.2 Phases of the T5 Expansion: 4000A and SPL 3

1.4 Conveyance System Analysis and Design 4

1.5 Drainage to and from Adjacent Properties 5

1.6 Downstream Boundary Condition 5

2.0 CONVEYANCE SYSTEM MODELING 5

2.1 Model Development 5

2.2 Pipe Capacity 6

LIST OF APPENDICES

Appendix A. Project Figures

Figure 1. Vicinity Map

Figure 2. USGS Map

Figure 3. NRCS Soils Map

Figure 4. Port of Vancouver Terminal 5 Vicinity Floodplain Map

Figure 5. 25-Year and 100-Year 24-Hour Isopluvials

Figure 6. Existing Stormwater System

Figure 7. T5 Expansion Proposed Stormwater System

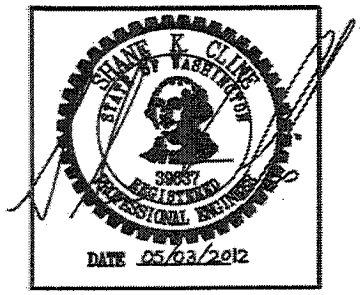
Figure 8. 4000A and SPL Pipe Alignments

Figure 9. Basin Map for Terminal 5

Appendix B. Hydrology Calculations

Appendix C. Hydraulic Calculations

Figure C1. Hydrograph Showing 100 Year Flow Rate Through Outfall Pipe to the Columbia River



EXECUTIVE SUMMARY

This report provides the stormwater system design and hydrologic and hydraulic analysis information for the Terminal 5 (T5) Expansion, part of the West Vancouver Freight Access (WVFA) Project (Project) located at the Port of Vancouver (Port), Washington.

The Project will expand the capacity of the rail system in order to reduce track congestion. Currently, stormwater runoff either infiltrates directly into the ground or is collected by an existing stormwater system and treated at the T5 lagoons. Quantity treatment or detention of stormwater will not be required on the Project because all stormwater at the Port is discharged to the Columbia River, which is an exempt water body with respect to quantity treatment.

The T5 Expansion will relocate existing tracks and construct a new perimeter access road around the outside of the track loop. Several crossings will be constructed to allow vehicular access to the inside of the track loop. New lighting and electrical conduit will be installed and multiple casings will be placed under the shifted tracks. A new tenant, Broken Hill Proprietary Billiton (BHPB), will be performing extensive site improvements at T5 beginning in the summer of 2012. These site improvements will include construction of a potash storage and transfer facility, rail dumper pit, and a ship loading facility. The stormwater design for T5 is intended to prepare the terminal for the construction associated with these site improvements.

The T5 Expansion will be constructed in phases to facilitate coordination with other projects on the site and reduce the impact of construction issues associated with groundwater. The 4000A project is the first phase of the T5 Expansion during which a portion of the complete stormwater system will be completed. The remainder of the stormwater system will be constructed during the next phase called the SPL Project. The second phase includes addition of a pump station and wet well, which will pump the water quality flow rate to the T5 lagoons. The stormwater system will not be operational during the end of the 4000A project (when the existing system is decommissioned) and during the beginning of the SPL Project (when the new stormwater system is completed).

HDR's stormwater design for the Project includes re-routing of the existing stormwater system so that the pipes do not cross the new tenant's lease area, additional stormwater infrastructure associated with roadway improvements, and a connection from BHPB's lease area to discharge treated stormwater to the existing outfall. The existing outfall will be used to discharge overflows from other portions of T5, as well as the BHPB's treated runoff, to the Columbia River. The SPL Project includes a rehabilitation of this existing outfall using a cured-in-place pipe lining method.

1.0 PROJECT OVERVIEW

1.1 Site Description

The Port's WVFA project will construct approximately 3.2 miles of new rail line to expand its rail capacity within the existing facility and relieve track congestion. Overall, the goals of the WVFA project are:

- Expand the Port rail capacity and operations within the existing Port facility;
- Relieve congestion and ensure continued safe operations as rail traffic expands in the Port and along the existing north-south and west-east main lines; and
- Minimize disruption to existing Port tenants and businesses while enhancing the rail system for future growth.

The Project site starts approximately 1,200 feet east of the Columbia River Rail Bridge, extends approximately 3.2 miles west, and ends just before the intersection of N.W. Old Lower River Road. Figures 1 and 2 provide the project location. The Port has filled the floodplain with dredge spoils which are the top layer of soils for much of the project area.

This report evaluates impacts to stormwater drainage resulting from the 4000A and SPL Projects of the T5 Expansion, associated with the full build-out of T5.

1.2 Existing Conditions

T5 currently consists of a track loop which was recently cleared to provide a graded surface for windmill turbine parts storage. The graded area is mostly compacted gravel with minimal paved roadways, several environmental caps, and a stormwater catchment and conveyance system composed of both recently constructed and older components. A trunkline collecting all of the flow conveys runoff to an existing pump station which operates as a temporary solution at this time. No power is currently routed to the existing pumps, so a generator is parked adjacent to the pump station. This generator must be manually activated to power the pumps so that water can be routed to the T5 lagoons west of the track loop.

Overflows are routed to a diversion box that spills into the outfall to the Columbia River. This system as a whole, including the T5 lagoons, was designed to drain and treat the terminal in its past condition, which included significantly more impervious pavement and roofing. Since most of the Terminal is now surfaced with gravel, the pumps are rarely activated. Figure 6 shows the layout of the existing system.

The T5 Lagoons were designed to treat industrial process water and stormwater for Terminal 5. The total area draining to the lagoons was over 130 acres when the site was used for aluminum industry related purposes.

1.3 Proposed Design

The Project includes relocation of existing tracks, construction of a new perimeter access road around the outside of the track loop and several crossings for vehicular access to the inside of the track loop, and installation of several utilities. The Port's new tenant, BHPB, will be performing extensive site improvements including construction of a

potash storage and transfer facility, rail dumper pit, and a ship loading facility. The stormwater design for T5 is intended to provide drainage for the future build-out of T5.

The proposed stormwater system needs to satisfy the City of Vancouver's stormwater management requirements, which are based on the Department of Ecology's 2005 Stormwater Management Manual for Western Washington (SMMWW) for design of water quality treatment facilities. These requirements include the need to treat runoff from new pollutant generating impervious surfaces (PGIS) to a "basic treatment" level. Detention is generally also a consideration, but due to the Project's proximity to the Columbia River, detention is not required. Since detention is not necessary, the Soil Conservation Service Unit Hydrograph Method was used for hydrology calculations. Standards, codes, and guidelines for conveyance are as per The City of Vancouver Engineering Services General Requirements and Details 2009 (GRD) and the American Railway Engineer and Maintenance-of-Way Association Manual for Railway Engineering 2007 (AREMA).

1.3.1 Full Build-Out

The proposed fully built-out system replaces any stormwater infrastructure that lies within the future BHPB lease and routes the trunkline around this property. Additional stormwater inlets are placed along a new perimeter access road that encircles much of the track loop. The trunkline structures are mostly WSDOT Manhole Type III with a few WDSOT Catch Basin Type II structures. WSDOT Catch Basin Type I structures are used for the lateral inlets. The pipe network consists of mostly corrugated polyethylene stormwater sewer pipes (CPSSP) with ductile iron sewer pipes and reinforced concrete pipes at a few locations. The stormwater system drains to a new wet well and pump station location outside of the track loop at the southwest portion of the Terminal. A 30-inch force main will connect the proposed pump station to the T5 lagoons.

1.3.2 Phases of the T5 Expansion: 4000A and SPL

The construction of the stormwater system needs to be completed in phases due to constructability constraints. Stone columns will be installed as part of another project at T5. This stone column work is expected to cause settlement which could damage any infrastructure nearby. Hence, these stone columns must be in place before subsurface infrastructure can be placed in their vicinity. In addition, high groundwater and the degree of contamination of the groundwater will increase the cost and duration of any construction that requires excavation. In consideration of these constraints, the stormwater conveyance system for the Project will be constructed in two phases: the 4000A Project and the SPL Project.

The proposed stormwater system has been divided into seven alignments (Alignments A through G). The 4000A Project will include construction of Alignments A, B, C, and D (See Figure 7). Alignment A drains the T5 perimeter access driveway from the intersection with Old Lower River Road to the proposed pump station. Alignment B drains a portion of the T5 perimeter access driveway to the east and a portion of T5 inside the track loop. Alignment D provides the connection to the BHPB stormwater system (which has its own, separate, water quality treatment facility) and allows it to drain directly to the existing outfall. Alignment C is a single pipe connecting the inside of the track loop to Alignment A. The components constructed in the 4000A project are discontinuous and will not be operational until the remainder of the stormwater system is completed in the next phase. The existing stormwater system will remain operational as long as is reasonably possible considering construction logistics. In addition, the Port is

prepared to pump and treat water from the non-operational system as needed while there is no connection to the T5 lagoons or the existing outfall.

The SPL Project is the second phase which will include construction of the remaining portions of the stormwater conveyance system including Alignments E, F, and G and the proposed wet well and pump station connecting the system to the T5 lagoons (see Figure 7). Alignments E and F drain portions of the T5 perimeter access driveway. Alignment G, which forms a connection between Alignments B and C, drains a portion of T5 inside the track loop. The SPL contractor will be responsible for pumping and treating water in the non-operational system as soon as they are mobilized. This contractor will also be required to complete construction of the operational stormwater system by September 30th, 2012.

The existing outfall will remain in service with the new upstream connection as part of the 4000A and SPL Projects. The outfall will be rehabilitated as part of the SPL Project. This work will include removal of a portion of the outfall pipe that extends into the Columbia River, and a new liner in the outfall pipe that will improve structural integrity while maintaining adequate conveyance capacity.

1.4 Conveyance System Analysis and Design

The Port's new tenant, BHPB, will treat their own stormwater and discharge the flows to the existing outfall through a connection to the proposed stormwater system. This accounts for approximately 40 acres of drainage area. While some additional area on the perimeter of T5 will drain to the T5 lagoons through the proposed pump station, the total contributing drainage area from T5 to the lagoons will be reduced from over 130 acres in the existing scenario to approximately 91 acres. BHPB has estimated the peak flow rate for their property to be 24 cubic feet per second (cfs) for the 25-year storm event and 30 cfs for the 100-year storm event; the downstream stormwater system has been designed with consideration of this input.

This pump station is designed to pump the water quality flow rate to the T5 lagoons. The water quality flow rate has been calculated to be 9 cfs based on the drainage area of 91 acres using MGS Flood and assumes fully impervious, fully built-out conditions (see Appendix B). The complete T5 Expansion proposed stormwater system is shown in Figure 6.

Due to the long runs of pipe and the desire to keep portions of the system elevated as high as possible (such as the pump station wet well), the system has been designed *without* the usual 0.2-foot drop per structure. Backflow prevention valves are proposed in structures just downstream of the overflow structure and where the connection is made to the BHPB storm line. These valves will be elastomer duckbill-type valves that will help reduce flooding inside the track loop during extremely high flows in the Columbia River. Due to the possibility of high groundwater and a relatively empty stormwater system because of the backflow prevention valves, all manholes and catch basin type II structures have been designed with counter buoyancy bases.

All the alignments except Alignment D (connection between the BHPB drainage system and the existing outfall) will drain to the proposed pump station which is designed to pump out the water quality flow. The pipes between the existing outfall pipe and the proposed pump station are designed to flow full before the outfall is utilized. In the event that the inflow rate of stormwater runoff into the system exceeds the pump station

pumping rate, flow in the pipeline between the pump station and the outfall will back up and discharge to the outfall while the pump station continues to pump the water quality flow rate. This allows the use of a portion of the pipe system as additional storage beyond the wet well. This reduces the number of required pump operation cycles and precludes the need for an additional storm line from the proposed pump station to the existing outfall.

1.5 Drainage to and from Adjacent Properties

The Port's facility and adjacent properties are mostly built-out and already have stormwater infrastructure installed. Offsite drainage improvements have been developed by tenants as separate projects; therefore, no offsite contributions of surface runoff are anticipated for the projects discussed here.

1.6 Downstream Boundary Condition

The two downstream boundary elements of the T5 stormwater conveyance system are the existing 36-inch outfall pipe discharging into the Columbia River and the proposed 30-inch force main between the new pump station and the T5 lagoons. The hydraulic capacity of the existing outfall pipe has been conservatively estimated to be at least 120 cfs which exceeds the maximum anticipated flow rate. The proposed pump station has been designed to pump the water quality flow rate through the 30-inch force main to the T5 lagoons.

2.0 CONVEYANCE SYSTEM MODELING

2.1 Model Development

A hydrologic and hydraulic model was developed using Bentley CivilStorm V8i to determine peak flow rates and size the conveyance system for the full build-out of the T5 Expansion. This model considers existing infrastructure that will remain in place and future infrastructure that is anticipated as part of the complete T5 Expansion project, as well as other future infrastructure that is not part of the T5 Expansion but will contribute to total runoff from the system. The model also assumes that all areas except track alignments are paved with impervious asphalt.

Civilstorm successively runs the hydrologic and hydraulic analysis. Rainfall depths for the 25-year, 24-hour and 100-year, 24-hour storm events were obtained from isopluvials for the state of Washington from the National Oceanic and Atmospheric Administration (NOAA) Atlas 2 (See Figure 2). The SCS Type-1 rainfall distribution was used for the project location. The Soil Conservation Service (SCS) Unit Hydrograph was used for the hydrology calculations. Curve numbers for the catchments were estimated using the data provided in Table 2.2 of the 2005 SMMWW Volume III; all curve numbers are 98 assuming full build out and paving for the entire terminal except on areas occupied by railroad tracks. Appendix B provides the curve number information and hydrologic modeling results for the T5 Expansion stormwater system. All times of concentration were assumed to be five minutes with the exception of two basins that have longer than typical flowpath lengths and the basin which will be occupied by the mining company. The time of concentration for this basin is adjusted such that the modeled peak flow rate matches the peak flow rate estimated by others and provided to HDR. Table B1 only

shows basin results for basins that drain to new structures and pipes constructed as part of the Terminal 5 Expansion project. Other basins shown in Figure 9 drain to existing or proposed structures and pipes.

2.2 Pipe Capacity

The 25-year storm event was used to determine if each pipe has sufficient capacity and the 100-year storm event was used to check for surcharging of structures. The modeling results presented in this report represent fully built-out conditions of the proposed stormwater conveyance system in T5 (See Appendix C).

Velocities in some of the pipes in the system may not meet flushing velocity requirements per the City of Vancouver's requirements, but the Port has been made aware of this and is prepared to increase maintenance activities as required. Due to modeling limitations in CivilStorm, the pump station has not been included in the model. This approach is conservative, as the pump station would in reality be pumping a constant 9 cfs out of the stormwater system before the flows back up in the pipe system and discharge to the existing outfall. In some cases, modeling results show that the existing pipes do not have sufficient capacity. This could be attributed to conservatism in the model or, in other cases, limitations of the model in representing the pipe systems accurately. In particular, some of the existing pipes are perforated pipes installed at a very shallow slope, and are designed to flow full. Since the model does not accommodate perforated pipes, they have been modeled as solid pipes with an inlet upstream. The lack of capacity shown in the model results is not due to insufficient downstream conveyance capacity. These pipes are designed by others and already exist at Terminal 5.

Figure C1 shows the hydrograph for the 100 year event through the outfall pipe to the Columbia River. The peak flow rate is 94 cfs. Note that this is assuming that the pump station is not in operation since the model does not account for the water quality flow rate being pumped to the T5 Lagoons. The final outfall pipe maximum capacity depends on the methods used to reline the pipe in the future. The current capacity of the pipe is estimated to be approximately 114 cfs. The pipe will be relined in the SPL Project. With a smoother interior but reduced diameter, the future maximum capacity of the pipe is estimated to be 120 cfs.

In conclusion, the modeling results indicate that the stormwater system design functions as intended to accommodate the 25- and 100-year storm events using conservative modeling techniques.

APPENDIX A

Project Figures

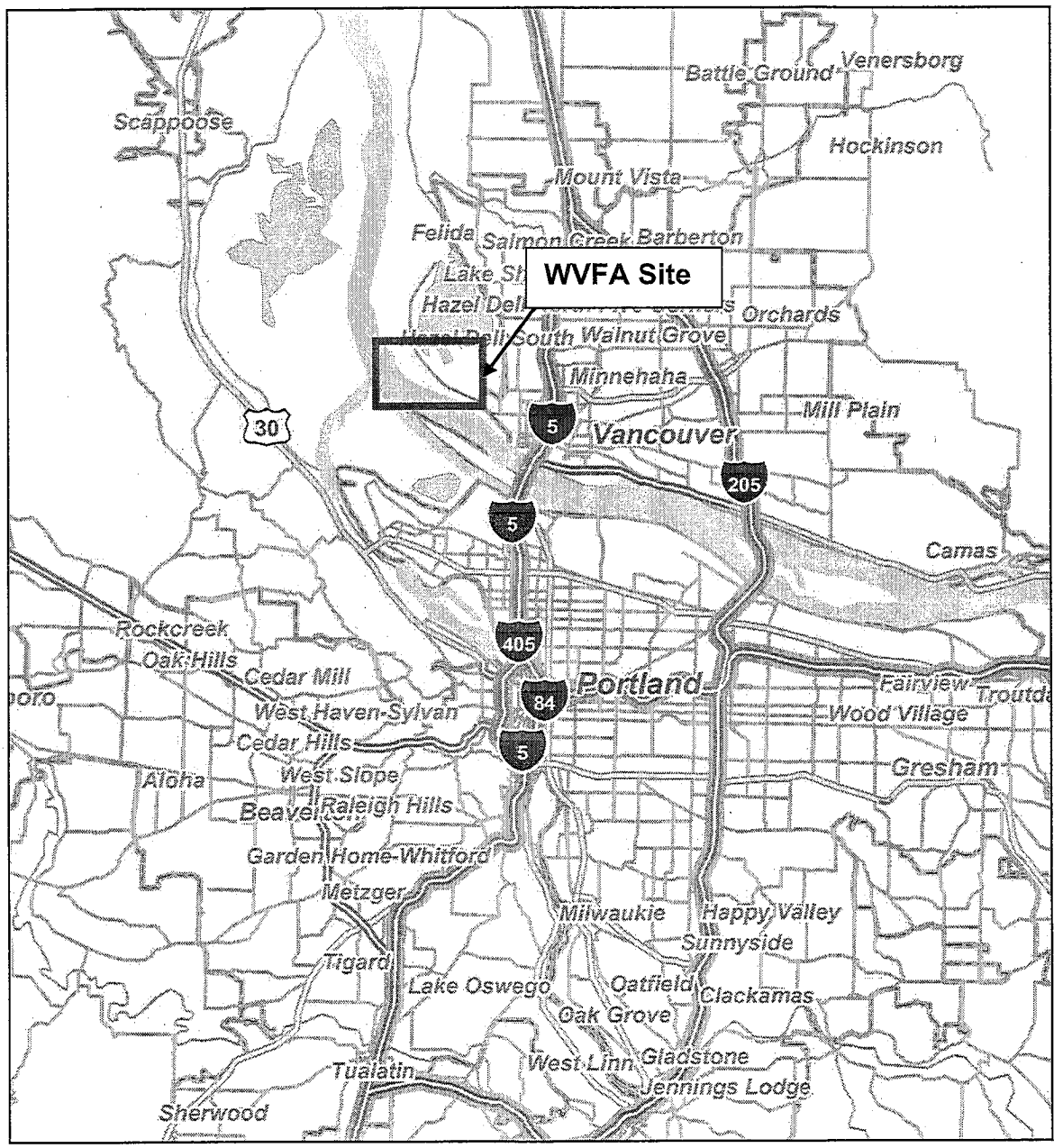
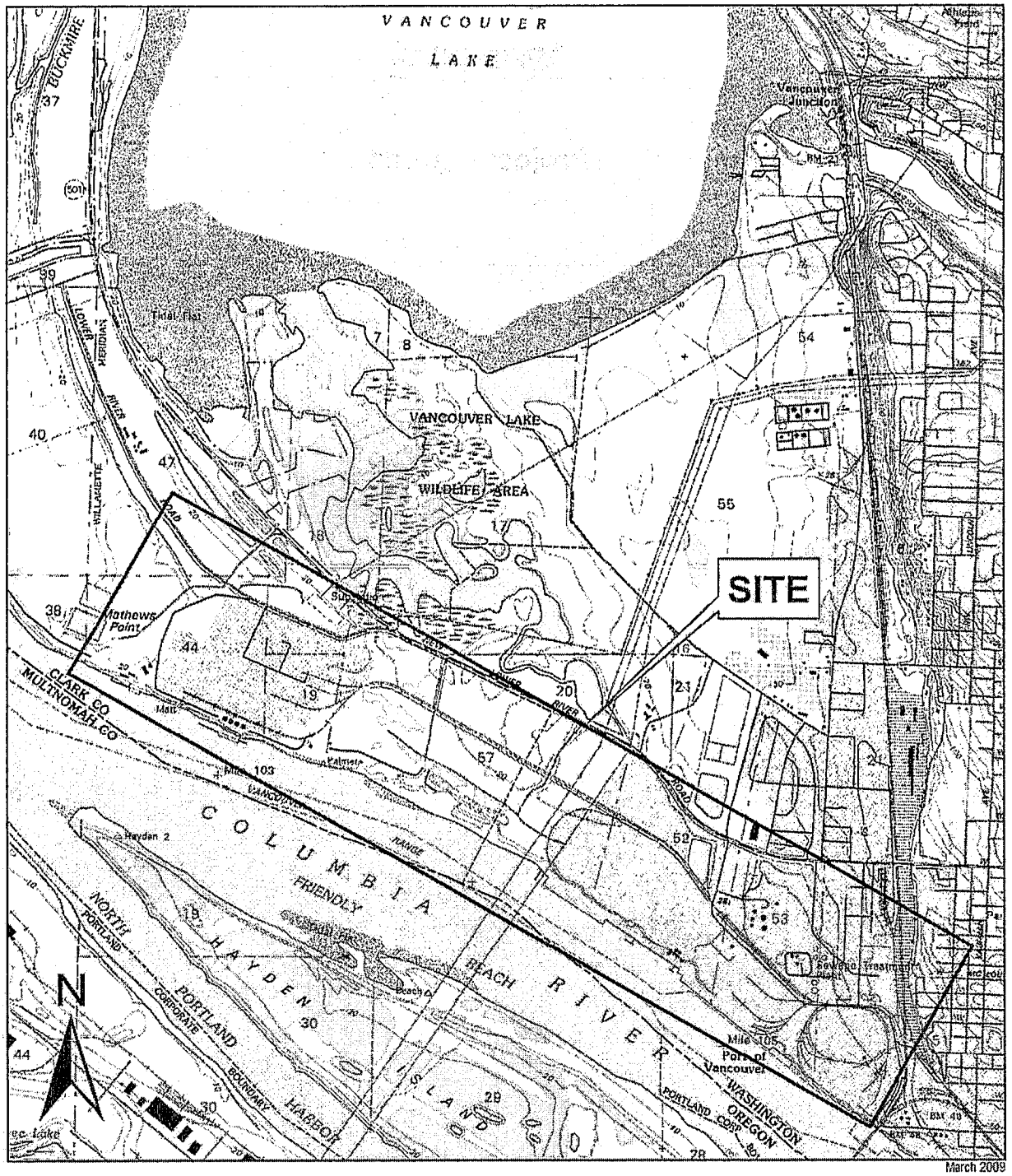


Figure 1. Vicinity Map



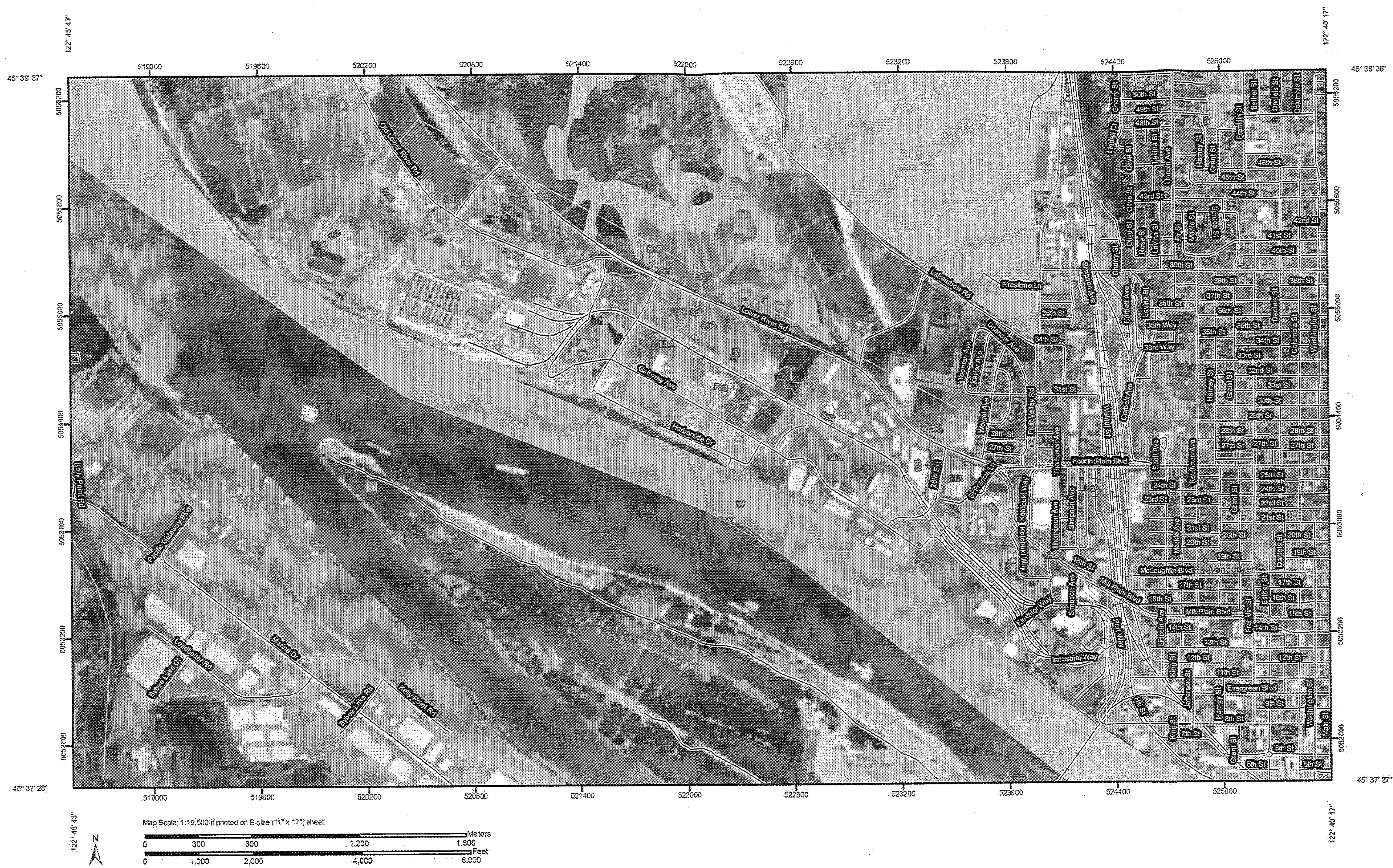
March 2009

HDR
ONE COMPANY | *Many Solutions*

SOURCE: USGS VANCOUVER, WA
TOPOGRAPHIC QUADRANGLE

Port of Vancouver | Freight Access

Figure 2. USGS Map



USDA Natural Resources Conservation Service

Web Soil Survey 2.1
National Cooperative Soil Survey

3/11/2009

Figure 3. NRCS Soils Map

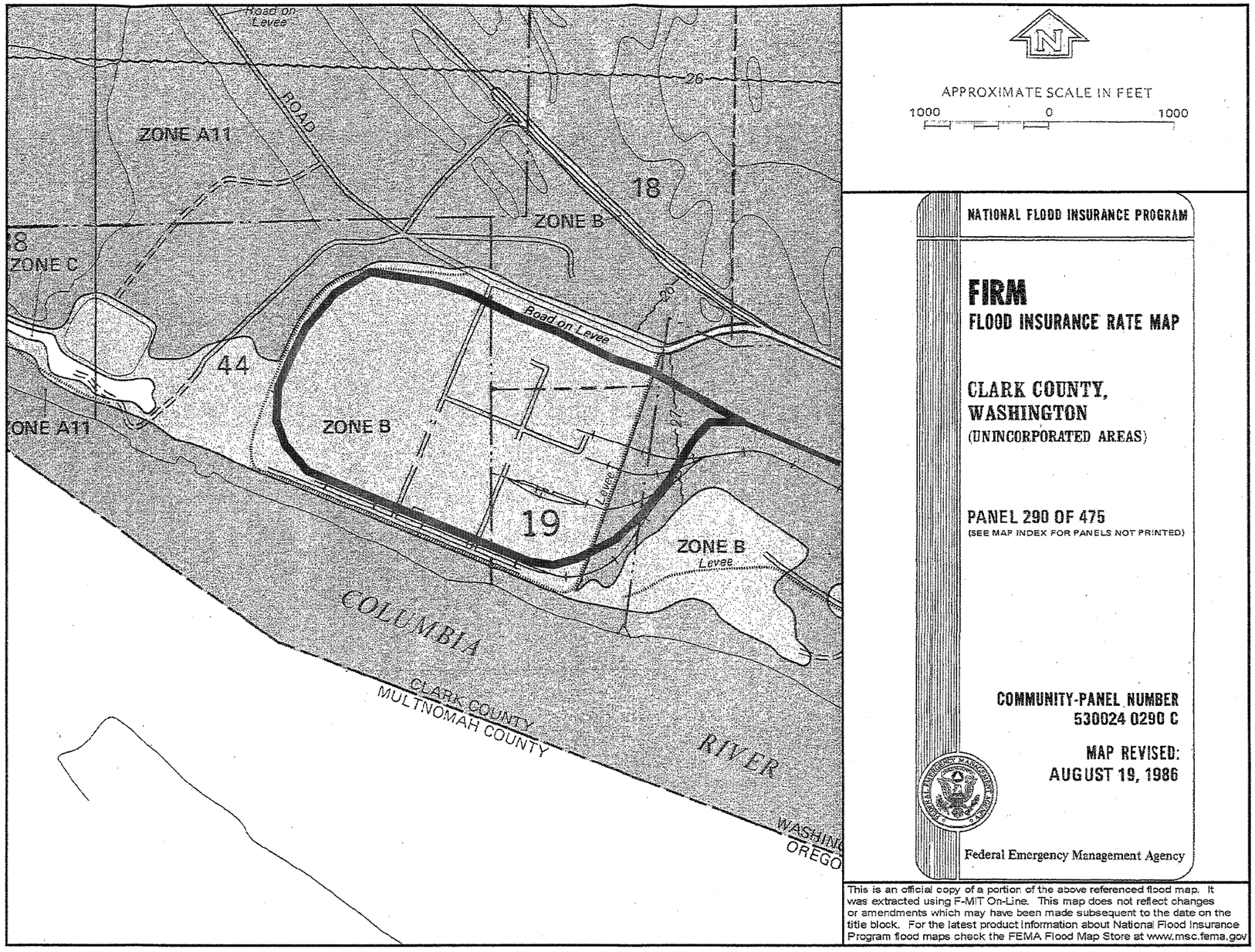
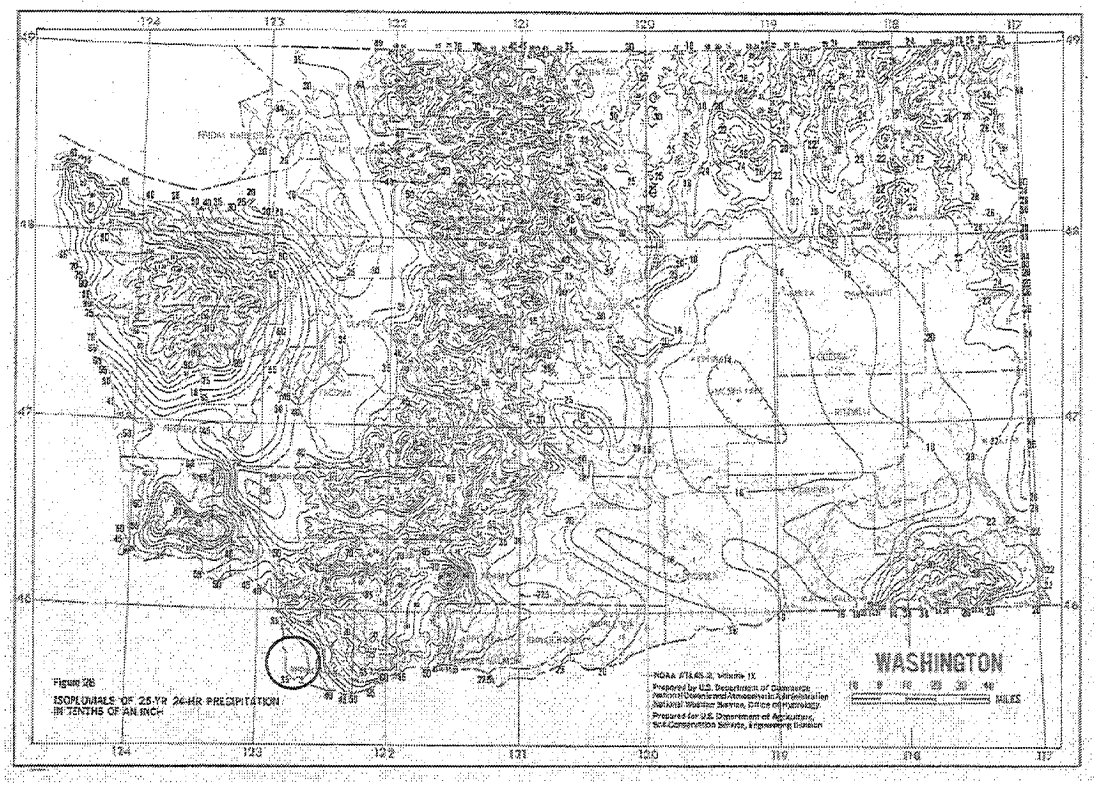


Figure 4. Port of Vancouver Terminal 5 Vicinity Floodplain Map

Key for NRCS soils map:

Clark County, Washington (WA011)	
Map Unit Symbol	**Map Unit Name**
193	Miscellaneous water
Fn	Fill land
HlA	Hillsboro silt loam, 0 to 3 percent slopes
HlB	Hillsboro loam, 3 to 8 percent slopes
HoA	Hillsboro silt loam, 0 to 3 percent slopes
MlA	McBee silt loam, coarse variant, 0 to 3 percent slopes
NbA	Newberg silt loam, 0 to 3 percent slopes
NbB	Newberg silt loam, 3 to 8 percent slopes
PhB	Pilchuck fine sand, 0 to 8 percent slopes
SmA	Sauvie silt loam, 0 to 3 percent slopes
SmB	Sauvie silt loam, 3 to 8 percent slopes
SpB	Sauvie silty clay loam, 0 to 8 percent slopes
W	Water



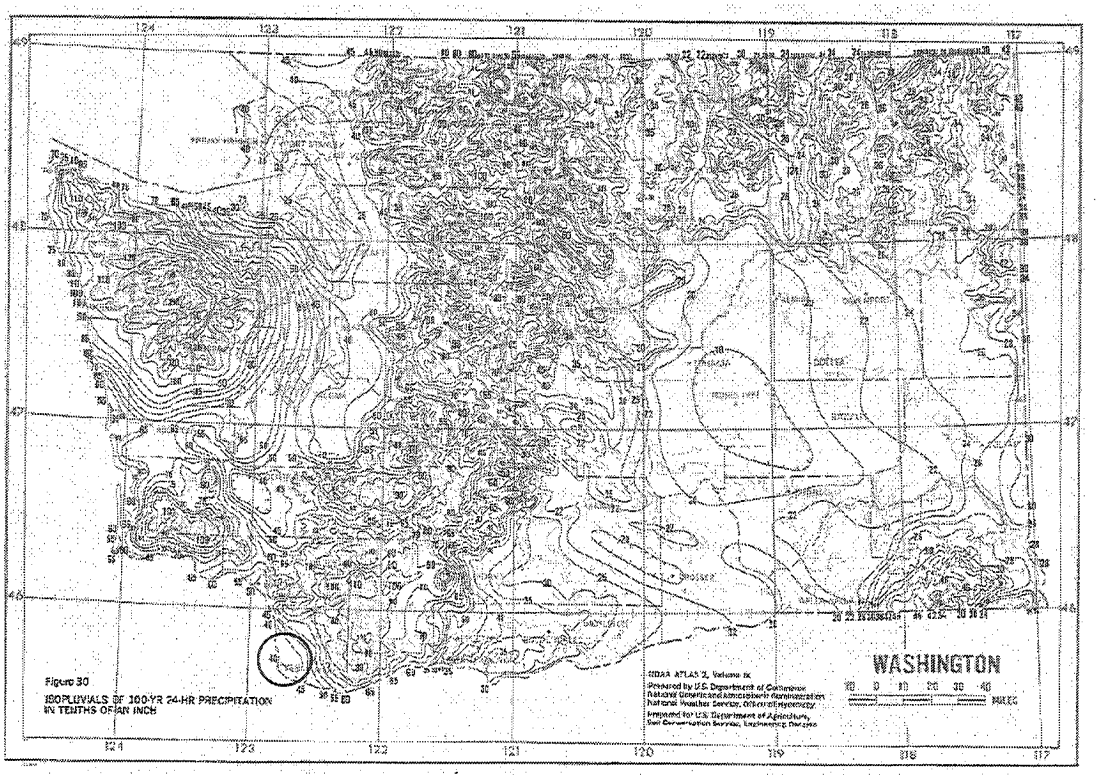


Figure 5. 25-Year and 100-Year 24-Hour Isopluvials

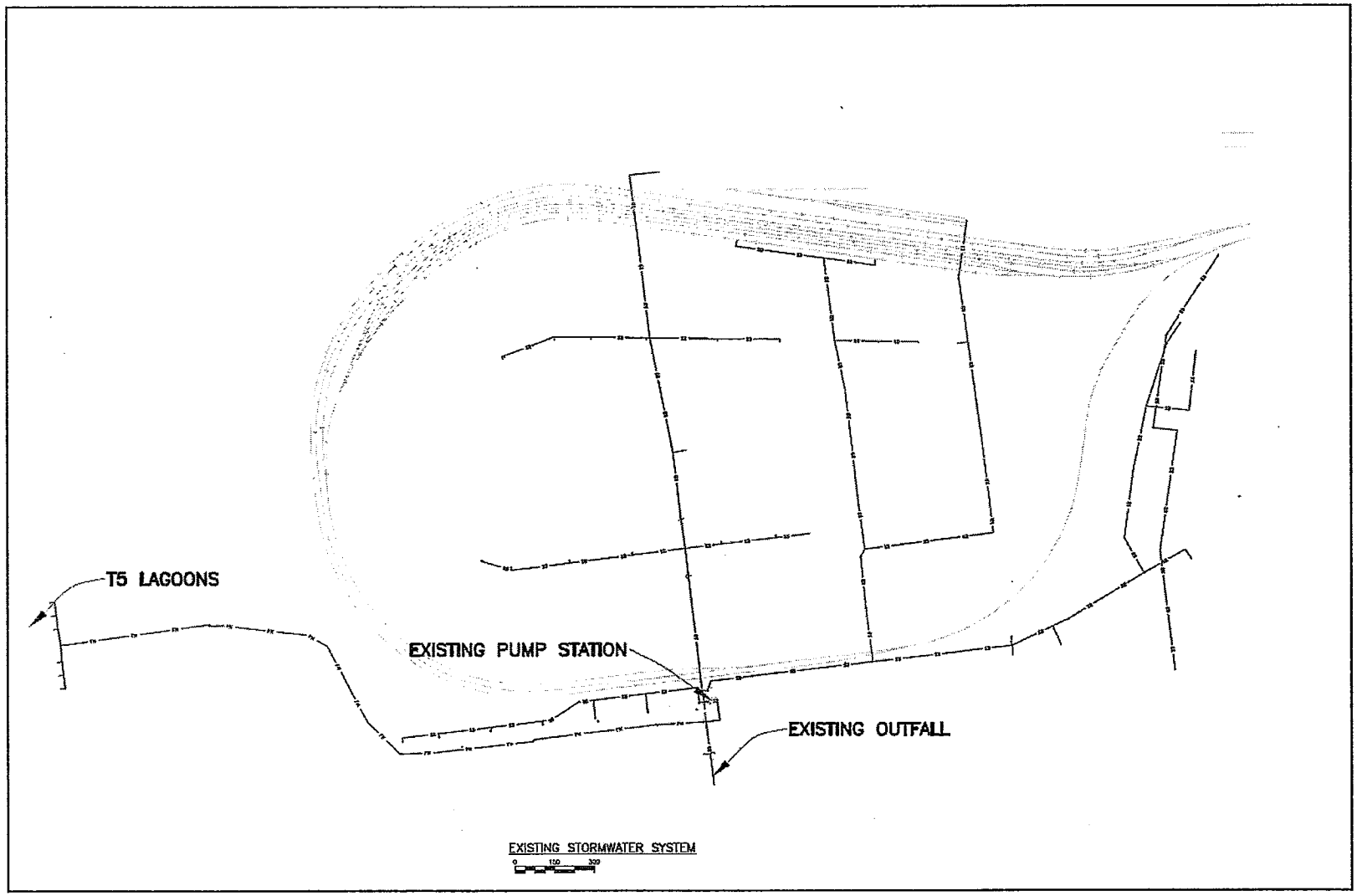


Figure 6. Existing Stormwater System

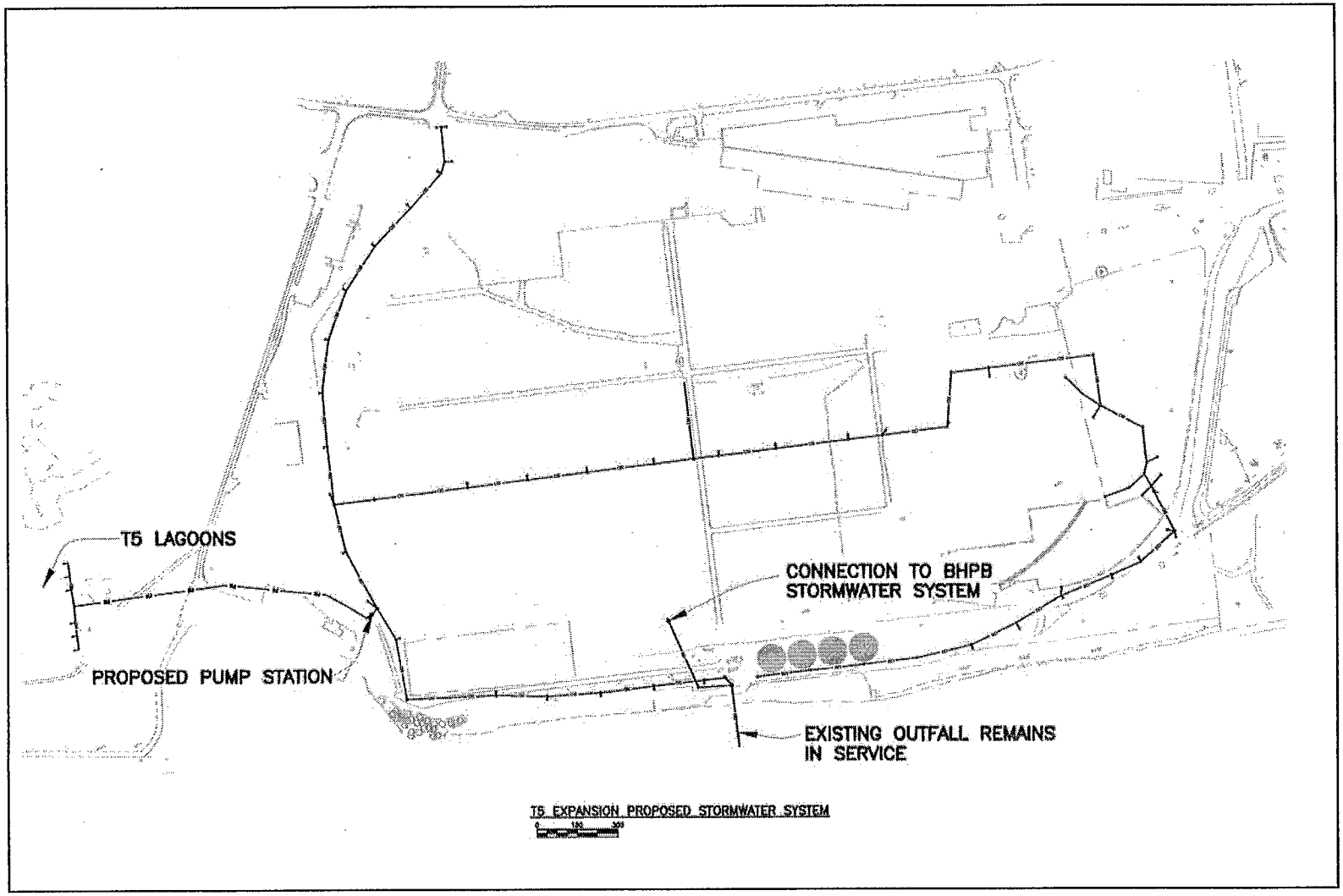


Figure 7. T5 Expansion Proposed Stormwater System

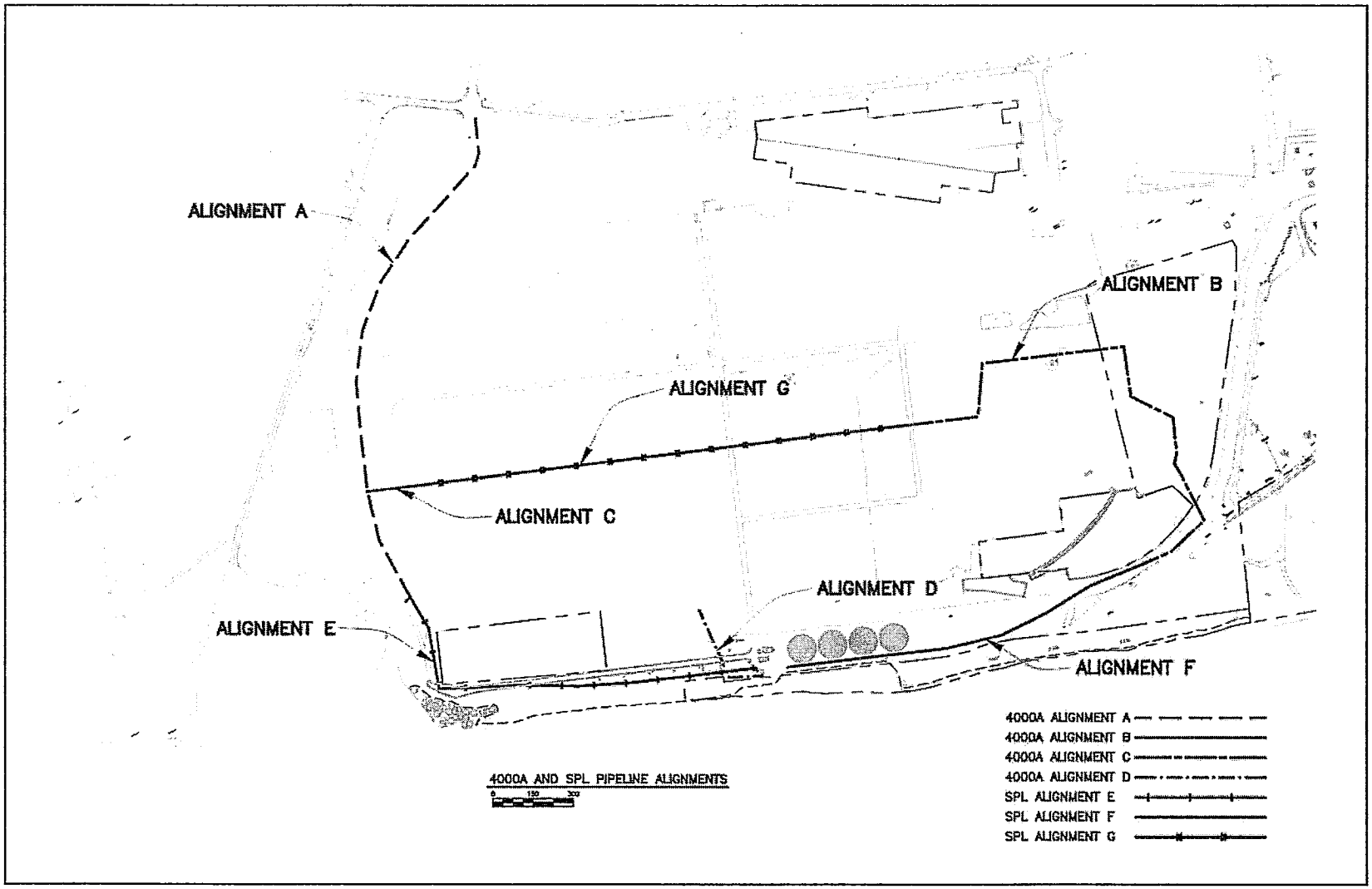


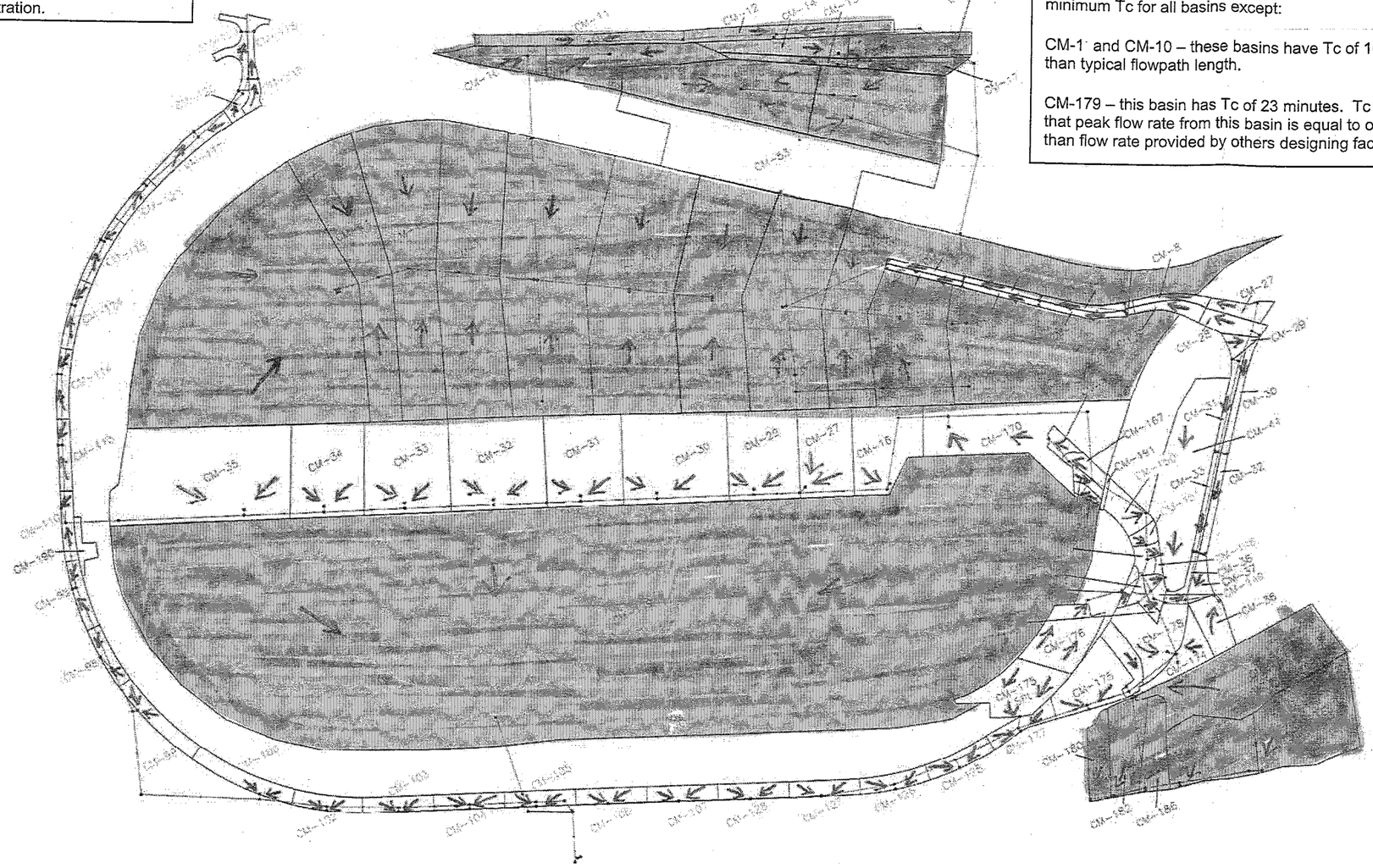
Figure 8. 4000A and SPL Pipe Alignments

See table B1 for basin parameters such as curve number, area, peak flow generated, and time of concentration.

Time of concentration (Tc) was not calculated. Assumed 5 minute minimum Tc for all basins except:

CM-1 and CM-10 – these basins have Tc of 10 mins due to longer than typical flowpath length.

CM-179 – this basin has Tc of 23 minutes. Tc was adjusted such that peak flow rate from this basin is equal to or slightly greater than flow rate provided by others designing facilities in this basin.



Highlighting indicates basins that drain to existing or proposed inlets and conveyance systems designed by others.

0 75 150 300

HDR

WEST VANCOUVER FREIGHT ACCESS

BASIN MAP FOR TERMINAL 5

DATE 5/3/12

FIGURE 1

Figure 9. Basin Map for Terminal 5

APPENDIX B

Hydrology Calculations

Curve Numbers

Curve numbers were selected for each basin based on Table 2.2 in the 2005 SMMWW Vol. III:

Table 2.2
Runoff Curve Numbers for Selected Agricultural, Suburban, and Urban Areas
(Sources: TR 55, 1986, and Stormwater Management Manual, 1992. See Section 2.1.1 for explanation)

Cover type and hydrologic condition.	CNs for hydrologic soil group A	B	C	D
Curve Numbers for Pre-Development Conditions				
Pasture, grassland, or range-continuous forage for grazing:				
Fair condition (ground cover 50% to 75% and not heavily grazed).	49	69	79	84
Good condition (ground cover >75% and lightly or only occasionally grazed)	39	61	74	80
Woods:				
Fair (Woods are grazed but not burned, and some forest litter covers the soil).	36	60	73	79
Good (Woods are protected from grazing, and litter and brush adequately cover the soil).	30	55	70	77
Curve Numbers for Post-Development Conditions				
Open space (lawns, parks, golf courses, cemeteries, landscaping, etc.)[1]				
Fair condition (grass cover on 50% - 75% of the area).	77	85	90	92
Good condition (grass cover on >75% of the area)	68	80	86	90
Impervious areas:				
Open water bodies: lakes, wetlands, ponds etc.	100	100	100	100
Paved parking lots, roofs[2], driveways, etc. (excluding right-of-way)	98	98	98	98
Permeable Pavement (See Appendix C to decide which condition below to use)				
Landscaped area	77	85	90	92
50% landscaped area/50% impervious	87	91	94	96
100% impervious area	98	98	98	98
Paved	98	98	98	98
Gravel (including right-of-way)	76	85	89	91
Dirt (including right-of-way)	72	82	87	89
Pasture, grassland, or range-continuous forage for grazing:				
Poor condition (ground cover <50% or heavily grazed with no mulch).	68	79	86	89
Fair condition (ground cover 50% to 75% and not heavily grazed).	49	69	79	84
Good condition (ground cover >75% and lightly or only occasionally grazed)	39	61	74	80
Woods:				
Poor (Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning).	45	66	77	83
Fair (Woods are grazed but not burned, and some forest litter covers the soil).	36	60	73	79
Good (Woods are protected from grazing, and litter and brush adequately cover the soil).	30	55	70	77

Single family residential[3]: Dwelling Unit/Gross Acre	Should only be used for subdivisions > 50 acres	Average Percent impervious area[3,4]	
1.0 DU/GA		15	Separate curve number
1.5 DU/GA		20	shall be selected for
2.0 DU/GA		25	pervious & impervious
2.5 DU/GA		30	portions of the site or
3.0 DU/GA		34	basin
3.5 DU/GA		38	
4.0 DU/GA		42	
4.5 DU/GA		46	
5.0 DU/GA		48	
5.5 DU/GA		50	
6.0 DU/GA		52	
6.5 DU/GA		54	
7.0 DU/GA		56	
7.5 DU/GA		58	
PUD's, condos, apartments, commercial businesses, industrial areas & & subdivisions < 50 acres	%impervious must be computed	Separate curve numbers shall be selected for pervious and impervious portions of the site	

For a more detailed and complete description of land use curve numbers refer to chapter two (2) of the Soil Conservation Service's Technical Release No. 55 . (210-VI-TR-55, Second Ed., June 1986).

A curve number of 98 was used for pavement.

Table B1. Catchment Modeling Parameters and Results for the 25-year Storm Event

Catchment Name	SCS Curve Number	Scaled Area (acres)	Peak 25-year Flow (cfs)	Time of Concentration (mins)	Unit Hydrograph Method
Alignment A					
CM-121	98	0.167	0.14	5	SCS Unit Hydrograph
CM-113	98	0.161	0.13	5	SCS Unit Hydrograph
CM-110	98	0.160	0.13	5	SCS Unit Hydrograph
CM-95	98	0.168	0.14	5	SCS Unit Hydrograph
CM-98	98	0.159	0.13	5	SCS Unit Hydrograph
CM-118	98	0.100	0.08	5	SCS Unit Hydrograph
CM-119	98	0.072	0.06	5	SCS Unit Hydrograph
CM-120	98	0.082	0.07	5	SCS Unit Hydrograph
CM-117	98	0.260	0.22	5	SCS Unit Hydrograph
CM-123	98	0.114	0.09	5	SCS Unit Hydrograph
CM-115	98	0.157	0.13	5	SCS Unit Hydrograph
CM-124	98	0.158	0.13	5	SCS Unit Hydrograph
CM-114	98	0.158	0.13	5	SCS Unit Hydrograph
CM-190	98	0.100	0.07	5	SCS Unit Hydrograph
Alignment B					
CM-136	98	0.073	0.06	5	SCS Unit Hydrograph
CM-149	98	0.108	0.09	5	SCS Unit Hydrograph
CM-148	98	0.022	0.02	5	SCS Unit Hydrograph
CM-165	98	0.100	0.08	5	SCS Unit Hydrograph
CM-154	98	0.055	0.05	5	SCS Unit Hydrograph
CM-191	98	0.024	0.02	5	SCS Unit Hydrograph
CM-170	98	1.942	1.61	5	SCS Unit Hydrograph
CM-16	98	0.943	0.78	5	SCS Unit Hydrograph
CM-175	98	0.631	0.52	5	SCS Unit Hydrograph
CM-176	98	0.221	0.18	5	SCS Unit Hydrograph
CM-174	98	0.327	0.27	5	SCS Unit Hydrograph
CM-178	98	0.632	0.52	5	SCS Unit Hydrograph
CM-27	98	0.853	0.7	5	SCS Unit Hydrograph
CM-135	98	0.063	0.05	5	SCS Unit Hydrograph
CM-140	98	0.029	0.02	5	SCS Unit Hydrograph
CM-153	98	0.115	0.1	5	SCS Unit Hydrograph
CM-151	98	0.084	0.07	5	SCS Unit Hydrograph
CM-150	98	0.245	0.2	5	SCS Unit Hydrograph
CM-155	98	0.062	0.05	5	SCS Unit Hydrograph
CM-167	98	0.120	0.1	5	SCS Unit Hydrograph
CM-176	98	0.628	0.5	5	SCS Unit Hydrograph
Alignment C					
No catchments in Alignment C. Upstream basins and existing system contribute flow.					

Table B1. Catchment Modeling Parameters and Results for the 25-year Storm Event

Catchment Name	SCS Curve Number	Scaled Area (acres)	Peak 25-year Flow (cfs)	Time of Concentration (mins)	Unit Hydrograph Method
Alignment D					
CM-179	98	37.829	23.9	23	SCS Unit Hydrograph
Alignment E					
CM-105	98	0.197	0.16	5	SCS Unit Hydrograph
CM-104	98	0.197	0.16	5	SCS Unit Hydrograph
CM-103	98	0.196	0.16	5	SCS Unit Hydrograph
CM-102	98	0.193	0.16	5	SCS Unit Hydrograph
CM-100	98	0.292	0.24	5	SCS Unit Hydrograph
CM-99	98	0.265	0.22	5	SCS Unit Hydrograph
Alignment F					
CM-106	98	0.197	0.16	5	SCS Unit Hydrograph
CM-107	98	0.198	0.16	5	SCS Unit Hydrograph
CM-128	98	0.197	0.16	5	SCS Unit Hydrograph
CM-127	98	0.196	0.16	5	SCS Unit Hydrograph
CM-126	98	0.196	0.16	5	SCS Unit Hydrograph
CM-125	98	0.198	0.16	5	SCS Unit Hydrograph
CM-177	98	0.191	0.16	5	SCS Unit Hydrograph
CM-175	98	0.652	0.52	5	SCS Unit Hydrograph
Alignment G					
CM-29	98	1.111	0.83	5	SCS Unit Hydrograph
CM-30	98	1.704	1.27	5	SCS Unit Hydrograph
CM-31	98	1.254	0.92	5	SCS Unit Hydrograph
CM-32	98	1.593	1.31	5	SCS Unit Hydrograph
CM-33	98	1.418	1.17	5	SCS Unit Hydrograph
CM-34	98	1.232	1.02	5	SCS Unit Hydrograph
CM-35	98	2.970	2.46	5	SCS Unit Hydrograph

MGS Flood Water Quality Flow Rate Results

MGS FLOOD
PROJECT REPORT

Program Version: 3.13 Run Date: 01/10/2012 10:01 AM

Input File Name: mgs test.fld
Project Name: POV T5 WQ flow
Analysis Title: POV T5 WQ flow
Comments:

********** Precipitation Input**********

Extended Precipitation Timeseries Selected
Climatic Region Number: 20
Full Period of Record Available used for Routing
Precipitation Station : 970044 Vancouver 44 in MAP 10/01/1939-10/01/2060
Evaporation Station : 971044 Vancouver 44 in MAP
Evaporation Scale Factor : 0.750

HSPF Parameter Region Number: 1
HSPF Parameter Region Name : USGS Default

********* Default HSPF Parameters Used (Not Modified by User) **********

********** Watershed Definition **********

Number of Subbasins: 1

********** Subbasin Number: 1 **********

***Tributary to Node: 1
***Bypass to Node : None

	Area(Acres)		
		Developed	
	Predeveloped	To Node	Bypass Node
Till Forest	0.000	0.000	0.000
Till Pasture	0.000	0.000	0.000
Till Grass	0.000	0.000	0.000
Outwash Forest	0.000	0.000	0.000
Outwash Pasture	0.000	0.000	0.000
Outwash Grass	91.320	0.000	0.000
Wetland	0.000	0.000	0.000
Impervious	0.000	91.320	0.000
Subbasin Total	91.320	91.320	0.000

**********Water Quality Facility Data **********

Node No: 2
2-Year Discharge Rate : 25.033 cfs

15-Minute Timestep, Water Quality Treatment Design Discharge
On-line Design Discharge Rate (91% Exceedance): 14.68 cfs
Off-line Design Discharge Rate (91% Exceedance): 8.65 cfs

APPENDIX C

Hydraulic Calculations

Table C1. Conduit Modeling Parameters and Results for the 25-year Storm Event

Conduit Name	Diameter (in)	Slope (ft/ft)	Maximum 25-year Flow (cfs)	Calculated Design Capacity (cfs)	Maximum Flow to Calculated Design Capacity Ratio
Alignment A					
CO-A5	12	0.020	0.14	5.45	0.03
CO-A10	12	0.020	0.08	5.47	0.01
CO-A15	12	0.002	0.34	1.71	0.20
CO-A20	12	0.020	0.06	5.47	0.01
CO-A25	12	0.002	0.58	1.74	0.33
CO-A30	12	0.020	0.07	5.41	0.01
CO-A35	12	0.002	0.65	1.73	0.38
CO-A40	12	0.020	0.22	5.45	0.04
CO-A45	12	0.002	0.69	1.74	0.40
CO-A50	12	0.020	0.09	5.44	0.02
CO-A55	12	0.002	0.71	1.74	0.41
CO-A60	12	0.020	0.13	5.44	0.02
CO-A65	12	0.002	0.74	1.74	0.43
CO-A70	12	0.020	0.13	5.44	0.02
CO-A75	18	0.002	0.8	5.13	0.16
CO-A80	12	0.020	0.13	5.44	0.02
CO-A85	24	0.002	0.91	11.00	0.08
CO-A90	12	0.020	0.13	5.44	0.02
CO-A95	24	0.002	1.03	10.94	0.09
CO-A100	12	0.020	0.13	5.47	0.02
CO-A105	48	0.002	57.59	69.94	0.82
CO-A110	12	0.020	0.14	5.44	0.03
CO-A115	48	0.002	57.81	66.94	0.86
CO-A120	12	0.020	0.13	5.45	0.02
Alignment B					
CO-B37	12	0.020	0.52	5.40	0.10
CO-B40	30	0.002	3.96	19.99	0.20
CO-B43	12	0.020	0.18	5.44	0.03
CO-B45	30	0.002	7.58	19.63	0.39
CO-B47	12	0.020	0.27	5.48	0.05
CO-B49	12	0.020	0.52	5.48	0.09
CO-B50	30	0.003	8.87	25.07	0.35
CO-B53/300	15	0.005	2.59	4.94	0.52
CO-B55	12	0.020	0.06	5.47	0.01

Table C1. Conduit Modeling Parameters and Results for the 25-year Storm Event

Conduit Name	Diameter (in)	Slope (ft/ft)	Maximum 25-year Flow (cfs)	Calculated Design Capacity (cfs)	Maximum Flow to Calculated Design Capacity Ratio
CO-B55	30	0.003	10.91	25.10	0.43
CO-B60	12	0.020	0.09	5.45	0.02
CO-B63	12	0.005	0.52	2.51	0.21
CO-B65	30	0.002	11.06	19.87	0.56
CO-B70	12	0.020	0.57	5.45	0.10
CO-B75	30	0.002	11.44	19.87	0.58
CO-B80	12	0.020	0.02	5.45	0.00
CO-B85	30	0.002	11.54	19.88	0.58
CO-B90	30	0.002	11.6	19.87	0.58
CO-B95	30	0.002	11.75	19.87	0.59
CO-B100	12	0.020	0.08	5.45	0.01
CO-B105	12	0.020	0.18	5.46	0.03
CO-B110	12	0.020	0.06	5.45	0.01
CO-B120	36	0.002	12.04	32.05	0.38
CO-B125	36	0.002	12.1	32.41	0.37
CO-B126	12	0.020	1.61	5.46	0.29
CO-B127	36	0.002	13.02	32.20	0.40
CO-B130	36	0.002	13.07	32.31	0.40
CO-B135	12	0.020	0.78	5.49	0.14
CO-B140	36	0.002	13.56	32.32	0.42
CO-B150	12	0.020	0.71	5.49	0.13
Alignment C					
CO-C235	48	0.002	53.54	69.69	0.77
Alignment D					
CO-D5	36	0.005	23.83	51.06	0.47
CO-D10	36	0.005	23.80	51.23	0.46
Alignment E					
CO-E1/E3	36	0.025	58.71	115.15	0.51
CO-E5	48	0.002	58.71	69.93	0.84
CO-E10	12	0.020	0.16	5.44	0.03
CO-E15	48	0.002	58.66	69.83	0.84
CO-E20	12	0.020	0.16	5.44	0.03
CO-E25	48	0.002	58.5	69.59	0.84
CO-E30	12	0.020	0.16	5.44	0.03
CO-E35	48	0.002	58.29	69.95	0.83
CO-E40	12	0.020	0.16	5.44	0.03
CO-E45	48	0.002	58.15	69.50	0.84
CO-E50	12	0.020	0.24	5.48	0.04
CO-E55	48	0.002	57.94	69.44	0.83
CO-E60	48	0.002	57.97	69.35	0.84

Table C1. Conduit Modeling Parameters and Results for the 25-year Storm Event

Conduit Name	Diameter (in)	Slope (ft/ft)	Maximum 25-year Flow (cfs)	Calculated Design Capacity (cfs)	Maximum Flow to Calculated Design Capacity Ratio
CO-E65	12	0.020	57.84	5.48	0.04
CO-E70/ A127	48	0.002	58.71	70.62	0.82
Alignment F					
CO-F5	12	0.002	0.16	1.78	0.09
CO-F10	18	0.002	0.33	4.70	0.07
CO-F15	18	0.002	0.49	4.70	0.10
CO-F20	18	0.002	0.65	4.72	0.14
CO-F23	12	0.020	0.16	5.00	0.03
CO-F25	18	0.002	0.95	4.69	0.20
CO-F27	12	0.020	0.16	5.45	0.03
CO-F30	24	0.002	1.73	10.31	0.17
CO-F32	12	0.005	0.54	2.54	0.21
CO-F33	12	0.020	0.16	5.49	0.03
CO-F35	24	0.002	2.96	10.05	0.29
Alignment G					
CO-G155	36	0.002	26.18	34.85	0.75
CO-G160	12	0.020	0.92	5.46	0.17
CO-G165	42	0.002	26.66	52.42	0.51
CO-G170	12	0.020	1.41	5.46	0.26
CO-G175	42	0.002	27.46	52.65	0.52
CO-G180	12	0.020	1.04	5.46	0.19
CO-G185	42	0.002	28.36	52.54	0.54
CO-G187	36	0.002	23.29	31.37	0.74
CO-G190	48	0.002	51.34	69.63	0.74
CO-G195	12	0.020	1.32	5.44	0.24
CO-G200	48	0.002	52.49	69.58	0.75
CO-G205	12	0.020	1.17	5.49	0.21
CO-G210	48	0.002	53.54	69.72	0.77
CO-G215	12	0.020	1.02	5.46	0.19
CO-G220	48	0.002	54.26	69.72	0.78
CO-G225	12	0.020	2.46	5.44	0.45
CO-G230	48	0.002	56.55	69.42	0.81

Table C2. Structures Modeling Results for the 100-year Storm Event

Structure Name	Structure Type	Structure surcharged for the 100-year Storm?
Alignment A		
CB1-A10	WSDOT Catch Basin Type 1	No
CB1-A100	WSDOT Catch Basin Type 1	No
CB1-A110	WSDOT Catch Basin Type 1	No
CB1-A120	WSDOT Catch Basin Type 1	No
CB1-A130	WSDOT Catch Basin Type 1	No
CB1-A20	WSDOT Catch Basin Type 1	No
CB1-A30	WSDOT Catch Basin Type 1	No
CB1-A40	WSDOT Catch Basin Type 1	No
CB1-A50	WSDOT Catch Basin Type 1	No
CB1-A60	WSDOT Catch Basin Type 1	No
CB1-A70	WSDOT Catch Basin Type 1	No
CB1-A80	WSDOT Catch Basin Type 1	No
CB1-A90	WSDOT Catch Basin Type 1	No
MH-A10	WSDOT Manhole Type 3	No
MH-A20	WSDOT Manhole Type 3	No
MH-A30	WSDOT Manhole Type 3	No
MH-A40	WSDOT Manhole Type 3	No
MH-A50	WSDOT Manhole Type 3	No
MH-A60	WSDOT Manhole Type 3	No
MH-A70	WSDOT Manhole Type 3	No
MH-A80	WSDOT Manhole Type 3	No
MH-A90	WSDOT Manhole Type 3	No
MH-A100	WSDOT Manhole Type 3	No
MH-A110	WSDOT Manhole Type 3	No
MH-A120	WSDOT Manhole Type 3	No
Alignment B		
CB1-B100	WSDOT Catch Basin Type 1	No
CB1-B110	WSDOT Catch Basin Type 1	No
CB1-B130	WSDOT Catch Basin Type 1	No
CB1-B140	WSDOT Catch Basin Type 1	No
CB1-B160	WSDOT Catch Basin Type 1	No
CB1-B170	WSDOT Catch Basin Type 1	No
CB1-B180	WSDOT Catch Basin Type 1	No
CB1-B80	WSDOT Catch Basin Type 1	No
CB1-B85	WSDOT Catch Basin Type 1	No
CB1-B87	WSDOT Catch Basin Type 1	No
CB1-B90	WSDOT Catch Basin Type 1	No
CB1-B90	WSDOT Catch Basin Type 1	No
72" STM MH 22	Existing Manhole	No

Table C2. Structures Modeling Results for the 100-year Storm Event

Structure Name	Structure Type	Structure surcharged for the 100-year Storm?
MH-B80	WSDOT Manhole Type 3	No
MH-B85	WSDOT Manhole Type 3	No
MH-B90	WSDOT Manhole Type 3	No
MH-B95	WSDOT Manhole Type 3	No
MH-B100	WSDOT Manhole Type 3	No
MH-B103	WSDOT Manhole Type 3	No
MH-B160	WSDOT Manhole Type 3	No
MH-B165	WSDOT Manhole Type 3	No
MH-B170	WSDOT Manhole Type 3	No
MH-B180	WSDOT Manhole Type 3	No
Alignment C		
MH-C260	WSDOT Manhole Type 3	No
Alignment D		
MH-D10	WSDOT Manhole Type 3	No
MHV-D10	120 Inch Manhole	No
MHV-D20	120 Inch Manhole	No
Alignment E		
CB1-E10	WSDOT Catch Basin Type 1	No
CB1-E20	WSDOT Catch Basin Type 1	No
CB1-E30	WSDOT Catch Basin Type 1	No
CB1-E40	WSDOT Catch Basin Type 1	No
CB1-E50	WSDOT Catch Basin Type 1	No
CB1-E60	WSDOT Catch Basin Type 1	No
MH-E10	WSDOT Manhole Type 3	No
MH-E20	WSDOT Manhole Type 3	No
MH-E30	WSDOT Manhole Type 3	No
MH-E40	WSDOT Manhole Type 3	No
MH-E50	WSDOT Manhole Type 3	No
MH-E60	WSDOT Manhole Type 3	No
MH-E70	WSDOT Manhole Type 3	No
MH-E80	WSDOT Manhole Type 3	No
Alignment F		
CB1-F10	WSDOT Catch Basin Type 1	No
CB1-F20	WSDOT Catch Basin Type 1	No
CB1-F30	WSDOT Catch Basin Type 1	No
CB1-F40	WSDOT Catch Basin Type 1	No
CB1-F50	WSDOT Catch Basin Type 1	No
CB1-F60	WSDOT Catch Basin Type 1	No
CB1-F70	WSDOT Catch Basin Type 1	No
MH-F50	WSDOT Manhole Type 3	No

Table C2. Structures Modeling Results for the 100-year Storm Event

Structure Name	Structure Type	Structure surcharged for the 100-year Storm?
MH-F60	WSDOT Manhole Type 3	No
MH-F65	WSDOT Manhole Type 3	No
MH-F70	WSDOT Manhole Type 3	No
Alignment G		
CB1-G200	WSDOT Catch Basin Type 1	No
CB1-G210	WSDOT Catch Basin Type 1	No
CB1-G220	WSDOT Catch Basin Type 1	No
CB1-G230	WSDOT Catch Basin Type 1	No
CB1-G240	WSDOT Catch Basin Type 1	No
CB1-G250	WSDOT Catch Basin Type 1	No
CB1-G260	WSDOT Catch Basin Type 1	No
MH-G200	WSDOT Manhole Type 3	No
MH-G205	WSDOT Manhole Type 3	No
MH-G210	WSDOT Manhole Type 3	No
MH-G215	WSDOT Manhole Type 3	No
MH-G220	WSDOT Manhole Type 3	No
MH-G230	WSDOT Manhole Type 3	No
MH-G240	WSDOT Manhole Type 3	No
MH-G250	WSDOT Manhole Type 3	No

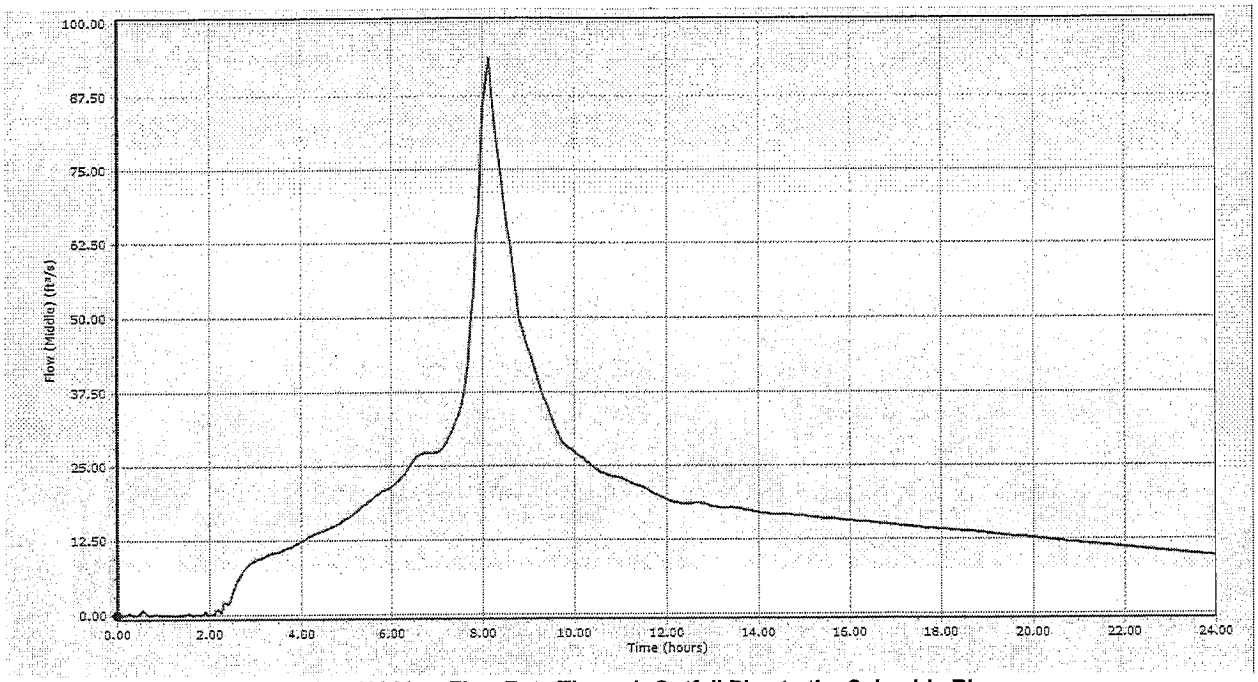
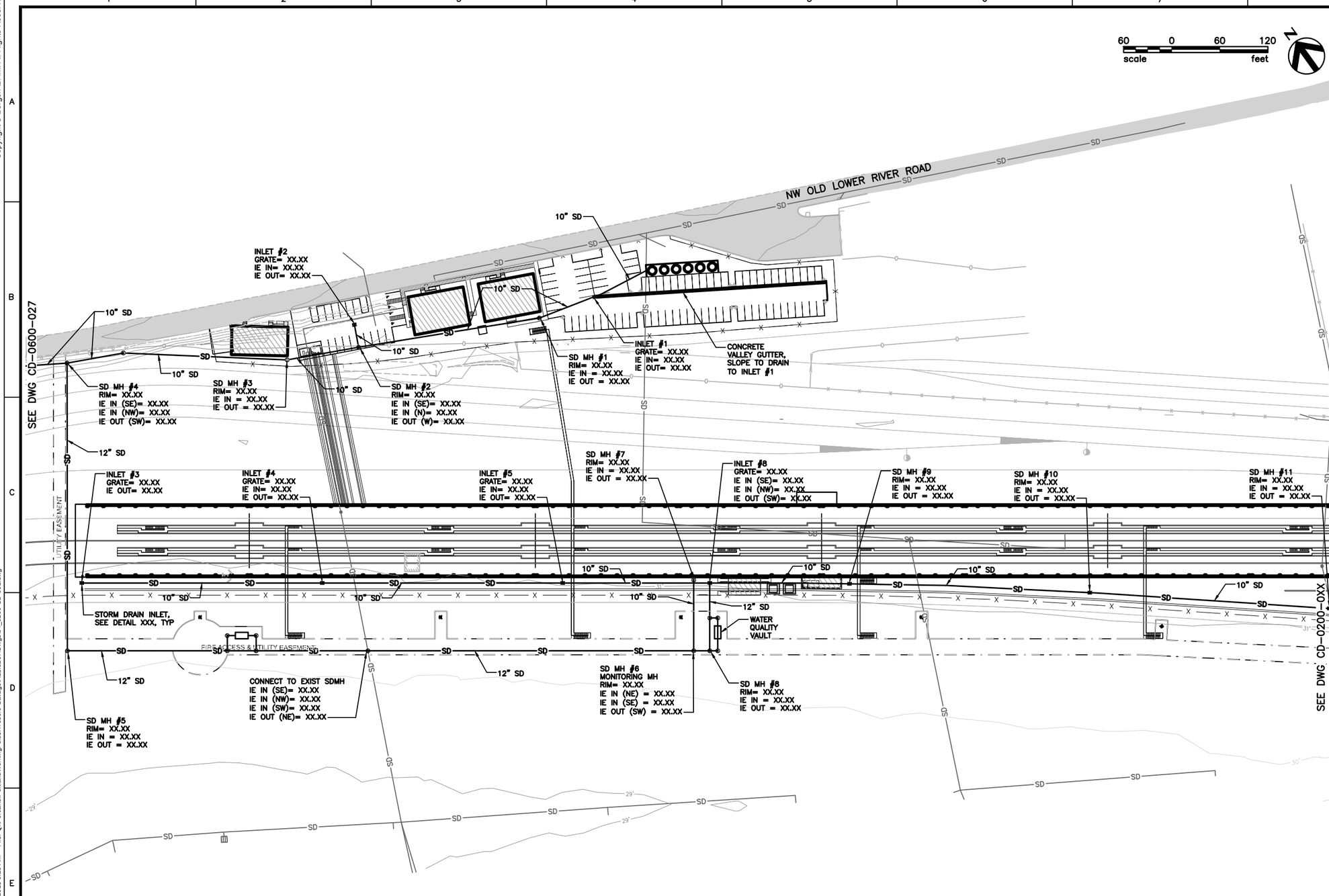


Figure C1. Hydrograph Showing 100 Year Flow Rate Through Outfall Pipe to the Columbia River

Attachment I
Stormwater Site Plans

Copyright © BergerABAM. All Rights Reserved.



NO.	DATE	REVISION	BY	CK'D	APP

BergerABAM
700 NE Multnomah Street, Suite 900
Portland, Oregon 97232-4189
(503) 872-4100 FAX: (503) 872-4101

TESORO SAVAGE

THIS DRAWING CONTAINS PROPRIETARY AND PRIVILEGED INFORMATION OF TESORO SAVAGE PETROLEUM LLC AND SHALL NOT BE DISCLOSED OR USED FOR THE BENEFIT OF OTHERS WITHOUT PRIOR WRITTEN PERMISSION OF THE DRAWING OWNER.

CUSTOMER: TESORO SAVAGE PETROLEUM TERMINAL LLC

PROJECT: TESORO SAVAGE PETROLEUM TERMINAL LLC
PORT OF VANCOUVER, WASHINGTON

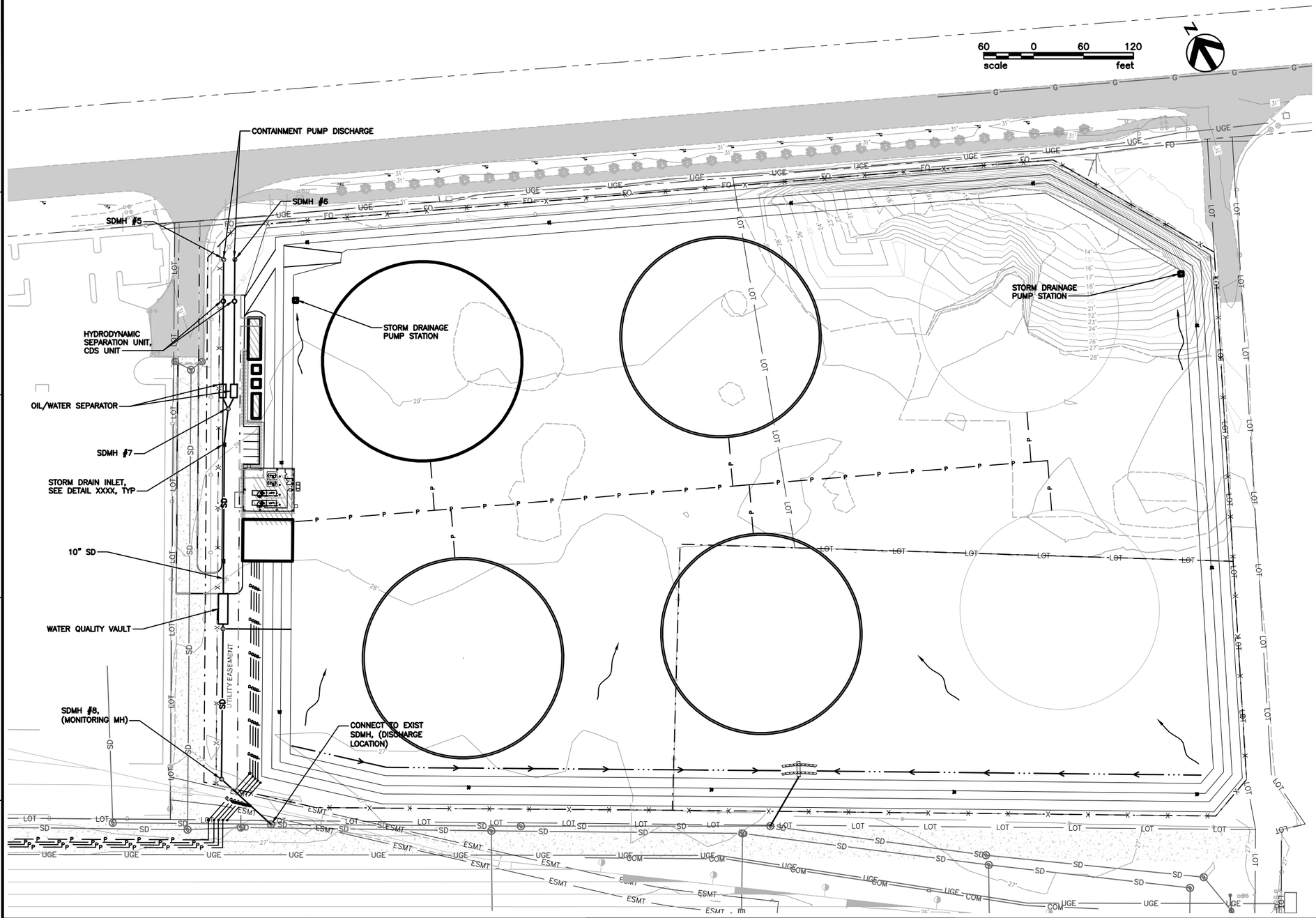
DESCRIPTION: GRADING AND DRAINAGE PLAN – UNLOADING & OFFICE AREA

DESIGN:	DES	START DATE:	8/9/2013	SCALE:	AS SHOWN
DRAWN:	TNP	PRINT DATE:	8/20/2013	PROJECT MANAGER:	PM
CHECKED:	CHK	APPROVED:	APPR	SIZE:	24X36

DRAWING NUMBER	SHEET	REV.
0200-CD-001		0

Last Saved by: Tony.pritchett on: Aug 20, 2013 9:28 AM File: Q:\Portland\Portland\WorkingFolder\Tesoro-Savage\A13.0267\Dwgs\04_0200-CD-001.dwg

Copyright © BergerABAM. All Rights Reserved.



NO.	DATE	REVISION	BY	CK'D	APP

BergerABAM
700 NE Multnomah Street, Suite 900
Portland, Oregon 97232-4189
(503) 872-4100 FAX: (503) 872-4101

TESORO SAVAGE

THIS DRAWING CONTAINS PROPRIETARY AND PRIVILEGED INFORMATION OF TESORO SAVAGE PETROLEUM LLC AND SHALL NOT BE DISCLOSED OR USED FOR THE BENEFIT OF OTHERS WITHOUT PRIOR WRITTEN PERMISSION OF THE DRAWING OWNER.

CUSTOMER: TESORO SAVAGE PETROLEUM TERMINAL LLC

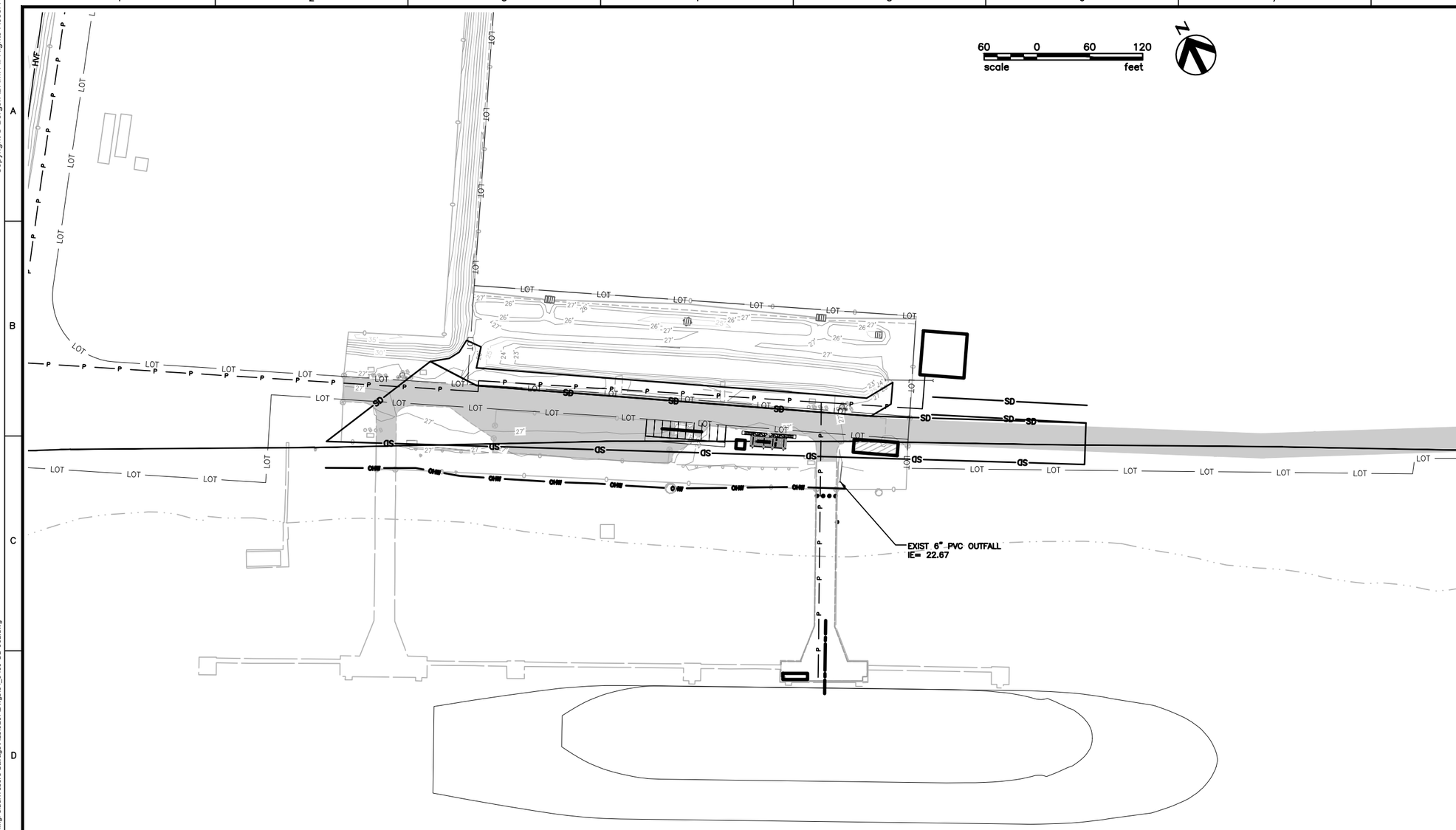
PROJECT: TESORO SAVAGE PETROLEUM TERMINAL LLC
PORT OF VANCOUVER, WASHINGTON

DESCRIPTION: GRADING AND DRAINAGE PLAN – TANK FARM AREA

DESIGN:	DES	START DATE:	8/9/2013	SCALE:	AS SHOWN
DRAWN:	TNP	PRINT DATE:	8/20/2013	PROJECT MANAGER:	PM
CHECKED:	CHK	APPROVED:	APPR	SIZE:	24X36
DRAWING NUMBER				SHEET	REV.
0300-CD-001				/	0

Last Saved by: Tony.pritchett on: Aug 20, 2013 9:39 AM File: Q:\Portland\Portland\WorkingFolder\Tesoro-Savage\A13.0267\Dwgs\04_0300-CD-001.dwg

Copyright © BergerABAM. All Rights Reserved.



NO.	DATE	REVISION	BY	CK'D	APP

BergerABAM
700 NE Multnomah Street, Suite 900
Portland, Oregon 97232-4189
(503) 872-4100 FAX: (503) 872-4101

TESORO SAVAGE

THIS DRAWING CONTAINS PROPRIETARY AND PRIVILEGED INFORMATION OF TESORO SAVAGE PETROLEUM LLC AND SHALL NOT BE DISCLOSED OR USED FOR THE BENEFIT OF OTHERS WITHOUT PRIOR WRITTEN PERMISSION OF THE DRAWING OWNER.

CUSTOMER: TESORO SAVAGE PETROLEUM TERMINAL LLC

PROJECT: TESORO SAVAGE PETROLEUM TERMINAL LLC
PORT OF VANCOUVER, WASHINGTON

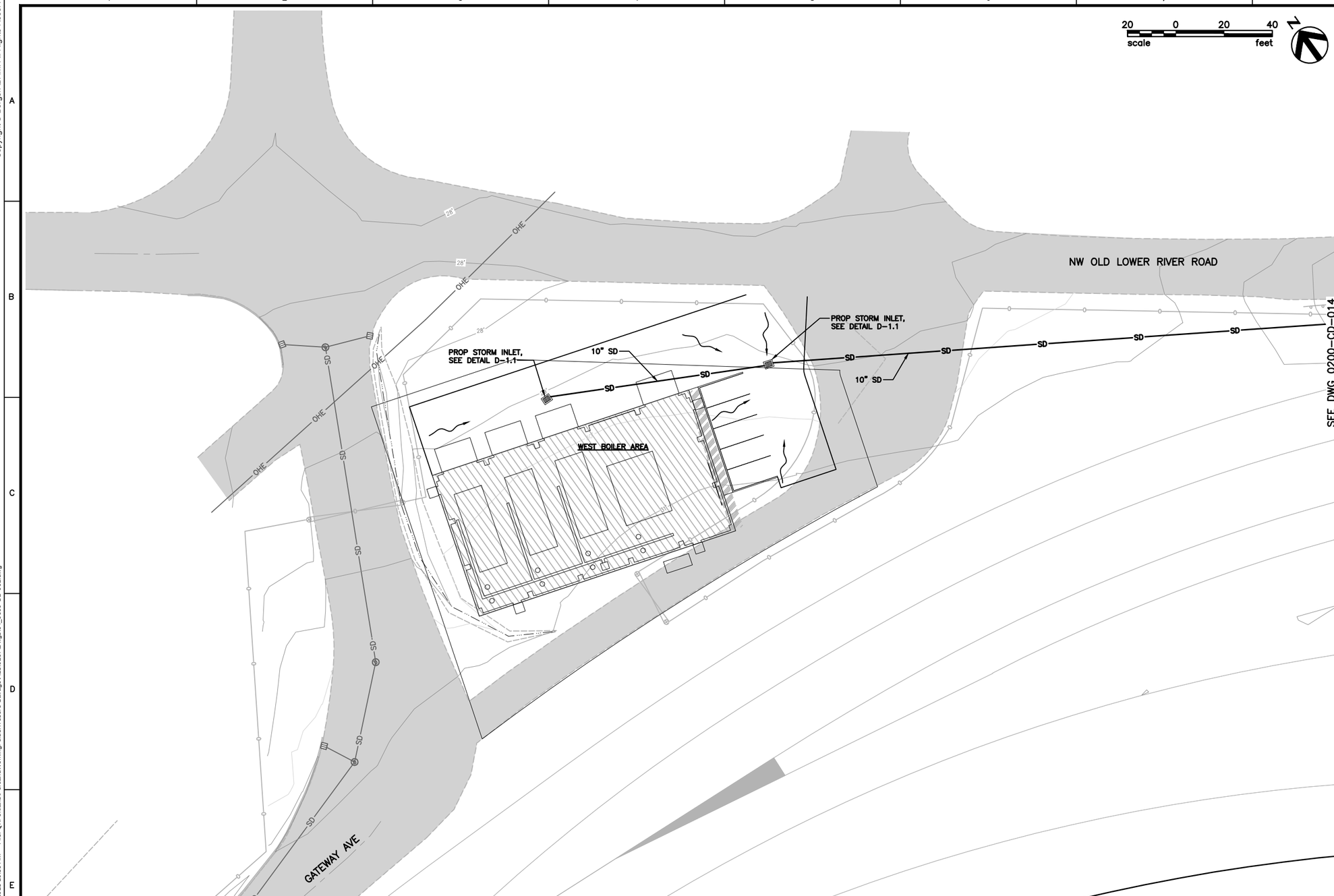
DESCRIPTION: GRADING AND DRAINAGE PLAN – DOCK AREA

DESIGN:	DES	START DATE:	8/9/2013	SCALE:	AS SHOWN
DRAWN:	TNP	PRINT DATE:	8/20/2013	PROJECT MANAGER:	PM
CHECKED:	CHK	APPROVED:	APPR	SIZE:	24X36

DRAWING NUMBER	SHEET	REV.
0400-CD-001		0

Last Saved by: Tony.pritchett on: Aug 20, 2013 10:22 AM File: Q:\Portland\Portland\WorkingFolder\Tesoro-Savage\A13.0267\Dwgs\04_0400-CD-001.dwg

Copyright © BergerABAM. All Rights Reserved.



NO.	DATE	REVISION	BY	CK'D	APP

BergerABAM
700 NE Multnomah Street, Suite 900
Portland, Oregon 97232-4189
(503) 872-4100 FAX: (503) 872-4101

TESORO SAVAGE

THIS DRAWING CONTAINS PROPRIETARY AND PRIVILEGED INFORMATION OF TESORO SAVAGE PETROLEUM LLC AND SHALL NOT BE DISCLOSED OR USED FOR THE BENEFIT OF OTHERS WITHOUT PRIOR WRITTEN PERMISSION OF THE DRAWING OWNER.

CUSTOMER: TESORO SAVAGE PETROLEUM TERMINAL LLC

PROJECT: TESORO SAVAGE PETROLEUM TERMINAL LLC
PORT OF VANCOUVER, WASHINGTON

DESCRIPTION: GRADING AND DRAINAGE PLAN – WEST BOILER AREA

DESIGN:	DES	START DATE:	8/9/2013	SCALE:	AS SHOWN
DRAWN:	TNP	PRINT DATE:	8/20/2013	PROJECT MANAGER:	PM
CHECKED:	CHK	APPROVED:	APPR	SIZE:	24X36

DRAWING NUMBER	SHEET	REV.
0600-CD-001		0

Last Saved by: Tony.pritchett on: Aug 20, 2013 10:56 AM File: Q:\Portland\PortlandWorkingFolder\Tesoro-Savage\A13.0267\Dwgs\04_0600-CD-001.dwg

Attachment J

Port of Vancouver, West Vancouver Freight Access Project
Parcel 1A Drainage Study

BergerABAM

700 Northeast Multnomah Street, Suite 900, Portland, Oregon 97232-4189
503/872-4100 • 503/872-4101 Fax • www.abam.com

Memorandum

Date: June 10, 2010

Subject: Port of Vancouver – West Vancouver Freight Access Project
Parcel 1A Drainage Study

From: Shawn Ellis, PE

To: Kurt Reichelt, HDR
Scott Hale, HDR

Route to: Papor-09-121 File

As requested by the Port of Vancouver, we have completed a review of drainage options for the Port's Parcel 1A property. Our understanding for the Port's desired future use of Parcel 1A and the results of our analyses based on this understanding is summarized in this memorandum.

Future Parcel 1A Sub-Basins

The purpose of this study is to determine the feasibility of providing for future drainage facilities for Parcel 1A after it is divided into three sub-basins. Two of the sub-basins will be approximately 22 acres each, and will be developed for light industrial use by outside parties or Port tenants. The balance of the parcel (15 acres) will remain Port property, and be used for rail and other Port access and as a utility corridor along the north side of the existing and future track corridor.

According to Port staff, the two 22-acre parcels will each provide on-site water quality treatment for storm water runoff. Treated storm water will be conveyed by Port-owned conveyance facilities for discharge to the Columbia River via the Port's outfall. The runoff will bypass the Port's existing water quality treatment facility (the T4 Pond). The 15-acre parcel will be conveyed for treatment in the T4 Pond.

Hydrology and Hydraulics

We have completed preliminary analyses to determine peak flows for a 25-year rainfall event from the combined 22-acre parcels and the 15-acre parcel to determine the size of the systems necessary to convey peak flows. The Santa Barbara Unit Hydrograph (SBUH) method was used for the analyses. Calculations are attached to this memo, but are summarized below. The design storm is the 25-year rainfall depth of 3.5 inches. Times of concentration are based on 100 feet of

overland flow for each system, 100 feet of concentrated flow, and the balance as pipe flow. Peak flow from the two combined parcels is predicted to be 30.8 cfs. Peak flow from the 15-acre parcel is predicted to be 9.5 cfs.

Required pipe sizes for the above peak discharges are determined from likely maximum slope requirements for each system based on the elevations for each system connection location. The 44-acre parcels will require a 36-inch pipe with a minimum slope assume to be xxx. The 15-acre parcel will require a 24-inch pipe with a minimum slope of 2.3%.

SBUH Input	**44-acre Parcels**	**15-acre Parcel**
Area (acres)	44 acres	15 acres
Percent Impervious	100%	100%
Curve Number	98	98
25-year Design Event	3.5 inches	3.5 inches
Time of Concentration	98	27.2 minutes
Peak Flow	30.8 cfs	9.5 cfs
Pipe Size	36-inch	24-inch

Grade Requirements For T4 Pond By-pass Conveyance System

The following assumptions and existing conditions have been considered to evaluate the feasibility of extending a gravity conveyance system from the western 22-acre parcel to the manhole south of the T4 pond.

- The conveyance system will be connected to the manhole just south of the T4 pond, and it has an invert elevation of 11.00 feet for the 60-inch pipe proposed from the T4 pond. The existing 60-inch outlet pipe has an invert elevation of 10.50 feet.
- Matching crowns at this manhole would require an invert elevation of 13.00 feet for the 36-inch conveyance pipe from Parcel 1A.
- Approximately 3,650 linear feet of conveyance pipe will be required to convey the two 22-acre sites runoff to the discharge at the Port's manhole south of the T4 pond. Assuming a minimum slope of 0.2% results in a 7.3-foot grade drop to this manhole.
- Approximately 900 linear feet of pipe in the westernmost 22-acre site at a slope of 0.5% will require a 4½-foot grade drop within the site.

- Site elevation in the NW corner of Parcel 1A will be at least 29 feet, based on adjacent survey data.
- The invert elevation for the upstream end of the on-site conveyance system, could be as low as 24.80 feet given the above criteria. The site elevation in the NW corner of Parcel 1A is likely to be at least 29 feet, based on adjacent survey data from Gateway Road and SR 501. Therefore, a depth of 4.2 feet for this upstream point is possible.
- Shallower depth for the on-site system may be required if water quality treatment systems selected by parcel owners/tenants require a hydraulic head to function.

It is recommended that 36-inch conveyance system be constructed as deeply as possible in order to allow for the most flexibility for design of the on-site storm water systems.

Options for Crossing the Track Corridor

An existing 42-inch pipe currently crosses the track corridor, extending towards the T4 pond from an inlet and manhole at the southeast corner of Parcel 1A. Existing Project 6 (Terminal 3 Rail Access) plans show modifications to this pipe system to provide access from Parcel 1A to the T4 pond. This pipe can be used for either the 44-acre conveyance or the 15-acre conveyance, although conditions for each are not ideal (see option discussions below).

For whichever system the 42-inch pipe is used, we recommend that a second storm pipe be installed as part of Project 6 (or partially during Project 6 with completion as part of Project 11). The second pipe will be either for conveyance of the 44-acre parcel or the 15-acre parcel.

Options for providing conveyance for the parallel pipe systems are described below:

- *Existing 42-inch Pipe for 44-acre Conveyance.* The existing 42-inch pipe could be used for conveyance of the 44-acre parcel. However, the pipe does not provide the same upstream or downstream elevations listed in the Grade Requirements above. The downstream end of the pipe on the south side of the track corridor is at elevation 15.31 feet. Approximately 1270 feet of pipe would be required to extend the system to the manhole south of the T4 pond. At a slope of 0.2% the invert at the manhole would be 12.77 feet. This would function hydraulically, but would not allow for matching pipe crowns.

  If the existing 42-inch pipe is proposed for conveyance of the 44-acre sites, a second storm crossing (24-inch pipe) should be installed for conveyance of the 15-acre parcel. The Project 6 plans should be modified to complete the connection as part of the project 6 project, so that future modification to the system won't be necessary, and to ensure that the required configuration of the both systems can function in the limited space available near the northwest corner of the pond.

- ***Existing* 42-inch Pipe for 15-acre Conveyance.** The current Project 6 plans provide for extension of the 42-inch to the T4 Pond. However, the existing pipe is below the pond water surface elevation of 16.65 feet, and is generally partially filled with water except when the pond's water surface drops due to evaporation during very dry periods. If the 15-acre parcel is used by this existing pipe, a second 36-inch storm crossing should be installed for the 44-acre parcel future conveyance.

Conveyance Calculations & Pipe Sizing

Project: West Vancouver Freight Access Project - Project 9
PAPOR-11-127
Date: 4/18/2011

Storm Drain A

Upstream	Downstream	Length	Peak Discharge Calculation									Pipe Design					
			Area (acres)	C	CA	Sum Ca	Tc (min)	Pipe Tc (min)	Sum Tc (min)	I (in/hr)	Q (cfs)	Dia (in)	Slope (ft/ft)	Mannings n	Capacity (cfs)	Velocity (fps)	Q/Qcap
Gateway Ave	MH P9-A1	238	2.030	0.9	1.83	1.83	6.5		6.5	2.31	4.22	18	0.0028	0.013	5.57	3.15	0.76
MH P9-A1	MH P9-A2	300	1.670	0.9	1.50	3.33		1.3	7.8	2.11	7.03	24	0.002	0.013	10.14	3.23	0.69
MH P9-A2	MH P9-A3	300	1.670	0.9	1.50	4.83		1.5	9.3	1.92	9.28	24	0.002	0.013	10.14	3.23	0.92
MH P9-A3	MH P9-A4	300	1.670	0.9	1.50	6.34		1.5	10.9	1.77	11.24	30	0.0015	0.013	15.92	3.24	0.71
MH P9-A4	MH P9-A5	300	1.670	0.9	1.50	7.84		1.5	12.4	1.66	12.99	30	0.0015	0.013	15.92	3.24	0.82
MH P9-A1	MH P9-A6	300	1.670	0.9	1.50	9.34		1.5	13.9	1.56	14.58	30	0.0015	0.013	15.92	3.24	0.92
MH P9-A5	MH P9-A7	300	1.670	0.9	1.50	10.85		1.5	15.5	1.48	16.03	36	0.0012	0.013	23.16	3.28	0.69
MH P9-A1	MH P9-A8	300	1.670	0.9	1.50	12.35		1.5	17.0	1.41	17.39	36	0.0012	0.013	23.16	3.28	0.75
MH P9-A1	MH P9-A9	241	1.670	0.9	1.50	13.85		1.5	18.5	1.35	18.66	36	0.0012	0.013	23.16	3.28	0.81
MH P9-A9	Exisiting MH	358	1.670	0.9	1.50	15.35		1.2	19.8	1.30	20.02	36	0.0012	0.013	23.16	3.28	0.86
		Total Area	17.06														

Storm Drain B

Upstream	Downstream	Length	Peak Discharge Calculation									Pipe Design					
			Area (acres)	C	CA	Sum Ca	Tc (min)	Pipe Tc (min)	Sum Tc (min)	I (in/hr)	Q (cfs)	Dia (in)	Slope (ft/ft)	Mannings n	Capacity (cfs)	Velocity (fps)	Q/Qcap
Farwest	MH P9-B1	5	22.000	0.9	19.80	19.80	98.0		98.0	0.57	11.32	30	0.0015	0.013	15.92	3.24	0.71
MH P9-B1	MH P9-B2	203	0.000	0.9	0.00	19.80		0.0	98.0	0.57	11.31	30	0.002	0.013	18.38	3.75	0.62
MH P9-B2	MH P9-B3	300	5.250	0.9	4.73	24.53		0.9	98.9	0.57	13.95	36	0.002	0.013	29.89	4.23	0.47
MH P9-B3	MH P9-B4	254	5.250	0.9	4.73	29.25		1.2	100.1	0.57	16.53	36	0.0015	0.013	25.89	3.66	0.64
MH P9-B4	MH P9-B5	279	5.250	0.9	4.73	33.98		1.2	101.3	0.56	19.09	42	0.0015	0.013	39.05	4.06	0.49
MH P9-B5	MH P9-B6	279	5.250	0.9	4.73	38.70		1.1	102.4	0.56	21.62	42	0.0015	0.013	39.05	4.06	0.55
MH P9-B6	Existing MH	50	1.000	0.9	0.90	39.60		1.1	103.6	0.56	22.00	42	0.0012	0.013	34.93	3.63	0.63
		Total Area	44.00														

Intensity (I)
From the WSDOT Hydraulics Manual, $I = m/Tc^n$
where m = 6.06 and n = 0.515 for the 25-year return period

Gateway Avenue Contribution to Storm Drain A taken from Project 19 calculations.
Farwest Steel contribution to Storm Drain B taken from Farwest Steel calculations.

Conveyance Calculations & Pipe Sizing

Project: West Vancouver Freight Access Project - Gateway Avenue Grade Separation
PAPOR-11-127
Date: 4/18/2011

Gateway Avenue From Lower River Road to MH-13

Upstream	Downstream	Length	Peak Discharge Calculation									Pipe Design					
			Area (acres)	C	CA	Sum Ca	Tc (min)	Pipe Tc (min)	Sum Tc (min)	I* (in/hr)	Q (cfs)	Dia (in)	Slope (ft/ft)	Mannings n	Capacity (cfs)	Velocity (fps)	Q/Qcap
MH-15	MH-14	294	0.180	0.9	0.16	0.16	5.0		5.0	2.65	0.43	12	0.005	0.013	2.52	3.22	0.17
MH-14	MH-13	109	0.295	0.9	0.27	0.43		1.5	6.5	2.31	0.99	12	0.005	0.013	2.52	3.22	0.39
		Total Area	0.48														

Gateway Avenue From High Point at Station G22+48.47 to MH-13

Upstream	Downstream	Length	Peak Discharge Calculation									Pipe Design					
			Area (acres)	C	CA	Sum Ca	Tc (min)	Pipe Tc (min)	Sum Tc (min)	I (in/hr)	Q (cfs)	Dia (in)	Slope (ft/ft)	Mannings n	Capacity (cfs)	Velocity (fps)	Q/Qcap
MH-7	MH-8	125	0.390	0.9	0.35	0.35	5.0		5.0	2.65	0.93	12	0.0534	0.013	8.25	10.51	0.11
MH-8	MH-9	170	0.000	0.9	0.00	0.35		0.2	5.2	2.59	0.91	12	0.0537	0.013	8.27	10.54	0.11
MH-9	MH-10	134	0.374	0.9	0.34	0.69		0.3	5.5	2.53	1.74	12	0.0446	0.013	7.54	9.60	0.23
MH-10	MH-11	122	0.000	0.9	0.00	0.69		0.2	5.7	2.47	1.70	12	0.019	0.013	4.92	6.27	0.35
MH-11	MH-12	53	0.386	0.9	0.35	1.04		0.3	6.0	2.40	2.49	12	0.0049	0.013	2.50	3.19	0.99
MH-12	MH-13	101	0.262	0.9	0.24	1.27		0.3	6.0	2.40	3.05	15	0.005	0.013	4.58	3.73	0.67
		Total Area	1.41														

Gateway Avenue From MH-13 to Discharge to Conveyance at Parcel 1A Tract

Upstream	Downstream	Length	Peak Discharge Calculation									Pipe Design					
			Area (acres)	C	CA	Sum Ca	Tc (min)	Pipe Tc (min)	Sum Tc (min)	I (in/hr)	Q (cfs)	Dia (in)	Slope (ft/ft)	Mannings n	Capacity (cfs)	Velocity (fps)	Q/Qcap
MH-13	Parcel 1A	238	0.141	0.9	0.13	1.83	6.5		6.5	2.31	4.21	18	0.0028	0.013	5.57	3.15	0.76
		Total Area	2.03	Includes areas from two tables above													

Gateway Avenue From High Point at Station G22+48.47 to discharge into the Terminal 5 System

Upstream	Downstream	Length	Peak Discharge Calculation									Pipe Design					
			Area (acres)	C	CA	Sum Ca	Tc (min)	Pipe Tc (min)	Sum Tc (min)	I* (in/hr)	Q (cfs)	Dia (in)	Slope (ft/ft)	Mannings n	Capacity (cfs)	Velocity (fps)	Q/Qcap
MH-6	MH-5	93	0.512	0.9	0.46	0.46	5.0		5.0	2.65	1.22	12	0.0322	0.013	6.40	8.16	0.19
MH-5	MH-4	260	0.215	0.9	0.19	0.65		0.2	5.2	2.60	1.70	12	0.0396	0.013	7.10	9.05	0.24
MH-4	MH-3	285	0.363	0.9	0.33	0.98		0.5	5.7	2.48	2.43	12	0.0391	0.013	7.06	8.99	0.34
MH-3	MH-2	119	0.319	0.9	0.29	1.27		0.5	6.2	2.37	3.00	12	0.0172	0.013	4.68	5.96	0.64
MH-2	MH-1	69	0.440	0.9	0.40	1.66		0.3	6.5	2.31	3.84	15	0.0077	0.013	5.68	4.63	0.68
MH-1	T5		0.132	0.9	0.12	1.78		0.2	6.8	2.26	4.03	15	0.005	0.013	4.58	3.73	0.88
		Total Area	1.98														

* Intensity (I)
From the WSDOT Hydraulics Manual, $I = m/Tc^n$
where m = 6.06 and n = 0.515 for the 25-year return period

Attachment K
Port of Vancouver Municipal Phase II General Stormwater Permit

Issuance Date: August 1, 2012
Effective Date: August 1, 2013
Expiration Date: July 31, 2018

Western Washington Phase II Municipal Stormwater Permit

National Pollutant Discharge Elimination System and
State Waste Discharge General Permit
for discharges from Small Municipal Separate Storm Sewers
in Western Washington

State of Washington
Department of Ecology
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this permit are authorized to discharge to waters of the state in accordance with the special and general conditions which follow.

Kelly Susewind, P.E., P.G.
Water Quality Program Manager
Department of Ecology

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

SPECIAL AND GENERAL CONDITIONS

SPECIAL CONDITIONS 5
S1. PERMIT COVERAGE AREA AND PERMITTEES 5
S2. AUTHORIZED DISCHARGES 10
S3. RESPONSIBILITIES OF PERMITTEES 11
S4. COMPLIANCE WITH STANDARDS 12
S5....STORMWATER MANAGEMENT PROGRAM FOR CITIES, TOWNS AND COUNTIES 14
S5.C.1 Public Education and Outreach 16
S5.C.2 Public Involvement and Participation 18
S5.C.3 Illicit Discharge Detection and Elimination 19
S5.C.4 Controlling Runoff from New Development, Redevelopment and Construction Sites 24
S5.C.5 Municipal Operations and Maintenance 31
S6. STORMWATER MANAGEMENT PROGRAM FOR SECONDARY PERMITTEES 35
S7. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS 42
S8. MONITORING AND ASSESSMENT 43
S9. REPORTING REQUIREMENTS 51
GENERAL CONDITIONS 53
G1. DISCHARGE VIOLATIONS 53
G2. PROPER OPERATION AND MAINTENANCE 53
G3. NOTIFICATION OF DISCHARGE, INCLUDING SPILLS 53
G4. BYPASS PROHIBITED 53
G5. RIGHT OF ENTRY 54
G6. DUTY TO MITIGATE 54
G7. PROPERTY RIGHTS 54
G8. COMPLIANCE WITH OTHER LAWS AND STATUTES 54
G9. MONITORING 54
G10. REMOVED SUBSTANCES 56
G11. SEVERABILITY 56
G12. REVOCATION OF COVERAGE 56
G13. TRANSFER OF COVERAGE 56

G14. GENERAL PERMIT MODIFICATION AND REVOCATION 57
G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION 57
G16. APPEALS 57
G17. PENALTIES 58
G18. DUTY TO REAPPLY 58
G19. CERTIFICATION AND SIGNATURE 58
G20. NON-COMPLIANCE NOTIFICATION 59
G21. UPSETS 59
DEFINITIONS AND ACRONYMS 60

APPENDICES

APPENDIX 1. Minimum Technical Requirements

APPENDIX 2. Total Maximum Daily Load Requirements

APPENDIX 3. Annual Report for Cities, Towns and Counties

APPENDIX 4. Annual Report for Secondary Permittees

APPENDIX 5. Notice of Intent

APPENDIX 6. Street Waste Disposal

APPENDIX 7. Determining Construction Site Damage Transport Potential

APPENDIX 8. Annual Report for New Permittees

APPENDIX 9. Stormwater Discharge Monitoring

SPECIAL CONDITIONS

S1. PERMIT COVERAGE AREA AND PERMITTEES

A. Geographic Area of Permit Coverage

This Permit is applicable to owners or operators of regulated small municipal separate storm sewer systems (MS4s) located west of the eastern boundaries of the following counties: Whatcom, Skagit, Snohomish, King, Pierce, Lewis and Skamania.

1. For all cities required to obtain coverage under this permit, the geographic area of coverage is the entire incorporated area of the city.

2. For all counties required to have coverage under this Permit, the geographic area of coverage is the urbanized areas and urban growth areas associated with permitted cities under the jurisdictional control of the county. The geographic area of coverage also includes any urban growth area contiguous to permitted urbanized areas under the jurisdictional control of the county.

   For Whatcom County, the geographic area of coverage also includes the unincorporated Birch Bay urban growth area.

3. For Secondary Permittees required to obtain coverage under this permit, the minimum geographic area of coverage is all areas identified under S1.A.1 and S1.A.2. At the time of permit coverage, Ecology may establish a geographic area of coverage specific to an individual Secondary Permittee.

4. All regulated small MS4s owned or operated by the Permittees named in S1.D.2.a(i) and (ii),and S1.D.2.b and located in another city or county area requiring coverage under this permit or the *Phase I Municipal Stormwater Permit* or the *Eastern Washington Phase II Municipal Stormwater Permit* are also covered under this permit.

B. Regulated Small Municipal Separate Storm Sewer Systems (MS4s)

All operators of regulated small MS4s are required to apply for and obtain coverage under this Permit or be permitted under a separate individual permit, unless waived or exempted in accordance with condition S1.C.

1. A regulated small MS4:

   a. Is a “Small MS4” as defined in the *Definitions and Acronyms* section at the end of this Permit; and

   b. Is located within, or partially located within, an urbanized area as defined by the latest decennial census conducted by the U.S. Bureau of Census, or designated by Ecology pursuant to 40 CFR 123.35(b) or 40 CFR 122.26(f); and

c. Discharges stormwater from the MS4 to a surface water of Washington State; and

d. Is not eligible for a waiver or exemption under S1.C. below.

2. All other operators of MS4s, including special purpose districts, which meet the criteria for a regulated small MS4 shall obtain coverage under this Permit. Other operators of small MS4s may include, but are not limited to: flood control, or diking and drainage districts, schools including universities, and correctional facilities that own or operate a small MS4 serving non-agricultural land uses.

3. Any other operators of small MS4s may be required by Ecology to obtain coverage under this permit or an alternative NPDES permit if Ecology determines the small MS4 is a significant source of pollution to surface waters of the state. Notification of Ecology's determination that permit coverage is required will be through the issuance of an Administrative Order issued in accordance with RCW 90.48.

4. The owner or operator of a regulated small MS4 may obtain coverage under this Permit as a Permittee, Co-permittee, or Secondary Permittee as defined in S1.D.1. below.

5. Pursuant to 40 CFR 122.26(f), any person or organization may petition Ecology to require that additional small MS4s obtain coverage under this Permit. The process for petitioning Ecology is:

   a. The person or organization shall submit a complete petition in writing to Ecology. A complete petition shall address each of the relevant factors for petitions outlined on Ecology's website.

   b. In making its determination on the petition, Ecology may request additional information from either the petitioner or the entity that is the subject of the petition.

   c. Ecology will make a final determination on a complete petition within 180 days of receipt of the petition and inform both the petitioner and the MS4 of the decision, in writing.

   d. If Ecology's final determination is that the candidate MS4 will be regulated, Ecology will issue an order to the operator of the MS4 requiring them to obtain coverage under this Permit. The order will specify:

      i. The geographic area of permit coverage for the MS4;

      ii. Any modified dates or deadlines for developing and implementing this Permit, as appropriate to the MS4, and for submitting their first annual report; and

iii. A deadline for the operator of the MS4 to submit a complete Notice of Intent (see Appendix 5) to Ecology.

C. Owners and operators of an otherwise regulated small MS4 are not required to obtain coverage under this Permit if:

1. The small MS4 is operated by:

a. A federal entity, including any department, agency or instrumentality of the executive, legislative, and judicial branches of the Federal government of the United States.

b. Federally recognized Indian Tribes located within Indian Country, including all trust or restricted lands within the 1873 Survey Area of the Puyallup Tribe of Indians; or

c. The Washington State Department of Transportation.

or:

2. The portions of the small MS4 located within the census defined urban area(s) serve a total population of less than 1000 people and a, b, and c, below all apply:

a. The small MS4 is not contributing substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the NPDES stormwater program.

b. The discharge of pollutants from the small MS4 has not been identified as a cause of impairment of any water body to which the MS4 discharges.

c. In areas where an EPA approved TMDL has been completed, stormwater controls on the MS4 have not been identified as being necessary.

In determining the total population served, both resident and commuter populations shall be included. For example:

- For publicly operated school complexes including universities and colleges the total population served would include the sum of the average annual student enrollment plus staff.
- For flood control, diking, and drainage districts the total population served would include residential population and any non-residents regularly employed in the areas served by the small MS4.

D. Obtaining coverage under this Permit

All operators of regulated small MS4s are required to apply for and obtain coverage in accordance with this section, unless waived or exempted in accordance with section S1.C.

1. Unless otherwise noted, the term "Permittee" shall include a city, town or county Permittee, New Permittee, Co-Permittee, Secondary Permittee, and New Secondary Permittee as defined below:

    a. "Permittee" is a city, town, or county owning or operating a regulated small MS4 applying and receiving a permit as a single entity.

    b. "New Permittee" is a city, town or county that is subject to the *Western Washington Phase II Municipal Stormwater General Permit* and was not subject to the permit prior to August 1, 2013.

    c. "Co-Permittee" is any owner or operator of a regulated small MS4 that is applying in a cooperative agreement with at least one other applicant for coverage under this Permit. Co-Permittees own or operate a regulated small MS4 located within or in proximity to another regulated small MS4.

    d. A "Secondary Permittee" is an operator of a regulated small MS4 that is not a city, town or county. Secondary Permittees include special purpose districts and other MS4s that meet the criteria for a regulated small MS4 in S1.B. above.

    e. "New Secondary Permittee" is a Secondary Permittee that is covered under a municipal stormwater general permit and was not covered by the permit prior to August 1, 2013.

2. Operators of regulated small MS4s have submitted or shall submit to Ecology either a *Notice of Intent (NOI) for Coverage under National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater General Permit* provided in Appendix 5 or a *Duty to Reapply - NOI.*

    a. The following Permittees and Secondary Permittees submitted a *Duty to Reapply - NOI* to Ecology prior to August 19, 2011:

        i. Cities and towns: Aberdeen, Algona, Anacortes, Arlington, Auburn, Bainbridge Island, Battle Ground, Bellevue, Bellingham, Black Diamond, Bonney Lake, Bothell, Bremerton, Brier, Buckley, Burien, Burlington, Camas, Centralia, Clyde Hill, Covington, Des Moines, DuPont, Duvall, Edgewood, Edmonds, Enumclaw, Everett, Federal Way, Ferndale, Fife, Fircrest, Gig Harbor, Granite Falls, Issaquah, Kelso, Kenmore, Kent, Kirkland, Lacey, Lake Forest Park, Lake Stevens, Lakewood, Longview, Lynnwood, Maple Valley, Marysville, Medina, Mercer Island, Mill Creek, Milton, Monroe, Mountlake Terrace, Mount Vernon, Mukilteo, Newcastle, Normandy Park, Oak Harbor, Olympia, Orting, Pacific, Port Orchard, Port Angeles, Poulsbo, Puyallup, Redmond, Renton, Sammamish, SeaTac, Sedro-Woolley, Shoreline, Snohomish, Steilacoom, Sumner, Tukwila, Tumwater, University Place, Vancouver, Washougal, and Woodinville.

ii. Counties: Cowlitz, Kitsap, Thurston, Skagit, and Whatcom.

iii. Secondary Permittees: Bainbridge Island School District #303, Bellingham School District, Bellingham Technical College, Cascadia College, Central Kitsap School District, Centralia College, Clark College, Consolidated Diking Improvement District #1 of Cowlitz County, Edmonds Community College, Evergreen College, Highline Community College, Kelso School District, Kent School District, Longview School District, Lower Columbia College, Port of Anacortes, Port of Bellingham, Port of Olympia, Port of Skagit County, Port of Vancouver, Skagit County Drainage District #19, Skagit Valley College, University of Washington Bothell, Washington State University Vancouver, Washington State General Administration (Capitol Campus), Washington Department of Corrections, Western Washington University, and Whatcom Community College.

b. Operators of regulated small MS4s have submitted or shall submit to Ecology a *Notice of Intent (NOI) for Coverage under National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater General Permit* provided in Appendix 5 before the effective date of this permit, with the following exceptions:

i. Operators of regulated small MS4s located in the Cities of Lynden and Snoqualmie shall submit a NOI or application to Ecology no later than 30 days after the effective date of this permit.

ii. Operators of regulated small MS4s listed in S1.D.2.a do not need to submit a new application to be covered under this permit.

c. For operators of regulated small MS4s listed in S1.D.2.a, coverage under this permit is automatic and begins on the effective date of this permit, unless the operator chooses to opt out of this General Permit. Any operator of a regulated small MS4 that is opting out of this permit shall submit an application for an individual MS4 permit in accordance with 40 CFR 122.33(b)(2)(ii) no later than the effective date of this permit.

d. Operators of regulated small MS4s which want to be covered under this permit as Co-Permittees shall each submit a NOI to Ecology.

e. Operators of regulated small MS4s which are relying on another entity to satisfy all of their permit obligations shall submit a NOI to Ecology.

f. Operators of small MS4s designated by Ecology pursuant to S1.B.3 of this permit shall submit a NOI to Ecology within 120 days of receiving notification from Ecology that permit coverage is required.

3. Application Requirements

a. For NOIs submitted after the issuance date of this Permit, the applicant shall include a certification that the public notification requirements of WAC 173-226-130(5) have been satisfied. Ecology will notify applicants in writing of their status concerning coverage under this Permit within 90 days of Ecology's receipt of a complete NOI.

b. Each Permittee applying as a Co-Permittee shall submit a NOI provided in Appendix 5. The joint NOI shall clearly identify the areas of the MS4 for which the Co-Permittee is responsible.

c. Permittees relying on another entity or entities to satisfy one or more of their permit obligations shall notify Ecology in writing. The notification shall include a summary of the permit obligations that will be carried out by another entity. The summary shall identify the other entity or entities and shall be signed by the other entity or entities. During the term of the permit, permittees may terminate or amend shared responsibility arrangements by notifying Ecology, provided this does not alter implementation deadlines.

d. Secondary Permittees required to obtain coverage under this Permit, and the *Phase I Municipal Stormwater Permit* or the *Eastern Washington Phase II Municipal Stormwater Permit* may obtain coverage by submitting a single NOI.

S2. AUTHORIZED DISCHARGES

A. This Permit authorizes the discharge of stormwater to surface waters and to ground waters of the state from MS4s owned or operated by each Permittee covered under this permit, in the geographic area covered pursuant to S1.A. These discharges are subject to the following limitations:

1. Discharges to ground waters of the state through facilities regulated under the Underground Injection Control (UIC) program, chapter 173-218 WAC, are not authorized under this Permit.

2. Discharges to ground waters not subject to regulation under the federal Clean Water Act are authorized in this permit only under state authorities, chapter 90.48 RCW, the Water Pollution Control Act.

B. This Permit authorizes discharges of non-stormwater flows to surface waters and to ground waters of the state from MS4s owned or operated by each Permittee covered under this permit, in the geographic area covered pursuant to S1.A, only under one or more of the following conditions:

1. The discharge is authorized by a separate NPDES or State Waste Discharge permit.

2. The discharge is from emergency fire fighting activities.

3. The discharge is from another illicit or non-stormwater discharge that is managed by the Permittee as provided in Special Condition S5.C.3 or S6.C.3.

These discharges are also subject to the limitations in S2.A.1 and S.2.A.2 above.

C. This Permit does not relieve entities that cause illicit discharges, including spills of oil or hazardous substances, from responsibilities and liabilities under state and federal laws and regulations pertaining to those discharges.

D. Discharges from MS4s constructed after the effective date of this permit shall receive all applicable state and local permits and use authorizations, including compliance with chapter 43.21C RCW (the State Environmental Policy Act).

E. This Permit does not authorize discharges of stormwater to waters within Indian Country or to waters subject to water quality standards of Indian Tribes, including portions of the Puyallup River and other waters on trust or restricted lands within the 1873 Survey Area of the Puyallup Tribe of Indians Reservation, except where authority has been specifically delegated to Ecology by the U.S. Environmental Protection Agency. The exclusion of such discharges from this Permit does not waive any rights the State may have with respect to the regulation of the discharges.

S3. RESPONSIBILITIES OF PERMITTEES

A. Each Permittee covered under this Permit is responsible for compliance with the terms of this Permit for the regulated small MS4s that they own or operate. Compliance with (1) or (2) below is required as applicable to each Permittee, whether the Permittee has applied for coverage as a Permittee, Co-Permittee, or Secondary Permittee.

1. All city, town and county Permittees are required to comply with all conditions of this Permit, including any appendices referenced therein, except for Special Condition S6 Stormwater Management Program for Secondary Permittees.

2. All Secondary Permittees are required to comply with all conditions of this Permit, including any appendices referenced therein, except for section S5 Stormwater Management Program for Cities, Towns and Counties and S8.B, S8.C, and S8.D Monitoring.

B. Permittees may rely on another entity to satisfy one or more of the requirements of this Permit. Permittees that are relying on another entity to satisfy one or more of their permit obligations remain responsible for permit compliance if the other entity fails to implement permit conditions. Permittees may rely on another entity provided all the requirements of 40 CFR 122.35(a) are satisfied, including but not limited to:

1. The other entity, in fact, implements the Permit requirements.

2. The other entity agrees to take on responsibility for implementation of the Permit requirement(s) as indicated on the NOI.

S4. COMPLIANCE WITH STANDARDS

A. In accordance with RCW 90.48.520, the discharge of toxicants to waters of the state of Washington which would violate any water quality standard, including toxicant standards, sediment criteria, and dilution zone criteria is prohibited. The required response to such discharges is defined in section S4.F, below.

B. This Permit does not authorize a discharge which would be a violation of Washington State Surface Water Quality Standards (chapter 173-201A WAC), Ground Water Quality Standards (chapter 173-200 WAC), Sediment Management Standards (chapter 173-204 WAC), or human health-based criteria in the national Toxics Rule (Federal Register, Vol. 57, NO. 246, Dec. 22, 1992, pages 60848-60923). The required response to such discharges is defined in section S4.F, below.

C. The Permittee shall reduce the discharge of pollutants to the maximum extent practicable (MEP).

D. The Permittee shall use all known, available, and reasonable methods of prevention, control and treatment (AKART) to prevent and control pollution of waters of the state of Washington.

E. In order to meet the goals of the Clean Water Act, and comply with S4.A , S4.B, S4.C, and S4.D each Permittee shall comply with all of the applicable requirements of this Permit as identified in S3 Responsibilities of Permittees.

F. A Permittee remains in compliance with S4 despite any discharges prohibited by S4.A or S4.B, when the Permittee undertakes the following response toward long-term water quality improvement:

1. A Permittee shall notify Ecology in writing within 30 days of becoming aware, based on credible site-specific information that a discharge from the MS4 owned or operated by the Permittee is causing or contributing to a known or likely violation of Water Quality Standards in the receiving water. Written notification provided under this subsection shall, at a minimum, identify the source of the site-specific information, describe the nature and extent of the known or likely violation in the receiving water, and explain the reasons why the MS4 discharge is believed to be causing or contributing to the problem. For ongoing or continuing violations, a single written notification to Ecology will fulfill this requirement.

2. In the event that Ecology determines, based on a notification provided under S4.F.1 or through any other means, that a discharge from an MS4 owned or operated by the Permittee is causing or contributing to a violation of Water Quality Standards in a receiving water, Ecology will notify the Permittee in writing that an adaptive management response outlined in S4.F.3 below is required, unless:

a. Ecology also determines that the violation of Water Quality Standards is already being addressed by a Total Maximum Daily Load (TMDL) or other enforceable water quality cleanup plan; or

b. Ecology concludes the MS4 contribution to the violation will be eliminated through implementation of other permit requirements.

3. Adaptive Management Response

a. Within 60 days of receiving a notification under S4.F.2, or by an alternative date established by Ecology, the Permittee shall review its Stormwater Management Program (SWMP) and submit a report to Ecology. The report shall include:

i. A description of the operational and/or structural BMPs that are currently being implemented to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards, including a qualitative assessment of the effectiveness of each best management practice (BMP).

ii. A description of potential additional operational and/or structural BMPs that will or may be implemented in order to apply AKART on a site-specific basis to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards.

iii. A description of the potential monitoring or other assessment and evaluation efforts that will or may be implemented to monitor, assess, or evaluate the effectiveness of the additional BMPs.

iv. A schedule for implementing the additional BMPs including, as appropriate: funding, training, purchasing, construction, monitoring, and other assessment and evaluation components of implementation.

b. Ecology will, in writing, acknowledge receipt of the report within a reasonable time and notify the Permittee when it expects to complete its review of the report. Ecology will either approve the additional BMPs and implementation schedule or require the Permittee to modify the report as needed to meet AKART on a site-specific basis. If modifications are required, Ecology will specify a reasonable time frame in which the Permittee shall submit and Ecology will review the revised report.

c. The Permittee shall implement the additional BMPs, pursuant to the schedule approved by Ecology, beginning immediately upon receipt of written notification of approval.

d. The Permittee shall include with each subsequent annual report a summary of the status of implementation and the results of any monitoring, assessment or evaluation efforts conducted during the reporting period. If, based on the information provided under this subsection, Ecology determines that modification of the BMPs or implementation schedule is

necessary to meet AKART on a site-specific basis, the Permittee shall make such modifications as Ecology directs. In the event there are ongoing violations of water quality standards despite the implementation of the BMP approach of this section, the Permittee may be subject to compliance schedules to eliminate the violation under WAC 173-201A-510(4) and WAC 173-226-180 or other enforcement orders as Ecology deems appropriate during the term of this permit.

e. A TMDL or other enforceable water quality cleanup plan that has been approved and is being implemented to address the MS4's contribution to the Water Quality Standards violation supersedes and terminates the S4.F.3 implementation plan.

f. Provided the Permittee is implementing the approved adaptive management response under this section, the Permittee remains in compliance with Condition S4, despite any on-going violations of Water Quality Standards identified under S4.A or B above.

g. The adaptive management process provided under Section S.4.F is not intended to create a shield for the Permittee from any liability it may face under 42 U.S.C. 9601 *et seq.* or chapter 70.105D RCW.

G. Ecology may modify or revoke and reissue this General Permit in accordance with G14 General Permit Modification and Revocation, if Ecology becomes aware of additional control measures, management practices or other actions beyond what is required in this Permit that are necessary to:

1. Reduce the discharge of pollutants to the MEP,

2. Comply with the state AKART requirements, or

3. Control the discharge of toxicants to waters of the State of Washington.

S5. STORMWATER MANAGEMENT PROGRAM FOR CITIES, TOWNS AND COUNTIES

A. Each Permittee shall develop and implement a Stormwater Management Program SWMP. A SWMP is a set of actions and activities comprising the components listed in S5 and any additional actions necessary, to meet the requirements of applicable TMDLs pursuant to S7 *Compliance with TMDL Requirements,* and S8 *Monitoring and Assessment*. This section applies to all cities, towns and counties covered under this Permit, including cities, towns and counties that are Co-permittees. Where the term "Permittee" is used in this section the requirements apply to all cities, towns and counties covered under this Permit.

New Permittees subject to this permit as described in S1.D.1.b shall fully meet the requirements in S5 as modified in footnotes below, or as specified in an alternate schedule as a condition of coverage by Ecology. Permittees obtaining coverage after

the issuance date of this permit shall fully meet the requirements in S5 as specified in an alternate schedule as a condition of coverage by Ecology.

1. At a minimum the Permittee's SWMP shall be implemented throughout the geographic area subject to this Permit as described in S1.A.[1]

2. Each Permittee shall prepare written documentation of the SWMP, called the SWMP Plan. The SWMP Plan shall be organized according to the program components in S5.C or a format approved by Ecology, and shall be updated at least annually for submittal with the Permittee's annual reports to Ecology (see S9 Reporting and Record Keeping). The SWMP Plan shall be written to inform the public of the planned SWMP activities for the upcoming calendar year, and shall include a description of:

    a. Planned activities for each of the program components included in S5.C.

    b. Any additional planned actions to meet the requirements of applicable TMDLs pursuant to S7 Compliance with Total Maximum Daily Load Requirements.

    c. Any additional planned actions to meet the requirements of S8 Monitoring.

3. The SWMP shall include an ongoing program for gathering, tracking, maintaining, and using information to evaluate SWMP development, implementation and permit compliance and to set priorities.

    a. Each Permittee shall track the cost or estimated cost of development and implementation of each component of the SWMP.[2] This information shall be provided to Ecology upon request.

    b. Each Permittee shall track the number of inspections, official enforcement actions and types of public education activities as required by the respective program component. This information shall be included in the annual report.

4. Permittees shall continue implementation of existing stormwater management programs until they begin implementation of the updated stormwater management program in accordance with the terms of this permit, including implementation schedules.

5. Coordination among Permittees

---

[1] New Permittees shall fully develop and implement the SWMP in accordance with the schedules contained in this section no later than February 2, 2018.

[2] New Permittees shall begin implementing the requirements of S5.A.3.a no later than August 1, 2015.

a. Coordination among entities covered under municipal stormwater NPDES permits may be necessary to comply with certain conditions of the SWMP. The SWMP should include, when needed, coordination mechanisms among entities covered under a municipal stormwater NPDES permit to encourage coordinated stormwater-related policies, programs and projects within adjoining or shared areas, including:

i. Coordination mechanisms clarifying roles and responsibilities for the control of pollutants between physically interconnected MS4s covered by a municipal stormwater permit.

ii. Coordinating stormwater management activities for shared water bodies among Permittees to avoid conflicting plans, policies and regulations.

b. The SWMP shall include coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of this permit. Permittees shall include a written description of internal coordination mechanisms in the Annual Report due no later than March 31, 2015.

B. The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the MEP, meet state AKART requirements, and protect water quality.

C. The SWMP shall include the components listed below. To the extent allowable under state or federal law, all components are mandatory for city, town or county Permittees covered under this permit.

1. Public Education and Outreach

The SWMP shall include an education and outreach program designed to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourage the public to participate in stewardship activities. The education program may be developed and implemented locally or regionally.

The minimum performance measures are:

a. Each Permittee shall provide an education and outreach program for the area served by the MS4. The program shall be designed to educate target audiences about the stormwater problem and provide specific actions they can follow to minimize the problem.[3]

i. To build general awareness, Permittees shall select from the following target audiences and subject areas:

[3] New Permittees shall begin implementing the requirements of S5.C.1 no later than August 1, 2015.

(a) General public (including school age children), and businesses (including home-based and mobile businesses)

- General impacts of stormwater on surface waters.
- Impacts from impervious surfaces.
- Impacts of illicit discharges and how to report them.
- Low impact development (LID) principles and LID BMPs.
- Opportunities to become involved in stewardship activities.

(b) Engineers, contractors, developers and land use planners

- Technical standards for stormwater site and erosion control plans.
- LID principles and LID BMPs.
- Stormwater treatment and flow control BMPs/facilities.

ii. To effect behavior change, Permittees shall select from the following target audiences and BMPs:

(a) General public (which may include school age children), businesses (including home-based and mobile businesses)

- Use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.
- Equipment maintenance.
- Prevention of illicit discharges.

(b) Residents, landscapers and property managers/owners

- Yard care techniques protective of water quality.
- Use and storage of pesticides and fertilizers and other household chemicals.
- Carpet cleaning and auto repair and maintenance.
- Vehicle, equipment and home/building maintenance.

- Pet waste management and disposal.
- LID principles and LID BMPs.
- Stormwater facility maintenance.
- Dumpster and trash compactor maintenance.

b. Each Permittee shall create stewardship opportunities and/or partner with existing organizations to encourage residents to participate in activities such as stream teams, storm drain marking, volunteer monitoring, riparian plantings and education activities.

c. Each Permittee shall measure the understanding and adoption of the targeted behaviors for at least one target audience in at least one subject area. No later than February 2, 2016, Permittees shall use the resulting measurements to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors.[4] Permittees may meet this requirement individually or as a member of a regional group.

2. Public Involvement and Participation

Permittees shall provide ongoing opportunities for public involvement and participation through advisory councils, public hearings, watershed committees, participation in developing rate-structures or other similar activities. Each Permittee shall comply with applicable state and local public notice requirements when developing elements of the SWMP.

The minimum performance measures are:

a. Permittees shall create opportunities for the public to participate in the decision-making processes involving the development, implementation and update of the Permittee's SWMP.[5]

b. Each Permittee shall post on their website their SWMP Plan and the annual report required under S9.A no later than May 31 each year. All other submittals shall be available to the public upon request. To comply with the posting requirement, a Permittee that does not maintain a website may submit the updated SWMP in electronic format to Ecology for posting on Ecology's website.

[4] By no later than August 1, 2017, New Permittees shall begin using the results of measuresments to direct education and outreach resources more effectively, as well as to evaluate changes in adopted behaviors.

[5] New Permittees shall develop and begin to implement requirements of S5.C.2.a no later than August 1, 2014.

3. Illicit Discharge Detection and Elimination

The SWMP shall include an ongoing program designed to prevent, detect, characterize, trace and eliminate illicit connections and illicit discharges into the MS4.

The minimum performance measures are:

a. Mapping of the MS4 shall continue on an ongoing basis.[6] MS4 maps shall be periodically updated. At a minimum, maps shall include the following information:

i. Known MS4 outfalls.

ii. Receiving waters, other than ground water.

iii. Stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee.

iv. Tributary conveyances to all known outfalls with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. The following attributes shall be mapped:

- Tributary conveyance type, material, and size where known.
- Associated drainage areas.
- Land use.

v. All connections to the MS4 authorized or allowed by the Permittee after February 16, 2007.[7]

vi. Geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters.

vii. To the extent consistent with national security laws and directives, each Permittee shall make available to Ecology upon request, MS4 map(s) depicting the information required in S5.C.3.a.i through vi above. The preferred format for mapping will be an electronic format with fully described mapping standards. An example description is available on Ecology website.

viii. Upon request, and to the extent appropriate, Permittees shall provide mapping information to federally-recognized Indian Tribes, municipalities, and other Permittees. This permit does not preclude

[6] New Permittees shall meet the requirements to map the MS4 according to S5.C.3.a no later than August 1, 2017, except where otherwise noted in this section.

[7] New Permittees shall meet the requirements of S5.C.3.a.v. after August 1, 2013 for all connections to the MS4 authorized after August 1, 2013.

Permittees from recovering reasonable costs associated with fulfilling mapping information requests by federally-recognized Indian Tribes, municipalities, and other Permittees.

b. Each Permittee shall implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the Permittee's MS4 to the maximum extent allowable under state and federal law.[8]

i. Allowable Discharges: The regulatory mechanism does not need to prohibit the following categories of non-stormwater discharges:

- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))
- Uncontaminated pumped ground water
- Foundation drains
- Air conditioning condensation
- Irrigation water from agricultural sources that is commingled with urban stormwater
- Springs
- Uncontaminated water from crawl space pumps
- Footing drains
- Flows from riparian habitats and wetlands
- Non-stormwater discharges authorized by another NPDES or state waste discharge permit
- Discharges from emergency fire fighting activities in accordance with S2 Authorized Discharges

ii. Conditionally Allowable Discharges: The regulatory mechanism may allow the following categories of non-stormwater discharges only if the stated conditions are met:

- Discharges from potable water sources, including but not limited to water line flushing, hyperchlorinated water line

[8] New Permittees shall meet the requirements of S5.C.3.b no later than February 2, 2016.

flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted, if necessary, and volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4.

- Discharges from lawn watering and other irrigation runoff. These discharges shall be minimized through, at a minimum, public education activities (see section S5.C.1) and water conservation efforts.

- Dechlorinated swimming pool, spa and hot tub discharges. The discharges shall be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted and reoxygenized if necessary, volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.

- Street and sidewalk wash water, water used to control dust, and routine external building washdown that does not use detergents. The Permittee shall reduce these discharges through, at a minimum, public education activities (see section S5.C.1) and/or water conservation efforts. To avoid washing pollutants into the MS4, Permittees shall minimize the amount of street wash and dust control water used.

- Other non-stormwater discharges. The discharges shall be in compliance with the requirements of a pollution prevention plan reviewed by the Permittee, which addresses control of such discharges.

iii. The Permittee shall further address any category of discharges in (i) or (ii) above if the discharges are identified as significant sources of pollutants to waters of the State.

iv. The ordinance or other regulatory mechanism shall include escalating enforcement procedures and actions.

v. The Permittee shall implement a compliance strategy that includes informal compliance actions such as public education and technical assistance as well as the enforcement provisions of the ordinance or other regulatory mechanism. To implement an effective compliance strategy, the Permittee's ordinance or other regulatory mechanism may need to include the following tools:

- The application of operational and/or structural source control BMPs for pollutant generating sources associated with existing land uses and activities where necessary to prevent illicit discharges. The source control BMPs referenced in this subsection are in Volume IV of the 2012 *Stormwater Management Manual for Western Washington*, or an equivalent manual approved by Ecology under the 2013 Phase I Permit.

- The maintenance of stormwater facilities which discharge into the Permittee's MS4 in accordance with maintenance standards established under S5.C.4 and/or S5.C.5 where necessary to prevent illicit discharges.

vi. The Permittee's ordinance or other regulatory mechanism in effect as of the effective date of this permit shall be revised if necessary to meet the requirements of this section no later than February 2, 2018.

c. Each Permittee shall implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4.[9] The program shall include the following components:

i. Procedures for conducting investigations of the Permittee's MS4, including field screening and methods for identifying potential sources.

The Permittee shall implement a field screening methodology appropriate to the characteristics of the MS4 and water quality concerns. Screening for illicit connections may be conducted using: *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*, Center for Watershed Protection, October 2004, or another methodology of comparable or improved effectiveness. The Permittee shall document the field screening methodology in the relevant Annual Report.

All Permittees, except for the City of Aberdeen, shall complete field screening for at least 40% of the MS4 no later than December 31, 2017,[10] and on average 12% each year thereafter. The City of Aberdeen shall complete field screening for at least 40% of the system no later than June 30, 2018 and on average 12% each year thereafter.

[9] New Permittees shall fully implement the requirements of S5.C.3.c no later than February 2, 2018, except where otherwise noted in this section.

[10] New Permittees shall complete S5.C.3.c.i requirements for field screening covering at least 12% of the MS4 within the Permittee's coverage area no later than December 31, 2017, and on average 12% each year thereafter.

ii. A publicly listed and publicized hotline or other telephone number for public reporting of spills and other illicit discharges.[11]

iii. An ongoing training program for all municipal field staff, who, as part of their normal job responsibilities, might come into contact with or otherwise observe an illicit discharge and/or illicit connection to the MS4, on the identification of an illicit discharge and/or connection, and on the proper procedures for reporting and responding to the illicit discharge and/or connection. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of the trainings provided and the staff trained.[12]

iv. Permittees shall inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.[13]

d. Each Permittee shall implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the Permittee's MS4.[14] The program shall include:

i. Procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the Permittee. Procedures shall address the evaluation of whether the discharge must be immediately contained and steps to be taken for containment of the discharge.

ii. Procedures for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, collecting and analyzing water samples, and/or other detailed inspection procedures.

iii. Procedures for eliminating the discharge; including notification of appropriate authorities; notification of the property owner; technical assistance; follow-up inspections; and use of the compliance strategy developed pursuant to S5.C.3.b.v, including escalating enforcement and legal actions if the discharge is not eliminated.

---

[11] New Permittees shall implement the requirements of S5.C.3.c.ii no later than August 1, 2015.

[12] New Permittees shall develop and begin implementing the ongoing training program described in S5.C.3.c.iii no later than February 2, 2016.

[13] New Permittees shall inform public employees, businesses, and the general public of hazards associated with illicit discharges no later than February 2, 2017.

[14] New Permittees shall fully develop and implement the requirements of S5.C.3.d no later than February 2, 2018.

iv. Compliance with the provisions in (i), (ii), and (iii), above, shall be achieved by meeting the following timelines:

- Immediately respond to all illicit discharges, including spills, which are determined to constitute a threat to human health, welfare, or the environment, consistent with General Condition G3.

- Investigate (or refer to the appropriate agency with the authority to act) within 7 days, on average, any complaints, reports or monitoring information that indicates a potential illicit discharge.

- Initiate an investigation within 21 days of any report or discovery of a suspected illicit connection to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection.

- Upon confirmation of an illicit connection, use the compliance strategy in a documented effort to eliminate the illicit connection within 6 months. All known illicit connections to the MS4 shall be eliminated.

e. Permittees shall train staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, and illicit connections, to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements or staffing. Permittees shall document and maintain records of the training provided and the staff trained.[15]

f. Recordkeeping: Permittees shall track and maintain records of the activities conducted to meet the requirements of this section.

4. <u>Controlling Runoff from New Development, Redevelopment and Construction Sites</u>

Each Permittee shall implement and enforce a program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities. The program shall apply to private and public development, including roads.[16]

The minimum performance measures are:

---

[15] New Permittees shall meet the requirements of S5.C.3.e no later than February 2, 2016.

[16] New permittees shall meet the requirements of S5.C.4 no later than December 31, 2017, except where otherwise specified in this section.

a. Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects. Except for Permittees in Lewis and Cowlitz counties and the City of Aberdeen, the ordinance or other enforceable mechanism to implement (i) through (iii), below, shall be adopted and effective no later than December 31, 2016. The local program adopted to meet the requirements of S5.C.5.a(i) through (iii), below shall apply to all applications[17] submitted on or after January 1, 2017 and shall apply to projects approved prior to January 1, 2017, which have not started construction[18] by January 1, 2022[19].

For permittees in Lewis and Cowlitz counties the ordinance or other enforceable mechanism to implement (i) through (iii), below, shall be adopted and effective no later than June 30, 2017. The local program adopted to meet the requirements of S5.C.5.a(i) through (iii), below shall apply to all applications submitted on or after July 1, 2017 and shall apply to projects approved prior to July 1, 2017, which have not started construction by June 30, 2022.

For the City of Aberdeen the ordinance or other enforceable mechanism to implement (i) through (iii), below, shall be adopted and effective no later than June 30, 2018. The local program adopted to meet the requirements of S5.C.5.a(i) through (iii), below shall apply to all applications submitted on or after July 1, 2018 and shall apply to projects approved prior to July 1, 2018, which have not started construction by June 30, 2023.

The ordinance or other enforceable mechanism shall include, at a minimum:

i. The Minimum Requirements, thresholds, and definitions in Appendix 1 or a program approved by Ecology under the 2013 NPDES Phase I Municipal Stormwater Permit, for new development, redevelopment, and construction sites. Adjustment and variance criteria equivalent to those in Appendix 1 shall be included. More stringent requirements may be used, and/or certain requirements may be tailored to local circumstances through the use

[17] In this context, "application" means, at a minimum a complete project description, site plan, and, if applicable, SEPA checklist. Permittees may establish additional elements of a completed application.

[18] In this context "started construction" means the site work associated with, and directly related to the approved project has begun. For example: grading the project site to final grade or utility installation. Simply clearing the project site does not constitute the start of construction. Permittees may establish additional requirements related to the start of construction.

[19] New Permittees shall meet the requirements of S5.C.4.a no later than December 31, 2017. The local program shall apply to all applications submitted on or after January 1, 2018 and shall apply to projects approved prior to January 1, 2018, which have not started construction by January 1, 2023.

of Ecology-approved basin plans or other similar water quality and quantity planning efforts. Such local requirements and thresholds shall provide equal protection of receiving waters and equal levels of pollutant control to those provided in Appendix 1.

ii. The local requirements shall include the following requirements, limitations, and criteria that, when used to implement the minimum requirements in Appendix 1 (or program approved by Ecology under the 2013 Phase I Permit) will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy the State requirement under chapter 90.48 RCW to apply AKART prior to discharge:

(a) Site planning requirements

(b) BMP selection criteria

(c) BMP design criteria

(d) BMP infeasibility criteria

(e) LID competing needs criteria

(f) BMP limitations

Permittees shall document how the criteria and requirements will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy State AKART requirements.

Permittees who choose to use the requirements, limitations, and criteria above in the 2012 *Stormwater Management Manual for Western Washington*, or a program approved by Ecology under the 2013 Phase I Permit, may cite this choice as their sole documentation to meet this requirement.

iii. The legal authority, through the approval process for new development and redevelopment, to inspect and enforce maintenance standards for private stormwater facilities approved under the provisions of this section that discharge to the Permittee's MS4.

b. The program shall include a permitting process with site plan review, inspection and enforcement capability to meet the standards listed in (i) through (iv) below, for both private and public projects, using qualified personnel (as defined in *Definitions and Acronyms*). At a minimum, this program shall be applied to all sites that meet the minimum thresholds adopted pursuant to S5.C.4.a.i, above.

i. Review of all stormwater site plans for proposed development activities.

ii. Inspect, prior to clearing and construction, all permitted development sites that have a high potential for sediment transport as determined

through plan review based on definitions and requirements in Appendix 7 Determining Construction Site Sediment Damage Potential. As an alternative to evaluating each site according to Appendix 7, Permittees may choose to inspect all construction sites that meet the minimum thresholds adopted pursuant to S5.C.4.a.i, above.

iii. Inspect all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection.

iv. Inspect all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. Verify that a maintenance plan is completed and responsibility for maintenance is assigned for stormwater treatment and flow control BMPs/facilities. Enforce as necessary based on the inspection.

v. Compliance with the inspection requirements in (ii), (iii) and (iv) above, shall be determined by the presence and records of an established inspection program designed to inspect all sites. Compliance during this permit term shall be determined by achieving at least 80% of scheduled inspections.

vi. An enforcement strategy shall be implemented to respond to issues of non-compliance.

c. The program shall include provisions to verify adequate long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities that are permitted and constructed pursuant to (b) above. Except for Permittees located in Lewis or Cowlitz Counties and the City of Aberdeen, these provisions shall be in place no later than December 31, 2016. [20] For Permittees in Lewis and Cowlitz counties, the provisions shall be in place no later than June 30, 2017. For the City of Aberdeen, the provisions shall be in place no later than June 30, 2018. The provisions shall include:

i. Implementation of an ordinance or other enforceable mechanism that clearly identifies the party responsible for maintenance, requires inspection of facilities in accordance with the requirements in (ii) through (iv) below, and establishes enforcement procedures.

ii. Each Permittee shall establish maintenance standards that are as protective or more protective of facility function than those specified in Chapter 4 of Volume V of the 2012 *Stormwater Management*

[20] New Permittees shall meet the requirements of S5.C.4.c no later than December 31, 2017.

Manual for Western Washington. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard.

The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standard between the period of inspections is not a permit violation.

iii. Annual inspections of all stormwater treatment and flow control BMPs/facilities that discharge to the MS4 and were permitted by the Permittee according to S5.C.4.b, including those permitted in accordance with requirements adopted pursuant to the 2007-2012 Ecology municipal stormwater permits, unless there are maintenance records to justify a different frequency.

Permittees may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 Certification and Signature.

iv. Inspections of all permanent stormwater treatment and flow control BMPs/facilities and catch basins in new residential developments every six months until 90% of the lots are constructed (or when construction is stopped and the site is fully stabilized) to identify maintenance needs and enforce compliance with maintenance standards as needed.

v. Compliance with the inspection requirements in (iii) and (iv) above shall be determined by the presence and records of an established inspection program designed to inspect all sites. Compliance during this permit term shall be determined by achieving at least 80% of scheduled inspections.

vi. Unless there are circumstances beyond the Permittee's control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:

- Within 1 year for typical maintenance of facilities, except catch basins.
- Within 6 months for catch basins.
- Within 2 years for maintenance that requires capital construction of less than $25,000.

Circumstances beyond the Permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, the Permittee shall document the circumstances and how they were beyond their control.

vii. The program shall include a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained.

d. The program shall make available as applicable copies of the "Notice of Intent for Construction Activity" and copies of the "Notice of Intent for Industrial Activity" to representatives of proposed new development and redevelopment. Permittees shall continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.[21]

e. Each Permittee shall ensure that all staff whose primary job duties are implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.[22]

f. Low impact development code-related requirements.

i. No later than December 31, 2016,[23] Permittees shall review, revise and make effective their local development-related codes, rules, standards, or other enforceable documents to incorporate and require LID principles and LID BMPs. For Permittees in Lewis and Cowlitz counties, the deadline for this requirement is no later than June 30, 2017; for the City of Aberdeen the deadline for this requirement is no later than June 30, 2018.

The intent of the revisions shall be to make LID the preferred and commonly-used approach to site development. The revisions shall be designed to minimize impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations. Permittees shall

[21] New Permittees shall meet the requirements of S5.C.4.d beginning no later than August 1, 2013.

[22] New Permittees shall meet the requirements of S5.C.4.e no later than December 31, 2017.

[23] New Permittees shall meet the requirements of S5.C.4.f.i no later than December 31, 2017.

conduct a similar review and revision process, and consider the range of issues, outlined in the following document: *Integrating LID into Local Codes: A Guidebook for Local Governments* (Puget Sound Partnership, 2012).

ii. Except for Permittees in Lewis and Cowlitz Counties and the City of Aberdeen, each Permittee shall submit a summary of the results of the review and revision process in (i) above with the annual report due no later than March 31, 2017[24]. Permittees in Lewis and Cowlitz counties shall submit the summary with the annual report due no later than March 31, 2018. The City of Aberdeen shall submit the summary with the Fifth Year annual report. This summary shall include, at a minimum, a list of the participants (job title, brief job description, and department represented), the codes, rules, standards, and other enforceable documents reviewed, and the revisions made to those documents which incorporate and require LID principles and LID BMPs. The summary shall include existing requirements for LID principles and LID BMPs in development-related codes. The summary shall be organized as follows:

(a) Measures to minimize impervious surfaces;

(b) Measures to minimize loss of native vegetation; and

(c) Other measures to minimize stormwater runoff.

g. Watershed-scale stormwater planning

Each Permittee that has all or part of its coverage area under this Permit in a watershed selected by a Phase I county for watershed-scale stormwater planning under condition S5.C.4.c of the *Phase I Municipal Stormwater General Permit* shall participate with the watershed-scale stormwater planning process led by the Phase I county.[25] As needed and as appropriate, the permittee shall:

i. Provide existing water quality and flow records.

ii. Provide existing and future land use and zoning maps to facilitate land cover projections.

iii. Participate in the development of strategies to prevent future and address existing impacts, including:

(a) Possible changes in development codes, rules, and standards.

---

[24] New Permittees shall meet the S5.C.4.f.ii reporting requirement in the annual report covering calendar year 2017 and due no later than March 31, 2018.

[25] For a description of the watershed-scale stormwater planning details, see Special Condition S5.C.5.c of the 2013 *Phase I Municipal Stormwater Permit*.

(b) Possible changes in land use management plans.

(c) Providing land ownership information and drainage conveyance maps to facilitate watershed modeling and regional facility siting.

iv. Provide monitoring locations.

5. Municipal Operations and Maintenance

Each Permittee shall implement an operations and maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.[26]

The minimum performance measures are:

a. Each Permittee shall implement maintenance standards that are as protective, or more protective, of facility function than those specified in Chapter 4 of Volume V of the 2012 *Stormwater Management Manual for Western Washington*. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard. Except for Permittees located in Lewis and Cowlitz Counties and the City of Aberdeen, no later than December 31, 2016, Permittees shall update their maintenance standards as necessary to meet the requirements of this section.[27] For Permittees in Lewis and Cowlitz counties, this requirement shall apply no later than June 30, 2017; for the City of Aberdeen this requirement shall apply no later than June 30, 2018.

i. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standard between inspections and/or maintenance is not a permit violation.

ii. Unless there are circumstances beyond the Permittee's control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:

- Within 1 year for typical maintenance of facilities, except catch basins.
- Within 6 months for catch basins.

[26] New Permittees shall develop and implement the requirements of S5.C.5 no later than December 31, 2017 except where otherwise noted in this section.

[27] New Permittees shall adopt the updated maintenance standards in Chapter 4 of Volume V of the 2012 *Stormwater Management Manual for Western Washington* or an Ecology-approved program under the 2013 Phase I Permit no later than December 31, 2017.

- Within 2 years for maintenance that requires capital construction of less than $25,000.

Circumstances beyond the Permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, the Permittee shall document the circumstances and how they were beyond their control.

b. Annual inspection of all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities, and taking appropriate maintenance actions in accordance with the adopted maintenance standards.[28]

Permittees may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 Certification and Signature.

c. Spot checks of potentially damaged permanent stormwater treatment and flow control BMPs/facilities after major storm events (24 hour storm event with a 10 year or greater recurrence interval). If spot checks indicate widespread damage/maintenance needs, inspect all stormwater treatment and flow control BMPs/facilities that may be affected. Conduct repairs or take appropriate maintenance action in accordance with maintenance standards established above, based on the results of the inspections.

d. Except for the City of Aberdeen, inspection of all catch basins and inlets owned or operated by the Permittee at least once no later than August 1, 2017 and every two years thereafter. [29] For the City of Aberdeen, the deadline for this requirement shall be no later than June 30, 2018. Clean catch basins if the inspection indicates cleaning is needed to comply with maintenance standards established in the 2012 *Stormwater Management Manual for Western Washington*. Decant water shall be disposed of in accordance with Appendix 6 *Street Waste Disposal*.

---

[28] New Permittees shall begin annual inspections of municipally owned and operated stormwater treatment and flow control facilities/BMPs no later than December 31, 2017.

[29] New Permittees shall inspect and, if needed, clean all catch basins and inlets owned or operated by the Permittee in accordance with the requirements of S5.C.5.c once during the permit term, to be completed no later than February 2, 2018.

The following alternatives to the standard approach of inspecting all catch basins once no later than August 1, 2017 and every two years thereafter (except no later than June 30, 2018 and every two years thereafter for the City of Aberdeen) may be applied to all or portions of the system:

i. The catch basin inspection schedule of every two years may be changed as appropriate to meet the maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records for catch basins, the Permittee may substitute written statements to document a specific, less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experiences and shall be certified in accordance with G19 Certification and Signature.

ii. Inspections at least once by August 1, 2017 and every two years thereafter may be conducted on a "circuit basis" whereby 25% of catch basins and inlets within each circuit are inspected to identify maintenance needs. Include an inspection of the catch basin immediately upstream of any system outfall, if applicable. Clean all catch basins within a given circuit for which the inspection indicates cleaning is needed to comply with maintenance standards established under S5.C.5.a, above.

iii. The Permittee may clean all pipes, ditches, catch basins, and inlets within a circuit once during the permit term. Circuits selected for this alternative must drain to a single point.

e. Compliance with the inspection requirements in b, c, and d above shall be determined by the presence of an established inspection program designed to inspect all sites and achieving at least 95% of inspections.

f. Implement practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee. Lands owned or maintained by the Permittee include, but are not limited to, streets, parking lots, roads, highways, buildings, parks, open space, road right-of-ways, maintenance yards, and stormwater treatment and flow control BMPs/facilities. The following activities shall be addressed:

- Pipe cleaning
- Cleaning of culverts that convey stormwater in ditch systems
- Ditch maintenance
- Street cleaning
- Road repair and resurfacing, including pavement grinding

- Snow and ice control
- Utility installation
- Pavement striping maintenance
- Maintaining roadside areas, including vegetation management
- Dust control
- Application of fertilizers, pesticides, and herbicides according to the instructions for their use, including reducing nutrients and pesticides using alternatives that minimize environmental impacts
- Sediment and erosion control
- Landscape maintenance and vegetation disposal
- Trash and pet waste management
- Building exterior cleaning and maintenance

g. Implement an ongoing training program for employees of the Permittee whose primary construction, operations or maintenance job functions may impact stormwater quality. The training program shall address the importance of protecting water quality, operation and maintenance standards, inspection procedures, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of training provided and the staff trained.

h. Implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in areas subject to this Permit that are not required to have coverage under the *General NPDES Permit for Stormwater Discharges Associated with Industrial Activities* or another NPDES permit that authorizes stormwater discharges associated with the activity. A schedule for implementation of structural BMPs shall be included in the SWPPP. Generic SWPPPs that can be applied at multiple sites may be used to comply with this requirement. The SWPPP shall include periodic visual observation of discharges from the facility to evaluate the effectiveness of the BMP.

i. Maintain records of inspections and maintenance or repair activities conducted by the Permittee.

S6. STORMWATER MANAGEMENT PROGRAM FOR SECONDARY PERMITTEES

A. This section applies to all Secondary Permittees and all New Secondary Permittees, whether coverage under this Permit is obtained individually or as a Co-Permittee with a city, town, county or another Secondary Permittee.

New Secondary Permittees subject to this Permit shall fully meet the requirements of this section as modified in footnotes in S6.D below, or as established as a condition of coverage by Ecology.

1. To the extent allowable under state, federal or local law, all components are mandatory for each Secondary Permittee covered under this Permit, whether covered as an individual Permittee or as a Co-Permittee.

2. Each Secondary Permittee shall develop and implement a stormwater management program (SWMP). A SWMP is a set of actions and activities comprising the components listed in S6 and any additional actions necessary to meet the requirements of applicable TMDLs pursuant to S7 *Compliance with TMDL Requirements*, and S8 *Monitoring and Assessment*. The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the MEP and protect water quality.

3. Unless an alternate implementation schedule is established by Ecology as a condition of permit coverage, the SWMP shall be developed and implemented in accordance with the schedules contained in this section and shall be fully developed and implemented no later than four and one-half years from the initial permit coverage date. Secondary Permittees that are already implementing some or all of the required SWMP components shall continue implementation of those components.

4. Secondary Permittees may implement parts of their SWMP in accordance with the schedule for cities, towns and counties in S5, provided they have signed a memorandum of understanding or other agreement to jointly implement the activity or activities with one or more jurisdictions listed in S1.D.2.a or S1.D.2.b, and submitted a copy of the agreement to Ecology.

5. Each Secondary Permittee shall prepare written documentation of the SWMP, called the SWMP Plan. The SWMP Plan shall include a description of program activities for the upcoming calendar year.

B. Coordination

Secondary Permittees shall coordinate stormwater-related policies, programs and projects within a watershed and interconnected MS4s. Where relevant and appropriate, the SWMP shall coordinate among departments of the Secondary Permittee to ensure compliance with the terms of this Permit.

C. Legal Authority

To the extent allowable under state law and federal law, each Secondary Permittee shall be able to demonstrate that they can operate pursuant to legal authority which authorizes or enables the Secondary Permittee to control discharges to and from MS4s owned or operated by the Secondary Permittee.

This legal authority may be a combination of statutes, ordinances, permits, contracts, orders, interagency agreements, or similar instruments.

D. Stormwater Management Program for Secondary Permittees

The SWMP for Secondary Permittees shall include the following components:

1. Public Education and Outreach

Each Secondary Permittee shall implement the following stormwater education strategies:

a. Storm drain inlets owned or operated by the Secondary Permittee that are located in maintenance yards, in parking lots, along sidewalks, and at pedestrian access points shall be clearly labeled with a message similar to "Dump no waste – Drains to water body".[30]

As identified during visual inspection and regular maintenance of storm drain inlets per the requirements of S6.D.3.d and S6.D.6.a.i below, or as otherwise reported to the Secondary Permittee, any inlet having a label that is no longer clearly visible and/or easily readable shall be re-labeled within 90 days.

b. Each year beginning no later than three years from the initial date of permit coverage, public ports, colleges, and universities shall distribute educational information to tenants and residents on the impact of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Distribution may be by hard copy or electronic means. Appropriate topics may include:

i. How stormwater runoff affects local water bodies.

ii. Proper use and application of pesticides and fertilizers.

iii. Benefits of using well-adapted vegetation.

iv. Alternative equipment washing practices, including cars and trucks, that minimize pollutants in stormwater.

v. Benefits of proper vehicle maintenance and alternative transportation choices; proper handling and disposal of vehicle wastes, including the location of hazardous waste collection facilities in the area.

[30] New Secondary Permittees shall label all inlets as described in S6.D.1.a no later than four years from the initial date of permit coverage.

vi. Hazards associated with illicit connections and illicit discharges.

vii. Benefits of litter control and disposal of pet waste.

2. Public Involvement and Participation

Each year no later than May 31, each Secondary Permittee shall:

a. Make the annual report available on the Permittee's website.

b. Make available on the Permittee's website the latest updated version of the SWMP Plan.

c. A Secondary Permittee that does not maintain a website may submit the updated SWMP Plan and annual report in electronic format to Ecology for posting on Ecology's website.

3. Illicit Discharge Detection and Elimination

Each Secondary Permittee shall:

a. From the initial date of permit coverage, comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern non-stormwater discharges.

b. Implement appropriate policies prohibiting illicit discharges,[31] and an enforcement plan to ensure compliance with illicit discharge policies.[32] These policies shall address, at a minimum: illicit connections, non-stormwater discharges, including spills of hazardous materials, and improper disposal of pet waste and litter.

i. Allowable discharges: The policies do not need to prohibit the following categories of non-stormwater discharges:

- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))
- Uncontaminated pumped ground water
- Foundation drains.

[31] New Secondary Permittees shall develop and implement appropriate policies prohibiting illicit discharges, and identify possible enforcement mechanisms as described in S6.D.3.b no later than one year from the initial date of permit coverage.

[32] New Secondary Permittees shall develop and implement an enforcement plan as described in S6.D.3.b no later than 18 months from the initial date of permit coverage.

- Air conditioning condensation
- Irrigation water from agricultural sources that is commingled with urban stormwater
- Springs
- Uncontaminated water from crawl space pumps
- Footing drains
- Flows from riparian habitats and wetlands
- Discharges from emergency fire fighting activities in accordance with S2 Authorized Discharges
- Non-stormwater discharges authorized by another NPDES or state waste discharge permit

ii. Conditionally allowable discharges: The policies may allow the following categories of non-stormwater discharges only if the stated conditions are met and such discharges are allowed by local codes:

- Discharges from potable water sources, including but not limited to water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4.
- Discharges from lawn watering and other irrigation runoff. These discharges shall be minimized through, at a minimum, public education activities and water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction.
- Dechlorinated swimming pool, spa and hot tub discharges. The discharges shall be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted and reoxygenated if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
- Street and sidewalk wash water, water used to control dust, and routine external building washdown that does not use

detergents. The Secondary Permittee shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction. To avoid washing pollutants into the MS4, the Secondary Permittee shall minimize the amount of street wash and dust control water used.

- Other non-stormwater discharges shall be in compliance with the requirements of a pollution prevention plan reviewed by the Permittee which addresses control of such discharges.

iii. The Secondary Permittee shall address any category of discharges in (i) or (ii) above if the discharge is identified as a significant source of pollutants to waters of the State.

c. Maintain a storm sewer system map showing the locations of all known storm drain outfalls, labeling the receiving waters (other than ground water) and delineating the areas contributing runoff to each outfall. Make the map (or completed portions of the map) available on request to Ecology and to the extent appropriate, to other Permittees. The preferred format for mapping is an electronic format with fully described mapping standards. An example description is provided on Ecology's website.[33]

d. Conduct field inspections and visually inspect for illicit discharges at all known MS4 outfalls. Visually inspect at least one third (on average) of all known outfalls each year beginning no later than two years from the initial date of permit coverage. Implement procedures to identify and remove any illicit discharges. Keep records of inspections and follow-up activities.

e. Implement a spill response plan that includes coordination with a qualified spill responder.[34]

f. No later than two years from initial date of permit coverage, provide staff training or coordinate with existing training efforts to educate staff on proper BMPs for preventing illicit discharges, including spills. Train all Secondary Permittee staff who, as part of their normal job responsibilities, have a role in preventing such illicit discharges.

4. <u>Construction Site Stormwater Runoff Control</u>

From the initial date of permit coverage, each Secondary Permittee shall:

---

[33] New Secondary Permittees shall meet the requirements of S6.D.3.c no later than four and one-half years from the initial date of permit coverage.

[34] New Secondary Permittees shall develop and implement a spill response plan as described in S6.D.3.e no later than four and one-half years from the initial date of permit coverage.

a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern construction phase stormwater pollution prevention measures.

b. Ensure that all construction projects under the functional control of the Secondary Permittee which require a construction stormwater permit obtain coverage under the *NPDES General Permit for Stormwater Discharges Associated with Construction Activitie*s or an individual NPDES permit prior to discharging construction related stormwater.

c. Coordinate with the local jurisdiction regarding projects owned or operated by other entities which discharge into the Secondary Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).

d. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.

e. Coordinate as requested with Ecology or the local jurisdiction to provide access for inspection of construction sites or other land disturbances which are under the functional control of the Secondary Permittee during land disturbing activities and/or construction period.

5. <u>Post-Construction Stormwater Management for New Development and Redevelopment</u>

From the initial date of permit coverage, each Secondary Permittee shall:

a. Comply with all relevant ordinances, rules and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern post-construction stormwater pollution prevention measures.

b. Coordinate with the local jurisdiction regarding projects owned or operated by other entities which discharge into the Secondary Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules and regulations of the local jurisdiction(s).

6. <u>Pollution Prevention and Good Housekeeping for Municipal Operations</u>

Each Secondary Permittee shall:

a. Implement a municipal operation and maintenance (O&M) plan to minimize stormwater pollution from activities conducted by the Secondary Permittee. The O&M Plan shall include appropriate pollution prevention and good housekeeping procedures for all of the following operations, activities, and/or types of facilities that are present within the Secondary

Permittee's boundaries and under the functional control of the Secondary Permittee.[35]

i. Stormwater collection and conveyance systems, including catch basins, stormwater pipes, open channels, culverts, and stormwater treatment and flow control BMPs/facilities. The O&M Plan shall address, at a minimum: scheduled inspections and maintenance activities, including cleaning and proper disposal of waste removed from the system. Secondary Permittees shall properly maintain stormwater collection and conveyance systems owned or operated by the Secondary Permittee and regularly inspect and maintain all stormwater facilities to ensure facility function.

   Secondary Permittees shall establish maintenance standards that are as protective or more protective of facility function than those specified in Chapter 4 Volume V of the 2012 *Stormwater Management Manual for Western Washington*. Secondary Permittees shall review their maintenance standards to ensure they are consistent with the requirements of this section.

   Secondary Permittees shall conduct spot checks of potentially damaged permanent stormwater treatment and flow control BMPs/facilities following major storm events (24 hour storm event with a 10 year or greater recurrence interval).

ii. Roads, highways, and parking lots. The O&M Plan shall address, but is not limited to: deicing, anti-icing, and snow removal practices; snow disposal areas; material (e.g. salt, sand, or other chemical) storage areas; all-season BMPs to reduce road and parking lot debris and other pollutants from entering the MS4.

iii. Vehicle fleets. The O&M Plan shall address, but is not limited to: storage, washing, and maintenance of Secondary Permittee vehicle fleets; and fueling facilities. Secondary Permittees shall conduct all vehicle and equipment washing and maintenance in a self-contained covered building or in designated wash and/or maintenance areas.

iv. External building maintenance. The O&M Plan shall address, building exterior cleaning and maintenance including cleaning, washing, painting; and maintenance and management of dumpsters; and other maintenance activities.

v. Parks and open space. The O&M Plan shall address, but is not limited to: proper application of fertilizer, pesticides, and herbicides;

[35] New Secondary Permittees shall develop and implement the operation and maintenance plan described in S6.D.6.a no later than three years from initial date of permit coverage.

sediment and erosion control; BMPs for landscape maintenance and vegetation disposal; and trash and pet waste management.

vi. Material storage facilities and heavy equipment maintenance or storage yards. Secondary Permittees shall develop and implement a Stormwater Pollution Prevention Plan to protect water quality at each of these facilities owned or operated by the Secondary Permittee and not covered under the *General NPDES Permit for Stormwater Discharges Associated with Industrial Activities* or under another NPDES permit that authorizes stormwater discharges associated with the activity.

vii. Other facilities that would reasonably be expected to discharge contaminated runoff. The O&M Plan shall address proper stormwater pollution prevention practices for each facility.

b. From the initial date of permit coverage, Secondary Permittees shall also have permit coverage for all facilities operated by the Secondary Permittee that are required to be covered under the *General NPDES Permit for Stormwater Discharges Associated with Industrial Activities* or another NPDES permit that authorizes discharges associated with the activity.

c. The O&M Plan shall include sufficient documentation and records as necessary to demonstrate compliance with the O&M Plan requirements in S6.D.6.a.(i) through (vii) above.

d. No later than three years from the initial date of permit coverage, Secondary Permittees shall implement a program designed to train all employees whose primary construction, operations, or maintenance job functions may impact stormwater quality. The training shall address:

i. The importance of protecting water quality.

ii. The requirements of this Permit.

iii. Operation and maintenance requirements.

iv. Inspection procedures.

v. Ways to perform their job activities to prevent or minimize impacts to water quality.

vi. Procedures for reporting water quality concerns, including potential illicit discharges (including spills).

S7. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

The following requirements apply if an applicable TMDL is approved for stormwater discharges from MS4s owned or operated by the Permittee. Applicable TMDLs are TMDLs

which have been approved by EPA on or before the issuance date of this Permit or prior to the date that Ecology issues coverage under this permit, whichever is later.

A. For applicable TMDLs listed in Appendix 2, affected Permittees shall comply with the specific requirements identified in Appendix 2. Each Permittee shall keep records of all actions required by this Permit that are relevant to applicable TMDLs within their jurisdiction. The status of the TMDL implementation shall be included as part of the annual report submitted to Ecology. Each annual report shall include a summary of relevant SWMP and Appendix 2 activities conducted in the TMDL area to address the applicable TMDL parameter(s).

B. For applicable TMDLs not listed in Appendix 2, compliance with this Permit shall constitute compliance with those TMDLs.

C. For TMDLs that are approved by EPA after this Permit is issued, Ecology may establish TMDL related permit requirements through future permit modification if Ecology determines implementation of actions, monitoring or reporting necessary to demonstrate reasonable further progress toward achieving TMDL waste load allocations, and other targets, are not occurring and shall be implemented during the term of this Permit or when this Permit is reissued. Permittees are encouraged to participate in development of TMDLs within their jurisdiction and to begin implementation.

S8. MONITORING AND ASSESSMENT

A. All Permittees including Secondary Permittees shall provide, in each annual report, a description of any stormwater monitoring or stormwater-related studies conducted by the Permittee during the reporting period. If other stormwater monitoring or stormwater-related studies were conducted on behalf of the Permittee during the reporting period, or if stormwater-related investigations conducted by other entities were reported to the Permittee during the reporting period, a brief description of the type of information gathered or received shall be included in the annual report.

Permittees are <u>not</u> required to provide descriptions of any monitoring, studies, or analyses conducted as part of the Regional Stormwater Management Program (RSMP) in annual reports. If a Permittee conducts independent monitoring in accordance with requirements in S8.B or S8.C below, annual reporting of such monitoring must follow the requirements specified in those sections.

B. Status and trends monitoring. By December 1, 2013, each city and county Permittee listed in S1.D.2.a(i) and S1.D.2.a(ii) located in Clallam, Island, King, Kitsap, Pierce, Skagit, Snohomish, Thurston, or Whatcom County shall notify Ecology in writing which of the following two options for status and trends monitoring the Permittee chooses to carry out during this permit cycle. Either option will fully satisfy the Permittee's obligations under this section (S8.B). Each Permittee shall select a single option for the duration of this permit term.

1. Status and Trends Monitoring Option #1: Each Permittee that chooses this option shall pay into a collective fund to implement RSMP small streams and marine nearshore status and trends monitoring in Puget Sound. The payments into the collective fund are due to Ecology annually beginning August 15, 2014. The payment amounts are (Permittees are listed alphabetically, by county):

Permittee	Annual payment amount	Permittee	Annual payment amount
Clallam Co.	N/A	Pierce Co.	N/A
Port Angeles	$4,732	Bonney Lake	$4,075
Island Co.	N/A	Buckley	$1,129
Oak Harbor	$5,719	DuPont	$1,936
King Co.	N/A	Edgewood	$2,350
Algona	$678	Fife	$2,005
Auburn	$16,914	Fircrest	$1,549
Bellevue	$30,009	Gig Harbor	$1,836
Black Diamond	$1,023	Lakewood	$14,367
Bothell	$8,163	Milton	$1,597
Burien	$11,238	Orting	$1,525
Clyde Hill	$695	Puyallup	$9,498
Covington	$4,307	Steilacoom	$1,538
Des Moines	$7,152	Sumner	$2,217
Duvall	$1,463	University Place	$7,704
Enumclaw	$2,806	Skagit Co.	$1,257
Federal Way	$21,673	Burlington	$2,194
Issaquah	$6,632	Anacortes	$4,102
Kenmore	$5,042	Mount Vernon	$7,574
Kent	$27,441	Sedro Woolley	$2,452
Kirkland	$12,116	Snohomish Co.	N/A
Lake Forest Park	$3,135	Arlington	$4,219
Maple Valley	$5,648	Brier	$1,585
Medina	$728	Edmonds	$9,987
Mercer Island	$5,589	Everett	$25,419
Newcastle	$2,431	Granite Falls	$824

Normandy Park	$1,597	Lake Stevens	$6,512
Pacific	$1,540	Lynnwood	$8,829
Redmond	$13,143	Marysville	$14,172
Renton	$21,055	Mill Creek	$4,566
Sammamish	$10,028	Monroe	$4,073
SeaTac	$6,322	Mountlake Terrace	$5,118
Shoreline	$13,327	Mukilteo	$4,920
Tukwila	$4,444	Snohomish	$2,276
Woodinville	$2,771	Thurston Co.	$12,841
Kitsap Co.	$17,133	Lacey	$9,799
Bainbridge Island	$5,709	Olympia	$11,110
Bremerton	$8,837	Tumwater	$4,095
Port Orchard	$2,664	Whatcom Co.	$3,714
Poulsbo	$2,187	Bellingham	$18,936
		Ferndale	$2,737

Or

2. Status and Trends Monitoring Option #2: Each Permittee that chooses this option shall conduct status and trends monitoring as follows:

   a. Beginning no later than July 31, 2014, conduct wadeable stream water quality, benthos, habitat, and sediment chemistry monitoring according to the Ecology-approved Quality Assurance Project Plan (QAPP) for RSMP Small Streams Status and Trends Monitoring.

      i. Permittees with population less than 10,000 in the permit coverage area shall conduct this monitoring at the first two qualified monitoring locations (as listed sequentially among the potential monitoring locations defined in the RSMP QAPP) that are located within the jurisdiction's boundaries. Counties shall monitor the first location inside UGA boundaries and the first location outside UGA boundaries.

      ii. Permittees with population equal to or greater than 10,000 and fewer than 50,000 in the permit coverage area shall conduct this monitoring at the first four qualified monitoring locations (as listed sequentially among the potential monitoring locations defined in the RSMP QAPP) that are located within the jurisdiction's boundaries. Counties shall monitor the first two locations inside UGA boundaries and the first two locations outside UGA boundaries.

iii. Permittees with population equal to or greater than 50,000 in the permit coverage area shall conduct this monitoring at the first eight qualified monitoring locations (as listed sequentially among the potential monitoring locations defined in the RSMP QAPP) that are located within the jurisdiction's boundaries. Counties shall monitor the first four locations inside UGA boundaries and the first four locations outside UGA boundaries.

Permittees with population equal to or greater than 50,000 in the permit coverage area and located entirely inland (*i.e.*, having no Puget Sound shoreline boundary) shall conduct this monitoring at an additional four monitoring locations (as listed sequentially among the potential monitoring locations defined in the RSMP QAPP), for a total of 12 monitoring locations.

And

b. Beginning no later than October 1, 2015, Permittees with Puget Sound shoreline shall conduct sediment chemistry, mussel, and bacteria monitoring according to the Ecology-approved QAPPs for RSMP Marine Nearshore Status and Trends Monitoring.

i. Permittees with population less than 10,000 shall conduct this monitoring at the first two qualified monitoring locations each, for sediment and for mussels and bacteria (as listed sequentially among the potential monitoring locations defined in the RSMP QAPPs), that are located adjacent to the jurisdiction's Puget Sound shoreline boundary.

ii. Permittees with population equal to or greater than 10,000 and fewer than 50,000 in the permit coverage area shall conduct this monitoring at the first four qualified monitoring locations each, for sediment and for mussels and bacteria (as listed sequentially among the potential monitoring locations defined in the RSMP QAPPs), that are located adjacent to the jurisdiction's Puget Sound shoreline boundary.

iii. Permittees with population equal to or greater than 50,000 in the permit coverage area shall conduct this monitoring at the first six qualified monitoring locations each, for sediment and for mussels and bacteria (as listed sequentially among the potential monitoring locations defined in the RSMP QAPPs), that are located adjacent to the jurisdiction's Puget Sound shoreline boundary.

And

c. Data and analyses shall be reported annually in accordance with the Ecology-approved QAPPs.

C. Stormwater management program effectiveness studies. By December 1, 2013, each city and county Permittee listed in S1.D.2.a(i) and S1.D.2.a(ii) shall notify Ecology in writing which of the following two options for effectiveness studies the Permittee chooses to carry out during this permit cycle. Either option will fully satisfy the Permittee's obligations under this section (S8.C). Each Permittee shall select a single option for the duration of this permit term.

1. Effectiveness Studies Option #1: Each Permittee that chooses this option shall pay into a collective fund to implement RSMP effectiveness studies. The payments into the collective fund are due to Ecology annually beginning August 15, 2014. The payment amounts are (Permittees are listed alphabetically, by county):

Permittee	Annual payment amount	Permittee	Annual payment amount
Clallam Co.	N/A	Lewis Co.	N/A
Port Angeles	$7,885	Centralia	$6,334
Clark Co.	N/A	Pierce Co.	N/A
Battle Ground	$7,079	Bonney Lake	$6,790
Camas	$7,002	Buckley	$1,882
Vancouver	$67,335	DuPont	$3,226
Washougal	$5,716	Edgewood	$3,916
Cowlitz Co.	$1,384	Fife	$3,340
Kelso	$4,793	Fircrest	$2,581
Longview	$14,687	Gig Harbor	$3,059
Grays Harbor Co.	N/A	Lakewood	$23,938
Aberdeen	$6,693	Milton	$2,661
Island Co.	N/A	Orting	$2,541
Oak Harbor	$9,528	Puyallup	$15,826
King Co.	N/A	Steilacoom	$2,563
Algona	$1,129	Sumner	$3,694
Auburn	$28,182	University Place	$12,836
Bellevue	$50,001	Skagit Co.	$2,094
Black Diamond	$1,705	Burlington	$3,655
Bothell	$13,601	Anacortes	$6,835
Burien	$18,724	Mount Vernon	$12,620
Clyde Hill	$1,157	Sedro Woolley	$4,085

Covington	$7,177	Snohomish Co.	N/A
Des Moines	$11,916	Arlington	$7,030
Duvall	$2,437	Brier	$2,640
Enumclaw	$4,675	Edmonds	$16,640
Federal Way	$36,111	Everett	$42,352
Issaquah	$11,050	Granite Falls	$1,373
Kenmore	$8,401	Lake Stevens	$10,850
Kent	$45,721	Lynnwood	$14,711
Kirkland	$20,187	Marysville	$23,613
Lake Forest Park	$5,224	Mill Creek	$7,608
Maple Valley	$9,410	Monroe	$6,786
Medina	$1,212	Mountlake Terrace	$8,527
Mercer Island	$9,313	Mukilteo	$8,198
Newcastle	$4,050	Snohomish	$3,792
Normandy Park	$2,661	Thurston Co.	$21,395
Pacific	$2,565	Lacey	$16,326
Redmond	$21,899	Olympia	$18,511
Renton	$35,082	Tumwater	$6,823
Sammamish	$16,709	Whatcom Co.	$6,188
SeaTac	$10,533	Bellingham	$31,550
Shoreline	$22,205	Ferndale	$4,561
Tukwila	$7,405		
Woodinville	$4,618		
Kitsap Co.	$28,547		
Bainbridge Island	$9,512		
Bremerton	$14,724		
Port Orchard	$4,439		
Poulsbo	$3,643		

Or

2. Effectiveness Studies Option #2: Each Permittee that chooses this option shall conduct stormwater discharge monitoring in accordance with Appendix 9 and the following:

   a. By February 2, 2014, each Permittee shall submit to Ecology a draft stormwater discharge monitoring QAPP for review and approval. If

Ecology does not request changes within 90 days, the draft QAPP is considered approved. Final QAPPs shall be submitted to Ecology as soon as possible following finalization.

i. Each Permittee with population fewer than 10,000 in the permit coverage area shall conduct stormwater discharge monitoring at one discharge monitoring location.

ii. Each Permittee with population equal to or greater than 10,000 but fewer than 50,000 in the permit coverage area shall conduct stormwater discharge monitoring at two discharge monitoring locations.

iii. Each Permittee with population equal to or greater than 50,000 but fewer than 100,000 in the permit coverage area shall conduct stormwater discharge monitoring at three discharge monitoring locations.

iv. Each Permittee with population 100,000 or more in the permit coverage area shall conduct stormwater discharge monitoring at four discharge monitoring locations.

b. Permittees shall document in the QAPP why selected discharge monitoring locations are of interest for long term stormwater discharge monitoring and associated stormwater management program effectiveness evaluations. Permittees are encouraged to monitor at locations chosen and submitted in the annual reports that were due March 31, 2011.

c. Flow monitoring at discharge monitoring locations shall be implemented beginning no later than October 1, 2014. Stormwater discharge monitoring shall be fully implemented no later than October 1, 2015. All monitoring shall be conducted in accordance with an Ecology-approved QAPP.

D. Source identification and diagnostic monitoring. Each city and county Permittee listed in S1.D.2.a(i) and S1.D.2.a(ii) shall pay into a collective fund to implement the RSMP Source Identification Information Repository (SIDIR). The payments into the collective fund are due to Ecology annually beginning August 15, 2014. The payment amounts are (Permittees are listed alphabetically, by county):

Permittee	Annual payment amount	Permittee	Annual payment amount
Clallam Co.	N/A	Lewis Co.	N/A
Port Angeles	$731	Centralia	$587
Clark Co.	N/A	Pierce Co.	N/A
Battle Ground	$657	Bonney Lake	$630

Camas	$649	Buckley	$175
Vancouver	$6,245	DuPont	$299
Washougal	$530	Edgewood	$363
Cowlitz Co.	$128	Fife	$310
Kelso	$444	Fircrest	$239
Longview	$1,362	Gig Harbor	$284
Grays Harbor Co.	N/A	Lakewood	$2,220
Aberdeen	$621	Milton	$247
Island Co.	N/A	Orting	$236
Oak Harbor	$884	Puyallup	$1,468
King Co.	N/A	Steilacoom	$238
Algona	$105	Sumner	$343
Auburn	$2,614	University Place	$1,190
Bellevue	$4,637	Skagit Co.	$194
Black Diamond	$158	Burlington	$339
Bothell	$1,261	Anacortes	$634
Burien	$1,736	Mount Vernon	$1,170
Clyde Hill	$107	Sedro Woolley	$379
Covington	$666	Snohomish Co.	N/A
Des Moines	$1,105	Arlington	$652
Duvall	$226	Brier	$245
Enumclaw	$434	Edmonds	$1,543
Federal Way	$3,349	Everett	$3,928
Issaquah	$1,025	Granite Falls	$127
Kenmore	$779	Lake Stevens	$1,006
Kent	$4,240	Lynnwood	$1,364
Kirkland	$1,872	Marysville	$2,190
Lake Forest Park	$484	Mill Creek	$706
Maple Valley	$873	Monroe	$629
Medina	$112	Mountlake Terrace	$791
Mercer Island	$864	Mukilteo	$760
Newcastle	$376	Snohomish	$352
Normandy Park	$247	Thurston Co.	$1,984

Pacific	$238	Lacey	$1,514
Redmond	$2,031	Olympia	$1,717
Renton	$3,253	Tumwater	$633
Sammamish	$1,550	Whatcom Co.	$574
SeaTac	$977	Bellingham	$2,926
Shoreline	$2,059	Ferndale	$423
Tukwila	$687		
Woodinville	$428		
Kitsap Co.	$2,647		
Bainbridge Island	$882		
Bremerton	$1,365		
Port Orchard	$412		
Poulsbo	$338		

S9. REPORTING REQUIREMENTS

A. No later than March 31 of each year beginning in 2015, each Permittee shall submit an annual report. The reporting period for the first annual report will be from January 1, 2014 through December 31, 2014. The reporting period for all subsequent annual reports will be the previous calendar year unless otherwise specified.

Permittees shall submit annual reports electronically using Ecology's WQWebDMR available on Ecology's website at http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html unless otherwise directed by Ecology.

Permittees unable to submit electronically through Ecology's WQWebDMR must contact Ecology to request a waiver and obtain instructions on how to submit an annual report in an alternative format.

B. Each Permittee is required to keep all records related to this permit and the SWMP for at least five years.

C. Each Permittee shall make all records related to this permit and the Permittee's SWMP available to the public at reasonable times during business hours. The Permittee will provide a copy of the most recent annual report to any individual or entity, upon request.

1. A reasonable charge may be assessed by the Permittee for making photocopies of records.

2. The Permittee may require reasonable advance notice of intent to review records related to this Permit.

D. The annual report for cities, towns, and counties

Each annual report shall include the following:

1. A copy of the Permittee's current SWMP Plan as required by S5.A.2.

2. Submittal of the annual report form as provided by Ecology pursuant to S9.A, describing the status of implementation of the requirements of this permit during the reporting period.

3. Attachments to the annual report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this permit during the reporting period. Refer to Appendix 3 for annual report questions.

4. If applicable, notice that the MS4 is relying on another governmental entity to satisfy any of the obligations under this permit.

5. Certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.

6. A notification of any annexations, incorporations or jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period.

E. Annual report for Secondary Permittees

Each annual report shall include the following:

1. Submittal of the annual report form as provided by Ecology pursuant to S9.A, describing the status of implementation of the requirements of this permit during the reporting period.

2. Attachments to the annual report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this permit during the reporting period. Refer to Appendix 4 for annual report questions.

3. If applicable, notice that the MS4 is relying on another governmental entity to satisfy any of the obligations under this permit.

4. Certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.

5. A notification of any jurisdictional boundary changes resulting in an increase or decrease in the Secondary Permittee's geographic area of permit coverage during the reporting period.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this Permit shall be consistent with the terms and conditions of this Permit.

G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control to achieve compliance with the terms and conditions of this Permit.

G3. NOTIFICATION OF DISCHARGE, INCLUDING SPILLS

If a Permittee has knowledge of a discharge, including spills, into or from a MS4 which could constitute a threat to human health, welfare, or the environment, the Permittee shall

A. Take appropriate action to correct or minimize the threat to human health, welfare and/or the environment.

B. Notify the Ecology regional office and other appropriate spill response authorities immediately but in no case later than within 24 hours of obtaining that knowledge. The Ecology Northwest Regional Office 24-hour number is 425-649-7000 and for the Southwest Regional Office the number is 360-407-6300.

C. Immediately report spills or other discharges which might cause bacterial contamination of marine waters, such as discharges resulting from broken sewer lines and failing onsite septic systems, to the Ecology regional office and to the Department of Health, Shellfish Program. The Department of Health's shellfish number is 360-236-3330 (business hours) or 360-789-8962 (24-hours).

D. Immediately report spills or discharges of oils or hazardous substances to the Ecology regional office and to the Washington Emergency Management Division at 1-800-258-5990.

G4. BYPASS PROHIBITED

The intentional bypass of stormwater from all or any portion of a stormwater treatment BMP whenever the design capacity of the treatment BMP is not exceeded, is prohibited unless the following conditions are met:

A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act (CWA); and

B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated stormwater, or maintenance during normal dry periods.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

G5. RIGHT OF ENTRY

The Permittee shall allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law at reasonable times:

A. To enter upon the Permittee's premises where a discharge is located or where any records must be kept under the terms and conditions of this Permit;

B. To have access to, and copy at reasonable cost and at reasonable times, any records that must be kept under the terms of the Permit;

C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the Permit;

D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and

E. To sample at reasonable times any discharge of pollutants.

G6. DUTY TO MITIGATE

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this Permit which has a reasonable likelihood of adversely affecting human health or the environment.

G7. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G8. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the Permit shall be construed as excusing the Permittee from compliance with any other applicable federal, state, or local statutes, ordinances, or regulations.

G9. MONITORING

A. Representative Sampling:

Samples and measurements taken to meet the requirements of this Permit shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

B. Records Retention:

The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the application for this permit, for a period of at least five years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Ecology. On request, monitoring data and analysis shall be provided to Ecology.

C. Recording of Results:

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Test Procedures:

All sampling and analytical methods used to meet the monitoring requirements in this Permit shall conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136, unless otherwise specified in this permit or approved in writing by Ecology.

E. Flow Measurement:

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.

F. Lab Accreditation:

All monitoring data, except for flow, temperature, conductivity, pH, total residual chlorine, and other exceptions approved by Ecology, shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, chapter 173-50 WAC. Soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by Ecology. Quick methods of field detection of pollutants including nutrients, surfactants, salinity, and other parameters are exempted from this requirement when the purpose of the sampling is identification and removal of a suspected illicit discharge.

G. Additional Monitoring:

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G10. REMOVED SUBSTANCES

With the exception of decant from street waste vehicles, the Permittee shall not allow collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to be resuspended or reintroduced to the storm sewer system or to waters of the state. Decant from street waste vehicles resulting from cleaning stormwater facilities may be reintroduced only when other practical means are not available and only in accordance with the Street Waste Disposal Guidelines in Appendix 6. Solids generated from maintenance of the MS4 may be reclaimed, recycled, or reused when allowed by local codes and ordinances. Soils that are identified as contaminated pursuant to chapter 173-350 WAC shall be disposed at a qualified solid waste disposal facility (see Appendix 6).

G11. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

G12. REVOCATION OF COVERAGE

The director may terminate coverage under this General Permit in accordance with chapter 43.21B RCW and chapter 173-226 WAC. Cases where coverage may be terminated include, but are not limited to the following:

A. Violation of any term or condition of this general permit;

B. Obtaining coverage under this general permit by misrepresentation or failure to disclose fully all relevant facts;

C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

D. A determination that the permitted activity endangers human health or the environment, or contributes significantly to water quality standards violations;

E. Failure or refusal of the Permittee to allow entry as required in chapter 90.48.090 RCW;

F. Nonpayment of permit fees assessed pursuant to chapter 90.48.465 RCW;

Revocation of coverage under this general permit may be initiated by Ecology or requested by any interested person.

G13. TRANSFER OF COVERAGE

The director may require any discharger authorized by this General Permit to apply for and obtain an individual permit in accordance with chapter 43.21B RCW and chapter 173-226 WAC.

G14. GENERAL PERMIT MODIFICATION AND REVOCATION

This General Permit may be modified, revoked and reissued, or terminated in accordance with the provisions of WAC 173-226-230. Grounds for modification, revocation and reissuance, or termination include, but are not limited to the following:

A. A change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this General Permit;

B. Effluent limitation guidelines or standards are promulgated pursuant to the CWA or chapter 90.48 RCW, for the category of dischargers covered under this General Permit;

C. A water quality management plan containing requirements applicable to the category of dischargers covered under this General Permit is approved; or

D. Information is obtained which indicates that cumulative effects on the environment from dischargers covered under this General Permit are unacceptable.

E. Changes in state law that reference this permit.

G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation and reissuance under Condition G12, G14, or 40 CFR 122.62 must report such plans, or such information, to Ecology so that a decision can be made on whether action to modify, or revoke and reissue this Permit will be required. Ecology may then require submission of a new or amended application. Submission of such application does not relieve the Permittee of the duty to comply with this Permit until it is modified or reissued.

G16. APPEALS

A. The terms and conditions of this General Permit, as they apply to the appropriate class of dischargers, are subject to appeal within thirty days of issuance of this General Permit, in accordance with chapter 43.21B RCW, and chapter 173-226 WAC.

B. The terms and conditions of this General Permit, as they apply to an individual discharger, are appealable in accordance with chapter 43.21B RCW within thirty days of the effective date of coverage of that discharger. Consideration of an appeal of General Permit coverage of an individual discharger is limited to the General Permit's applicability or nonapplicability to that individual discharger.

C. The appeal of General Permit coverage of an individual discharger does not affect any other dischargers covered under this General Permit. If the terms and conditions of this General Permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

D. Modifications of this Permit are appealable in accordance with chapter 43.21B RCW and chapter 173-226 WAC.

G17. PENALTIES

40 CFR 122.41(a)(2) and (3), 40 CFR 122.41(j)(5), and 40 CFR 122.41(k)(2) are hereby incorporated into this Permit by reference.

G18. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

G19. CERTIFICATION AND SIGNATURE

All formal submittals to Ecology shall be signed and certified.

A. All permit applications shall be signed by either a principal executive officer or ranking elected official.

B. All formal submittals required by this Permit 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 Ecology, and

2. The authorization specifies either an individual or a position having responsibility for the overall development and implementation of the stormwater management program. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under condition G19.B.2 is no longer accurate because a different individual or position has responsibility for the overall development and implementation of the stormwater management program, a new authorization satisfying the requirements of condition G19.B.2 must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a formal submittal under this Permit shall make the following certification:

"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 willful violations."

G20. NON-COMPLIANCE NOTIFICATION

In the event a Permittee is unable to comply with any of the terms and conditions of this Permit, the Permittee must:

A. Notify Ecology of the failure to comply with the permit terms and conditions in writing within 30 days of becoming aware that the non-compliance has occurred. The written notification must include all of the following:

   1. A description of the non-compliance, including dates.

   2. Beginning and end dates of the non-compliance, and if the compliance has not been corrected, the anticipated date of correction.

   3. Steps taken or planned to reduce, eliminate, or prevent reoccurrence of the non-compliance.

B. Take appropriate action to stop or correct the condition of non-compliance.

G21. UPSETS

Permittees must meet the conditions of 40 CFR 122.41(n) regarding "Upsets." The conditions are as follows:

A. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

B. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (C) of this condition are met. Any determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, will not constitute final administrative action subject to judicial review.

C. Conditions necessary for demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:

   1. An upset occurred and that the Permittee can identify the cause(s) of the upset;

   2. The permitted facility was at the time being properly operated; and

   3. The Permittee submitted notice of the upset as required in 40 CFR 122.41(l)(6)(ii)(B) (24-hour notice of noncompliance).

   4. The Permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate).

D. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

DEFINITIONS AND ACRONYMS

This section includes definitions for terms used in the body of the permit and in all the appendices except Appendix 1. Terms defined in Appendix 1 are necessary to implement requirements related to Appendix 1.

40 CFR means Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

AKART means all known, available, and reasonable methods of prevention, control and treatment. See also State Water Pollution Control Act, chapter 90.48.010 RCW and chapter 90.48.520 RCW.

All known, available and reasonable methods of prevention, control and treatment refers to the State Water Pollution Control Act, chapter 90.48.010 RCW and chapter 90.48.520 RCW.

Applicable TMDL means a TMDL which has been approved by EPA on or before the issuance date of this Permit, or prior to the date that Ecology issues coverage under this Permit, whichever is later.

Beneficial Uses means uses of waters of the state which include but are not limited to use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.

Best Management Practices are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by Ecology that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

BMP means Best Management Practice.

Bypass means the diversion of stormwater from any portion of a stormwater treatment facility.

Census defined urban area means Urbanized Area.

Circuit means a portion of a MS4 discharging to a single point or serving a discrete area determined by traffic volumes, land use, topography or the configuration of the MS4.

Component or **Program Component** means an element of the Stormwater Management Program listed in S5 Stormwater Management Program for Cities, Towns, and Counties or S6 Stormwater Management Program for Secondary Permittees, S7 Compliance with Total Maximum Daily Load Requirements, or S8 Monitoring of this permit.

Co-Permittee means an owner or operator of an MS4 which is in a cooperative agreement with at least one other applicant for coverage under this permit. A Co-Permittee is an owner or operator of a regulated MS4 located within or in proximity to another regulated MS4. A Co-Permittee is only responsible permit conditions relating to discharges from the MS4 the Co-Permittee owns or operates. See also 40 CFR 122.26(b)(1)

CWA means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq).

Director means the Director of the Washington State Department of Ecology, or an authorized representative.

Entity means a governmental body, or a public or private organization.

EPA means the U.S. Environmental Protection Agency.

General Permit means a permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

Ground water means water in a saturated zone or stratum beneath the surface of the land or below a surface water body. Refer to chapter 173-200 WAC.

Hazardous substance means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090 or WAC 173-303-100.

Heavy equipment maintenance or storage yard means an uncovered area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are washed or maintained, or where at least five pieces of heavy equipment are stored on a long-term basis.

Highway means a main public road connecting towns and cities.

Hydraulically near means runoff from the site discharges to the sensitive feature without significant natural attenuation of flows that allows for suspended solids removal. See Appendix 7 Determining Construction Site Sediment Damage Potential for a more detailed definition.

Hyperchlorinated means water that contains more than 10 mg/Liter chlorine.

Illicit connection means any infrastructure connection to the MS4 that is not intended, permitted or used for collecting and conveying stormwater or non-stormwater discharges allowed as specified in this permit (S5.C.3 and S6.D.3). Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the MS4.

Illicit discharge means any discharge to a MS4 that is not composed entirely of stormwater or of non-stormwater discharges allowed as specified in this permit (S5.C.3 and S6.D.3).

Impervious surface means a non-vegetated surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an

increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or stormwater areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.

Land disturbing activity means any activity that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to clearing, grading, filling and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered land disturbing activity. Vegetation maintenance practices, including landscape maintenance and gardening, are not considered land disturbing activity. Stormwater facility maintenance is not considered land disturbing activity if conducted according to established standards and procedures.

LID means Low Impact Development.

LID BMP means low impact development best management practices.

LID Principles means land use management strategies that emphasize conservation, use of on-site natural features, and site planning to minimize impervious surfaces, native vegetation loss, and stormwater runoff.

Low Impact Development means a stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

Low impact development best management practices means distributed stormwater management practices, integrated into a project design, that emphasize pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration. LID BMPs include, but are not limited to, bioretention/rain gardens, permeable pavements, roof downspout controls, dispersion, soil quality and depth, vegetated roofs, minimum excavation foundations, and water re-use.

Material Storage Facilities means an uncovered area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.

Maximum Extent Practicable refers to paragraph 402(p)(3)(B)(iii) of the federal Clean Water Act which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.

MEP means Maximum Extent Practicable.

MS4 means municipal separate storm sewer system.

Municipal Separate Storm Sewer System means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of Washington State.

(ii) Designed or used for collecting or conveying stormwater.

(iii) Which is not a combined sewer;

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.; and

(v) Which is defined as "large" or "medium" or "small" or otherwise designated by Ecology pursuant to 40 CFR 122.26.

National Pollutant Discharge Elimination System means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

Native vegetation means vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest and which reasonably could have been expected to naturally occur on the site. Examples include trees such as Douglas Fir, western hemlock, western red cedar, alder, big-leaf maple; shrubs such as willow, elderberry, salmonberry, and salal; and herbaceous plants such as sword fern, foam flower, and fireweed.

New development means land disturbing activities, including Class IV General Forest Practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of hard surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development. Refer to Appendix 1 for a definition of hard surfaces.

New Permittee means a city, town, or county that is subject to the *Western Washington Municipal Stormwater General Permit* and was not subject to the permit prior to August 1, 2013.

New Secondary Permittee means a Secondary Permittee that is covered under a municipal stormwater general permit and was not covered by the permit prior to August 1, 2013.

NOI means Notice of Intent.

Notice of Intent means the application for, or a request for coverage under a General Permit pursuant to WAC 173-226-200.

Notice of Intent for Construction Activity means the application form for coverage under the *Construction Stormwater General Permit.*

Notice of Intent for Industrial Activity means the application form for coverage under the *General Permit for Stormwater Discharges Associated with Industrial Activities*.

NPDES means National Pollutant Discharge Elimination System.

Outfall means point source as defined by 40 CFR 122.2 at the point where a discharge leaves the MS4 and discharges to waters of the State. Outfall does not include pipes, tunnels, or other conveyances which connect segments of the same stream or other surface waters and are used to convey primarily surface waters (i.e. culverts).

Permittee unless otherwise noted, the term "Permittee" includes city, town, or county Permittee, Co-Permittee, New Permittee, Secondary Permittee, and New Secondary Permittee.

Physically Interconnected means that one MS4 is connected to another storm sewer system in such a way that it allows for direct discharges to the second system. For example, the roads with drainage systems and municipal streets of one entity are physically connected directly to a storm sewer system belonging to another entity.

Project site means that portion of a property, properties, or right-of-ways subject to land disturbing activities, new hard surfaces, or replaced hard surfaces. Refer to Appendix 1 for a definition of hard surfaces.

QAPP means Quality Assurance Project Plan.

Qualified Personnel means someone who has had professional training in the aspects of stormwater management for which they are responsible and are under the functional control of the Permittee. Qualified Personnel may be staff members, contractors, or volunteers.

Quality Assurance Project Plan means a document that describes the objectives of an environmental study and the procedures to be followed to achieve those objectives.

RCW means the Revised Code of Washington State.

Receiving waters means bodies of water or surface water systems to which surface runoff is discharged via a point source of stormwater or via sheet flow. Receiving waters may also be ground water to which surface runoff is directed by infiltration.

Redevelopment means, on a site that is already substantially developed (i.e., has 35% or more of existing hard surface coverage), the creation or addition of hard surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of hard surface that is not part of a routine maintenance activity; and land disturbing activities. Refer to Appendix 1 for a definition of hard surfaces.

Regional Stormwater Monitoring Program means, for all of western Washington, a stormwater-focused monitoring and assessment program consisting of these components: status and trends monitoring in small streams and marine nearshore areas, stormwater management program effectiveness studies, and a source identification information repository (SIDIR). The priorities and scope for the RSMP are set by a formal stakeholder group. For this permit term, RSMP status and trends monitoring will be conducted in the Puget Sound basin only.

Regulated Small Municipal Separate Storm Sewer System means a Municipal Separate Storm Sewer System which is automatically designated for inclusion in the Phase II stormwater permitting program by its location within an Urbanized Area, or by designation by Ecology and is not eligible for a waiver or exemption under S1.C.

RSMP means Regional Stormwater Monitoring Program.

Runoff is water that travels across the land surface and discharges to water bodies either directly or through a collection and conveyance system. See also "Stormwater."

Secondary Permittee is an operator of a regulated small MS4 which is not a city, town or county. Secondary Permittees include special purpose districts and other public entities that meet the criteria in S1.B.

Sediment/Erosion-Sensitive Feature means an area subject to significant degradation due to the effect of construction runoff, or areas requiring special protection to prevent erosion. See Appendix 7 Determining Construction Site Sediment Transport Potential for a more detailed definition.

Shared water bodies means water bodies, including downstream segments, lakes and estuaries that receive discharges from more than one Permittee.

SIDIR means Source Identification Information Repository.

Significant contributor means a discharge that contributes a loading of pollutants considered to be sufficient to cause or exacerbate the deterioration of receiving water quality or instream habitat conditions.

Small Municipal Separate Storm Sewer System means an MS4 that is not defined as "large" or "medium" pursuant to 40 CFR 122.26(b)(4) & (7) or designated under 40 CFR 122.26 (a)(1)(v).

Source control BMP means a structure or operation that is intended to prevent pollutants from coming into contact with stormwater through physical separation of areas or careful management of activities that are sources of pollutants. The *SWMMWW* (2012) separates source control BMPs into two types. Structural Source Control BMPs are physical, structural, or mechanical devices, or facilities that are intended to prevent pollutants from entering stormwater. Operational BMPs are non-structural practices that prevent or reduce pollutants from entering stormwater. See Volume IV of the *SWMMWW* (2012) for details.

Stormwater means runoff during and following precipitation and snowmelt events, including surface runoff, drainage or interflow.

Stormwater Associated with Industrial and Construction Activity means the discharge from any conveyance which is used for collecting and conveying stormwater, which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant, or associated with clearing, grading and/or excavation, and is required to have an NPDES permit in accordance with 40 CFR 122.26.

Stormwater Management Program means a set of actions and activities designed to reduce the discharge of pollutants from the MS4 to the MEP and to protect water quality, and comprising the components listed in S5 (for cities, towns and counties) or S6 (for Secondary Permittees) of this Permit and any additional actions necessary to meet the requirements of

applicable TMDLs pursuant to S7 *Compliance with TMDL Requirements*, and S8 *Monitoring and Assessment*.

Stormwater Treatment and Flow Control BMPs/Facilities means detention facilities, treatment BMPs/facilities, bioretention, vegetated roofs, and permeable pavements that help meet Appendix 1 Minimum Requirements #6 (treatment), #7 (flow control), or both.

SWMMWW means *Stormwater Management Manual for Western Washington (2005).*

SWMP means Stormwater Management Program.

TMDL means Total Maximum Daily Load.

Total Maximum Daily Load means a water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation must also account for seasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. The Clean Water Act, section 303, establishes the water quality standards and TMDL programs.

Tributary conveyance means pipes, ditches, catch basins, and inlets owned or operated by the Permittee and designed or used for collecting and conveying stormwater.

UGA means Urban Growth Area.

Urban Growth Area means those areas designated by a county pursuant to RCW 36.70A.110.

Urbanized Area is a federally-designated land area comprising one or more places and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile. Urbanized Areas are designated by the U.S. Census Bureau based on the most recent decennial census.

Vehicle Maintenance or Storage Facility means an uncovered area where any vehicles are regularly washed or maintained, or where at least 10 vehicles are stored.

Water Quality Standards means Surface Water Quality Standards, chapter 173-201A WAC, Ground Water Quality Standards, chapter 173-200 WAC, and Sediment Management Standards, chapter 173-204 WAC.

Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the state" as defined in chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and water courses within the jurisdiction of the State of Washington.

Waters of the United States refers to the definition in 40 CFR 122.2.

Updated July 31, 2013

Washington Department of Ecology

Errata for 2013-2018 Western Washington Municipal Stormwater Permit

Issued on August 1, 2012

Permit Errata:

1. Page 10, S1.D.3.b, second sentence: Delete the second word "joint" that refers to the NOI.

2. Page 25, S5.C.4.a: In each of the first three paragraphs, the reference "*S5.C.5.a(i) through (iii)*" is incorrect. In all three, the reference is as follows: *"The local program adopted to meet the requirements of S5.C.4.a.(i) through (iii), below shall apply to all applications submitted……"*

3. Page 30, S5.C.4.g: The correct reference is to S5.C.5.c of the Phase I permit.

4. Page 32, footnote #28 should read: "New permittees shall begin annual inspections of municipally owned ~~and~~ or operated…."

5. Page 43, S.8.A Monitoring and Assessment, second paragraph, line 2: The statement says Regional Stormwater Management Program for "RSMP" instead of Regional Stormwater Monitoring Program.

6. Page 45, S8.B.2.a: Replace "July 31, 2014" with "October 31, 2014".

7. Page 60: Definition of Co-Permittee, missing word in third sentence: *"A Co-Permittee is only responsible for permit conditions relating to discharges from the MS4 the Co-Permittee owns or operates."*

8. Page 66: The acronym SWMMWW refers to the 2012 *Stormwater Management Manual for Western Washington* (rather than the 2005 manual).

9. Appendix 3: In order to provide an electronic method for annual reporting, Ecology will have to break-up several annual report questions into separate parts. Here is a listing of the annual report questions affected by this formatting change:

    - Annual report question (Q)7 now has a separate Q7b: "Attach description of how this requirement was met."
    - Q9 now has a separate Q9b: "List the website address in Comments field"
    - Q12 now has a separate Q12b: "Cite the Prohibited Discharge code reference in Comments field"

- Q17 now has a separate Q17b: "Describe information sharing actions in Comments field."
- Q23 now has a separate Q23b: "Cite code reference for revised ordinance or other enforceable mechanism to address runoff from new development, redevelopment and construction sites in Comments field."
- Q44 now has a separate Q44b: "Please note in the Comments field what kinds of facilities are covered by this alternative maintenance standard. (S5.C.5.a)"
- Q67 now has a separate Q67b: "List permit conditions described in non-compliance notification(s) in Comments field."

10. Appendix 3: Add question 13b to question 13: *"Cite methodology in Comments field."*

11. Appendix 3: Revise the permit reference in question 56 to "S8.A".

12. Appendix 3: Revise the permit reference in question 57 to "S8.B.1".

13. Appendix 3: Revise the permit reference in question 57b to "S8.B.2".

14. Appendix 3: Delete question 58b and renumber 58c to be 58b.

15. Appendix 3: Revise the permit reference in question 58 to "S8.C.1".

16. Appendix 3: Revise the permit reference in question 58b to "S8.C.2".

17. Appendix 3: Revise the permit reference in question 59 to "S8.D.1".

18. Appendix 3: In question 57b, replace "July 31, 2014" with "October 31, 2014".

19. Appendix 4: In order to provide an electronic method for annual reporting, Ecology will have to break-up several annual report questions into separate parts. Here is a listing of the annual report questions affected by this formatting change:
    - Annual report question (Q) 10 now has a separate Q10b: "[If applicable,] made the map available on request to Ecology or others."
    - Q13 now has a separate Q13b: "Attach a summary of each illicit discharge discovered and actions taken to eliminate each of the discharges. (S6.D.3.d)"

20. Appendix 8: In order to provide an electronic method for annual reporting, Ecology will have to break-up several annual report questions into separate parts. Here is a listing of the annual report questions affected by this formatting change:

- Annual report question (Q) 7 now has a separate Q7b: “Attach description of how this requirement was met.”
- Q9 now has a separate Q9b: “List the website address in Comments field”
- Q12 now has a separate Q12b: “Cite reference for ordinance or other regulatory mechanism to meet this requirement in Comments field.”
- Q14 now has a separate Q14b: “Cite methodology used in the Comments section.”
- Q16 now has a separate Q16c: “Provide hotline telephone number in the Comments field.”
- Q18 now has a separate Q18b: “Describe activities in Comments field.”
- Q24 now has a separate Q24b: “Cite the jurisdiction code reference used to meet this requirement in Comments field.”
- Q40 now has a separate Q40b: “Attach documentation of any maintenance delays. (S5.C.4.c.vi).”
- Q46 now has a separate Q46b: “Please note in the Comments field what kinds of facilities are covered by this alternative maintenance standard. (S5.C.5.a)”
- Q66 now has a separate Q66b: “List permit conditions described in non-compliance notification(s) in Comments field.”

21. Appendix 8: Revise the permit reference in question 58 to “S8.A”.

22. Appendix 9, Page 4, first sub-bullet under Organics: Correct the spelling of “dibenzo(a,h)” to “dibenzo(a,h)anthracene”.

23. Appendix 9, Page 4, second sub-bullet under Organics: Correct the spelling of “dichlobenyl” to “dichlobenil”.

24. Appendix 9, Page 4, second bullet under “Grab Samples”: delete “The lube oil fraction, not the diesel fraction, is targeted for NWTPH-Dx.”

25. Appendix 9, Page 5, first sub-bullet under Organics: Correct the spelling of “2,6-dimethylnapthalene” to “2,6-dimethylnaphthalene” and “2-ethylnapthalene” to “2-methylnaphthalene”.

26. Appendix 9, Page 9, Table A9-1, first row of second column under “Petroleum Hydrocarbons”: delete “or EPA SW-846 method 8015B; lube oil fraction”.

27. Appendix 9, Page 9, Table A9-1, the last sentence of the footnote a should read: “For non-detect values below the reporting limit, report results at the method detection limit from the lab and the qualifier of “U” for undetected at that concentration.”

28. Appendix 9 – At the back of Appendix 9, add the laboratory method for Wet Sieving and Mass Measurement for Laser Diffraction Analysis (from Appendix 9, of the Phase I Municipal Stormwater Permit effective September 1, 2012 pages 4-7). Available online here: www.ecy.wa.gov/programs/wq/stormwater/municipal/MUNIdocs/Appendix9errata.pdf

Response to Comments Errata:

1. Part III – Response to Comments on Western Washington Phase II Permit, page 9, add the words "more than" (see below) to the Response, which describes the rationale for allowing more than two years for projects with costs greater than $25,000.

   Comment: S5.C.4.c.iii - Clarify the purpose of language regarding construction of less than $25,000 as well as the category for circumstances beyond the Permittee's control.

   Response: Ecology provided a timeline of more than two years for capital construction costs of greater than $25,000 because it is anticipated that those projects need additional planning or implementation time compared to other maintenance projects. For larger, more expensive projects, Ecology recognizes the permittee may need to go through capital planning, with timeframes that could extend beyond the term of this permit. Circumstances beyond the control of the permittee may also result in failure to meet the designated timelines. Permittees must document the circumstances and how they were beyond the Permittee's control. The permit provides a list of circumstances that would justify a delay beyond the timelines in the permit.

Attachment L
Port of Vancouver Industrial General Stormwater Permit

Issuance Date: October 21, 2009
Effective Date: January 1, 2010
Expiration Date: January 1, 2015

Modification Issuance Date: May 16, 2012
Modification Effective Date: July 1, 2012

INDUSTRIAL STORMWATER GENERAL PERMIT

A National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Stormwater Discharges Associated With Industrial Activities

State of Washington
Department of Ecology
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified or revoked, Permittees that have properly obtained coverage under this general permit are authorized to discharge in accordance with the special and general conditions which follow.

Kelly Susewind, P.E., P.G. Manager
Water Quality Program
Washington State Department of Ecology

TABLE OF CONTENTS

SUMMARY OF PERMIT REPORTS & SUBMITTALS 5

SUMMARY OF REQUIRED ONSITE DOCUMENTATION 5

SPECIAL CONDITIONS 6

S1. PERMIT COVERAGE 6
- A. Facilities Required to Seek Coverage Under This General Permit 6
- B. Significant Contributors of Pollutants 8
- C. Facilities Not Required to Obtain Coverage 8
- D. Facilities Excluded from Coverage 9
- E. Discharges to Ground 10
- F. Conditional "No Exposure" Exemption 10

S2. APPLICATION FOR COVERAGE 11
- A. Obtaining Permit Coverage 11
- B. Modification of Permit Coverage 11
- C. Permit Coverage Timeline 12
- D. Transfer of Permit Coverage 12

S3. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) 13
- A. General Requirements 13
- B. Specific SWPPP Requirements 14

S4. GENERAL SAMPLING REQUIREMENTS 21
- A. General Requirements 21
- B. Sampling Requirements 21
- C. Analytical Procedures for Sampling Requirements 24
- D. Laboratory Accreditation 24

S5. BENCHMARKS, EFFLUENT LIMITATIONS AND SPECIFIC SAMPLING REQUIREMENTS 24
- A. Benchmarks and Sampling Requirements 24
- B. Additional Sampling Requirements for Specific Industrial Groups 25
- C. Stormwater Discharges Subject to Effluent Limitation Guidelines 27
- D. Conditionally Authorized Non-Stormwater Discharges 28
- E. Prohibited Discharges 29
- F. General Prohibitions 29

S6. DISCHARGES TO 303(d)-LISTED OR TMDL WATERS 30
- A. General Requirements for Discharges to 303(d)-listed Waters 30
- B. Limits on Coverage for New Discharges to TMDL or 303(d)-listed Waters 30
- C. Additional Sampling Requirements and Effluent Limits for Discharges to Certain 303(d)-listed Waters 30

D. Requirements for Discharges to Waters with Applicable TMDLs 33

S7. INSPECTIONS 33
A. Inspection Frequency and Personnel 33
B. Inspection Components..... 33
C. Inspection Results 34
D. Reports of Non-Compliance 34

S8. CORRECTIVE ACTIONS 35
A. Implementation of Source Control and Treatment BMPs from Previous Permit..... 35
B. Level One Corrective Actions – Operational Source Control BMPs 35
C. Level Two Corrective Actions – Structural Source Control BMPs..... 35
D. Level Three Corrective Actions – Treatment BMPs 36

S9. REPORTING AND RECORDKEEPING 37
A. Discharge Monitoring Reports..... 37
B. Annual Reports 38
C. Records Retention..... 39
D. Additional Sampling by the Permittee..... 39
E. Reporting Permit Violations 39
F. Public Access to SWPPP 40

S10. COMPLIANCE WITH STANDARDS 40

S11. PERMIT FEES.....41

S12. SOLID AND LIQUID WASTE MANAGEMENT.....41

S13. NOTICE OF TERMINATION (NOT) 41
A. Conditions for a NOT 41
B. Procedure for Obtaining Termination..... 42

GENERAL CONDITIONS 43

G1. DISCHARGE VIOLATIONS 43

G2. SIGNATORY REQUIREMENTS.....43

G3. RIGHT OF INSPECTION AND ENTRY 44

G4. GENERAL PERMIT MODIFICATION AND REVOCATION 44

G5. REVOCATION OF COVERAGE UNDER THE PERMIT 44

G6. REPORTING A CAUSE FOR MODIFICATION 45

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES.....45

G8. DUTY TO REAPPLY 45
G9. REMOVED SUBSTANCES 45
G10. DUTY TO PROVIDE INFORMATION 46
G11. OTHER REQUIREMENTS OF 40 CFR 46
G12. ADDITIONAL SAMPLING 46
G13. PENALTIES FOR VIOLATING PERMIT CONDITIONS 46
G14. UPSET 46
G15. PROPERTY RIGHTS 47
G16. DUTY TO COMPLY 47
G17. TOXIC POLLUTANTS 47
G18. PENALTIES FOR TAMPERING 47
G19. REPORTING PLANNED CHANGES 47
G20. REPORTING OTHER INFORMATION 48
G21. REPORTING ANTICIPATED NON-COMPLIANCE 48
G22. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT 48
G23. APPEALS 49
G24. SEVERABILITY 49
G25. BYPASS PROHIBITED 49
APPENDIX 1 - ACRONYMS 51
APPENDIX 2 - DEFINITIONS 52
APPENDIX 3 - SWPPP CERTIFICATION FORM 60
APPENDIX 4 - EXISTING DISCHARGERS TO IMPAIRED WATER BODIES 61
APPENDIX 5 - DISCHARGERS SUBJECT TO TMDL REQUIREMENTS 61

SUMMARY OF PERMIT REPORTS & SUBMITTALS

Permit Section	Submittal	Frequency	Due Date(s)
S1.F	Conditional "No Exposure" Certification Form	As necessary	As necessary
S2.B	*Application* for Permit Coverage	As necessary	As necessary
S2.B.	Request Modification of Permit Coverage	As necessary	As necessary
S2.D	Request Transfer of Coverage	As necessary	As necessary
S9.A	Discharge Monitoring Reports (DMRs)	1/quarter	within 45 days after the end of each quarter
S9.B	Annual Report	1/year	May 15th (except 2010)
S9.C.	SWPPP, if requested by *Ecology*	Per *Ecology* request	Within 14 days of request
S9.E	Noncompliance Notification	As necessary	Within 30 days of noncompliance event

SUMMARY OF REQUIRED ONSITE DOCUMENTATION[1]

Permit Condition(s)	Document Title
S3.A.4.a	*Stormwater Pollution Prevention Plan* (SWPPP)[2]
S9.B	Copies of Annual Reports
S9.C.1.a	Copy of Permit
S9.C.1.b	Copy of Permit Coverage Letter
S9.C.1.c	Original Sampling Records (Field Notes and Laboratory Reports)
S7.C & S9.C.1.d	Site Inspection Reports
S9.C.1.j	Copies of Discharge Monitoring Reports (DMRs)

[1] A complete list is contained in Condition S9.C. The permittee shall make all plans, documents and records required by this permit immediately available to Ecology or the local jurisdiction upon request.
[2] With signed and completed SWPPP Certification Form(s) – see Appendix 3

SPECIAL CONDITIONS

S1. PERMIT COVERAGE

A. Facilities Required to Seek Coverage Under This General Permit

This statewide permit applies to *facilities* conducting *industrial activities* that *discharge stormwater* to a surface water body or to a *storm sewer* system that drains to a surface water body. Beginning on the effective date of this permit and lasting through its expiration date, the Permittee is authorized to *discharge stormwater* and conditionally approved non-stormwater *discharges* to *waters of the state*. All *discharge*s and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

The permit requires coverage for private entities, state, and *local government* facilities, and includes *existing facilities* and *new facilities*. Facilities conducting industrial activities listed in Table 1 or referenced in S1.A3 shall apply for coverage under this permit or apply for a Conditional No Exposure exemption, if eligible (Condition S1.F). The *Department of Ecology (Ecology)* may also require permit coverage for any *facility* on a case-by-case basis in order to protect *waters of the state* (Condition S1.B).

1. Facilities engaged in any industrial activities in Table 1 shall apply for coverage if *stormwater* from the *facility discharge*s to a surface water body, or to a *storm sewer* system that *discharge*s to a surface water body. The *Standard Industrial Classification (SIC)* groups generally, but not always, associated with these activities are listed in Table 1.

Table 1: Activities Requiring Permit Coverage and the Associated SIC Code Groups

Industrial Activities	SIC Code
Metal Mining	10xx
Coal Mining	12xx
Oil and Gas Extraction	13xx
Mining and Quarrying of Nonmetallic Minerals, except Fuels (except facilities in SIC Codes 1411, 1422, 1423, 1429, 1442, 1446, 1445, 1459, and 1499; these facilities are covered under the Sand and Gravel General Permit)	14xx
Food and Kindred Products	20xx
Tobacco Products	21xx
Textile Mill Products	22xx
Apparel and Other Finished Products Made from Fabrics and Similar Material	23xx
Lumber and Wood Products	24xx
Furniture and Fixtures	25xx
Paper and Allied Products	26xx
Printing, Publishing and Allied Industries	27xx
Chemicals and Allied Products	28xx
Petroleum Refining and Related Industries (Except facilities in SIC 2951; these facilities are covered under the Sand and Gravel General Permit)	29xx
Rubber and Miscellaneous Products	30xx
Leather and Leather Products	31xx
Stone, Clay, Glass, and Concrete Products (Except facilities in SIC 3272-3273; these	32xx

Industrial Activities	SIC Code
facilities are covered under the Sand and Gravel General Permit)	
Primary Metal Industries	33xx
Fabricated Metal Products	34xx
Industrial and Commercial Machinery and Computer Equipment	35xx
Electronic and Other Electrical Equipment and Components	36xx
Transportation Equipment	37xx
Measuring, Analyzing, and Controlling Instruments; Photographic, Medical, and Optical Goods; Watches and Clocks	38xx
Miscellaneous Manufacturing Industries	39xx
Farm Product Storage	4221
Refrigerated Storage	4222
General Storage	4225
Recycling facilities involved in the recycling of materials, including but not limited to, metal scrap yards, battery reclaimers, salvage yards, auto recyclers, and automobile junkyards.	5015 and 5093
Steam Electric Power Generation	N/A
Active *landfills*, including, but not limited to, wood waste and inert *landfills*, transfer stations, open dumps, compost facilities, and *land application sites*, except as described in S1.C.6 or C.7.	4953
Hazardous waste treatment, storage, and disposal (TSD) facilities, and recycling facilities regulated under Chapter 173-303 WAC.	N/A
Treatment works treating domestic sewage, or any other sewage sludge, or wastewater treatment device or system, used in the storage, recycling, and reclamation of municipal or domestic sewage (including land dedicated to the disposal of sewage sludge that are located within the confines of the *facility*) with the design flow capacity of 1 million gallons per day (MGD) or more, or required to have a pretreatment program under *40 CFR* §403.	4952
Transportation facilities which have *vehicle maintenance* activity, equipment cleaning operations, or airport deicing operations:	
• Railroad Transportation	40xx
• Local and Suburban Transit and Interurban Highway Passenger Transportation	41xx
• Motor Freight Transportation (except SIC 4221–25)	42xx
• United States Postal Service	43xx
• Water Transportation	44xx
• Air Transportation	45xx
• Petroleum Bulk Stations and Terminals	5171

2. Any *facility* that has an existing *National Pollutant Discharge Elimination System (NPDES)* permit which does not address all *stormwater discharges associated with industrial activity* [*40 CFR* Subpart 122.26(b)(14)] shall obtain permit coverage.
3. Any *inactive facility* which is listed under *40 CFR* Subpart 122.26(b)(14) where *significant materials* remain onsite and are exposed to *stormwater* shall obtain permit coverage.

B. Significant Contributors of Pollutants

Ecology may require a *facility* to obtain coverage under this permit if *Ecology* determines the *facility*:

1. Is a *significant contributor of pollutants* to *waters of the state*, including *ground water*;
2. May reasonably be expected to cause a violation of any *water quality standard*; or
3. Conducts *industrial activity*, or has a SIC code, with *stormwater* characteristics similar to any *industrial activity* or SIC code listed in Table 1 in S1.A1.

C. Facilities Not Required to Obtain Coverage

Ecology does not require the types of facilities listed below to obtain coverage under this permit, unless determined to be a *significant contributor of pollutants*.

1. Industrial facilities that submit an *application* and qualify for a Conditional "No Exposure" Exemption. (Condition S1.F)
2. Industrial facilities that *discharge stormwater* only to a municipal *combined sewer* or *sanitary sewer*. *Discharge* of stormwater to sanitary or *combined sewers* shall only occur as authorized by the municipal sewage authority.
3. Industrial facilities that *discharge stormwater* only to groundwater (e.g., on-site infiltration) with no *discharge* to *surface waters of the state* under any condition.
4. Office buildings and/or administrative parking lots from which *stormwater* does not commingle with stormwater from areas associated with *industrial activity*.
5. Any part of a *facility* with a *discharge* that is in compliance with the instructions of an On-Scene-Coordinator pursuant to *40 CFR* part 300 (The National Oil and Hazardous Substances Pollution Contingency Plan) or 33 CFR 153.10(e) (Pollution by Oil and Hazardous Substances), in accordance with *40 CFR* 122.3(d).
6. Any *land application site* used for the beneficial use of industrial or municipal wastewater for agricultural activities or when applied for landscaping purposes at agronomic rates.
7. Any farmland, domestic garden, or land used for sludge management where domestic sewage sludge (biosolids) is beneficially reused (nutrient builder or soil conditioner) and which is not physically located in the confines of domestic sewage treatment

works, or areas that are in compliance with Section 405 (Disposal of Sewage Sludge) of the *Clean Water Act (CWA)*.

8. Any inactive coal mining operation if:

   a. The performance bond issued to the *facility* by the appropriate Surface Mining Control and Reclamation Act (SMCRA) authority has been released from applicable state or federal reclamation requirements after December 17, 1990.

   b. The mine does not have a *discharge* of *stormwater* that comes in contact with any overburden, raw material, intermediate products, finished products, byproducts, or waste products located on the site of the *facility*.

9. Inactive mining, inactive oil and gas operations, or inactive *landfill*s where neither an owner nor an operator can be identified.

10. Closed *landfills* that are capped and stabilized, in compliance with Chapter 173-304 WAC, and in which no *significant materials* or industrial *pollutant*s remain exposed to *stormwater*. Permittee's with existing coverage may submit a *Notice of Termination* in accordance with Special Condition S13.A.1.

D. Facilities Excluded from Coverage

Ecology will not cover the following facilities or activities under this permit:

1. Any part of a *facility* that has a *stormwater discharge* subject to *stormwater* Effluent Limitations Guidelines, New Source Performance Standards (NSPS) Under *40 CFR* Subchapter N, or Toxic Pollutant Effluent Standards under *40 CFR* Subchapter D Part 129; these facilities must apply for NPDES permit coverage in an individual or industry-specific *general permit* for those *stormwater discharge*s.

   Below is a list of categories of industries specified in *40 CFR* Subchapter N for which at least one subpart includes *stormwater* effluent limitations guidelines or NSPS. Industries included in this list should review the Subchapter N guidelines to determine if they are subject to a *stormwater* effluent limitation guideline for activities which they perform at their site.

40 CFR 411 Cement manufacturing	40 CFR 423 Steam electric power generating
40 CFR 412 Feedlots	40 CFR 434 Coal mining
40 CFR 418 Fertilizer manufacturing	40 CFR 436 Mineral mining and processing
40 CFR 419 Petroleum refining	40 CFR 440 Ore mining and dressing
40 CFR 422 Phosphate manufacturing	40 CFR 443 Paving and roofing materials (tars & asphalt)

   Facilities discharging any of the following toxic *pollutant*s, which are limited by effluent standards in *40 CFR* Subchapter D Part 129: Aldrin/Dieldrin; DDT; Endrin; Toxaphene; Benzidine; or Polychlorinated Biphenyls (PCBs); these facilities shall obtain coverage under an individual NPDES permit.

2. Nonpoint source silvicultural activities with natural *runoff* that are excluded in *40 CFR* Subpart 122.27.

3. Industrial activities operated by any department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government of the United States, or another entity, such as a private contractor, performing industrial activity for any such department, agency, or instrumentality.
4. Facilities located on Tribal lands or facilities that *discharge stormwater* to receiving waters subject to *water quality standards* of Indian Tribes, including portions of the Puyallup River and other waters on trust or restricted lands within the 1873 Survey Area of the Puyallup Tribe of Indians Reservation.
5. Any *facility* authorized to *discharge stormwater* associated with *industrial activity* under an existing NPDES individual or other *general permit.*
6. All *construction activities*. Operators of these construction activities shall seek coverage under the Construction Stormwater General Permit or an individual NPDES permit for *stormwater* associated with *construction activity*.
7. Facilities that *discharge* to a water body with a *control plan*, unless this *general permit* adequately provides the level of protection required by the *control plan*.
8. *New dischargers* to a water body listed pursuant to Section 303(d) of the CWA, unless the Permittee meets the requirements of Condition S6.B.
9. Hazardous waste *landfill*s subject to *40 CFR* Part 445, Subpart A.

E. Discharges to Ground

1. For sites that *discharge* to both surface water and *ground water*, the terms and conditions of this permit shall apply to all *ground water discharge*s.
2. Facilities that *discharge* to *ground water* through an *underground injection control well* shall comply with any applicable requirements of the Underground Injection Control (UIC) regulations, Chapter 173-218 WAC.

F. Conditional "No Exposure" Exemption

1. Any *industrial activity* identified for coverage under Condition S1.A. that is eligible for a “No Exposure” exemption from the permit under *40 CFR* 122.26 (g), may submit a No Exposure Certification Form to *Ecology*, either in writing or electronically.
   a. A Permittee is automatically granted a No Exposure exemption 90 days from *Ecology*’s receipt of a complete and accurate No Exposure Certification Form, unless *Ecology* informs the applicant in writing or electronically within 90 days that it has denied or approved the request.
   b. *Ecology* will automatically terminate permit coverage when it grants the No Exposure exemption to a permitted *facility*.
   c. Facilities which are granted a No Exposure exemption must submit a No Exposure Certification Form to *Ecology* once every five years, or by October 1, 2013, whichever is earlier.

d. No Exposure exemptions are conditional. If there is a change at the *facility* that results in the exposure of industrial activities or materials to *stormwater*, the *facility* is required to immediately apply for and obtain a permit.

S2. APPLICATION FOR COVERAGE

A. Obtaining Permit Coverage

1. Permitted Facilities

   Permittees with coverage under the existing industrial *stormwater general permit* (effective date Nov 15, 2008) are automatically covered under this permit unless otherwise notified by *Ecology*.

2. Unpermitted Facilities

   Unpermitted facilities that require coverage under this permit shall submit a complete and accurate permit *application* to *Ecology* as follows:

   a. Existing Facilities

      i. Unpermitted existing facilities that require coverage under this permit shall submit a complete and accurate permit *application* to *Ecology*.

      ii. Existing facilities are facilities in operation prior to the effective date of this permit, January 1, 2010.

   b. New Facilities

      New facilities are facilities that begin operation on or after the effective date of this permit, January 1, 2010. All unpermitted new facilities shall:

      i. Submit a complete and accurate permit *application* to *Ecology* at least 60 days before the commencement of *stormwater discharge* from the *facility*.

      ii. The *application* shall include certification that the *facility* has met the applicable public notice and *State Environmental Policy Act (SEPA)* requirements in WAC 173-226-200(f).

B. Modification of Permit Coverage

A Permittee anticipating a *significant process change*, or otherwise requesting a modification of permit coverage, shall submit a complete Modification of Coverage Form to *Ecology*. The Permittee shall:

1. Apply for modification of coverage at least 60 days before implementing a *significant process change*; or by May15th prior to a Corrective Action deadline, if requesting a Level 2 or 3 time extension or waiver request per Condition S8.B-D.

2. Complete the public notice requirements in WAC 173-226-130(5) as part of a complete *application* for modification of coverage.

3. Comply with SEPA as part of a complete *application* for modification of coverage if undergoing a *significant process change*.

C. Permit Coverage Timeline

1. If the applicant does not receive notification from *Ecology*, permit coverage automatically commences on whichever of the following dates occurs last:
   a. The 31st day following receipt by *Ecology* of a completed *application* for coverage .
   b. The 31st day following the end of a 30-day public comment period.
   c. The effective date of the *general permit*.
2. *Ecology* may need additional time to review the *application*:
   a. If the *application* is incomplete.
   b. If it requires additional site-specific information.
   c. If the public requests a public hearing.
   d. If members of the public file comments.
   e. When more information is necessary to determine whether coverage under the *general permit* is appropriate.
3. When *Ecology* needs additional time:
   a. *Ecology* will notify the applicant in writing within 30 days and identify the issues that the applicant must resolve before a decision can be reached.
   b. *Ecology* will submit the final decision to the applicant in writing. If *Ecology* approves the *application* for coverage, coverage begins the 31st day following approval, or the date the approval letter is issued, whichever is later.

D. Transfer of Permit Coverage

Coverage under this *general permit* shall automatically transfer to a *new discharger*, if all of the following conditions are met:

1. The Permittee (existing *discharger*) and *new discharger* submit to *Ecology* a complete, written, signed agreement (Transfer of Coverage Form) containing a specific date for transfer of permit responsibility, coverage, and liability.
2. The type of industrial activities and practices remain substantially unchanged.
3. *Ecology* does not notify the Permittee of the need to submit a new *application* for coverage under the *general permit* or for an individual permit pursuant to Chapters 173-216, 173-220, and 173-226 WAC.
4. *Ecology* does not notify the existing *discharger* and *new discharger* of its intent to revoke coverage under the *general permit*. The transfer is effective on the date specified in the written agreement unless *Ecology* gives this notice.

S3. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General Requirements

1. All Permittees and applicants for coverage under this permit shall develop and implement a SWPPP for the permitted *facility* as follows:
2. The SWPPP shall specify the *Best Management Practices* (BMPs) necessary to:
   a. Provide *all known, available, and reasonable methods of prevention, control, and treatment (AKART)* of *stormwater pollution*.
   b. Ensure the *discharge* does not cause or contribute to a violation of the *Water Quality Standards*.
   c. Comply with applicable federal technology-based treatment requirements under *40 CFR* 125.3.
3. Proper Selection and Use of *Stormwater Management Manuals (SWMM)*:

   BMPs shall be consistent with:

   a. *Stormwater Management Manual* for Western Washington (*2005* edition), for sites west of the crest of the Cascade Mountains.
   b. *Stormwater Management Manual* for Eastern Washington (*2004* edition), for sites east of the crest of the Cascade Mountains.
   c. Revisions to the manuals in S3.A.3. a & b., or other *stormwater* management guidance documents or manuals which provide an equivalent level of *pollution* prevention, that are approved by *Ecology* and incorporated into this permit in accordance with the permit modification requirements of WAC 173-220-190. For purposes of this section, the documents listed in Appendix 10 of the Phase I Municipal Stormwater Permit are hereby incorporated into this permit.
   d. Documentation in the SWPPP that the BMPs selected are *demonstrably equivalent* to practices contained in stormwater technical manuals approved by *Ecology*, including the proper selection, implementation, and maintenance of all applicable and appropriate *best management practices* for on-site *pollution* control.
4. Update of the SWPPP
   a. The Permittee shall modify the SWPPP if the owner/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 *pollutant*s in *stormwater* discharges from the site. The Permittee shall modify the SWPPP:
      i. As necessary to include additional or modified BMPs designed to correct problems identified.
      ii. To correct the deficiencies identified in writing from *Ecology* within 30 days of notice.

b. The Permittee shall modify the SWPPP whenever there is a change in design, construction, operation, or maintenance at the *facility* that significantly changes the nature of *pollutant*s discharged in *stormwater* from the *facility*, or significantly increases the quantity of pollutants discharged.

5. Other *Pollution Control Plans*

   The Permittee may incorporate by reference applicable portions of plans prepared for other purposes at their *facility*. Plans or portions of plans incorporated by reference into a SWPPP become enforceable requirements of this permit and must be available along with the SWPPP as required in S9.F. A *Pollution* Prevention Plan prepared under the Hazardous Waste Reduction Act, Chapter 70.95C RCW, is an example of such a plan.

6. Signatory Requirements

   The Permittee shall sign and certify all SWPPPs in accordance with General Condition G2, each time it revises or modifies a SWPPP to comply with Conditions S3.A.4 (Update of the SWPPP), S7 (Inspections) or S8 (Corrective Actions). A SWPPP Certification Form is contained in Appendix 3 of this permit.

B. <u>Specific SWPPP Requirements</u>

The SWPPP shall contain a site map, a detailed assessment of the *facility*, a detailed description of the BMPs, Spill Prevention and Emergency Cleanup Plan, and a sampling plan. The Permittee shall identify any parts of the SWPPP which the *facility* wants to claim as Confidential Business Information.

1. The site map shall identify:

   a. The scale or include relative distances between significant structures and drainage systems.

   b. Significant features.

   c. The *stormwater* drainage and *discharge* structures and identify, by name, any other party other than the Permittee that owns any *stormwater* drainage or discharge structures.

   d. The *stormwater* drainage areas for each *stormwater discharge* point off-site (including discharges to *ground water*) and assign a unique identifying number for each discharge point.

   e. Each sampling location by unique identifying number.

   f. Paved areas and buildings.

   g. Areas of *pollutant* contact (actual or potential) associated with specific industrial activities.

   h. Conditionally approved non-*stormwater* discharges (Condition S5.D).

   i. Surface water locations (including wetlands and drainage ditches).

   j. Areas of existing and potential soil *erosion* (in a *significant amount*).

k. *Vehicle maintenance* areas.

l. Lands and waters adjacent to the site that may be helpful in identifying *discharge* points or drainage routes.

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

   a. The *facility* description shall describe:

      i. The industrial activities conducted at the site.

      ii. *Regular business hours* and seasonal variations in business hours or industrial activities.

      iii. The general layout of the *facility* including buildings and storage of raw materials, and the flow of goods and materials through the *facility*.

   b. The inventory of industrial activities shall identify all areas associated with industrial activities (see Table 1) that have been or may potentially be sources of *pollutant*s, including, but not limited to, the following:

      i. Loading and unloading of dry bulk materials or liquids.

      ii. Outdoor storage of materials or products.

      iii. Outdoor manufacturing and processing.

      iv. On-site dust or particulate generating processes.

      v. On-site waste treatment, storage, or disposal.

      vi. *Vehicle* and equipment fueling, maintenance, and/or cleaning (includes washing).

      vii. Roofs or other surfaces exposed to *air emissions* from a manufacturing building or a process area.

      viii. Roofs or other surfaces composed of materials that may be mobilized by *stormwater* (e.g., galvanized roofs, galvanized fences, etc.).

   c. The inventory of materials shall list:

      i. The types of materials handled at the site that potentially may be exposed to precipitation or *runoff* and could result in *stormwater pollution*.

      ii. A short narrative for each material describing the potential of the *pollutant* to be present in *stormwater* discharges. The Permittee shall update this narrative when data become available to verify the presence or absence of these pollutants.

      iii. A narrative description of any potential sources of *pollutant*s from past activities, materials and spills that were previously handled, treated, stored, or disposed of in a manner to allow ongoing exposure to *stormwater*. Include the

method and location of on-site storage or disposal. List significant spills and significant leaks of toxic or hazardous pollutants.

3. The SWPPP shall identify specific individuals by name or by title within the organization (*pollution* prevention team) whose responsibilities include: SWPPP development, implementation, maintenance, and modification.

4. *Best Management Practices* (BMPs)

   a. General BMP Requirements

      The Permittee shall describe each BMP selected to eliminate or reduce the potential to contaminate *stormwater* and prevent violations of *water quality standards*.

   b. No later than July 1, 2010, the Permittee shall include each of the following mandatory BMPs in the SWPPP and implement the BMPs. The Permittee may omit individual 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. Prior to July 1, 2010, the Permittee shall implement the BMP requirements of the previous Industrial *Stormwater General Permit*, or Condition S3.B.4 of this permit.

      i. Operational *Source Control BMPs*

         1) The SWPPP shall include the *Operational Source Control BMPs* listed as "applicable" in *Ecology*'s SWMMs, or other guidance documents or manuals approved in accordance with S3.A.3.c.

         2) <u>Good Housekeeping</u>: The SWPPP shall include BMPs that define ongoing maintenance and cleanup, as appropriate, of areas which may contribute *pollutant*s to *stormwater* discharges. The SWPPP shall include the schedule/frequency for completing each housekeeping task, based upon *industrial activity*, sampling results and observations made during inspections. The Permittee shall:

            a) Vacuum paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated *pollutant*s a minimum of once per quarter.

            b) Identify and control all on-site sources of dust to minimize *stormwater* contamination from the deposition of dust on areas exposed to precipitation.

            c) Inspect and maintain bag houses monthly to prevent the escape of dust from the system. Immediately remove any accumulated dust at the base of exterior bag houses.

            d) Keep all dumpsters under cover or fit with a lid that must remain closed when not in use.

3) Preventive Maintenance: The SWPPP shall include BMPs to inspect and maintain the *stormwater* drainage, source controls, treatment systems (if any), 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. The Permittee must:

   a) Clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe.

   b) 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.

   c) Immediately clean up spills and leaks (e.g., using absorbents, vacuuming, etc.) to prevent the *discharge* of *pollutant*s.

4) Spill Prevention and Emergency Cleanup Plan (SPECP): The SWPPP shall include a 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. The Permittee shall:

   a) Store all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater.

   b) Prevent precipitation from accumulating in containment areas with a roof or equivalent structure or include a plan on how it will manage and dispose of accumulated water if a containment area cover is not practical.

   c) 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:

      i) Oil absorbents capable of absorbing 15 gallons of fuel.

      ii) A storm drain plug or cover kit.

      iii) A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity.

      iv) A non-metallic shovel.

      v) Two five-gallon buckets with lids.

d) Not lock shut-off fueling nozzles in the open position. Do not "top-off" tanks being refueled.

e) Block, plug or cover storm drains that receive *runoff* from areas where fueling, during fueling.

f) Use drip pans or equivalent containment measures during all petroleum transfer operations.

g) Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone *vehicle*s and equipment awaiting maintenance to protected areas).

h) 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.

i) 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.

5) Employee Training: The SWPPP shall include BMPs to provide SWPPP training for employees who have duties in areas of industrial activities subject to this permit. At a minimum, the training plan shall include:

a) The content of the training,

i) An overview of what is in the SWPPP.

ii) How employees make a difference in complying with the SWPPP and preventing contamination of *stormwater*.

iii) Spill response procedures, good housekeeping, maintenance requirements, and material management practices.

b) How the Permittee will conduct training.

c) The frequency/schedule of training. The Permittee shall train employees annually, at a minimum.

d) A log of the dates on which specific employees received training.

6) Inspections and Recordkeeping: The SWPPP shall include documentation of procedures to ensure compliance with permit requirements for inspections and recordkeeping. At a minimum, the SWPPP shall:

a) Identify *facility* personnel who will inspect designated equipment and *facility* areas as required in Condition S7.

b) Contain a visual inspection report or check list that includes all items required by Condition S7.C.

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.

d) Define how the Permittee will comply with signature requirements and records retention identified in Special Condition S9, Reporting and Recordkeeping Requirements.

e) Include a certification of compliance with the SWPPP and permit for each inspection using the language in S7.C.1.c.

7) *Illicit Discharges*: The SWPPP shall 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 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 comingle 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.

ii. Structural *Source Control BMPs*

1) The SWPPP shall include the *Structural Source Control BMPs* listed as "applicable" in *Ecology*'s SWMMs, or other guidance documents or manuals approved in accordance with S3.A.3.c.

2) The SWPPP shall 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.

Permittees shall:

a) Use grading, berming, or curbing to prevent *runoff* of contaminated flows and divert run-on away from these areas.

b) Perform all cleaning operations indoors, under cover, or in bermed areas that prevent *stormwater runoff* and run-on and also that capture any overspray.

c) 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*.

iii. *Treatment BMP*s

The Permittee shall:

1) Use *Treatment BMPs* consistent with the applicable documents referenced in Condition S3.A.3.

2) Employ oil/water separators, booms, skimmers or other methods to eliminate or minimize oil and grease contamination of *stormwater* discharges.

3) Obtain *Ecology* approval before beginning construction/installation of all *treatment BMP*s that include the addition of chemicals to provide treatment.

iv. *Stormwater* Peak *Runoff* Rate and Volume Control BMPs

Facilities with *new development* or *redevelopment* shall 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 shall be selected according to S3.A.3.

v. *Erosion and Sediment Control BMPs*

The SWPPP shall describe the 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 shall implement and maintain:

1) *Sediment* control BMPs such as *detention* or retention ponds or traps, vegetated filter strips, bioswales, or other permanent *sediment* control BMPs 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.).

5. Sampling Plan

The SWPPP shall include a sampling plan. The plan shall:

a. Identify points of *discharge* to surface water, *storm sewers*, or discrete *ground water* infiltration locations, such as dry wells or *detention* ponds.

b. Include documentation of why each *discharge* point is not sampled per S4.B.2.c (if applicable):

i. Location of which *discharge* points the Permittee does not sample because the *pollutant* concentrations are substantially identical to a discharge point being sampled.

ii. General industrial activities conducted in the drainage area of each *discharge* point.

iii. *Best Management Practices* conducted in the drainage area of each outfall.

iv. Exposed materials located in the drainage area of each *discharge* point that are likely to be significant contributors of *pollutant*s to *stormwater discharges*.

v. Impervious surfaces in the drainage area that could affect the percolation of *stormwater runoff* into the ground (e.g., asphalt, crushed rock, grass, etc.).

vi. Reasons why the Permittee expects the *discharge* points to discharge substantially identical effluents.

c. Identify each sampling location by its unique identifying number such as A1, A2, etc.

d. Identify staff responsible for conducting *stormwater* sampling.

e. Specify procedures for sample collection and handling.

f. Specify procedures for sending samples to a laboratory.

g. Identify parameters for analysis, holding times and preservatives, laboratory *quantitation levels,* and analytical methods.

h. Specify the procedure for submitting results to *Ecology*.

S4. GENERAL SAMPLING REQUIREMENTS

A. General Requirements

The Permittee shall conduct sampling of *stormwater* in accordance with this permit and the SWPPP.

B. Sampling Requirements

1. Sample Timing and Frequency

a. The Permittee shall sample the *discharge* from each designated location at least once per quarter:

1st Quarter = January, February, and March

2nd Quarter = April, May, and June

3rd Quarter = July, August, and September

4th Quarter = October, November, and December

b. Permittees shall sample the *stormwater discharge* from the first fall storm event each year. "First fall storm event" means the first time after October 1st of each year that precipitation occurs and results in a *stormwater discharge* from a *facility*.

c. Permittees shall collect samples within the first 12 hours of *stormwater discharge* events. If it is not possible to collect a sample within the first 12 hours of a *stormwater* discharge event, the Permittee must collect the sample as soon as practicable after the first 12 hours, and keep documentation with the sampling records (Condition S4.B.3) explaining why they could not collect samples within the first 12

hours; or if it is unknown (e.g., discharge was occurring during start of regular business hours).

d. The Permittee shall obtain *representative samples*, which may be a single grab sample, a time-proportional sample, or a flow-proportional sample.

e. Permittees need not sample outside of *regular business hours*, during unsafe conditions, or during quarters where there is no discharge, but shall submit a Discharge Monitoring Report each reporting period (Condition S9.A).

2. Sample Location(s)

a. The Permittee shall designate sampling location(s) at the point(s) where it discharges *stormwater* associated with *industrial activity* off-site.

b. 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).

c. The Permittee shall sample each distinct point of *discharge* off-site except as otherwise exempt from monitoring as a "substantially identical outfall" per S3.B.5.b. The Permittee is required to monitor only one of the "substantially identical outfalls" if two or more outfalls discharge substantially identical effluents (based on similar industrial activities and site conditions).

d. The exception to sampling each point of *discharge* in S4.B.2.c does not apply to any point of discharge subject to numeric effluent limitations (Conditions S5.C, S6.C & S6.D).

3. Sample Documentation

For each *stormwater* sample taken, the Permittee shall record the following information and retain it on-site for *Ecology* review:

a. Sample date.

b. Sample time.

c. A notation describing if the Permittee collected the sample within the first 12 hours of *stormwater* discharge events; or, if it is unknown (e.g., discharge was occurring during start of regular business hours).

d. An explanation of why it could not collect a sample within the first 12 hours of a *stormwater discharge* event, if it was not possible. Or, if it is unknown, an explanation of why it doesn't know if a sample was collected within or outside the first 12 hours of stormwater discharge.

e. Sample location (using SWPPP identifying number).

f. Method of sampling, and method of sample preservation, if applicable.

g. Individual who performed the sampling.

4. Laboratory Documentation

The Permittee shall retain laboratory reports on-site for *Ecology* review and shall ensure that all laboratory reports providing data for all parameters include the following information:

a. Date of analysis.

b. Parameter name.

c. CAS number, if applicable.

d. Analytical method(s).

e. Individual who performed the analysis.

f. Method detection limit (MDL).

g. Laboratory *quantitation level* (QL) achieved by the laboratory.

h. Reporting units.

i. Sample result.

j. Quality assurance/quality control data.

5. The Permittee shall maintain the original records onsite and make them available to *Ecology* upon request.

6. The Permittee may suspend sampling for one or more parameters (other than "visible oil sheen") based on consistent attainment of *benchmark* values when:

   a. Eight consecutive quarterly samples, collected after the effective date of this permit, demonstrate a reported value equal to or less than the *benchmark* value; or for pH, within the range of 5.0 – 9.0.

   b. For purposes of tallying "consecutive quarterly samples":

      i. Do not include any quarters in which the Permittee did not collect a sample, but should have (e.g., discharge(s) occurred during normal working hours, and during safe conditions; but no sample was collected during the entire quarter). If this occurs, the tally of consecutive quarterly samples is reset to zero.

      ii. Do not include any quarters in which the Permittee did not collect a sample because there was no *discharge* during the quarter (or the discharges during the quarter occurred outside normal working hours or during unsafe conditions). These quarters are not included in the calculation of eight consecutive quarters, but do not cause the tally to be reset; i.e., they are skipped over.

      iii. Permittees who suspended sampling based on consistent attainment of benchmarks prior to July 1, 2012 must resume/continue sampling until a total of eight consecutive quarterly samples demonstrate consistent attainment.

   c. Permittees monitoring more than once per quarter shall average all of the monitoring results for each parameter (except pH and "visible oil sheen") and compare the average value to the *benchmark* value.

7. A Permittee who has a *significant process change* shall not use previous sampling results to demonstrate consistent attainment.
8. Suspension of sampling based on consistent attainment *does not* apply to *pollutant* parameters subject to numeric effluent limits based on federal Effluent Limitation Guidelines (Condition S5.C) or Section 303(d) of the *Clean Water Act* (Condition S6).

C. Analytical Procedures for Sampling Requirements

The Permittee shall ensure that analytical methods used to meet the sampling requirements specified in this permit conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in *40 CFR* Part 136.

D. Laboratory Accreditation

1. The Permittee shall ensure that all analytical data required by *Ecology* is prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, Chapter 173-50 WAC.
2. *Turbidity* and pH are exempt from this requirement, unless the laboratory must be registered or accredited for any other parameter.

S5. BENCHMARKS, EFFLUENT LIMITATIONS AND SPECIFIC SAMPLING REQUIREMENTS

A. Benchmarks and Sampling Requirements

1. Permittees shall sample their *stormwater discharges* as specified in Condition S4 and as specified in Table 2.
2. Additional sampling and/or requirements apply to specific industrial categories (S5.B), and facilities subject to effluent limitation guidelines (S5.C), and certain discharges to impaired waterbodies (S6).
3. If a Permittee's discharge exceeds a *benchmark* listed in Table 2, the Permittee shall take the actions specified in Condition S8. Permittees sampling more than once per quarter shall average the sample results for each parameter (except pH and “visible oil sheen”) and compare the average value to the *benchmark* to determine if the discharge has exceeded a *benchmark* value.

Table 2: Benchmarks and Sampling Requirements Applicable to All Facilities

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level [a]	Minimum Sampling Frequency [b]
Turbidity	NTU	25	EPA 180.1 Meter	0.5	1/quarter
pH	Standard Units	Between 5.0 and 9.0	Meter/Paper [c]	±0.5	1/quarter
Oil Sheen	Yes/No	No Visible Oil Sheen	N/A	N/A	1/quarter
Copper, Total	µg/L	Western WA: 14 Eastern WA: 32	EPA 200.8	2.0	1/quarter
Zinc, Total	µg/L	117	EPA 200.8	2.5	1/quarter

[a] The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table. However, if a Permittee knows that an alternate, less sensitive method (higher detection level and *quantitation level*) from *40 CFR* Part 136 is sufficient to produce measurable results in its effluent, it may use that method for analysis.

[b.] 1/quarter means 1 sample taken each quarter, year-round.

[c.] Permittees shall use either a calibrated pH meter or narrow-range pH indicator paper with a resolution not greater than ± 0.5 SU.

B. Additional Sampling Requirements for Specific Industrial Groups

1. In addition to the requirements in Table 2, all Permittees identified by an *industrial activity* in Table 3 shall sample *stormwater* discharges as specified in Condition S4 and in Table 3.
2. If a *discharge* exceeds a *benchmark* listed in Table 3, the Permittee shall take the actions specified in Condition S8. Permittees sampling more than once per quarter shall average the sample results for each parameter and compare the average value to the *benchmark* to determine if it the discharge has exceeded a *benchmark*.

Table 3: Additional Benchmarks and Sampling Requirements Applicable to Specific Industries

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level [a]	Minimum Sampling Frequency [b]
1. Chemical and Allied Products (28xx), Food and Kindred Products (20xx)					
BOD_5	mg/L	30	EPA 405.1 or SM 5210B	2	1/quarter
Nitrate/Nitrite, as Nitrogen	mg/L	0.68	EPA 353.1	0.10	1/quarter
Phosphorus, Total	mg/L	2.0	EPA 365.1	0.10	1/quarter
2. Primary Metals(33xx), Metals Mining (10xx), Automobile Salvage and Scrap Recycling (5015 and 5093), Metals Fabricating (34xx)					
Lead, Total	µg/L	81.6	EPA 200.8	0.5	1/quarter
Total Petroleum Hydrocarbons (TPH)	mg/L	10	NWTPH-Dx	0.1	1/quarter
3. Hazardous Waste Treatment, Storage and Disposal Facilities and Dangerous Waste Recyclers subject to the provisions of Resource Conservation and Recovery Act (RCRA) Subtitle C					
Chemical Oxygen Demand (COD)	mg/L	120	SM5220-D	10	1/quarter
Ammonia, Total, as N	mg/L	2.1	SM4500-NH3- GH	0.3	1/quarter
TSS	mg/L	100	SM2540-D	5	1/quarter
Arsenic, Total	µg/L	150	EPA 200.8	0.5	1/quarter
Cadmium, Total	µg/L	2.1	EPA 200.8	0.25	1/quarter
Cyanide, Total	µg/L	22	SM 4500-CN I	10	1/quarter
Lead, Total	µg/L	81.6	EPA 200.8	0.5	1/quarter
Magnesium, Total	µg/L	64	EPA 200.7	80	1/quarter
Mercury, Total	µg/L	1.4	EPA 1631E	0.0005	1/quarter
Selenium, Total	µg/L	5.0	EPA 200.8	1.0	1/quarter
Silver, Total	µg/L	3.8	EPA 200.8	0.2	1/quarter
Total Petroleum Hydrocarbons (TPH)	mg/L	10	NWTPH-Dx	0.1	1/quarter
4. Air Transportation[c] (45xx)					
Ammonia	mg/L	2.1	SM4500-NH3- GH	0.3	1/quarter
BOD_5	mg/L	30	EPA 405.1 or SM 5210B	2	1/quarter
COD	mg/L	120	EPA 410.2	5	1/quarter
Nitrate/Nitrite, as N	mg/L	0.68	EPA 4500-NO3-E/F/H	0.10	1/quarter

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level [a]	Minimum Sampling Frequency [b]
5. Timber Product Industry (24xx), Paper and Allied Products (26xx)					
COD	mg/L	120	SM5220-D	10	1/quarter
TSS	mg/L	100	SM2540-D	5	1/quarter

[a] The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table. However, if a Permittee knows that an alternate, less sensitive method (higher detection level and *quantitation level*) from *40 CFR* Part 136 is sufficient to produce measurable results in their effluent, that method may be used for analysis.

[b.] 1/quarter means 1 sample taken each quarter, year-round.

[c.] For airports where a single permittee, or a combination of permitted facilities use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis, monitor these additional four parameters in those outfalls that collect *runoff* from areas where deicing activities occur (SIC 4512-4581).

C. Stormwater Discharges Subject to Effluent Limitation Guidelines

1. Permittees with discharges from the following activities shall comply with the effluent limits and monitor as specified in Condition S4 and Tables 4 and 5.
2. The *discharge* of the *pollutant*s at a level more than that identified and authorized by this permit for these activities shall constitute a violation of the terms and conditions of this permit.
3. Permittees operating non-hazardous waste *landfill*s subject to the provisions of *40 CFR* Part 445 Subpart B shall not exceed the effluent limits[3] listed in Table 4.

[3] As set forth in *40 CFR* Part 445 Subpart B, these numeric effluent limits apply to contaminated *stormwater* discharges from Municipal Solid Waste Landfills that have not been closed in accordance with *40 CFR* 258.60, and to contaminated *stormwater* discharges from those landfills that are subject to the provisions of *40 CFR* Part 257 except for discharges from any of the following facilities:
(a) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill;
(b) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in *40 CFR* Subchapter N as the industrial or commercial operation, or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
(c) landfills operated in conjunction with CWT facilities subject to *40 CFR* Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or
(d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

Table 4: Effluent Limits Applicable to Non-Hazardous Waste Landfills Subject to 40 CFR Part 445 Subpart B

Parameter	Units	Average Monthly [a]	Maximum Daily [b]	Analytical Method [c]	Laboratory Quantitation Level [d]	Minimum Sampling Frequency [e]
BOD_5	mg/L	37	140	EPA 405.1 or SM 5210B	2	1/quarter
TSS	mg/L	27	88	SM2540-D	5	1/quarter
Ammonia (total as N)	mg/L	4.9	10	SM4500-NH3-GH.	0.3	1/quarter
Alpha Terpineol	µg/L	16	33	EPA 625	5	1/quarter
Benzoic Acid	µg/L	71	120	EPA 625	50	1/quarter
p-Cresol (4-methylphenol)	µg/L	14	25	EPA 8270D	10 ug/L	1/quarter
Phenol	µg/L	15	26	EPA 625	4.0	1/quarter
Zinc, Total	µg/L	110	200	EPA 200.8	2.5	1/quarter
pH	SU	Between 6.0 and 9.0		Meter/Paper[e]	±0.1	1/quarter

a. Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the *discharge* value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured. If only one sample is taken during the calendar month, the average monthly effluent limitation applies to that sample. If only one sample is taken during the reporting period, the average monthly effluent limitation applies to that sample.

b. Maximum daily effluent limit means the highest allowable daily discharge. The daily *discharge* means the *discharge of a pollutant* measured during a calendar day. The daily discharge is the average measurement of the *pollutant* over the day; this does not apply to pH.

c. Or other equivalent EPA-approved method with the same or lower *quantitation level*.

d. The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table. However, if a Permittee knows that an alternate, less sensitive (higher detection level and *quantitation level*) from *40 CFR* Part 136 method will provide measurable results in its effluent, it may use that method for analysis.

e 1/quarter means 1 sample taken each quarter, year-round.

D. Conditionally Authorized Non-Stormwater Discharges

1. The categories and sources of non-*stormwater* discharges identified in Condition S5. D.2, below, are conditionally authorized, provided:

   a. The *discharge* is otherwise consistent with the terms and conditions of this permit, including Condition S5, S6 and S10.

b. The Permittee conducts the following assessment for each non-*stormwater discharge* (except for S5.D.2.a & f) and documents the assessment in the SWPPP, consistent with Condition S3.B.2. The Permittee shall:

i. Identify each source.

ii. Identify the location of the discharge into the *stormwater* collection system.

iii. Characterize the discharge including estimated flows or flow volume, and likely *pollutant*s which may be present.

iv. Evaluate and implement available and reasonable *source control BMPs* to reduce or eliminate the discharge.

v. Evaluate compliance of the *discharge* with the state *water quality standards*.

vi. Identify appropriate BMPs for each discharge to control *pollutant*s and or flow volumes.

2. Conditionally authorized non-*stormwater* discharges include:

a. Discharges from fire fighting activities.

b. Fire protection system flushing, testing, and maintenance.

c. Discharges of potable water including water line flushing, provided that water line flushing must be de-chlorinated prior to discharge.

d. Uncontaminated air conditioning or compressor condensate.

e. Landscape watering and irrigation drainage.

f. Uncontaminated *ground water* or spring water.

g. Discharges associated with dewatering of foundations, footing drains, or utility vaults where flows are not contaminated with process materials such as solvents.

h. Incidental windblown mist from cooling towers that collects on rooftops or areas adjacent to the cooling tower. This does not include intentional discharges from cooling towers such as piped cooling tower blow down or drains.

E. <u>Prohibited Discharges</u>

Unless authorized by a separate NPDES or state waste *discharge* permit, the following discharges are prohibited:

1. The discharge of *process wastewater* is not authorized. *Stormwater* that commingles with *process wastewater* is considered *process wastewater*.

2. *Illicit discharges* are not authorized by this permit. Conditionally authorized non-*stormwater* discharges in compliance with Condition S5.D are not *illicit discharges*.

F. <u>General Prohibitions</u>

Permittees shall manage *stormwater* to prevent the *discharge* of:

1. Synthetic, natural or processed oil or oil-containing products as identified by an oil sheen, and
2. Trash and floating debris.

S6. DISCHARGES TO 303(D)-LISTED OR TMDL WATERS

A. General Requirements for Discharges to 303(d)-listed Waters

Permittees with coverage under this permit that *discharge* to a *303(d)-listed water body* shall conduct sampling and inspections in accordance with Conditions S4, S6, and S7.

B. Limits on Coverage for New Discharges to TMDL or 303(d)-listed Waters

Facilities that meet the definition of "*new discharger*" and *discharge* to a *303(d) listed waterbody* are not eligible for coverage under this permit unless the *facility*:

1. Prevents all exposure to *stormwater* of the *pollutant*(s) for which the waterbody is impaired, and retains documentation of procedures taken to prevent exposure onsite with its SWPPP; or
2. Documents that the *pollutant*(s) for which the waterbody is impaired is not present at the *facility*, and retains documentation of this finding with the SWPPP; or
3. Provides *Ecology* with data to support a showing that the *discharge* is not expected to cause or contribute to an exceedance of a water quality standard, and retain such data onsite with its SWPPP. The *facility* must provide data and other technical information to *Ecology* sufficient to demonstrate:
   a. For discharges to waters without an *EPA* approved or established *TMDL*, that the *discharge* of the *pollutant* for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; or
   b. For discharges to waters with an *EPA* approved or established *TMDL*, that there are sufficient remaining *wasteload allocations* in an *EPA* approved or established *TMDL* to allow industrial *stormwater discharge* and that existing *dischargers* to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with *water quality standards*.

Facilities are eligible for coverage under this permit if *Ecology* issues permit coverage based upon an affirmative determination that the *discharge* will not cause or contribute to the existing impairment.

C. Additional Sampling Requirements and Effluent Limits for Discharges to Certain 303(d)-listed Waters

1. Beginning July 1, 2010, Permittees discharging to a *303(d)-listed water body* that does not have an EPA-approved *total maximum daily load (TMDL)* shall comply with the applicable sampling requirements and effluent limits in Table 5, unless a compliance schedule is requested and granted in accordance with S6.C.1.b&c.

a. Facilities subject to these limits include, but may not be limited to, facilities listed in Appendix 4.

b. For purposes of this condition, "applicable sampling requirements and effluent limits" means the sampling and effluent limits in Table 5 that correspond to the specific parameter(s) the receiving water is *303(d)-listed* for at the time of permit coverage, or Total Suspended Solids (TSS) if the waterbody is *303(d)-listed* for any *sediment* quality parameter at the time of permit coverage.

c. Permittees may request a compliance schedule for relief from the July 1, 2010 deadline to comply with an applicable effluent limit in Condition S6.C. Permittees shall submit requests for compliance schedules in writing to *Ecology* no later than January 31, 2010 and shall include the company name, *facility* location, industrial *stormwater* permit number, and the reason for requesting a compliance schedule.

d. *Ecology* will consider all compliance schedule requests submitted by January 31, 2010. If *Ecology* determines that a Permittee is unable to comply with the applicable effluent limits by July 1, 2010, *Ecology* will establish a compliance schedule to require compliance as soon as possible, and no later than twenty-four months, or two complete wet seasons, after the effective date of this permit. *Ecology* will send its decision regarding the request for compliance schedule to the Permittee no sooner than April 1, 2010.

e. For purposes of this condition, "wet season" means Oct 1st through June 30th.

Table 5: Sampling and Effluent Limits Applicable to Discharges to 303(d)-listed Waters

Parameter	Units	Effluent Limit		Analytical Method [a]	Laboratory Quantitation Level [b]	Sampling Frequency
		Fresh Water	Marine			
Turbidity	NTUs	25	25	EPA 180.1 Meter	0.5	1/quarter [c]
pH	SU	[i]	Between 7.0 and 8.5	Meter [d]	±0.5	1/quarter [c]
Fecal Coliform Bacteria	# colonies/ 100 mL	[h]	[h]	SM 9222D	20 CFU/ 100 mL	1/quarter [c]
TSS [e]	mg/L	30	30	SM2540-D	5	1/quarter [c]
Phosphorus, Total	mg/L	[f]	[f]	EPA 365.1	0.01	1/quarter [c]
Ammonia, total as N	mg/L	[f]	[f]	SM 4500 NH^3-GH	0.3	1/quarter [c]
Copper, Total	µg/L	[f]	[f]	EPA 200.8	2.0	1/quarter [c]
Lead, Total	µg/L	[f]	[f]	EPA 200.8	0.5	1/quarter [c]
Mercury, Total	µg/L	2.1	1.8	EPA1631E	0.0005	1/quarter [c]
Zinc, Total	µg/L	[f]	[f]	EPA 200.8	2.5	1/quarter [c]
Pentachlorophenol	µg/L	9[g]	[f]	EPA 625	1.0	1/quarter [c]

[a] Or other equivalent method with the same reporting level.

[b.] The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table.

[c] 1/quarter means 1 sample taken each quarter, e.g., Q1 = Jan 1 – March 31st , Q2 = April 1 – June 30th, etc.

[d.] Permittees shall use either a calibrated pH meter consistent with *EPA* 9040 or an approved state method.

[e] A Permittee who discharges to a water body *303(d)-listed* for any *sediment* quality parameter shall sample the *discharge* for TSS.

[f.] Site-specific effluent limitation will be assigned at the time of permit coverage.

[g.] Based on a pH of 7.0.

[h.] A numeric effluent limit does not apply, but permittees must sample according to Table 5. In addition, the following mandatory BMPs shall be incorporated into the SWPPP and implemented:

1) Use all known, available and reasonable methods to prevent rodents, birds, and other animals from feeding/nesting/roosting at the facility. Nothing in this section shall be construed as allowing violations of any applicable federal, state or local statutes, ordinances, or regulations including the Migratory Bird Treaty Act.

2) perform at least one annual dry weather inspection of the stormwater system to identify and eliminate sanitary sewer cross-connections;

3) Install structural source control BMPs to address on-site activities and sources that could cause bacterial contamination (e.g., dumpsters, compost piles, food waste, animal products, etc.):

4) Implement operational source control BMPs to prevent bacterial contamination from any known sources of fecal coliform bacteria (e.g., animal waste, etc.);

5) Additional bacteria-related sampling and/or BMPs, if ordered by Ecology on a case-by-case basis.

[i.] The effluent limit for a Permittee who discharges to a fresh water body *303(d)-listed* for pH is: Between 6.0 and 8.5, if the 303(d)-listing is for high pH only; Between 6.5 and 9.0, if the 303(d)-listing is for low pH only; and Between 6.5 and 8.5 if the 303(d)-listing is for both low and high pH. All pH effluent limits are applied end-of-pipe.

D. Requirements for Discharges to Waters with Applicable TMDLs

1. The Permittee shall comply with *applicable TMDL* determinations. *Applicable TMDLs* or *TMDL* determinations are *TMDL*s which have been completed by the issuance date of this permit, or which have been completed prior to the date that the Permittee's *application* is received by *Ecology*, whichever is later. *Ecology* will list the Permittee's requirements to comply with this condition on the letter of permit coverage.
2. *TMDL* requirements associated with *TMDL*s completed after the issuance date of this permit only become effective if they are imposed through an administrative order issued by *Ecology*.
3. Where *Ecology* has established a *TMDL wasteload allocation* and sampling requirements for the Permittee's discharge, the Permittee shall comply with all requirements of the *TMDL* as listed in Appendix 5.
4. Where *Ecology* has established a *TMDL* general *wasteload allocation* for industrial *stormwater* discharges for a parameter present in the Permittee's discharge, but has not identified specific requirements, *Ecology* will assume the Permittee's compliance with the terms and conditions of the permit complies with the approved *TMDL*.
5. Where *Ecology* has not established a *TMDL wasteload allocation* for industrial *stormwater* discharges for a parameter present in the Permittee's discharge, but has not excluded these discharges, *Ecology* will assume the Permittee's compliance with the terms and conditions of this permit complies with the approved *TMDL*.
6. Where a *TMDL* for a parameter present in the Permittee's *discharge* specifically precludes or prohibits discharges of *stormwater* associated with *industrial activity*, the Permittee is not eligible for coverage under this permit.

S7. INSPECTIONS

A. Inspection Frequency and Personnel

1. The Permittee shall conduct and document visual inspections of the site each month.
2. The Permittee shall ensure that inspections are conducted by *qualified personnel*.

B. Inspection Components

Each inspection shall include:

1. Observations made at *stormwater* sampling 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 *stormwater* 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, the Permittee shall notify *Ecology* within seven days.

b. The Permittee shall 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 Permittee shall record the results of each inspection in an inspection report or checklist and keep the records on-site for *Ecology* review. The Permittee shall ensure each inspection report documents the observations, verifications and assessments required in S7.B and includes:

   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 the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must 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 Condition G2.A, or a duly authorized representative of the *facility*, in accordance with Condition G.2.B.

D. Reports of Non-Compliance

The Permittee shall prepare reports of non-compliance identified during an inspection in accordance with the requirements of Condition S9.E.

S8. CORRECTIVE ACTIONS

A. Implementation of Source Control and Treatment BMPs from Previous Permit

In addition to the Corrective Action Requirements of S8.B-D, Permittees shall implement any applicable Level 1, 2 or 3 Responses required by the previous Industrial Stormwater *General Permit*(s). Permittees shall continue to operate and/or maintain any source control or *treatment BMP*s related to Level 1, 2 or 3 Responses implemented prior to the effective date of this permit.

B. Level One Corrective Actions – Operational Source Control BMPs

Permittees that exceed any applicable *benchmark* value(s) in Table 2 or Table 3, shall complete a Level 1 Corrective Action for each parameter exceeded in accordance with the following:

1. Within 14 days of receipt of sampling results that indicate a benchmark exceedance:
   a. Conduct an inspection to investigate the cause.
   b. Review the SWPPP and ensure that it fully complies with Permit Condition S3, and contains the correct BMPs from the applicable *Stormwater Management Manual*.
   c. Make appropriate revisions to the SWPPP to include additional *Operational Source Control BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges. The Permittee shall sign and certify the revised SWPPP in accordance with S3.A.6.
2. Summarize the Level 1 Corrective Actions in the Annual Report (Condition S9.B)
3. **Level One Deadline:** The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than the DMR due date for the quarter the *benchmark* was exceeded.

C. Level Two Corrective Actions – Structural Source Control BMPs

Permittees that exceed an applicable *benchmark* value (for a single parameter) for any two quarters during a calendar year shall complete a Level 2 Corrective Action in accordance with S8.C. Alternatively, the permittee may skip Level 2 and complete a Level 3 Corrective Action in accordance with Condition S8.D.

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3.
2. Make appropriate revisions to the SWPPP to include additional *Structural Source Control BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges. The Permittee shall sign and certify the revised SWPPP in accordance with S3.A.6.
3. Summarize the Level 2 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B).

4. **Level 2 Deadline:** The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than August 31st the following year[4].

   a. If installation of necessary *Structural Source Control BMPs* is not feasible by August 31st the following year, *Ecology* may approve additional time, by approving a *Modification of Permit Coverage*.

   b. If installation of *Structural Source Control BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* may waive the requirement for additional *Structural Source Control BMPs* by approving a *Modification of Permit Coverage*.

   c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a *Modification of Coverage* form to *Ecology* in accordance with Condition S2.B, by May 15th prior to Level 2 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.

   d. For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

D. <u>Level Three Corrective Actions – Treatment BMPs</u>

Permittees that exceed an applicable *benchmark* value (for a single parameter) for any three quarters during a calendar year shall complete a Level 3 Corrective Action in accordance with S8.D. A Level 2 Corrective Action is not required.

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3.
2. Make appropriate revisions to the SWPPP to include additional *Treatment BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges. Revisions shall include additional operational and/or structural source control BMPs if necessary for proper performance and maintenance of *Treatment BMPs*.

   a. The Permittee shall sign and certify the revised SWPPP in accordance with S3.A.6.

   b. A licensed professional engineer, geologist, hydrogeologist, or Certified Professional in Storm Water Quality (CPSWQ) shall design and stamp the portion of the SWPPP that addresses *stormwater* treatment structures or processes.

      i. *Ecology* may waive the requirement for a licensed or certified professional upon request of the Permittee and demonstration that the Permittee or treatment device vendor can properly design and install the treatment device; or the treatment BMP doesn't require site-specific design or sizing (e.g., off-the-shelf filtration units, etc.).

      ii. *Ecology* will not waive the Level 3 requirement for a licensed or certified professional more than one time during the permit cycle.

[4] For Level 2 Corrective Actions triggered in 2011 and due in 2012, the Level 2 Deadline is September 30, 2012.

3. Before installing treatment BMPs that require the site-specific design or sizing of structures, equipment, or processes to collect, convey, treat, reclaim, or dispose of industrial stormwater, the Permittee shall submit an engineering report, plans and specifications, and an operations and maintenance (O&M) manual to Ecology for review in accordance with Chapter 173-240 WAC.

   a. The engineering report shall be submitted no later than the May 15th prior to the Level 3 deadline, unless an alternate due date is specified in an order.

   b. The plans and specifications and O&M Manual shall be submitted at least 30 days before construction/installation, unless an alternate date is specified in an order. Upon request of the Permittee, Ecology may allow final conceptual drawings to be substituted for plans and specifications.

4. Summarize the Level 3 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B). Include information on how monitoring, assessment or evaluation information was (or will be) used to determine whether existing treatment BMPs will be modified/enhanced, or if new/additional treatment BMPs will be installed.

5. **Level 3 Deadline**: The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than September 30th the following year.

   a. If installation of necessary *Treatment BMPs* is not feasible by the Level 3 Deadline; *Ecology* may approve additional time by approving a *Modification of Permit Coverage*.

   b. If installation of *Treatment BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to violation of a water quality standard, *Ecology* may waive the requirement for *Treatment BMPs* by approving a *Modification of Permit Coverage*.

   c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to *Ecology* in accordance with Condition S2.B, by May 15th prior to the Level 3 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.

   d. For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

S9. REPORTING AND RECORDKEEPING

A. <u>Discharge Monitoring Reports</u>

1. The Permittee shall submit sampling data obtained during each reporting period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by *Ecology*.

2. The Permittee shall submit sampling results within 45 days of the end of each reporting period.
3. The first reporting period shall begin on the effective date of permit coverage.
4. Upon permit coverage, the Permittee shall ensure that DMRs are postmarked or received by *Ecology* by the DMR Due Dates below:

Table 7: Reporting Dates and DMR Due Dates

Reporting Period	Months	DMR Due Date
1st	January-March	May 15
2nd	April-June	August 14
3rd	July-Sept	November 14
4th	October-December	February 14

5. DMRs shall be submitted using *Ecology*'s WAWebDMR system or by mail to the following address:

Department of Ecology
Water Quality Program – Industrial Stormwater
PO Box 47696
Olympia, Washington 98504-7696

6. Upon permit coverage, the Permittee shall submit a DMR each reporting period, whether or not the *facility* has discharged *stormwater* from the site.
   a. If no *stormwater* sample was obtained from the site during a given reporting period, the Permittee shall submit the DMR form indicating "no sample obtained", or "no discharge during the quarter", as applicable.
   b. If a Permittee has suspended sampling for a parameter due to consistent attainment, the Permittee shall submit a DMR and indicate that it has achieved Consistent Attainment for that parameter(s).

B. <u>Annual Reports</u>

1. The Permittee shall submit a complete and accurate Annual Report to the Department of *Ecology* no later than May 15th of each year (except 2010) using a form provided by or otherwise approved by *Ecology*.
2. The annual report shall include corrective action documentation as required in S8.B-D. If corrective action is not yet completed at the time of submission of this annual report, the Permittee must describe the status of any outstanding corrective action(s).
3. Permittees shall include the following information with each annual report. The Permittee shall:
   a. Identify the condition triggering the need for corrective action review.
   b. Describe the problem(s) and identify the dates they were discovered.
   c. Summarize any Level 1, 2 or 3 corrective actions completed during the previous calendar year and include the dates it completed the corrective actions.

d. Describe the status of any Level 2 or 3 corrective actions triggered during the previous calendar year, and identify the date it expects to complete corrective actions.

4. Permittees shall retain a copy of all annual reports onsite for *Ecology* review.

C. Records Retention

1. The Permittee shall retain the following documents onsite for a minimum of five years:

   a. A copy of this permit.

   b. A copy of the permit coverage letter.

   c. Records of all sampling information specified in Condition S4.B.3.

   d. Inspection reports including documentation specified in Condition S7.

   e. Any other documentation of compliance with permit requirements.

   f. All equipment calibration records.

   g. All BMP maintenance records.

   h. All original recordings for continuous sampling instrumentation.

   i. Copies of all laboratory reports as described in Condition S3.B.4.

   j. Copies of all reports required by this permit.

   k. Records of all data used to complete the *application* for this permit.

2. The Permittee shall extend the period of records retention during the course of any unresolved litigation regarding the *discharge* of *pollutant*s by the Permittee, or when requested by *Ecology*.

3. The Permittee shall make all plans, documents and records required by this permit immediately available to *Ecology* or the local jurisdiction upon request; or within 14 days of a written request from *Ecology*.

D. Additional Sampling by the Permittee

If the Permittee samples any *pollutant* at a designated sampling point more frequently than required by this permit, then the Permittee shall include the results in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Reporting Permit Violations

1. In the event the Permittee is unable to comply with any of the terms and conditions of this permit which may endanger human health or the environment, or the facility experiences any *bypass* or upset which causes an exceedance of any effluent limitation in the permit, the Permittee shall:

   a. Immediately take action to minimize potential *pollution* or otherwise stop the noncompliance and correct the problem.

b. Immediately notify the appropriate *Ecology* regional office of the failure to comply.

c. Submit a detailed written report to *Ecology* within 30 days unless *Ecology* requests an earlier submission. The Permittee's report shall contain:

i. A description of the noncompliance, including exact dates and times.

ii. Whether the noncompliance has been corrected and, if not, when the noncompliance will be corrected.

iii. The steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2. Compliance with the requirements of this section does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Public Access to SWPPP

The Permittee shall provide access to, or a copy of, the SWPPP to the public when requested in writing. Upon receiving a written request from the public for the SWPPP, the Permittee shall:

1. Provide a copy of the SWPPP to the requestor within 14 days of receipt of the written request; or

2. Notify the requestor within 10 days of receipt of the written request of the location and times within normal business hours when the requestor may view the SWPPP , and provide access to the SWPPP within 14 days of receipt of the written request; or

3. Provide a copy of the plans and records to *Ecology*, where the requestor may view the records, within 14 days of a request; or may arrange with the requestor for an alternative, mutually agreed upon location for viewing and/or copying of the plans and records. If access to the plans and records is provided at a location other than at an *Ecology* office, the Permittee will provide reasonable access to copying services for which it may charge a reasonable fee.

S10. COMPLIANCE WITH STANDARDS

A. Discharges shall not cause or contribute to a violation of *Surface Water Quality Standards* (Chapter 173-201A WAC), Ground Water Quality Standards (Chapter 173-200 WAC), Sediment Management Standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (*40 CFR* 131.36). Discharges that are not in compliance with these standards are prohibited.

B. *Ecology* will presume compliance with *water quality standards*, unless *discharge* monitoring data or other site specific information demonstrates that a discharge causes or contributes to violation of *water quality standards*, when the Permittee is:

1. In full compliance with all permit conditions, including planning, sampling, monitoring, reporting, and recordkeeping conditions.
2. Fully implementing storm water *best management practices* contained in storm water technical manuals approved by the department, or practices that are *demonstrably equivalent* to practices contained in storm water technical manuals approved by *Ecology*, including the proper selection, implementation, and maintenance of all applicable and appropriate *best management practices* for on-site *pollution* control.

C. Prior to the *discharge* of *stormwater* and non-stormwater to *waters of the state*, the Permittee shall apply all known and reasonable methods of prevention, control, and treatment (*AKART*). To comply with this condition, the Permittee shall prepare and implement an adequate SWPPP, with all applicable and appropriate BMPs, including the BMPs necessary to meet the standards identified in Condition S10.A, and shall install and maintain the BMPs in accordance with the SWPPP, applicable SWMMs, and the terms and conditions of this permit.

S11. PERMIT FEES

A. The Permittee shall pay permit fees assessed by *Ecology* and established in Chapter 173-224 WAC.

B. *Ecology* will continue to assess permit fees until it terminates a permit in accordance with Special Condition S13 or revoked in accordance with General Condition G5.

S12. SOLID AND LIQUID WASTE MANAGEMENT

The Permittee shall not allow solid waste material or *leachate* to cause violations of the State Surface *Water Quality Standards* (Chapter 173-201A WAC), the *Ground Water Quality Standards* (Chapter 173-200 WAC) or the Sediment Management Standards (Chapter 173-204 WAC).

S13. NOTICE OF TERMINATION (NOT)

A. <u>Conditions for a NOT</u>

Ecology may approve a *Notice of Termination* (NOT) request when the Permittee meets one or more of the following conditions:

1. All permitted *stormwater* discharges associated with *industrial activity* that are authorized by this permit cease because the *industrial activity* has ceased, and no *significant materials* or industrial *pollutant*s remain exposed to *stormwater*.
2. The party that is responsible for permit coverage (signatory to *application*) sells or otherwise legally transfers responsibility for the *industrial activity*.
3. All *stormwater* discharges associated with *industrial activity* are prevented because the *stormwater* is redirected to a *sanitary sewer*, or discharged to ground (e.g., infiltration, etc.).

B. Procedure for Obtaining Termination

1. The Permittee shall apply for a NOT on a form specified by *Ecology* (NOT Form).
2. The Permittee seeking permit coverage termination shall sign the NOT in accordance with Condition G2. of this permit.
3. The Permittee shall submit the completed NOT form to *Ecology* at the address in Condition S9.A.5.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this *general permit* shall be consistent with the terms and conditions of this *general permit*. Any *discharge* of any *pollutant* more frequently than, or at a level in excess of that identified and authorized by the *general permit*, shall constitute a violation of the terms and conditions of this permit.

G2. SIGNATORY REQUIREMENTS

A. All permit *applications* shall be signed:

1. In the case of corporations, by a responsible corporate officer of at least the level of vice president of a corporation.
2. In the case of a partnership, by a general partner of a partnership.
3. In the case of sole proprietorship, by the proprietor.
4. In the case of a municipal, state, or other public *facility*, by either a principal executive officer or ranking elected official.

B. All reports required by this permit and other information requested by *Ecology* 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.

C. Changes to authorization. If an authorization under paragraph G2.B.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 paragraph G2.B.2 above shall be submitted to *Ecology* prior to, or together with, any reports, information, or *applications* to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

> "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."

G3. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of *Ecology*, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a *discharge* is located or where any records shall be kept under the terms and conditions of this permit.

B. To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.

C. To inspect, at reasonable times, any facilities, equipment (including sampling and control equipment), practices, methods, or operations regulated or required under this permit.

D. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the *Clean Water Act*.

G4. GENERAL PERMIT MODIFICATION AND REVOCATION

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of Chapter 173-226 WAC. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, the following:

A. When a change which occurs in the technology or practices for control or abatement of *pollutant*s applicable to the category of *dischargers* covered under this permit.

B. When effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of *dischargers* covered under this permit.

C. When a water quality management plan containing requirements applicable to the category of *dischargers* covered under this permit is approved.

D. When information is obtained which indicates that cumulative effects on the environment from *dischargers* covered under this permit are unacceptable.

G5. REVOCATION OF COVERAGE UNDER THE PERMIT

A. Pursuant with Chapter 43.21B RCW and Chapter 173-226 WAC, *Ecology* may terminate coverage for any *discharger* under this permit for cause. Cases where coverage may be terminated include, but are not limited to, the following:

1. Violation of any term or condition of this permit.
2. Obtaining coverage under this permit by misrepresentation or failure to disclose fully all relevant facts.
3. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

4. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
5. A determination that the permitted activity endangers human health or the environment, or contributes to *water quality standards* violations.
6. Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.
7. Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable.

B. *Ecology* may require any *discharger* under this permit to apply for and obtain coverage under an individual permit or another more specific *general permit*.

C. Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within 90 days from the time of revocation and is submitted along with a complete individual permit *application* form.

G6. REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new *application*, or a supplement to the previous *application*, whenever a material change to the *industrial activity* or in the quantity or type of *discharge* is anticipated which is not specifically authorized by this permit. This *application* shall be submitted at least 60 days prior to any proposed changes. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G8. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the expiration date of this permit.

G9. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other *pollutant*s removed in the course of treatment or control of *stormwater* shall not be resuspended or reintroduced to the final effluent stream for *discharge* to state waters.

G10. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to *Ecology*, within a reasonable time, all information which *Ecology* may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to *Ecology*, upon request, copies of records required to be kept by this permit [*40 CFR* 122.41(h)].

G11. OTHER REQUIREMENTS OF 40 CFR

All other requirements of *40 CFR* 122.41 and 122.42 are incorporated in this permit by reference.

G12. ADDITIONAL SAMPLING

Ecology may establish specific sampling requirements in addition to those contained in this permit by administrative order or permit modification.

G13. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to $10,000 and costs of prosecution, or by imprisonment at the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of this permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to $10,000 for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G14. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted *facility* was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S9.E; and 4) the Permittee complied with any remedial measures required under this permit.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G15. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G16. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the *Clean Water Act* and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal *application*.

G17. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the *Clean Water Act* for toxic *pollutant*s within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G18. PENALTIES FOR TAMPERING

The *Clean Water Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate any sampling device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than $20,000 per day of violation, or imprisonment of not more than four years, or both.

G19. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, give notice to *Ecology* of planned physical alterations, modifications or additions to the permitted *industrial activity*, which will result in:

A. The permitted *facility* being determined to be a new source pursuant to *40 CFR* 122.29(b).

B. A *significant process change*, as defined in the glossary of this permit.

C. A change in the location of *industrial activity* that affects the Permittee's sampling requirements in Conditions S3, S4, S5, and S6.

Following such notice, permit coverage may be modified, or revoked and reissued pursuant to *40 CFR* 122.62(a) to specify and limit any *pollutant*s not previously limited. Until such modification is effective, any new or increased *discharge* in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G20. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit *application*, or submitted incorrect information in a permit *application* or in any report to *Ecology*, it shall promptly submit such facts or information.

G21. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to *Ecology* by submission of a new *application*, or supplement to the existing *application*, at least 45 days prior to commencement of such discharges, of any *facility* expansions, production increases, or other planned changes, such as process modifications, in the permitted *facility* or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by *Ecology*.

G22. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT

A. Any *discharger* authorized by this permit may request to be excluded from coverage under the *general permit* by applying for an individual permit.

B. The *discharger* shall submit to *Ecology* an *application* as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons shall fully document how an individual permit will apply to the applicant in a way that the *general permit* cannot.

C. *Ecology* may make specific requests for information to support the request. *Ecology* shall either issue an individual permit or deny the request with a statement explaining the reason for the denial.

D. When an individual permit is issued to a *discharger* otherwise subject to the industrial *stormwater general permit*, the applicability of the industrial *stormwater general permit* to that Permittee is automatically terminated on the effective date of the individual permit.

G23. APPEALS

A. The terms and conditions of this *general permit*, as they apply to the appropriate class of *dischargers*, are subject to appeal by any person within 30 days of issuance of this *general permit*, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.

B. The terms and conditions of this *general permit*, as they apply to an individual *discharger*, are appealable in accordance with Chapter 43.21B RCW within 30 days of the effective date of coverage of that *discharger*. Consideration of an appeal of *general permit* coverage of an individual *discharger* is limited to the *general permit*'s applicability or nonapplicability to that individual *discharger*.

C. The appeal of *general permit* coverage of an individual *discharger* does not affect any other *discharger*s covered under this *general permit*. If the terms and conditions of this *general permit* are found to be inapplicable to any individual *discharger*(s), the matter shall be remanded to *Ecology* for consideration of issuance of an individual permit or permits.

G24. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or *application* of any provision of this permit to any circumstance, is held invalid, the *application* of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

G25. BYPASS PROHIBITED

Bypass, which is the intentional diversion of waste streams from any portion of a treatment *facility*, is prohibited, and *Ecology* may take enforcement action against a Permittee for *bypass* unless one of the following circumstances (A, B, or C) is applicable.

A. <u>*Bypass* for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions</u>

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by *Ecology* prior to the *bypass*. The Permittee must submit prior notice, if possible, at least ten (10) days before the date of the *bypass*.

B. <u>*Bypass* Which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit</u>

This *bypass* is permitted only if:

1. *Bypass* is unavoidable to prevent loss of life, personal injury, or *severe property damage*. "*Severe property damage*" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a *bypass*.

2. There are no feasible alternatives to the *bypass*, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a *bypass* which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment *facility*.
3. *Ecology* is properly notified of the *bypass* as required in condition S9E of this permit.

C. <u>*Bypass* which is Anticipated and has the Potential to Result in Noncompliance of this Permit</u>

The Permittee must notify *Ecology* at least thirty (30) days before the planned date of *bypass*. The notice must contain (1) a description of the *bypass* and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of *bypass* under each alternative; (5) a recommendation as to the preferred alternative for conducting the *bypass*; (6) the projected date of *bypass* initiation; (7) a statement of compliance with SEPA; (8) a request for modification of *water quality standards* as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the *bypass*.

For probable construction bypasses, the need to *bypass* is to be identified as early in the planning process as possible. The analysis required above must be considered during preparation of the engineering report or facilities plan and plans and specifications and must be included to the extent practical. In cases where the probable need to *bypass* is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the *bypass*.

Ecology will consider the following prior to issuing an administrative order for this type *bypass*:

1. If the *bypass* is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
2. If there are feasible alternatives to *bypass*, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment *facility*.
3. If the *bypass* is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed *bypass* and any other relevant factors, *Ecology* will approve or deny the request. The public must be notified and given an opportunity to comment on *bypass* incidents of significant duration, to the extent feasible. Approval of a request to *bypass* will be by administrative order issued by *Ecology* under RCW 90.48.120.

APPENDIX 1 - ACRONYMS

BMP	Best Management Practice
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response Compensation & Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWA	Centralized Waste Treatment
EPA	Environmental Protection Agency
ESC	Erosion and Sediment Control
FWPCA	Federal Water Pollution Control Act
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
SARA	Superfund Amendment and Reauthorization Act
SEPA	State Environmental Policy Act
SIC	Standard Industrial Classification
SMCRA	Surface Mining Control and Reclamation Act
SWMM	Stormwater Management Manual
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
USC	United States Code
USEPA	United States Environmental Protection Agency
WAC	Washington Administrative Code
WQ	Water Quality

APPENDIX 2 - DEFINITIONS

40 CFR means Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

303(d)-listed water body means waterbodies as listed as Category 5 on Washington State's Water Quality Assessment.

Air Emission means a release of air contaminants into the ambient air.

AKART is an acronym for "all known, available, and reasonable methods of prevention, control, and treatment." AKART represents the most current methodology that can be reasonably required for preventing, controlling, or abating the *pollutant*s and controlling *pollution* associated with a discharge.

Applicable TMDL means any *TMDL* which has been completed either before the issuance date of this permit or the date the permittee first obtains coverage under this permit, whichever is later.

Application means a request for coverage under this *general permit* pursuant to WAC 173-226-200. Also called a *Notice of Intent (NOI)*.

Best Management Practices (*BMPs* - general definition) means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the *pollution* of *waters of the state*. BMPs include treatment systems, operating procedures, and practices to control: plant site *runoff*, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In this permit BMPs are further categorized as operational source control, structural source control, *erosion* and *sediment* control, and *treatment BMP*s.

Benchmark means a *pollutant* concentration used as a permit threshold, below which a pollutant is considered unlikely to cause a water quality violation, and above which it may. When pollutant concentrations exceed benchmarks, corrective action requirements take effect. Benchmark values are not *water quality standards* and are not numeric effluent limitations; they are indicator values.

Bypass means the intentional diversion of waste streams from any portion of a treatment *facility*.

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a *sanitary sewer* and a *storm sewer*, and into which inflow is allowed by local ordinance.

Construction Activity means clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, industrial buildings, and demolition activity.

Control Plan means a *total maximum daily load (TMDL)* determination, restrictions for the protection of endangered species, a *ground water* management plan, or other limitations that regulate or set limits on discharges to a specific water body or *ground water* recharge area.

Demonstrably Equivalent means that the technical basis for the selection of all storm water *best management practices* are documented within a storm water *pollution* prevention plan. The storm water *pollution* prevention plan must document: 1) The method and reasons for choosing the storm water *best management practices* selected; 2) The *pollutant* removal performance expected from the practices selected; 3) The technical basis supporting the performance claims for the practices selected, including any available existing data concerning field performance of the practices selected; 4) An assessment of how the selected practices will comply with state *water quality standards*; and 5) An assessment of how the selected practices will satisfy both applicable federal technology-based treatment requirements and state requirements to use all known, available, and reasonable methods of prevention, control, and treatment.

Detention means the temporary storage of *stormwater* to improve quality and/or to reduce the mass flow rate of discharge.

Discharge [of a pollutant] means any addition of any *pollutant* or combination of pollutants to waters of the United States from any point source. This definition includes additions of pollutants into waters of the United States from: surface *runoff* which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, *municipality*, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Discharger means an owner or operator of any *facility* or activity subject to regulation under Chapter 90.48 RCW or the Federal *Clean Water Act*.

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such *ground water* infiltration or surface waters as may be present.

Ecology means the Washington State Department of *Ecology*.

EPA means the United States Environmental Protection Agency.

Equivalent BMPs means operational, source control, treatment, or innovative BMPs which result in equal or better quality of *stormwater discharge* to surface water or to *ground water* than BMPs selected from the SWMM.

Erosion means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

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.

Existing Facility means a *facility* that was in operation prior to the effective date of this permit. It also includes any *facility* that is not categorically included for coverage but is in operation when identified by *Ecology* as a *significant contributor of pollutants*.

Facility means any NPDES "point source" (including land or appurtenances thereto) that is subject to regulation under the NPDES program. See *40 CFR* 122.2.

General Permit means a permit which covers multiple *dischargers* of a point source category within a designated geographical area, in lieu of individual permits being issued to each *discharger*.

Ground Water means water in a saturated zone or stratum beneath the land surface or a surface water body.

Illicit Discharge means any *discharge* that is not composed entirely of *stormwater* except (1) discharges authorized pursuant to a separate NPDES permit, or (2) conditionally authorized non-*stormwater* discharges identified in Condition S5.D.

Inactive Facility means a *facility* that no longer engages in business, production, providing services, or any auxiliary operation.

Industrial Activity means (1) the 11 categories of industrial activities identified in *40 CFR* 122.26(b)(14)(i-xi) that must apply for either coverage under this permit or no exposure certification, (2) any *facility* conducting any activities described in Table 1, and (3) identified by *Ecology* as a *significant contributor of pollutants*. Table 1 lists the 11 categories of industrial activities identified in *40 CFR* 122.26(b)(14)(i-xi) in a different format.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a *land application site*, surface impoundment, injection well, or waste pile.

Land Application Site means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

Leachate means water or other liquid that has percolated through raw material, product or waste and contains substances in solution or suspension as a result of the contact with these materials.

Local Government means any county, city, or town having its own government for local affairs.

Material Handling means storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product.

Municipality means a political unit such as a city, town or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal *Clean Water Act*, for the *discharge* of *pollutant*s to *surface waters of the state* from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of *Ecology*.

New Development means land disturbing activities, including Class IV -general forest practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of impervious surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development.

New Discharge(r) means a *facility* from which there is a discharge, that did not commence the *discharge* at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See *40 CFR* 122.2.

New Facility means a *facility* that begins activities that result in a *discharge* or a potential discharge to *waters of the state* on or after the effective date of this *general permit*.

Noncontact Cooling Water means water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

Notice of Termination (NOT) means a request for termination of coverage under this *general permit* as specified by Special Condition S13 of this permit.

Operational Source Control BMPs means schedule of activities, prohibition of practices, maintenance procedures, employee training, good housekeeping, and other managerial practices to prevent or reduce the *pollution* of *waters of the state*. Not included are BMPs that require construction of *pollution* control devices.

Pollutant means the *discharge* of any of the following to *waters of the state*: dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of section 312 of the FWPCA nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the FWPCA.

Pollution means contamination or other alteration of the physical, chemical, or biological properties of *waters of the state*; including change in temperature, taste, color, *turbidity*, or odor of the waters; or such *discharge* of any liquid, gaseous, solid, radioactive or other substance into any *waters of the state* as will or is likely to create a nuisance or render such waters harmful,

detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish, or other aquatic life.

Process Wastewater means any water which, during manufacturing or processing, comes into direct contact or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Qualified Personnel means those 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.

Quantitation Level (QL) also known as Minimum Level of Quantitation (ML) means the lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that all method-specified sample weights, volumes, and cleanup procedures have been employed.

Reasonable Potential means the likely probability for *pollutant*s in the *discharge* to exceed the applicable water quality criteria in the receiving water body.

Redevelopment means on a site that is already substantially developed (i.e., has 35% or more of existing impervious surface coverage), the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities.

Regular Business Hours means those time frames when the *facility* is engaged in its primary production process, but does not include additional shifts or weekends when partial staffing is at the site primarily for maintenance and incidental production activities. *Regular business hours* do not include periods of time that the *facility* is inactive and *unstaffed*.

Representative [sample] means a sample of the *discharge* that accurately characterizes *stormwater runoff* generated in the designated drainage area of the *facility*.

Runoff means that portion of rainfall or snowmelt water not absorbed into the ground that becomes surface flow.

Sanitary Sewer means a sewer which is designed to convey *domestic wastewater*.

Sediment means the fragmented material that originates from the weathering and *erosion* of rocks, unconsolidated deposits, or unpaved yards, and is transported by, suspended in, or deposited by water.

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a *bypass*. *Severe property damage* does not mean economic loss caused by delays in production.

Significant Amount means an amount of a *pollutant* in a *discharge* that is amenable to available and reasonable methods of prevention, control, or treatment; or an amount of a *pollutant* that has a *reasonable potential* to cause a violation of surface or *ground water quality standards* or *sediment* management standards.

Significant Contributor of Pollutant(s) means a *facility* determined by *Ecology* to be a contributor of a *significant amount*(s) of a *pollutant*(s) to *waters of the state*.

Significant Materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the *facility* is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with *stormwater* discharges.

Significant Process Change means any modification of the *facility* that would result in any of the following:

1. Add different *pollutants* in a *significant amount* to the discharge.
2. Increase the *pollutants* in the *stormwater discharge* by a *significant amount*.
3. Add a new *industrial activity* (SIC) that was not previously covered.
4. Add additional impervious surface or acreage such that *stormwater* discharge would be increased by 25% or more.

Source Control BMPs means structures or operations that are intended to prevent pollutants from coming into contact with stormwater through physical separation of areas or careful management of activities that are sources of pollutants. This permit separates source control into two types: *structural source control BMPs* and *operational source control BMPs*.

Standard Industrial Classification (SIC) is the statistical classification standard underlying all establishment-based federal economic statistics classified by industry as reported in the 1987 SIC Manual by the Office of Management and Budget.

State Environmental Policy Act (SEPA) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

Storm Sewer means a sewer that is specifically designed to carry *stormwater*. Also called a storm drain.

Stormwater means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a *stormwater drainage system* into a defined surface water body, or a constructed infiltration *facility*.

Stormwater Discharge Associated with Industrial Activity means the *discharge* from any conveyance that is used for collecting and conveying *stormwater* and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant (see *40 CFR* 122(b)(14)).

Stormwater Drainage System means constructed and natural features which function together as a system to collect, convey, channel, hold, inhibit, retain, detain, infiltrate or divert *stormwater*.

Stormwater Management Manual (SWMM) or Manual means the technical manuals prepared by *Ecology* for *stormwater* management in western and eastern Washington.

Stormwater Pollution Prevention Plan (SWPPP) means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of *stormwater*.

Structural Source Control BMPs means physical, structural, or mechanical devices or facilities that are intended to prevent *pollutant*s from entering *stormwater*.

Surface Waters of the State includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state.

Total Maximum Daily Load (TMDL) means a calculation of the maximum amount of a *pollutant* that a water body can receive and still meet state *water quality standards*. Percentages of the *total maximum daily load* are allocated to the various *pollutant* sources. A *TMDL* is the sum of the allowable loads of a single *pollutant* from all contributing point and nonpoint sources. The *TMDL* calculations include a "margin of safety" to ensure that the water body can be protected in case there are unforeseen events or unknown sources of the *pollutant*. The calculation also accounts for seasonable variation in water quality.

Treatment BMPs means BMPs that are intended to remove *pollutant*s from *stormwater*.

Turbidity means the clarity of water expressed as nephelometric *turbidity* units (NTU) and measured with a calibrated turbidimeter.

Underground Injection Control Well means a well that is used to *discharge* fluids into the subsurface. An *underground injection control well* is one of the following:

1. A bored, drilled, or driven shaft,
2. An improved sinkhole, or
3. A subsurface fluid distribution system. (WAC 173-218-030)

Unstaffed means the *facility* has no assigned staff. A site may be "*unstaffed*" even when security personnel are present, provided that *pollutant* generating activities are not included in their duties.

Vehicle means a motor-driven conveyance that transports people or freight, such as an automobile, truck, train, or airplane.

Vehicle Maintenance means the rehabilitation, mechanical repairing, painting, fueling, and/or lubricating of a motor-driven conveyance that transports people or freight, such as an automobile, truck, train, or airplane.

Wasteload Allocation (WLA) means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of *pollution*. WLAs constitute a type of water quality based effluent limitation (*40 CFR* 130.2(h)).

Water Quality Standards means the Water Quality Standards for *Surface Waters of the State* of Washington, Chapter 173-201A WAC, Ground Water Quality Standards (Chapter 173-200 WAC), Sediment Management Standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (*40 CFR* 131.36).

Waters of the State includes those waters defined as "waters of the United States" in *40 CFR* Subpart 122.2 within the geographic boundaries of Washington State. State statute defines "*waters of the state*" to include lakes, rivers, ponds, streams, wetlands, inland waters, under*ground water*s, salt waters and all other surface waters and water courses within the jurisdiction of the state of Washington (Chapter 90.48 RCW).

APPENDIX 3 - SWPPP CERTIFICATION FORM

The Permittee shall use this form to sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S3 and S8 of the Industrial Stormwater General Permit.

- A SWPPP certification form needs to be completed and attached to all SWPPPs.
- Each time a Level 1, 2, or 3 Corrective Action is required, this form needs to be re-signed and re-certified by the Permittee, and attached to the SWPPP.

Is this SWPPP certification in response to a Level 1, 2 or 3 Corrective Action? ☐Yes ☐No

If Yes:

- Type of Corrective Action?: ☐Level 1 ☐Level 2 ☐Level 3
- Date SWPPP update/revision completed:_____.

"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 4 - EXISTING DISCHARGERS TO IMPAIRED WATER BODIES

This appendix has a link below to a website list of existing Permittees that *discharge pollutant*s of concern to impaired water bodies.

http://www.ecy.wa.gov/programs/wq/stormwater/industrial/permitdocs/iswgpapp4.pdf

This list is based on the best information available to *Ecology*. There will be changes and updates to this list based on new, more accurate information. If changes or updates are made, *Ecology* will notify the affected permittees directly. Such changes or updates will not become effective until 30 days after the affected *dischargers* are notified.

This list is generated by comparing the *discharge* point of each individual *discharger* permitted under the Industrial *Stormwater General Permit* with the 2008 list of Category 5 impaired waters (the *303(d) list*), approved by US *EPA* on January 29, 2009.

APPENDIX 5 - DISCHARGERS SUBJECT TO TMDL REQUIREMENTS

The list of *dischargers* identified as discharging to water bodies which have completed water quality clean-up plans or *TMDL*s and associated monitoring requirements can be viewed on *Ecology*'s website at: http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html

The most current list can also be obtained by contacting Ecology at:

Industrial Stormwater General Permit
Washington State Department of Ecology
P.O. Box 47696
Olympia, WA 98504-7600

This list is based on the best information available to *Ecology*. There will be changes and updates to this list based on new, more accurate information. If changes or updates are made, *Ecology* will notify the affected permittees directly. Such changes or updates will not become effective until 30 days after the affected *dischargers* are notified.

Industrial Stormwater General Permit Modification

Addendum to Fact Sheet: Appendix E

Response to Public Comments on the Draft Permit Modification

May 16, 2012

Ecology received 68 public comments on the draft Industrial Stormwater General Permit (ISGP) modification that was released for public comment on February 1, 2012. These comments were submitted by 20 interested parties, prior to the close of the public comment period on March 16, 2012. Copies of all comment letters, emails, and oral testimony were posted on Ecology's Industrial Stormwater General Permit website:
http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html

Ecology has assembled excerpts from comments into this document, and organized them by topic and/or permit condition. Ecology has provided a written response to each comment, and indicated where changes were made based on public comments. Underlined language is used to indicate new language compared to the original 2010 ISGP.

Table of Contents

General Comments 4
Association of Washington Business 4
BNSF 4
Washington Refuse and Recycling Association 5
Bob Yoder, Redmond Neighborhood Blog 5
Economic Impact Analysis 6
Auto Recyclers of Washington 6
Auto Recyclers of Washington 7
Condition S1. Permit Coverage 7
BNSF 7
BNSF 8
City of Longview 9
United States Environmental Protection Agency – Region 10 9
Condition S2. Application For Coverage 11
Association of Washington Business 11
Auto Recyclers of Washington 11
Association of Washington Business 12
BNSF 12
Boeing 13
Port of Tacoma 14
Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project 15
Weyerhaeuser 15
S3. Stormwater Pollution Prevention Plan (SWPPP) 16
Association of Washington Business 16
Wafertech 16
Weyerhaeuser 17
S4. General Sampling Requirements 17
Association of Washington Business 17
Association of Washington Business 18
BNSF 18
BNSF 19
Dawson Consulting LLC 21
Nisqually Environmental Sampling and Consulting 21
Port of Tacoma 22
Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project 23
Washington Refuse & Recycling Association 23
Weyerhaeuser 24
S6. Discharges to 303(d)-Listed or TMDL Waters 25
Association of Washington Business 25

Boeing 26
City of Everett 28
City of Longview 29
Lincoln Loehr 29
Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project 30
Snoqualmie Tribe 32
Washington Refuse and Recycling Association 33
Weyerhaeuser 33
S8. Corrective Actions 35
Association of Washington Business 35
Auto Recyclers of Washington 37
Auto Recyclers of Washington 37
Association of Washington Business 38
Association of Washington Business 38
Association of Washington Business 39
BNSF 40
BNSF 40
BNSF 42
Boeing 42
City of Longview 48
Dawson Consulting LLC 49
Dawson Consulting LLC 50
Landau Associates, Inc. 52
Nisqually Environmental Sampling and Consulting 53
Port of Tacoma 54
Port of Tacoma 54
Port of Tacoma 56
Port of Tacoma 57
Port of Tacoma 59
Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project 60
Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project 61
Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project 62
Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project 63
Washington Refuse and Recycling Association 64
Washington Refuse and Recycling Association 65
Weyerhaeuser 66
Weyerhaeuser 67

General Comments

Association of Washington Business

1. AWB and member companies who own and operate facilities permitted under the ISGP have spent considerable time and energy working with Ecology on the current ISGP. The current round of revisions highlights the ongoing need for a permit that is both stable and understandable. While AWB appreciates the immediate need for some of the modifications in the draft, our members have expressed a concern that ongoing litigation will continue to create more uncertainty and additional changes to the ISGP may be required in the future. Any modifications made to the ISGP should be changes that are not likely to be revised again within the next few months pending the outcome of current litigation.

   Additionally, AWB and its member companies continue to express concerns about the ongoing costs of complying with environmental regulations, including the ISGP. While those who own and operate facilities permitted under the ISGP are committed to staying in compliance with their permit obligations, the costs of compliance are significant. Ecology must consider modifications that provide a reasonable and certain pathway for compliance. Permit modifications that reference the use of BMPs without specifically defining critical terms are likely to create additional costs and another round of permit revisions or litigation (see Section II for specific examples). Ultimately, Ecology should use this opportunity to modify the ISGP to provide greater clarity on the use of adaptive management (as directed by the Pollution Control Hearings Board) to the regulated community, which serves Ecology's objective to protect water quality and the regulated community's objective to confidently comply with the obligations of the ISGP.

   Response: Ecology agrees that the ongoing litigation will continue to create uncertainty, but Ecology has decided to fully address the PCHB ruling now, rather than to wait for the litigation to be resolved.

BNSF

2. **Additional Matters Ecology Should Address at this Time**
   Other than formal amendments to the permit, Ecology lacks a clear, consistent and reliable means of communicating its policy decisions to the regulated community. It issued a "Frequently Asked Questions" (FAQs) document in mid-March 2011 and, when challenged, it issued a qualification to the FAQ that left the regulated community uncertain as to its continued application. Ecology has previously stated that permittees may call or email Ecology for guidance, but that guidance can be inconsistent. One notable example applicable to transportation facilities is the effect of stand-alone mobile fueling on the obligation to seek permit coverage. In a November 2009 email exchange (see Attachment 1), prior to issuing the current ISGP, Ross Dunning of Kennedy Jenks Consultants asked Ecology two specific questions on this point: "If a facility does not require permit coverage because the[y] don't have a vehicle maintenance shop ... then fueling that is performed onsite does NOT trigger the requirement to apply for permit coverage" and "So it would seem that a transportation facility that performs vehicle maintenance (including fueling) but does not have a vehicle maintenance

shop is not required to apply for permit coverage. Can you confirm?" Ecology emailed back confirming the accuracy of these statements. After it finalized the ISGP effective January 1, 2010, Ecology completely changed its position on these points. The FAQs now state that anywhere a maintenance or fueling activity takes place constitutes a"shop," and therefore mobile fueling from a vendor's truck triggers the obligation to secure coverage.
Ecology should take this opportunity to clearly state its policy decisions via permit amendments rather than continue its *ad hoc* and sometimes inconsistent practice of issuing informal guidance. Therefore, Ecology should further amend the ISGP and address the following issues: [See other BNSF comments]

Response: Ecology has clarified the secondary triggers for transportation facilities include vehicle maintenance activity, rather than vehicle maintenance shops. This is consistent with Ecology's original intent. The word "shops" has been deleted, and it has been replaced with "activity". Ecology is also finalizing the proposal to delete "material handling facilities", because it was incorrectly included in the 2009 permit.

Revision to S1.A.1 Table 1:

Transportation facilities which have *vehicle maintenance* ~~shops~~ activity, ~~material handling facilities,~~ equipment cleaning operations, or airport deicing operations:

- Railroad Transportation
- Local and Suburban Transit and Interurban Highway Passenger Transportation
- Motor Freight Transportation (except SIC 4221–25)
- United States Postal Service
- Water Transportation
- Air Transportation
- Petroleum Bulk Stations and Terminals

Washington Refuse and Recycling Association

3.

Lastly, we appreciated the opportunity to hear directly from you at the Vancouver Workshop. Your thorough explanation and your overall approach to working with facility owners was both enlightening and encouraging.

Response: Thank you – Ecology appreciates your attendance and questions at the workshop.

Bob Yoder, Redmond Neighborhood Blog

4.

http://redmondcity.blogspot.com/2012/01/opinion-citizen-potests-city-approval.html
Dear WDOE: Please click on this link to my report on industrial storm water run-off at All Wood Recyling (AWR) of SE Redmond, WA. This storm water and sewer pollution has been ongoing and the City is undergoing a retroactive permitting process to correct actions taken by AWR. This industrial site stormwater pollution was first reported by me in 2006. WDOE and other regulatory agencies visited the site, but nothing has been done until now - and actions are only now being attempted. What is wrong with our regulatory process?

AWR has proposed in their SEPA checklist only one vault and one stormwater pond.
The site encompasses both sides of Evans Creek, a class I stream with wild, endangered Chinook salmon runs (?).
THIS INDUSTRIAL SITE SITS OVER A CITY AQUIFER - SIX FEET UNDER IN SOME PLACES.
I can't make the town meeting. But, please review this link to my blog story.

Response: City of Redmond and Ecology staff recognizes this site has potential for ground water pollution. Ecology, EPA, Redmond and King County Health staff worked with regulating the facility activities in 2008-09. Corrections focused on restricting the type of material processed on site and better pollution prevention practices. Since this facility does not discharge stormwater to surface waters, it is not covered under Ecology's Industrial Stormwater General Permit. The facility is currently regulated under Ecology's Underground Injection Control (UIC) rules, which are intended to protect groundwater quality. Ecology also required the facility to apply for and obtain a state waste discharge (individual) permit and develop an engineering plan to cease the injection well use. Site options for stormwater treatment are limited because they are in the shoreline management area up against a salmon-bearing stream. All Wood's consultant proposed connecting the worst of the runoff to the sewer as part of their permit application and engineering report in 2010. The City of Redmond required additional alternative evaluation before issuing permits for the proposed site improvements.

Economic Impact Analysis

Auto Recyclers of Washington

5.

WAC 173-226-120 requires an economic analysis of any proposed water-quality general permit to serve the following purposes. The analysis must provide:
• A brief description of the compliance requirements of the general permit.
• The estimated costs for complying with the permit, based upon existing data for facilities intended to be covered under the general permit.
A comparison, to the greatest extent possible, of the cost of compliance for small businesses with the cost of compliance for the largest ten percent of the facilities intended to be covered under the general permit.

• A summary of how the permit provides mitigation to reduce the effect on small businesses (if a disproportionate impact is expected), without compromising the mandated intent of the permit.
A small business is defined as any business entity, including a sole proprietorship, corporation, partnership, or other legal entity, that is owned and operated independently from all other businesses, and that has 50 or fewer employees.
As we point out below, several of the proposed revisions to the ISWSGP will have a significantly disproportionate impact on small businesses. The failure of the Department to issue the Economic Analysis as required by WAC 173-226-120 is a gross failure of this proposal and is reason enough for the Department to not adopt these proposed revisions and for the Department to engage in a stakeholder process to eliminate or minimize any disproportionate impacts on small businesses from these proposed revisions.

Response: Ecology completed an Economic Impact Analysis when the 2009 Industrial Stormwater Permit was issued, and it concluded "*the general permit has a disproportionate impact on small businesses.*" The analysis states that it is difficult to avoid disproportionate costs for smaller businesses, as small businesses will always be disproportionately impacted, relative to large businesses. For the permit modifications intended to address the PCHB ruling, Ecology is not able to offer mitigation without violating requirements of the state or federal water pollution control laws.

Auto Recyclers of Washington

6.

Before adopting the provision identified above, the WA Department of Ecology must provide appropriate mechanisms and assistance to mitigate the small business economic impacts of these proposed permit revisions in accordance with RCW 34.05.

Response: See response to comment # 5 above.

Condition S1. Permit Coverage

BNSF

7.

Transportation Facilities and Point-source Discharges from Regulated Activities

The permit is presently unclear whether a transportation facility triggers ISGP coverage if it does not have a point source discharge from the triggering activities identified by 40 C.P.R. § 122.26(b)(14)(viii): a vehicle maintenance shop, equipment cleaning, and airplane deicing. The 2010 ISGP defines "facility" in a circular manner as "any NPDES 'point source' (including land or appurtenances thereto) that is subject to regulation under the NPDES program." ISGP, at p. 53 (emphasis added). From this definition, it is unclear whether storm water discharges from areas of a facility on which no industrial activity takes place require permit coverage if stormwater from areas of industrial activity do not discharge to surface waters. BNSF proposes that Ecology revise ConditionS 1.A as follows:

1. Facilities engaged in any industrial activities in Table 1 shall apply for coverage if *stormwater* from the *facility discharges* to a surface water body, or to a *storm sewer* system that *discharges* to a surface water body.

(Where federal regulations onlv require coverage if certain "industrial activities" trigger coverage, e.g., 40 C.F.R. *§* 122.26(b)(14)(viii), a facility is only required to apply for coverage if there is a point source discharge from an area of triggering industrial activities.) The *Standard Industrial Classification (SIC)* groups generally, but not always, associated with these activities are listed in Table 1.

Ecology should also revise the portion of Table 1 that is directly affected by this change: Transportation facilities which have a point source discharge of stormwater associated with vehicle maintenance shops, material handling facilities, equipment cleaning operations, or airport deicing operations:

• Railroad Transportation 40xx

• Local and Suburban Transit and Interurban Highway Passenger Transportation 41 xx
• Motor Freight Transportation (except SIC 4221-25) 42xx
• United States Postal Service 43xx
• Water Transportation 44xx
• Air Transportation 45xx
• Petroleum Bulk Stations and Terminals 5171

Response: EPA has defined "stormwater associated with industrial activity" as a point source subject to regulation under the NPDES program. Ecology considers it unnecessary to add "point source discharge" to the secondary triggers for transportation facilities.

Ecology has clarified the secondary triggers for transportation facilities include vehicle maintenance activity, rather than vehicle maintenance shops. This is consistent with Ecology's original intent. The word "shops" has been deleted, and it has been replaced with "activity". Ecology is also finalizing the proposal to delete "material handling facilities", because it was incorrectly included in the 2009 permit.

Revision to S1.A.1 Table 1:

Transportation facilities which have *vehicle maintenance* ~~shops~~ activity, ~~material handling facilities,~~ equipment cleaning operations, or airport deicing operations:

- Railroad Transportation
- Local and Suburban Transit and Interurban Highway Passenger Transportation
- Motor Freight Transportation (except SIC 4221–25)
- United States Postal Service
- Water Transportation
- Air Transportation
- Petroleum Bulk Stations and Terminals

BNSF

8.

Owner and Operator

Missing entirely are definitions of "owner" and "operator," which are relevant for permitting purposes because federal regulations impose permitting responsibility on the operator of a facility rather than the owner. 40 C.P.R.§ 122.21(b). Previous iterations of the ISGP (e.g., the 2002 ISGP) contained definitions to help facilities determine which entities needed coverage. The ISGP also does not answer whether it is possible for different entities to hold ISGP coverage in discrete areas of a large facility. BNSF suggests that Ecology insert, prior to the existing Condition S1.A, the following section (with the existing S1.A becoming S1.B and so forth):

> **S1. PERMIT COVERAGE**
> A. Who Is the Permittee?
> The Permittee must have day-to-day operational control to assure compliance and the power or capacity to make timely discovery of discharges and direct the activities of persons who control the mechanisms causing the pollution.

The owner is the Permittee if they are also the operator of the industrial facility. If the owner and the operator (or tenant) of an industrial facility are not the same, the operator is typically the Permittee and the owner may choose to be a co-Permittee.

B. Facilities Required to Seek Coverage Under This General Permit

C. Facilities Not Required to Obtain Coverage

Response: Ecology has decided against making the change suggested. Under section 301(a) of the Clean Water Act, 33 USC section 1311(a), "the discharge of any pollutant by any person shall be unlawful" unless the discharge is authorized by an NPDES permit. This prohibition suggests that both the owner and the operator need to be permitted since both are "persons" who will be discharging pollutants. However, under 40 CFR section 122.21(b), when a facility is owned by one person but operated by another, it is the operator's duty to obtain a permit. Ecology considers the permitting requirements to be fulfilled if the operator has sole permit coverage at a facility. Nothing in the permit precludes multiple entities from holding permit coverage at a facility. If that is necessary, each entity should submit a separate notice of intent (NOI) to apply for permit coverage.

City of Longview

9.

Under the Conditional No Exposure exemption in S1.F, the words "or material" in the second sentence should be removed or further clarified, such as suggested below:

> If there is a change at the *facility* that results in the exposure of industrial activities and associated materials to *stormwater*, the *facility* is required to immediately apply for and obtain a permit.

Response: Ecology reviewed the "Conditional No Exposure" language in EPA's Phase II Stormwater rule, and verified that EPA uses the same terminology ("industrial activity and materials") as the ISGP. Specifically, page 68785 of Federal Register /Vol. 64, No. 235 /Wednesday, December 8, 1999 /Rules and Regulations, states "*EPA expects that most facility changes can be anticipated, therefore dischargers should apply for and obtain NPDES permit coverage in advance of changes that result in exposure to industrial activities or materials.*" Ecology has decided to not to remove or further clarify the language in Condition S1.F, to remain consistent with the Phase II Stormwater Rule.

United States Environmental Protection Agency – Region 10

10.

The U.S. Environmental Protection Agency Region 10 appreciates the opportunity to review and comment on the proposed modification to the WA ISGP. The purpose of the modification is to respond to the Apri125, 2011 Pollution Control Hearings Board ruling. We hope you will consider the EPA's comment as you finalize this important permit.

As you may be aware, there has been some confusion in the past over the definition of *federal facility*. The Washington Department of Ecology has written storm water general permits that contain the same definition *of federal facility* that the EPA's permits contain. The EPA would like to bring to your attention the fact that the EPA intends to adjust the definition *of federal*

facility in its storm water genenil permits as they are reissued. To ensure consistency and clarity for the regulated community, the EPA encourages Ecology to adjust the *federal facility* language in Ecology's storm water general permits as well.

The EPA has revised the definition of *federal facility* in the recently reissued Construction Storm Water General Permit (CGP) and plans on malting the same revision at the time the EPA's Multi Sector Storm Water General Permit (MSGP) is reissued. Specifically, the definition of *federal facility* has been replaced with the term, *federal operator* which has been defined as an entity that meets the definition of "Operator" in the permit and is any department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government of the United States, or another entity, such as a private contractor, perforrping a construction activity for any such department, agency, or instrumentality. (See also, Page 5, Appendix A of the EPA CGP @ *http://www.epa.gov/npdes/pubs/cgp2012_appendixa.pdf)*

The purpose of this change is to clarify who needs to obtain coverage under a storm water general permit in a situation where the State does not have permitting authority for federal facilities. The revised definition makes clear that where the operator is a department, agency or instrumentality of the Federal government (a "federal entity") or another party engaging in a construction activity for any such federal entity, the operator is a *federal operator* that must obtain coverage under the EPA permit. For example:

- Where a federal entity is conducting a construction activity, whether on land owned or leased by the federal government or otherwise, and that federal entity meets the definition of an "operator," the federal entity is *a federal operator* and must obtain permit coverage under the EPA permit.
- Where a federal entity has hired a contractor to complete the day-to-day activity on a construction site, but retains control over the project(e.g., site design/specifications, construction, oversight) the federal entity is a *federal operator* and must obtain coverage under the EPA permit. The contractor should determine whether it meets the definition of "Operator" under this permit and, if it does, should obtain permit coverage.
- Where a federal entity has hired a contractor to complete the day-to-day activity on a construction site and does not retain control over the project, the contractor should determine whether it meets the definition of "Operator" under this permit and, if it does, should obtain state permit coverage. The federal entity in this case must determine whether it meets the definition of *federal operator* under the EPA permit and, if it doe~, should obtain permit coverage.
- Where a private party is independently conducting a construction activity on federal land or property (e.g., developing an oil and gas lease, grazing lease, or ski resort lease) the private party should determine whether it meets the definition of "operator" under the corresponding state construction general permit and, if it does, should obtain coverage under the state construction general permit.

The EPA encourages Ecology to modify the WA ISGP such that it will be consistent with the revised definitions of *federal facility* and *federal operator.* If you have any questions regarding this comment, please feel free to contact Margaret McCauley of my staff at (206) 553-1772.

Response: Ecology agrees with the suggestion, and will revise ISGP Condition S1.D.3 to be consistent with EPA's EPA's usage and definition of *federal operator*:

S1.D Facilities Excluded from Coverage

Ecology will not cover the following facilities or activities under this permit:

3. Industrial activities operated by any department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government of the United States, or another entity, such as a private contractor, performing industrial activity for any such department, agency, or instrumentality.

Condition S2. Application For Coverage

Association of Washington Business

11.

S2.B.l Modification of Permit Coverage: The submittal dates for the Annual Report and any Modification of Permit Coverage requesting a Level 2 or 3 time extension should be coordinated. While April 1st is fine for the Corrective Action time extension, it is at this time that permittees are likely to confirm their status, announce decisions on Corrective Actions, and determine if a time extension should be requested. Ecology should consider advancing the Annual Report date from May 15th to April 1st.

Response: Ecology agrees that the annual report and modification of coverage deadlines should be coordinated. Ecology has considered public comments and the pros and cons associated with various deadlines and scheduling constraints, and has decided make the Modification of Coverage deadline (for Level 2/3 waiver or extension requests) consistent with the current Annual Report due date: May 15th. This is also the due date for the 1st quarter DMR, and there are administrative efficiencies gained by making these all due on the same date.

Condition S2.B.1 will be revised as follows:

Apply for modification of coverage at least 60 days before implementing a *significant process change*; or by May15th ~~June 1st~~ prior to a Corrective Action deadline, if requesting a Level 2 or 3 time extension or waiver request per Condition S8.B-D.

Auto Recyclers of Washington

12.

Ecology proposes to shorten the deadline to request a Level 2 or 3 Corrective Action waiver or extension by two months. This proposal will impose disproportionate economic impacts on small businesses. It will impose unreasonable deadlines on small business permittees and jeopardize the very survival of their businesses and the jobs of their workers. This draft revision is incredibly ill-conceived as it appears that the Department believes that small business operators have nothing more to do but to manage their ISWGP. That clearly is not the case and for that reason alone, this proposed revised provision should not be adopted.

Response: Ecology has considered public comments and the pros and cons associated with various deadlines and scheduling constraints, and has decided make the Modification of Coverage deadline (for Level 2/3 waiver or extension requests) consistent with the current

Annual Report due date: May 15th. This is also the due date for the 1st quarter DMR, and there are administrative efficiencies gained by making these all due on the same date.

Association of Washington Business

13.

S2.C Permit Coverage Timeline: Ecology proposes to remove the applicability of automatic commencement of applications for modification of coverage, including applications for waivers and extensions under Condition S8. The permit should retain an automatic commencement process.

Response: Ecology disagrees with the suggestion, and has decided to make the permit consistent with WAC 173-226, which provides for the automatic approvals of new applications (NOIs), but not for modifications of coverage.

BNSF

14.

Proposed Changes to Condition S2.C

In its effort to eliminate confusion regarding the applicable timeline for consideration of a Level2/Level 3 modification (waiver or extension), Ecology has introduced other unintentional confusion into the timelines. The PCHB held that the more specific 60-day timeline for review set out in Condition S8 applied to Level 2/Level 3 modifications (extension/waiver) and not the general 30-day deadline set out in Condition S2. In consideration of this decision and the potential confusion, Ecology's proposed changes simply eliminate the word "modification" from Condition S2. This, however, leaves no deadline for Ecology's review of permit modifications other than Level 2/Level 3 waivers or extensions.

In order to avoid the inadvertent elimination of any kind of time line for the review of other permit modifications, Ecology should instead amend Condition S2 as follows:

A. Permit Coverage or Permit Modification Timeline

1. If the applicant does not receive notification from *Ecology,* permit coverage or modification of coverage automatically commences on whichever of the following dates occurs last:

a. The 31st day following receipt by *Ecology* of a completed *application* for coverage or modification of coverage form"""; or

b. The 31st day following the end of a 30-day public comment period"""; or

c. The effective date of the *general permit"""*; or

d. For modifications of coverage related to waivers ofLevel2 or Level3 corrective actions governed by Condition S8, the 61 st day following receipt bv Ecology of a completed modification of coverage form.

2. *Ecology* may need additional time to review the *application:*

a. If the *application* is incomplete.

b. If it requires additional site-specific information.

c. If the public requests a public hearing.

d. If members of the public file comments.

e. When more information is necessary to determine whether coverage under the *genera/permit* is appropriate.

3. When *Ecology* needs additional time:
a. *Ecology* will notify the applicant in writing within 30 days and identify the issues that the applicant must resolve before a decision can be reached.
b. *Ecology* will submit the final decision to the applicant in writing. If *Ecology* approves the *application* for coverage/coverage, coverage begins the 31st day following approval, or the date the approval letter is issued, whichever is later.

Response: Ecology disagrees with the suggestion, and has decided to make the permit consistent with WAC 173-226, which provides for the automatic approvals of new applications (NOIs), but not for modifications of coverage.

Boeing

15.

Condition S2. Applications for Coverage or Modification of Coverage
Ecology proposes to modify Condition S2.C by removing the applicability of automatic commencement of applications for modification of coverage, including applications for waivers and extensions under Condition S8. The permit should retain an automatic commencement process in order to provide regulatory certainty that would otherwise be lost under the proposed modification. The availability of some process to modify permit corrective action deadlines to address site specific conditions is essential. The waiver and extension process will be illusory unless there is allowance for automatic commencement of permit modifications that authorize waivers and extension. In 2011 the department was unable to process the majority of waiver and extension requests. Without automatic commencement, many facilities that are entitled to waiver and extension would be forced to comply with inappropriate deadlines and they will have no recourse to avoid being in noncompliance with the permit. Retaining the automatic commencement provision also will allow for orderly permit implementation. In the event there is automatic commencement of a waiver and extension, Ecology would retain the authority to modify that result through administrative orders and do so in a way that allows facilities to remain in compliance with the permit. Boeing thus objects to the removal of the provision concerning the applicability of automatic commencement of applications for modification of coverage including applications for waivers and extensions under Condition S8. It is neither fair nor necessary to pull a provision providing certainty in this already excessively complex permit under these circumstances.

Ecology should add clarifying language that public notice does not have to be completed by the April 1st deadline for applications for waivers and extensions under Condition S8. The draft modification already imposes a significantly shorter deadline for Condition S8 applications and there is no reason for Ecology to delay considering the applications pending documentation that public notice has been completed.

Boeing recommends that Ecology retain the approval process in S8 by providing the permittee with more specific instructions and examples. The Department should embrace its duty to make at least a reasonable effort in education and outreach prior to removing a valuable tool for permittee compliance created by “confusion”, as noted in the Fact Sheet (page 10, para 2).

Boeing has the following questions regarding the proposed modifications to Condition S2:

Q1: Will applications be deemed automatically denied if Ecology does not approve the applications within 60 days of filing with the department?
Q2: At what point, if any, in the application process should a facility determine whether its application has been automatically denied?
Q3: How do the permittee deadlines change if the department requires clarification or holds public hearings that go beyond the permit deadlines to implement corrective action?

Response: Ecology disagrees with the suggestion, and has decided to make the permit consistent with WAC 173-226, which provides for the automatic approvals of new applications (NOIs), but not for modifications of coverage.

Response Q1: No, applications will not be automatically denied if Ecology does not approve the applications within 60 days. All applications will either be approve or denied in writing.

Response Q2: See Response Q1.

Response Q3: If Ecology requires clarification, or additional information, the issue will be resolved prior to the applicable Level 2/3 deadline. Public hearings are highly unlikely (Ecology has no record of a public hearing ever being conducted on a modification request), but in the event a public hearing is requested and Ecology agrees to hold one, Ecology will attempt get it held it in advance of the applicable Level 2/3 deadline.

Ecology has considered public comments and the pros and cons associated with various deadlines and scheduling constraints, and has decided make the Modification of Coverage deadline (for Level 2/3 waiver or extension requests) consistent with the current Annual Report due date: May 15th. This is also the due date for the 1st quarter DMR, and there are administrative efficiencies gained by making these all due on the same date.

Port of Tacoma

16.

S2. Application for Coverage
B.1. Apply for modification of coverage at least 60 days before implementing a significant process change; or by ~~June~~ April 1st prior to a Corrective Action deadline, if requesting a Level 2 or 3 time extension or waiver request per Condition S8.B-D.

Comment:
This proposed change for the due date of the modification will inhibit the ability of the permittee to complete an appropriate analysis of potential source control Best Management Practices (BMPs). Ecology's *Modification of Permit Coverage Form* requires the Level 2/ Level 3 extensions requests provide a "technical basis for extension" and include "proposed timeline for completion and describe issues that affect completion date; for example, state/local permits, study, design, financing, professional services and contracting, etc."

Reducing the submission schedule does not allow enough time to provide all of the **technical** information that is needed for selecting BMPs that will solve the problem, provide source control and improve water quality.

The Port suggests that Ecology not change the application due date to ensure there is adequate time for facilities to investigate/analyze the problem, select appropriate source control BMPs and support the intent of this permit, which is to improve water quality stormwater discharges at industrial facilities.

Response: Ecology has considered public comments and the pros and cons associated with various deadlines and scheduling constraints, and has decided make the Modification of Coverage deadline (for Level 2/3 waiver or extension requests) consistent with the current Annual Report due date: May 15th. This is also the due date for the 1st quarter DMR, and there are administrative efficiencies gained by making these all due on the same date.

Ecology wants to clarify that a permittee requesting a Level 2/3 time extension is not required to submit complete information on the specific BMPs that will be implemented to address the corrective action; often the permittee hasn't selected the BMPs at this stage in the process. However, the permittee is likely aware of the project management issues that can affect the completion date. Therefore the permittee's "technical basis for extension" (modification application) must include as much detail as possible regarding the proposed timeline for completion and describe issues that affect completion date; for example, state/local permits, study, design, financing, professional services and contracting, etc.

Condition S2.B.1 will be revised as follows:

Apply for modification of coverage at least 60 days before implementing a *significant process change*; or by May15th ~~June 1st~~ prior to a Corrective Action deadline, if requesting a Level 2 or 3 time extension or waiver request per Condition S8.B-D.

Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project

17.

Conditions S2.B. and C.
The commenters support the proposed modifications to S2.B. and C. to clarify the process for modification of permit coverage.

Response: Thank you.

Weyerhaeuser

18.

S2.B.1. Modification of Permit Coverage –
It would make sense to coordinate the submittal dates for the Annual Report and any Modification of Permit Coverage requesting a Level 2 or 3 time extension. This point in time is logically when a permittee will confirm their status, announce decisions on Corrective Actions,

and determine if a time extension should be requested. April 1st is fine for the Corrective Action time extension. Ecology should consider advancing the Annual Report date from May 15th to April 1st.

Response: Ecology agrees that the annual report and modification of coverage deadline should be coordinated. Ecology has considered public comments and the pros and cons associated with various deadlines and scheduling constraints, and has decided make the Modification of Coverage deadline (for Level 2/3 waiver or extension requests) consistent with the current Annual Report due date: May 15th. This is also the due date for the 1st quarter DMR, and there are administrative efficiencies gained by making these all due on the same date.

S3. Stormwater Pollution Prevention Plan (SWPPP)

Association of Washington Business

19.

S3.A General Requirements:
NEW SECTION REQUESTED-Ecology needs an unambiguous statement to define "all known, available, and reasonable methods of prevention, control, and treatment (AKART) for stormwater pollution." While S3.A.2.a references AKART under the general requirements of a SWPPP, permittees and Ecology staff should be able to discern what constitutes AKART.

Response: As stated in the Stormwater Management Manual for Western Washington (Volume I, Section 1.6) and Stormwater Management Manual for Eastern Washington (Chapter 1, Section 1.1.1), stormwater management techniques applied in accordance with [the Stormwater Management Manuals] are presumed to meet the technology-based treatment requirement of State law to provide all known available and reasonable methods of treatment, prevention and control (AKART; RCW 90.52.040 and RCW 90.48.010). However, at any given facility there may be different or additional requirements in order to satisfy the state AKART requirements due to site-specific conditions.

Wafertech

20.

Illicit Discharges:
WaferTech is requesting clarification regarding pressure washing using water only. There are situations where our facility will request to be able to pressure wash, using city water only, with no chemicals or added cleaning agents, to clean the side of a building, sidewalk, etc. The temperature of the water is ambient. The purpose of the cleaning would be to remove mold or moss, etc. WaferTech does not believe that this activity negatively impacts stormwater; and in the past request to our DOE inspector for approval for this activity, he has agreed. If some language could be added to the revised permit to allow for this, then it would alleviate WaferTech from requesting approval from DOE for each pressure wash event, as described above.

Response: No, the ISGP does not categorically authorize the discharge of pressure washing water, regardless of the temperature or soap content. The federal NPDES regulations include

requirements to eliminate non-stormwater discharges, such as process wastewater (e.g., pressure washing water). Pressure washing water may contain elevated levels of turbidity, metals and other pollutants regulated under the ISGP (depending on the surface, contamination, location, etc.), and can cause violations of the water quality standards. Continue working with your inspector on site specific activities and BMPs.

Weyerhaeuser

21.

S3.A.7. – New Section – Ecology should include a new subsection which says AKART
a. The identification, application/installation, and maintenance of applicable Best Management Practices from appropriate Stormwater Management Manuals constitutes the provision of "*all known, available, and reasonable methods of prevention, control, and treatment (AKART) for stormwater pollution".*

Support for Request – An unambiguous statement defining AKART is important. Permittees and Ecology staff should be able to discern, with confidence, what constitutes AKART. The ISGWP requires AKART, but the only permit section which references this legal requirement appears to be in S3.A[1].

Response: As stated in the Stormwater Management Manual for Western Washington (Volume I, Section 1.6) and Stormwater Management Manual for Eastern Washington (Chapter 1, Section 1.1.1), stormwater management techniques applied in accordance with [the Stormwater Management Manuals] are presumed to meet the technology-based treatment requirement of State law to provide all known available and reasonable methods of treatment, prevention and control (AKART; RCW 90.52.040 and RCW 90.48.010). However, at any given facility there may be different or additional requirements in order to satisfy the state AKART requirements due to site-specific conditions.

S4. General Sampling Requirements

Association of Washington Business

22.

S4.B.3 Sampling Documentation: The stormwater sampling documentation change from 30 minutes to 12 hours is greatly appreciated. The modified time frame is a more attainable requirement. Taking a stormwater sample within 30 minutes of the commencement of discharge is extremely difficult due to the complexity of staffing, tasking, calibrating equipment, gathering sampling necessities (even if they are set aside), donning the proper protective wear, and maintaining safety in the storm environment.

Response: Thank you.

---

1 S3.A. is defining the needed content of the SWPPP and includes a listing of AKART, federal technology-based requirements, and identifying the obligation for sufficient BMPs to allow for achievement of water quality standards.

Association of Washington Business

23.

S4.B.6 Sampling Requirements: The stormwater sampling change suspension from four consecutive quarters to eight consecutive quarters seems excessive. Implementing the *draft* change would mean that if a permit holder had two "dry" quarters (normally during the summer), a permit owner would end up sampling for two and a half years. If a permit holder has a proven track record, why would eight consecutive quarters be necessary? Assuming that Ecology's proposed revision of the "consistent attainment" parameter is driven by the PCHB decision in Copper Development, et.al. v. Washington Department of Ecology (PCHB Nos. 09-135 through 09-141), Ecology should simply accept the PCHB's direction that seven consecutive quarterly sample results attaining benchmark values is a demonstration of continuous attainment.

Response: The Pollution Control Hearings Board rejected the reduction from 8 quarters to 4 quarters and ordered Ecology to require "at least seven quarters of meeting benchmark values". Ecology has decided to return to the previous (2002-2009) permit requirement that required a total of 8 consecutive quarterly samples to demonstrate consistent attainment. Ecology has also refined the language that allow permittees that already suspended sampling to count those quarters towards the eight required. Ecology believes that, for the facilities that suspended sampling based on four quarters, requiring 4 more samples would better represent the full range of climatic and seasonal variation compared to only 3.

Condition S4.B.6 will be revised as follows:

iii. <u>Permittees who suspended sampling based on consistent attainment of benchmarks prior to July 1, 2012 must resume/continue sampling until a total of eight consecutive quarterly samples demonstrate consistent attainment.</u>

Example: If a permittee suspended sampling Zinc on January 1, 2012 based upon 4 consecutive quarterly samples collected in 2011, the permittee must resume sampling Zinc on July 1, 2012 until four more consecutive quarterly samples (for a total of 8) are equal to or less than the Zinc *benchmark*.

BNSF

24.

Proposed revision to Condition S4.B.6

In its April 21, 2011 Findings, Conclusion, and Order in *Copper Development v. Ecology*, 09-131 *et seq* (Order), the Pollution Control Hearings Board (PCHB) criticized Ecology's lack of evidence as to the sufficiency of four quarters of sampling to demonstrate "consistent attainment." The PCHB specifically cited to an internal briefing paper stating that seven quarters are adequate. Order, pp. 65-66. Ecology now proposes to require that facilities successfully sample for eight consecutive quarters to prove consistent attainment. Ecology's Fact Sheet accompanying the draft permit amendments presents no new information or science supporting the increase to eight quarters, the same flaw for which the PCHB criticized Ecology when it set the number at four quarters. Further, the PCHB gave Ecology the discretion to continue with the present four quarters of sampling to demonstrate consistent attainment if sampling resumed

within two to three years, rather than the full five-year permit cycle. Ecology does not explain whether or not it considered this alternative and, if so, why it rejected it.

Response: The Pollution Control Hearings Board rejected the reduction from 8 quarters to 4 quarters and ordered Ecology to require "at least seven quarters of meeting benchmark values". Ecology has decided to return to the previous (2002-2009) permit requirement that required a total of 8 consecutive quarterly samples to demonstrate consistent attainment. Ecology has also refined the language that allow permittees that already suspended sampling to count those quarters towards the eight required. Ecology believes that, for the facilities that suspended sampling based on four quarters, requiring 4 more samples would better represent the full range of climatic and seasonal variation compared to only 3.

Ecology considered the PCHB decision that gave Ecology the discretion to continue with the present four quarters of sampling to demonstrate consistent attainment if sampling resumed within 2-3 years. Ecology rejected this alternative because it would introduce tracking and compliance issues, since the resumption of sampling would be different for different facilities, and different outfalls, based upon the 2-3 year anniversary date of the 4th consecutive quarter.

BNSF

25.

Off-site storm water run-on

Ecology's proposed permit amendments for facilities that discharge to 303(d)-listed water bodies raises an issue common to a wide variety of industrial facilities. BNSF applauds Ecology for recognizing the difficult position of Permittees whose facilities exceed benchmarks due to influences outside the Permittees' control, but believes that Ecology should provide a broader solution to address this problem at all Washington facilities, not just those that discharge to a 303(d)-listed water body. As currently written, the 2010 ISGP makes Permittees responsible for the pollution that runs onto their property. At some of its facilities, there are sources outside BNSF's control (e.g., public highways and non-point source runoff) that may be the cause of exceedances at some of its facilities, but which are not themselves currently subject to effluent limits for stormwater runoff. There are a variety of reasons why it may be ineffective to negotiate with neighboring landowners (e.g., where there is no existing legal obligation for that neighbor to reduce contaminants in stormwater runoff or the source cannot be identified). Moreover, revising a facility's sampling plan is difficult where, for instance, it is sheet flow from various parts of a neighboring property or non-point source pollution that runs on to the facility from a road that commingles with the stormwater exposed to the Permittee's activities.

In such situations, Ecology should provide a mechanism so that facilities are not unfairly burdened by the (potentially unregulated) discharges of their neighbors. One option would be allowing Permittees to take upstream samples that show that the facility's exceedances are caused by storm water runoff from neighboring properties or from non-point source runoff. Ecology should revise Condition S4.B.2 to allow Permittees to report the results of sequential samples - one on the source property immediately before the stormwater runs on to the Permittee's property and one on the Permittee's property- that estimate the discharges actually caused by the Permittee. More accurate sample results would help a Permittee expeditiously determine whether its facility is the cause of the benchmark exceedances and, if not, would alleviate the significant

cost of preparing a waiver application and/or installing structural or treatment measures to address pollution caused by a neighbor. This information would also help Ecology set its regulatory priorities to address major sources of pollution. BNSF proposes the following language:

S4. GENERAL SAMPLING REQUIREMENTS

A. General Requirements

The Permittee shall conduct sampling of *stormwater* in accordance with this permit and the SWPPP.

B. Sampling Requirements

1. Sample Timing and Frequency

a. The Permittee shall sample the *discharge* from each designated location at least once per quarter:

1st Quarter= January, February, and March

2nd Quarter= April, May, and June

3rd Quarter= July, August, and September

4th Quarter= October, November, and December

b. Permittees shall sample the *stormwater discharge* from the first fall storm event each year. "First fall storm event" means the first time after October 1st of each year that precipitation occurs and results in a *stormwater discharge* from *a facility.*

c. Permittees shall collect samples within the first 12 hours of *stormwater discharge* events. If it is not possible to collect a sample within the first 12 hours of a *stormwater* discharge event, the Permittee must collect the sample as soon as practicable after the first 12 hours, and keep documentation with the sampling records (Condition S4.B.3) explaining why they could not collect samples within the first 12 hours.

d. The Permittee shall obtain *representative samples,* which may be a single grab sample, a time-proportional sample, or a flow-proportional sample. e. Permittees need not sample outside of *regular business hours,* during unsafe conditions, or during quarters where there is no discharge, but shall submit a Discharge Monitoring Report each reporting period (Condition S9.A).

2. Sample Location(s)

a. The Permittee shall designate sampling location(s) at the point(s) where it discharges *stormwater* associated with *industrial activity* off-site.

b. 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 G 12).

c. The Permittee shall sample each distinct point of *discharge* off-site except as otherwise exempt from monitoring as a "substantially identical outfall" per S3.B.5.b. The Permittee is required to monitor only one of the "substantially identical outfalls" if two or more outfalls discharge substantially identical effluents (based on similar industrial activities and site conditions).

d. The exception to sampling each point of *discharge* in S4.B.2.c does not apply to any point of discharge subject to numeric effluent limitations (Conditions S5.C, S6.C & S6.D).

e. Where *stormwater* from adjacent properties discharges to a Permittee's *facilitv* and commingles with *stormwater* associated with *industrial activity* at the Permittee's *facility,* the Pennittee may conduct sequential sampling and report the sampling results for the

difference in pollutant concentration in the DMR for stormwater associated with *industrial activity* at the Permittee's *facility*.

Response: Ecology has considered the comment and suggested revision, but has decided to have permittees sample and report stormwater discharge quality, even if that stormwater has been affected by off-site activity or run-on. State and federal laws and rules, and case law, for NPDES permitting does not excuse dischargers from the pollutant contributions that originate from off-site activity and/or sources, including run on that co-mingles with stormwater associated with industrial activity. No change made in response to this comment.

Dawson Consulting LLC

26.

S4. General Sampling Requirements [Consistent Attainment]

We support the modification that allows permittees that suspended sampling based on consistent attainment of four consecutive samples to use those samples toward their new total of eight samples. At the Seattle workshop, Ecology noted that a permittee with six consecutive samples need only meet the benchmark in an additional two consecutive samples. This doesn't appear to be allowed pursuant to the proposed revision at S4.B.6., and should be allowed. Perhaps the requirement could be modified to state that permittees who suspended sampling based on consistent attainment prior to [the modification effective date] must resume/continue sampling until a total of eight samples demonstrate compliance.

Response: Ecology agrees with the suggestion, as it is consistent with the PCHB order and Ecology's intent. Condition S4.B.6 will be revised as follows:

<u>Permittees who suspended sampling based on consistent attainment of benchmarks prior to July 1, 2012 must resume/continue sampling until a total of eight consecutive quarterly samples demonstrate consistent attainment.</u>

Example: If a permittee suspended sampling Zinc on January 1, 2012 based upon 4 consecutive quarterly samples collected in 2011, the permittee must resume sampling Zinc on July 1, 2012 until four more consecutive quarterly samples (for a total of 8) are equal to or less than the Zinc *benchmark*.

Nisqually Environmental Sampling and Consulting

27.

The provisions in the permit requiring notation assuring that the sample was obtained during the first 12 hours of discharge or noting why the sample was obtained outside of the 12 hour window is difficult to implement. Specifically, for a company that operates on a single shift, 8 hour day, a person upon entering the premises during a rain event, would check the discharge location and if there was discharge, would not be able to sample because he or she would not know when the discharge occurred and therefore would not be able to select the two choices offered by ecology (within 12 hours or outside 12 hours). Only discharge that occurred during a rain event that started during the 8 hours of operation would be able to be sampled, assuming that there was

discharge during this 8 hours. We prefer that this provision be stricken from the permit as the data is not collected by Ecology (it is not noted on the DMR or the eDMR system, however realize that this may not be possible and secondarily suggest that a third option be allowed, "Unknown, discharge was occurring during start of business".

Response: Ecology agrees that there may be circumstances that prevent a permittee from knowing if the discharge was collected within the first 12 hours, or outside the first 12 hours of a discharge. For example, if a permittee arrives at the facility at the start of regular working hours and the discharge was already occurring, and he/she doesn't know how many hours had elapsed since the discharge began. Is such situations, the permittee can't certify if it was within 12 hours, or outside of 12 hours of the discharge beginning, so the permit conditions S4.B.1.c and S4.B.3.c&d have been revised:

S4.B.1.c
Permittees shall collect samples within the first 12 hours of *stormwater discharge* events. If it is not possible to collect a sample within the first 12 hours of a *stormwater* discharge event, the Permittee must collect the sample as soon as practicable after the first 12 hours, and keep documentation with the sampling records (Condition S4.B.3) explaining why they could not collect samples within the first 12 hours; or if it is unknown (e.g., discharge was occurring during start of regular business hours).

S4.B.3.c
A notation describing if the Permittee collected the sample within the first 12 hours of *stormwater* discharge events; or, if it is unknown (e.g., discharge was occurring during start of *regular business hours*).

S4.B.3.d
An explanation of why it could not collect a sample within the first 12 hours of a *stormwater discharge* event, if it was not possible. Or, if it is unknown, an explanation of why it doesn't know if a sample was collected within or outside the first 12 hours of *stormwater* discharge.

Port of Tacoma

28.

S4. General Sampling Requirements
B.6.b.iii Permittees who suspended sampling based on consistent attainment of benchmarks for four consecutive quarterly samples must resume/continue sampling until four more consecutive quarterly samples (for a total of 8) demonstrate consistent attainment of the applicable benchmark.
Comment:
The purpose of this section is to prove the facility meets or exceeds the standard for stormwater discharge. Four quarters equates to an entire year of a five-year permit cycle. If the permitted facility has shown to consistently meet benchmarks over an entire year then that facility should be able to suspend sampling for those parameters. Retroactively requiring resuming sampling for an additional four consecutive quarters in the middle of the permit cycle is onerous for those facilities that have been in consistent attainment.

The Port requests clarification about when sampling needs to resume, since there is no effective date to this change.

Response: The change to Condition S4.B.6.b.iii is driven by a PCHB order. Ecology understands the concerns about sampling resuming in the middle of the permit cycle, but cannot continue to allow the suspension of sampling after 4 quarters (one year) of consistently meeting the benchmark.

The resumption of sampling begins on the effective date of the modification, July 1, 2012 (i.e., sampling needs to resume during the 3rd Quarter of 2012), and continues until the benchmark is attained during 8 consecutive quarters.

Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project

29.

Condition S4.B.6.
The commenters support the change in qualification for the consistent attainment exemption from monitoring requirements to eight consecutive quarters below benchmark.

We suggest, however, that Ecology include language stating that the exemption expires at some particular date, i.e., the ISPG expiration date. There is no guarantee that the ISGP will be timely reissued so that it does not continue in effect beyond its expiration date. Ecology has not reliably reissued general permits upon their expiration. For instance, the Phase I Municipal Stormwater General Permit issued in 2000 was in effect for years after its 2005 expiration date. If this ISGP continues in effect beyond its expiration date, without the inclusion of a set consistent attainment monitoring exemption expiration date, the exemption continues with it. This would be an unacceptable result and Ecology should take the precautionary step of including an exemption termination date in this condition.

Why is there no expiration date for the consistent attainment monitoring exemption?

Response: Ecology considered the suggestion, but has decided against having permit requirements change on the expiration date of the permit. Ecology plans to reissue the ISGP with an effective date of January 1, 2015, and sampling will resume on that date. No change to permit.

Washington Refuse & Recycling Association

30.

The modification to S4.B.6. Consistent Attainment
We believe the requirement for "benchmark attainment" required before sampling is suspended should be 7 samples as opposed to the proposed 8 samples.
Proposed Revisions
l.Pg.4 #6. The permitted may suspend sampling for one or more parameters (other than "visible oil sheen") based on consistent attainment of benchmark values when:
a. Seven consecutive quarterly samples demonstrate a reported value equal to or less than the benchmark value; or for Ph within the range 5.0- 9.0. These quarterly samples can be collected prior to the effective date of this regulation.

Reason: PCHB ruling (p 65-66) states "an internal briefing paper stated that seven samples are adequate." Additionally, there is no reason to delay the sampling for the benchmarks for those that have already reached their consistent attainment, let the sampling continue. There are quarters when no sampling can occur because of "no" rain event so to prolong the sampling has no value.
2.S4.B.6 iii Permittees who suspended their sampling based on their consistent attainment of benchmarks for four quarterly samples must resume/continue sampling until three more consecutive quarterly samples (for a total of seven) demonstrate attainment of the applicable benchmark.

Response:
The Pollution Control Hearings Board rejected the reduction from 8 quarters to 4 quarters and ordered Ecology to require "at least seven quarters of meeting benchmark values". Ecology has decided to return to the previous (2002-2009) permit requirement that required a total of 8 consecutive quarterly samples to demonstrate consistent attainment. Ecology has also refined the language that allow permittees that already suspended sampling to count those quarters towards the eight required. Ecology believes that, for the facilities that suspended sampling based on four quarters, requiring 4 more samples would better represent the full range of climatic and seasonal variation compared to only 3.

Weyerhaeuser

31.
S4.B.6. Sampling Requirements –
Ecology's proposed revision of the "consistent attainment" parameter is driven by the PCHB decision in Copper Development, et.al. vs. Washington Department of Ecology (PCHB Nos. 09-135 through 09-141). In Conclusion of Law 31, the PCHB said "…we conclude that at least seven quarters of meeting benchmark values should be expected prior to a suspension of sampling for the remainder of the permit term."

Why would not Ecology simply accept the PCHB direction that seven consecutive quarterly sample results attaining benchmark values is a demonstration of continuous attainment? The agency should change the proposed permit language from "Eight" to "Seven consecutive quarters...".

Response: The Pollution Control Hearings Board rejected the reduction from 8 quarters to 4 quarters and ordered Ecology to require "at least seven quarters of meeting benchmark values". Ecology has decided to return to the previous (2002-2009) permit requirement that required a total of 8 consecutive quarterly samples to demonstrate consistent attainment. Ecology has also refined the language that allow permittees that already suspended sampling to count those quarters towards the eight required. Ecology believes that, for the facilities that suspended sampling based on four quarters, requiring 4 more samples would better represent the full range of climatic and seasonal variation compared to only 3.

Condition S4.B.6 will be revised as follows:

Permittees who suspended sampling based on consistent attainment of benchmarks prior to July 1, 2012 must resume/continue sampling until a total of eight consecutive quarterly samples demonstrate consistent attainment.

Example: If a permittee suspended sampling Zinc on January 1, 2012 based upon 4 consecutive quarterly samples collected in 2011, the permittee must resume sampling Zinc on July 1, 2012 until four more consecutive quarterly samples (for a total of 8) are equal to or less than the Zinc *benchmark*.

S6. Discharges to 303(d)-Listed or TMDL Waters

Association of Washington Business

32.

S6.Table 5 Sampling and Effluent Limits Applicable to Discharges to 303(d)-Listed Waters: Several of the proposed footnote "h" requirements relating to mandatory BMPs targeting fecal coliform in stormwater are not practical and likely to be misunderstood. The broad language used to define "mandatory BMPs" in h(1) is vague. The proposed narrative limits include requirements to install "effective structural source control BMPs" and "effective source control BMPs to eliminate" known sources of bacteria. What is meant by "effective" and "eliminate"? Further, what are "all known, available and reasonable methods to prevent rodents, birds, and other animals from feeding/nesting/roosting at the facility"? Will Ecology's final version of the Table 5 fecal coliform requirement be the model for other stormwater permittees discharging fecal coliform to 303(d)-listed waters? Will Phase I and Phase II municipal stormwater permits or the WSDOT municipal stormwater permit be subject to the same AKART requirements?

Response: Ecology has considered public comments and has refined the mandatory BMPs:

A numeric effluent limit does not apply, but permittees must sample according to Table 5. In addition, the following mandatory BMPs shall be incorporated into the SWPPP and implemented:

1) Use all known, available and reasonable methods to prevent rodents, birds, and other animals from feeding/nesting/roosting at the facility. Nothing in this section shall be construed as allowing violations of any applicable federal, state or local statutes, ordinances, or regulations including the Migratory Bird Treaty Act.
2) Perform at least one annual dry weather inspection of the stormwater system to identify and eliminate sanitary sewer cross-connections;
3) Install structural source control BMPs to address on-site activities and sources that could cause bacterial contamination (e.g., dumpsters, compost piles, food waste, animal products, etc.):
4) Implement operational source control BMPs to prevent bacterial contamination from any known sources of fecal coliform bacteria (e.g., animal waste, etc.);
5) Additional bacteria-related sampling and/or BMPs, if ordered by Ecology on a case-by-case basis.

Boeing

33.

Condition S6. 303(d) Limits

Ecology proposes to replace numeric effluent limitations for discharges to section 303(d) water bodies listed as impaired for fecal coliform criteria with narrative limits. The proposed narrative limits include requirements to install "effective structural source control BMPs" and "effective source control BMPs to eliminate" known sources of bacteria. Boeing has substantial concern about what is meant by "effective" in the proposed narrative limits. This is an imprecise word that is subject to varying interpretations. Combined with a proposed condition that facilities must "eliminate" known sources of bacteria, the narrative limits are potentially as stringent and likely as impossible to attain as the current numeric limits.

Rather than introducing new and ambiguous terms, Ecology should consider using familiar terminology. For example, the phrase AKART is a generally accepted concept from which to start a discussion on BMP implementation.

Boeing recommends that industrial sites with activities that are not associated bacterial pollution be excluded from the fecal coliform provision in Condition S6 of the ISGP. Ecology concludes in its own report to the legislature[2] and in the 2009 draft ISGP fact sheet that there is no need for any fecal coliform limit to industrial activities that are not associated with bacterial pollution. It is unrealistic for industries not associated with bacterial pollution to attempt to control or eliminate the bacteria associated with animal life, such as birds. The unrealistic nature of such coverage is emphasized by conclusions recently documented in EPA's International Stormwater BMP Database that stormwater treatment systems are likely to act as incubators for animal-introduced bacteria.

Boeing recommends that Ecology work with the permittee to develop a quarterly monitoring program focused on the effectiveness of the BMPs in attaining a sustainable reduction in bacterial pollution. This program would create an adaptive management scheme to apply the preferred BMP approach as conditions change at a facility. The BMP effectiveness approach provides a more objective evaluation of the facility's efforts to use AKART successfully than relying on end-of-pipe measurements, particularly in light of the information discussed in previous paragraph.

Boeing has the following questions regarding the proposed modifications to Condition S6:

Q1: Are the BMPs associated with detection and removal of illicit connections (S3.B.7) sufficient to meet the narrative requirement for ensuring exclusion of human-caused fecal coliform bacteria?

Q2: Ecology's proposed modifications to Condition S6 contain ambiguous terms. Permittees need to have a process by which they can determine how they are to satisfy the conditions imposed by these terms.

Q3: What constitute "effective" structural and operation source control BMPs?

[2] Industrial Stormwater Discharges to Impaired Water Bodies, Options for Numeric Effluent Limitations, Ecology No. 09-10-005 (Dec. 2008).

Q4: What manuals and guidance documents should be consulted in identifying effective BMPs to reduce or eliminate bacterial pollution?
Q5: What BMP(s) does Ecology consider applicable or recommended for eliminating bacterial contamination in industrial stormwater?
Q6: Does Ecology believe that it would be reasonable and lawful to exclude all wildlife including birds from an industrial facility, with particular concern for species protected under the Endangered Species Act, Migratory Bird Treaty Act, or other similar statutes?

Response: Ecology agrees that the current limits are as stringent as the previous numeric effluent limitations, as they are Narrative Water Quality-Based Effluent Limitations, intended to prevent discharges which cause or contribute to violations of the water quality standards for bacteria. Ecology. They are intended to be as stringent as the previous limits, so as to not run afoul of the Anti-backsliding provisions of the Clean Water Act. Ecology disagrees that the mandatory BMPs are impossible to attain. Ecology also disagrees with Boeing's suggestion to use "AKART" because it would imply that the limits are technology-based, which is not the case. Rather, the BMPs are narrative water quality-based limits which, along with Condition S10 – COMPLIANCE WITH STANDARDS, are intended to prevent discharges that could cause or contribute to a violation of water quality standards in waterbodies that are already polluted, and "listed" pursuant to Section 303(d) of the Clean Water Act. No change to permit based on comment. Ecology believes it would be unlawful to following Boeings recommendation to exclude "industrial sites with activities that are not associated with bacterial pollution" from the fecal coliform provision in Condition S6 of the ISGP. RCW 90.48.555(7)(b) doesn't allow for the exclusion suggested by Boeing: "By July 1, 2012, the industrial storm water general permit must require permittees with discharges to water bodies listed as impaired for bacteria to comply with nonnumeric, narrative effluent limitations."

Ecology has considered public comments and has refined the mandatory BMPs:

A numeric effluent limit does not apply, but permittees must sample according to Table 5. In addition, the following mandatory BMPs shall be incorporated into the SWPPP and implemented:

1) Use all known, available and reasonable methods to prevent rodents, birds, and other animals from feeding/nesting/roosting at the facility. Nothing in this section shall be construed as allowing violations of any applicable federal, state or local statutes, ordinances, or regulations including the Migratory Bird Treaty Act.
2) Perform at least one annual dry weather inspection of the stormwater system to identify and eliminate sanitary sewer cross-connections;
3) Install structural source control BMPs to address on-site activities and sources that could cause bacterial contamination (e.g., dumpsters, compost piles, food waste, animal products, etc.):
4) Implement operational source control BMPs to prevent bacterial contamination from any known sources of fecal coliform bacteria (e.g., animal waste, etc.);
5) Additional bacteria-related sampling and/or BMPs, if ordered by Ecology on a case-by-case basis.

City of Everett

34.

My comments do not relate strictly to critical analysis of the permit, but act rather as an appeal for the actions taken in the Legislature and applied to the permit to be considered with regard to municipalities under the Phase I and II NPDES municipal stormwater permits. I am referring to page 11 of the draft fact sheet titled *Revisions Related to Numeric Effluent Limits for Discharges to 303(d) Waters.* As a result of recent legislation, industrial permittees will not longer be subject to numeric effluent limits for fecal coliform. One question I do have, is will this also apply to industries and businesses that have the potential for fecal coliform contamination as a result of their processes? I am referring to businesses involving composting, soils manufacture, and animal handling. If local jurisdictions are still required to inspect these businesses, will it be sufficient to only look at BMPs, and not ask for sampling results (or not sample ourselves if we observe problems)? It seems that these businesses should retain limits.

Jurisdictions also have parking lots and trees that attract birds. We also build stormwater ponds that attract birds and wildlife, and retain natural features such as wetlands, which is a requirement of state and federal law. Part of our TMDL program under the NPDES Phase II permit requires us to visually inspect for flows coming into impaired waterbodies in the dry season. A number of these flows are coming from wetlands inhabited by birds. During these low flow periods, the numbers for fecal coliform can be very high, and yet there is little we can do about these natural discharges with wildlife as a primary cause of bacterial pollution. Once we have done the education efforts, put up the Mutt Mitt stations, developed enforcement strategies for pet waste, and inspection programs for animal handling facilities, it is difficult to see an effective path forward when remaining coliform problems appear to be from wildlife. Microbial Source Tracking has confirmed this in at least one location in Everett.

What I would request is opening a serious dialog between jurisdictions with TMDLs and Ecology to discuss what can be realistically done when fecal coliform exceedances are a result of wildlife. Application of AKART to natural wetlands would put us in violation of laws protecting wildlife. We are all aware that when it rains, stormwater carries fecal coliform from multiple sources to the creeks, so is the state standard realistic? We do recognize that shellfish areas require special effort, and we agree that it is important to protect this resource.

Thank you for your consideration of these comments, and I look forward to further discussion with Ecology.

Response: Ecology has verified that no compost, soil manufacturing, or animal handling facilities under the ISGP discharge to fecal coliform 303(d)-listed waterbodies (Water Quality Assessment Category 5). Therefore, industrial facilities in those sectors were not previously subject to 303(d)-related numeric effluent limits under the ISGP.

Condition S6.D of the ISGP will continue to require compliance with any additional requirements set forth in an EPA-approved Total Maximum Daily Load (TMDL, or Water Clean-up Plan). The Phase I and Phase II Municipal Stormwater Permits (Appendix 2) also specifies additional requirements for certain jurisdictions with TMDLs.

In addition, Ecology may require specific ISGP facilities with elevated risk for fecal coliform contamination to perform appropriate monitoring (per Condition G12 Additional Sampling) or pollution prevention measures. Municipalities are encouraged to work with Ecology on identifying and addressing issues at facilities with materials or processes likely to cause bacteria-related pollution.

Ecology agrees that the issues regarding the fecal coliform standard, municipal stormwater, and TMDLs are complex and in a state of evolution. Local jurisdictions, Ecology, and other stakeholders certainly need to continue discussing the issues and working together on solutions.

City of Longview

35.

Consider adding to sections S1.D.8 and S6.B the exclusion for the fecal parameter when discharging to 303(d) listed waters.

Response: Ecology cannot make changes to the legal requirements for *new* dischargers to 303(d)- listed waterbodies. Ecology's change regarding fecal coliform is based upon RCW 90.48.555(7)(b), which only applies only to *existing* dischargers to 303(d)-listed waterbodies.

Lincoln Loehr

36.

I concur with the ISGP moving away from numeric bacteria limits for stormwater discharges to 303(d) listed waters. The proposed narrative requirements however are probably asking more than is necessary. If a facility isn't likely to have bacterial discharges as a result of industrial or human practices at the site, then there really isn't much to be concerned about. Generally there should be no need for any provision for bacteria for such facilities in the general permit.

Assuming that Ecology will not remove bacteria provisions from the general permit, then the proposed bacteria requirement for S6.C Table 5 footnote h to "1) Use all known, available and reasonable methods to prevent rodents, birds, and other animals from feeding/nesting/roosting at the facility" is excessive. Essentially this is putting AKART style requirements in the permit to prevent wildlife from utilizing the site. This is especially odd since some of the best stormwater management practices actually create habitat that is attractive to wildlife, particularly aquatic birds. This should be viewed as an enhancement, and birds as a bacterial concern should not require management, at least in most cases. Perhaps management even of birds is appropriate in some situations, such as adjacent to commercial shellfish operations, but thats about the only reason to go to such an extreme.

The laws pertaining to AKART relate to wastes proposed for discharge (RCW 90.52.040, and RCW 90.54.020) or to toxics (RCW 90.48.520). Bacteria is not a toxic, nor is it a waste that the facilities propose to discharge or expect to result in their discharge from human or process inputs. To the extent that it occurs from inputs of non-domestic wildlife, that should not warrant actions to control. Waterfowl will get to water and will introduce bacteria. Diverting water fowl away will simply result in their bacteria inputs occuring to other nearby water.

Change 1) in proposed footnote "h" to read something like the following:

1) Evaluate whether domestic animals (e.g., horses, cattle, dogs) might have access to stormwater systems such as ponds and take reasonable methods to prevent them from doing so. Ponds, wetlands and swales are expected to attract birds and other wildlife and generally that is OK. This permit does not require actions to discourage birds or other wildife that may be attracted to stormwater systems and property. If the facility lies in a shellfish protection district, there could be wildlife controls imposed through that process.

Response: Ecology disagrees with the suggestion that AKART requirements don't apply to bacteria or other pollutants that are unexpected or not directly related to human or process inputs. However, the mandatory BMPs related to fecal coliform bacteria are water quality-based narrative effluent limits [RCW 90.48.555(7)], rather than technology based (AKART) effluent limits.

Ecology believes that (1) in footnote "h", is properly focused on nuisance animals and birds that would be associated with industrial facilities (e.g., seagulls, pigeons, rats, etc.), and believes that it would be inappropriate to mention domestic animals (e.g., horses, cattle, etc.). Ecology also disagrees with the suggestion for the permit to state that birds and wildlife are "OK". Concentrated populations of Canada geese and other waterfowl can cause damage and water quality problems in stormwater ponds including erosion; invasive species; increased nutrients, bacteria and other pathogens; and increased turbidity from waterfowl sifting through the pond bottom for invertebrates.

Best management practices (e.g., un-mowed pond buffers, etc.), including a range of commercial bird control products (e.g., predator decoys, noise makers, lights, wires, repellants, etc.) are available to upset the behavior of waterfowl and encourage them to move elsewhere.

Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project

37.

<u>Condition S6.C.</u>
The commenters oppose the removal of the numeric fecal coliform effluent limitation for discharges to receiving waters 303(d)-listed for fecal coliform and its replacement with mandatory fecal coliform-specific BMPs. Commenters understand that amendment of RCW 90.48.555 to specifically call for this change is pending, but this modification violates federal law.

The fecal coliform numeric effluent limitations are water quality-based effluent limitations. Where receiving waters do not meet fecal coliform water quality criteria, resulting in their inclusion on the 303(d) list, it is reasonable to conclude that stormwater discharges, or any discharges, that contain a concentration of fecal coliform greater than the water quality criteria contribute to the impairment. Certainly, in such a situation, reasonable potential to cause or contribute to violations of water quality standards (per 40 C.F.R. § 122.44(d)) exists. Under federal law, this reasonable potential means that the permit must include a numeric effluent limitation for fecal coliform, so long as one is feasible. The Pollution Control Hearings Board specifically found that the fecal coliform numeric effluent limitation is appropriately derived. Thus, the fecal coliform numeric effluent limitation is required by federal regulations. There is

no legal or appropriate consideration of Ecology's stated basis for this proposed modification – the "uniqueness of fecal coliform" and that "industrial facilities are not considered a significant source of bacteria in Washington's water bodies" – in light of these legal requirements and the findings of the Board. Furthermore, the substitution of a short list of mandatory BMPs (proposed footnote h. to Table 5) for the fecal coliform numeric effluent limitation conflates water quality-based and technology-based effluent limitations. Because the ISGP must require strict compliance with water quality standards, this is insufficient. *Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1164 (9th Cir. 1999); *see also, Ackels v. U.S. Envtl. Protection Agency*, 7 F.3d 862, 865-66 (9th Cir. 1993) (when it comes to ensuring compliance with water quality standards, "economic and technological constraints are not a valid consideration" in developing NPDES permits).

Does Ecology contend that the proposed mandatory BMPs constitute an acceptable water quality-based effluent limitation for fecal coliform? If so, why?

What information does Ecology have that indicates that implementation of these mandatory BMPs will reduce fecal coliform discharge concentrations to levels low enough to ensure that discharges will not contribute to fecal coliform water quality criteria violations in receiving waters that are 303(d)-listed for fecal coliform?

Does Ecology contend that there is no reasonable potential for ISGP permittees discharging into receiving waters impaired for fecal coliform to cause or contribute to a violation of the fecal coliform water quality criteria? If so, why?

Does Ecology contend that the inclusion of the fecal coliform numeric effluent limitation is infeasible? If so, why?

The deletion of the fecal coliform numeric effluent limitation violates the anti-backsliding prohibition of 33 U.S.C. § 1342(o) because the modified ISGP will have effluent limitations that are less stringent than the comparable effluent limitations in the current permit. None of the exceptions to the anti-backsliding prohibition apply, so the proposed modification is illegal. Does Ecology contend that the removal of the fecal coliform numeric effluent limitation does not constitute backsliding? If so, why?

Does Ecology contend that one or more of the 33 U.S.C. § 1342(o)(2) exceptions to the anti-backsliding prohibition applies? If so, which one(s) and why?

Commenters have been involved in citizen enforcement actions against a number of permittees where there are or have been issues of compliance with the fecal coliform numeric effluent limitations. These cases include ones concerning Meltec (Division of Young Corp.), SSA Terminals LLC, Total Terminals, Inc., and Manke Lumber Co. These cases involved sometimes very elevated fecal coliform stormwater discharge concentrations, sometimes an order of magnitude or two above the applicable numeric effluent limitation. In each case, we suspect that the cause of the elevated fecal coliform was not only birds, but also (as identified by proposed footnote h. para. 3) of the draft modified permit) dumpsters, composting materials, food waste, or animal products. In our monitoring of discharge monitoring reports and other submissions by

these and other permittees, we have certainly seen indications that permittees can indeed control fecal coliform levels in stormwater discharges and bring them below the numeric effluent limitations through the implementation of reasonable measures.
What is the basis for the fact sheet assertion that permittees currently subject to the fecal coliform effluent limitation are or will be unable to comply "due to factors beyond the control of industrial facilities"? Has Ecology evaluated this assertion in light of examples of permittees that have managed to reduce fecal coliform concentration levels? What analysis of permittee monitoring data has Ecology performed to support this assertion?
In addition, the commenters note that the fecal coliform numeric effluent limitation was part of the 2004 legislative bargain resulting in enactment of RCW 90.48.555. The state statutory mandate to include numeric effluent limitations for discharges into 303(d) listed waters was one of the primary concessions obtained by the environmentalist side from Ecology and the regulated entities in the agreement. As parties actively involved in the negotiations that resulted in RCW 90.48.555, commenters are very dismayed by Ecology's efforts to remove this effluent limitation.
If the fecal coliform numeric effluent limitation is removed as proposed, what provisions of the permit ensure that discharges to fecal coliform-impaired (303(d)-listed) waters will not contribute to the impairment? Given the ISGP's treatment of other pollutants of concern (e.g., copper) with stringent benchmarks and corrective actions up to level 3 implementation of treatment BMPs, why is there no benchmark and adaptive management process for fecal coliform?

Response: Ecology considers the mandatory BMPs in Condition S6, along with Condition S10 – Compliance With Standards, "water quality-based narrative effluent limitations" for fecal coliform bacteria and consistent RCW 90.48.555(7). Ecology does not consider the narrative effluent limits less stringent than the previous numeric effluent limitations, and has concluded that the revision does not run afoul of the Anti-backsliding provisions of the federal Clean Water Act. Ecology believes that the mandatory BMPs listed in Table 5 (footnote h) will prevent discharges that could cause or contribute to violations of water quality standards. Ecology agrees that birds are not the only potential source of bacteria at industrial facilities; other on-site sources and activities are sometimes responsible for elevated bacteria levels. Ecology believes that appropriate best management practices can prevent stormwater contamination from dumpsters, composting materials, food waste, or animal products and reduce high fecal coliform levels in stormwater down to the water quality standards for bacteria.

Snoqualmie Tribe

38.

NOTE: The following is a *summary* of Oral Testimony Provided by Matt Bearwold, Water Quality Manager - Snoqualmie Tribe, at March 12, 2012 Public Hearing, South Seattle Community College – Georgetown Campus. Ecology's website contains an .mp3 file with Mr. Bearwold's complete testimony:
http://www.ecy.wa.gov/programs/wq/stormwater/industrial/commentsfeb12/iswgphearingseattle.mp3

My comments are limited to revisions to the numeric effluent limits, for discharges to 303(d) listed water bodies.

It's easy to construe it that you're almost giving up on 303(d) water bodies. When Ecology's rational for the changes is explained, understand you're looking for regulatory flexibility; that may or may not be justified. The 303(d) impaired waterbodies, we're supposed be working harder to protect - concerned the proposed changes can in effect reverse that. Even if not in effect, it's sort of an attitude. (2:43)
If we're doing quarterly monitoring anyway, and we have the numbers/data available, why don't we use that? Leaves too much room for ambiguity. How much is too much? Previous limits, based on state limits, that's easy to justify. Troublesome to adjust them, if they don't concur with the state limits, you [Ecology] need to figure out how to make these mesh.
Concern is that we change rules more in direction of protecting resource, not away from it.

Response: Ecology sincerely appreciates the testimony given at the March 12, 2012 public hearing in Seattle. Ecology considers the mandatory BMPs in Condition S9, along with Condition S10 – Compliance With Standards, "water quality-based narrative effluent limitations" for fecal coliform bacteria and consistent RCW 90.48.555(7). Ecology is certainly not giving up on the waterbodies impaired for bacteria and considers new narrative effluent limits to be no less stringent than the previous numeric effluent limitations. Ecology believes that appropriate best management practices can prevent stormwater contamination from dumpsters, composting materials, food waste, or animal products and reduce previously high fecal coliform levels in stormwater down to the water quality standards for bacteria.

Washington Refuse and Recycling Association

39.

Change requirements for Bacteria "impaired" waterbodies
We agree with the Department of Ecology's proposal to replace numeric effluent limits with BMP's. As we stated in our opening general comments, we believe that Best Management Practices be employed in lieu of strict numeric measurement as the best approach to the unique situation of each facility.

Response: Thank you.

Weyerhaeuser

40.

S6. Table 5 Discharges to 303(d) or TMDL Waters – Several of the proposed footnote "h" requirements relating to mandatory BMPs targeting fecal coliform in stormwater are not practical and/or will be misunderstood, and thus in the end, largely ignored.

First, recognize the scope of the Table 5 requirements is probably significant. There appear to be about 500-600 waterbody segments listed for fecal coliform on the 2008 Section 303(d) Category 5 report. The point here is that there may be 100's of ISWGP permittees who discharge into a Category 5 waterbody segment, and thus subject to the S6. Table 5 proposed requirements.

Second, the broad language used to define "mandatory BMPs" in subsection 1) is problematic. To illustrate, in subsection 1), what exactly are the "all known, available and reasonable methods" which Ecology has in mind? Will it be necessary for permittees to hire hunters/trappers

to kill or divert all animal life that seeks entry to a facility? Is this a 24/7 obligation? Should sound machines or ribbons or netting or an electrified fence be placed around the perimeter of a property? These techniques/equipment (and many others) would certainly be AKART contenders.

A practical approach (and one consistent with the PCHB Conclusion of Law 21 in Copper Development) would substitute this language as the "footnote h":
h) ISWGP dischargers to 303(d) or TMDL waters must:

> 1) Perform and document a dry weather inspection to identify and eliminate sanitary sewer cross-connections;
> 2) Install operational and structural source control, and describe in the SWPPP, those BMPs which seek to minimize precipitation/stormwater contact with probable sources of fecal coliform bacteria (e.g., dumpsters, compost piles, exposed food wastes, exposed animal products)
> 3) Sampling/analysis for fecal coliform would be required if Ecology determines the industrial activity at a Facility is a likely and persistent source of fecal coliform to the stormwater discharge(s).

Finally, should we expect that Ecology's final version of this Table 5 fecal coliform requirement will now be the model for other stormwater permittees discharging to fecal coliform/303(d) waterbodies? For example, will future versions of the Phase I and Phase II municipal stormwater permits, or the WSDOT Municipal stormwater permit, include the same requirements? If not, why not?

Response: Ecology recognizes that there are 500-600 waterbody segments "impaired" for fecal coliform, and approximately 80 facilities are affected by the additional fecal coliform requirements. The ISGP does not require extreme measures like hunting/trapping, but there are known, available and reasonable best management practices (e.g., un-mowed pond buffers, "Don't feed the birds" signs, etc.) and commercial products (e.g., predator decoys, noise makers, lights, wires, repellants, etc.) are available to comply with permit conditions and prevent discharges that violate the water quality standards for bacteria.

Ecology has considered public comments and has refined the mandatory BMPs:

A numeric effluent limit does not apply, but permittees must sample according to Table 5. In addition, the following mandatory BMPs shall be incorporated into the SWPPP and implemented:

1) Use all known, available and reasonable methods to prevent rodents, birds, and other animals from feeding/nesting/roosting at the facility. Nothing in this section shall be construed as allowing violations of any applicable federal, state or local statutes, ordinances, or regulations including the Migratory Bird Treaty Act.
2) Perform at least one annual dry weather inspection of the stormwater system to identify and eliminate sanitary sewer cross-connections;

3) Install structural source control BMPs to address on-site activities and sources that could cause bacterial contamination (e.g., dumpsters, compost piles, food waste, animal products, etc.):
4) Implement operational source control BMPs to prevent bacterial contamination from any known sources of fecal coliform bacteria (e.g., animal waste, etc.);
5) Additional bacteria-related sampling and/or BMPs, if ordered by Ecology on a case-by-case basis.

S8. Corrective Actions

Association of Washington Business

41.

Generally, Ecology should consider deferring any modifications to Condition S8 until the appeal of the ISGP is final. Modifications to Condition S8 are premature, unless Ecology is prepared to adopt permit language or policies that fully implement the statutory presumption of compliance as required by the statute. Ecology's revisions do not meet any reasonable standard of adaptive management for Corrective Actions; rather, the revisions continue the directed management approach that the PCHB noted needed more agency involvement and information, especially at Level 3.

Response: Ecology has decided not to defer modifications to Condition S8, due the nature of the ongoing litigation. Ecology has made significant revisions to the Level 2 and 3 requirements in S8, based on public comments, including more Ecology involvement at Level 3 through the review of engineering reports for treatment systems that involve site specific design or sizing.

The final permit language:

Level Three Corrective Actions – Treatment BMPs

Permittees that exceed an applicable *benchmark* value (for a single parameter) for any three quarters during a calendar year shall complete a Level 3 Corrective Action in accordance with ~~the following~~ <u>S8.D. A Level 2 Corrective Action is not required</u>.

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3.
2. Make appropriate revisions to the SWPPP to include additional *Treatment BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges. <u>Revisions shall include additional operational and/or structural source control BMPs if necessary for proper performance and maintenance of *Treatment BMPs*.</u>
   a. The Permittee shall sign and certify the revised SWPPP in accordance with S3.A.6.
   b. A licensed professional engineer, geologist, hydrogeologist, or Certified Professional in Storm Water Quality (CPSWQ) shall design and stamp the portion of the SWPPP that addresses *stormwater* treatment structures or processes.

i. *Ecology* may waive the requirement for a licensed or certified professional upon request of the Permittee and demonstration that the Permittee or treatment device vendor can properly design and install the treatment device; or the treatment BMP doesn't require site-specific design or sizing (e.g., off-the-shelf filtration units, etc.).

ii. *Ecology* will not waive the Level 3 requirement for a licensed or certified professional more than one time during the permit cycle.

3. Before installing treatment BMPs that require the site-specific design or sizing of structures, equipment, or processes to collect, convey, treat, reclaim, or dispose of industrial stormwater, the Permittee shall submit an engineering report, plans and specifications, and an operations and maintenance (O&M) manual to Ecology for review in accordance with Chapter 173-240 WAC.

   a. The engineering report shall be submitted no later than the May 15th prior to the Level 3 deadline, unless an alternate due date is specified in an order.

   b. The plans and specifications and O&M Manual shall be submitted at least 30 days before construction/installation, unless an alternate date is specified in an order. Upon request of the Permittee, Ecology may allow final conceptual drawings to be substituted for plans and specifications.

4. Summarize the Level 3 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B). Include information on how monitoring, assessment or evaluation information was (or will be) used to determine whether existing treatment BMPs will be modified/enhanced, or if new/additional treatment BMPs will be installed.

5. **Level 3 Deadline**: The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than September 30th the following year.

   a. If installation of necessary *Treatment BMPs* is not feasible by the Level 3 Deadline; *Ecology* may approve additional time by approving a *Modification of Permit Coverage*.

   b. If installation of *Treatment BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to violation of a water quality standard, *Ecology* may waive the requirement for *Treatment BMPs* by approving a *Modification of Permit Coverage*.

   c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to *Ecology* in accordance with Condition S2.B, by ~~June 1st~~ May 15th prior to the Level 3 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.

   d. For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

Auto Recyclers of Washington

42.

The proposed requirement that a permittee take a corrective action and modify its SWPPP within 14-days of exceeding a benchmark clearly has a disproportionate economic impact on small businesses. Small business operators have over 100,000 requirements imposed on them every day by a large number of federal, state and local government agencies and small businesses do not have a legion of staff with extensive technical expertise available to determine a corrective action, assess its costs and how it will be paid for, locate items to implement it, and how accomplish it and modify its SWPPP within 14 days. This provision is totally unworkable for the hundreds of small businesses covered by the ISWGP and must not be adopted as proposed. At a minimum, small businesses must have more than 14 days to accomplish all of these corrective action tasks, no less than 45-days. The Department must recognize that the two major parties representing the business community in the appeal of the ISWGP were two of the largest corporations in Washington State with relatively infinite resources as compared to an average small business and they were not in a position to understand and represent the needs and concerns of small businesses subject to the ISWGP. In its decision, the Board did not issue any analysis or consider any impact of its decision on small businesses covered by the permit. The new permit provisions cannot make small businesses the innocent collateral causalities of this appeal and these changes.

Response: The PCHB order correctly pointed out that the previous iterations of the ISGP (2002-2009) required permittees to initiate a Level 1 response within two weeks:

> *A Level 1 corrective action is required for any exceedance of the applicable benchmark, and requires the permittee to make appropriate revisions to the SWPPP to include additional Operational Source Control BMPs with the goal of achieving applicable benchmark values in future discharges. The permittee must summarize the Level 1 corrective actions in its annual report to Ecology. The permit establishes a deadline to fully implement the revised SWPPP "as soon as possible, but no later that the DMR due date for the quarter the benchmark was exceeded" (which is forty-five days after the end of the quarter, per Condition S9.A.4.). Condition S8.B. Although Ecology views this Level 1 provision as substantially identical to the previous permit, the 2010 ISGP does not have a specific timeframe by which a permittee must initiate a response to a benchmark exceedence, whereas the previous permit required a facility inspection "as promptly as possible but no later than two weeks after sampling results." Exs. P-5, B-36; Killelea Testimony.*

Ecology believes that the draft permit language is reasonable and workable, based on experience gained during 2002-2009, and it is legally necessary to comply with the PCHB order. As such, no change will be made in response to this comment.

Auto Recyclers of Washington

43.

Ecology proposes that the corrective action plan be completed two months sooner than under the current permit. This will be totally unworkable for many small businesses. Many corrective

actions may require a permit to install, the purchase of new items, and will result in unexpected costs to small business covered by the ISWGP.

Those new costs may require that the business to go find and arrange financing to pay for the corrective action. This requirement will prove unworkable for many small businesses covered by the ISWGP and will have a huge disproportionate economic impact on small businesses and should not be adopted as currently proposed. The timeframe for small businesses cannot realistically be reduced by two months to be fair to small business operators. The proposed reduction of two months must not apply to small businesses.

Response: The concerns about the economic impact of a shortened corrective action timeline were considered, but Ecology has to apply the PCHB ruling to all permittees, including small businesses. Based on public comments, and consideration of 1) wet-weather construction constraints, 2) environmental impacts of working during the wet season (erosion, fish windows, wet weather paving, etc.), and 3) the potential for increased workload from Level 2 extension requests, Ecology has decided to implement the PCHB ruling by shortening the Level 2 deadline from September 30th, to August 30th, and allowing facilities to implement a Level 3 corrective action in lieu of a Level 2 corrective action. Ecology also clarified that a Level 2 corrective action is not *required* if a permittee has triggered a Level 3 corrective action.

Association of Washington Business

44.

S8.C.2 and D.2 Level Two and Level Three Corrective Actions: The current permit language demands that "additional" BMPs be identified and implemented in pursuit of the goal of achieving the applicable benchmark values. This directive is counter to RCW 90.48.555(6) which states that, at all times, "all applicable and appropriate best management practices" be selected, implemented and maintained. Responsible permittees have already been adjusting their SWPPPs with an "adaptive management" approach for quite a number of years. At some point in the Corrective Action process a permittee is likely to conclude that all applicable and appropriate BMPs have been implemented. A demand for serial "addition" of BMPs may be hollow. Ecology would more appropriately reference the "all applicable and appropriate" language.

Response: Ecology disagrees with the suggestion that S8.C.2 and D.2. are counter to RCW 90.48.555(6). Ecology believes Condition S8 contains an “enforceable adaptive management mechanism” that is consistent with the intent and requirements of the PCHB order and applicable state and federal water quality laws and regulations.

Waivers are available if a permittee can justify that additional treatment BMPs are not feasible or not necessary to prevent discharges that cause or contribute to violations of water quality standards.

Association of Washington Business

45.

S8.C.5 and D.S- Additional Corrective Action May Be Required: The subsection heading indicates additional corrective actions "may" be required; the section text says "must." What

permit requirement does Ecology intend? The comment offered above for S8.C.2. and D.2. also applies to C.5. and D.5.

Response: Based on public comments, additional revisions have been made to clarify Ecology's intent that additional Level 2 or 3 corrective actions aren't triggered (accrued) during the calendar year following the calendar year that the permittee triggered a Level 2 or 3 corrective action. However, benchmark exceedances begin counting towards additional Level 2 or 3 corrective actions the year after the Level 2 or 3 deadline. An example is provided below.
The final language is:

S8.C.4.d:
<u>For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.</u>

S8.D.5.d:
<u>For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.</u>

Example:

- Permittee exceeds zinc benchmark during 3 quarters in 2011, therefore a Level 3 corrective action must be completed by September 30, 2012.
- To allow a "time-out" period for the permittee to plan/install/monitor their Level 3 treatment BMPs in 2012, any zinc exceedances in 2012 do not trigger additional Level 2 or 3 corrective actions.
- If the permittee continues to exceed the zinc benchmark in 2013 (calendar year following Level 3 Treatment due date), another Level 3 corrective action is required by September 30, 2014.
- Waivers are available if a permittee can justify that additional treatment BMPs are not feasible or not necessary to prevent discharges that cause or contribute to violations of water quality standards.

Association of Washington Business

46.

S8.D.2 Level Three Corrective Actions - Treatment BMPs: The last sentence demands Level 3 Treatment BMPs or additional BMPs necessary to "meet" the goal of achieving the applicable benchmark value(s). The permit treats benchmark values as if they are numeric effluent limits, but they are just goals. Under the permit, if the goals (effluent limits) are not consistently achieved, additional actions must be taken. With this nuanced approach and outcome, Ecology must be prepared to accept a permittee's judgment on BMP adequacy.

Response: Benchmark values are not *water quality standards* and are not numeric effluent limitations; they are indicator values used in conjunction with Condition S8 to comply with RCW 90.48.555(8)(a).

BNSF

47.

Proposed revision to Condition S8.B

In its Fact Sheet, Ecology again does not present any reason for selecting a 14-day deadline for initiating investigations as part of Level 1 corrective action responses. The PCHB required only a "reasonably short timeline." A strict 14-day deadline does not recognize that many businesses rely on the same environmental consultants to perform this work, and that this limited pool of consultants would have to conduct investigations at facilities all over Washington within a greatly compressed time frame. Thirty days is a more reasonable timeline.

Response: The PCHB order correctly pointed out that the previous iterations of the ISGP (2002-2009) required permittees to initiate a Level 1 response within two weeks:

> *A Level 1 corrective action is required for any exceedance of the applicable benchmark, and requires the permittee to make appropriate revisions to the SWPPP to include additional Operational Source Control BMPs with the goal of achieving applicable benchmark values in future discharges. The permittee must summarize the Level 1 corrective actions in its annual report to Ecology. The permit establishes a deadline to fully implement the revised SWPPP "as soon as possible, but no later that the DMR due date for the quarter the benchmark was exceeded" (which is forty-five days after the end of the quarter, per Condition S9.A.4.). Condition S8.B. Although Ecology views this Level 1 provision as substantially identical to the previous permit, the 2010 ISGP does not have a specific timeframe by which a permittee must initiate a response to a benchmark exceedence, whereas the previous permit required a facility inspection "as promptly as possible but no later than two weeks after sampling results." Exs. P-5, B-36; Killelea Testimony.*

Ecology believes that the draft permit language is reasonable and workable, based on experience gained during 2002-2009, and it is legally necessary to comply with the PCHB order. As such, no change will be made in response to this comment.

BNSF

48.

Proposed revision to Condition S8.C

Ecology proposes to shorten the deadline for Level 2 and Level 3 corrective actions from September 30th of the following year to July 30th of the following year. The PCHB characterized the Level 2 deadline as "excessively long" only in conjunction with footnote 4 and only in the "absence of evidence that structural source control BMPs typically require this long to implement, become effective, and be evaluated." Since Ecology deleted footnote 4, which is part of the basis for the PCHB's disapproval, Ecology should re-evaluate whether the facts justify the current September 30th timeline. For example, most Level2 and Level 3 treatment options require significant construction, and a permittee will need the full summer construction season to complete this kind of work. Ecology should collect evidence on the timeline for major construction activities before making this type of change to the permit.

Response: Ecology did not propose to shorten the deadline for Level 3 corrective actions; the change is limited to Level 2 corrective actions (structural source control BMPs). Ecology agrees that footnote 4 was related to the PCHB's disapproval of the Sept. 30th deadline, but disagrees that the deletion of Footnote 4 would allow Ecology to disregard their order and retain the September 30th Level 2 deadline. This portion of the PCHB order is unambiguous:

> *We also conclude that the deadline for implementation of a Level 2 corrective action (September 30 of the following calendar year) is excessively long and must be shortened. As currently written, the timeframe provides a permittee up to one and one half years of the five year permit cycle to implement a Level 2 corrective action, depending on when during the calendar year the benchmark exceedences occur.*

Based on public comments, and consideration of 1) wet-weather construction constraints, 2) environmental impacts of working during the wet season (erosion, fish windows, wet weather paving, etc.), and 3) the potential for increased workload from Level 2 extension requests, Ecology has decided to implement the PCHB ruling by shortening the Level 2 deadline from September 30th, to August 31st (beginning in 2013). This deadline may be extended on a case by case basis by submitting a Modification of Coverage request by May 15th prior to the Level 2 deadline. The problem with "Footnote 4" has been resolved with new language in S8.C.4.d.

The final language is:

> **Level 2 Deadline:** The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than <u>August 31st</u> the following year[4].
>
> a. If installation of necessary *Structural Source Control BMPs* is not feasible by August 31st the following year, *Ecology* may approve additional time, by approving a *Modification of Permit Coverage*.
>
> b. If installation of *Structural Source Control BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* may waive the requirement for additional *Structural Source Control BMPs* by approving a *Modification of Permit Coverage*.
>
> c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a *Modification of Coverage* form to *Ecology* in accordance with Condition S2.B, by <u>May 15th</u> prior to Level 2 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.
>
> d. <u>For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.</u>

[4] <u>For Level 2 Corrective Actions triggered in 2011 and due in 2012, the Level 2 Deadline is September 30, 2012</u>.

BNSF

49.

Ecology should revise the ISGP to explicitly allow Permittees to obtain a waiver from Level 2 and 3 requirements where the facility has established that the primary cause of the exceedances triggering structural/treatment BMPs is run-on from a neighboring property. The current ISGP requires that a facility demonstrate that structural/treatment BMPs are (1) not feasible; or (2) not necessary to prevent discharges that may cause or contribute to violation of a water quality standard. BNSF suggests that Ecology revise Condition S8.C.4.b and S8.D.4.b as follows:
If installation of *[Structural Source Control BMPs* or *Treatment BMPs]* is not feasible, or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, or where the exceedances requiring the construction of *[Structural Source Control BMPs* or *Treatment BMPs]* are due to stormwater run-on from adjacent properties, *Ecology* may waive the requirement for additional *[Structural Source Control BMPs* or *Treatment BMPs]* by approving a *Modification of Permit Coverage.*

Response: Ecology considered the suggestion, but has determined that disregarding the requirements for discharges affected by off-site sources (run-on from adjacent properties, aerial deposition, fugitive dust, etc.) would not be consistent with applicable laws, regulations and case law. In some cases, the existing ISGP criteria for waivers (i.e., not feasible/not necessary) may apply to a discharge affected by run-on from adjacent properties.

Boeing

50.

Condition S8. Corrective Actions
1. ***Ecology should defer any modifications to Condition S8 until Boeing's appeal of the ISGP finally has been resolved.*** The Court of Appeals has accepted direct review of PCHB rulings on the legality of the ISGP. (*See e.g., Copper Development Association v. Ecology*, PCHB No 09-135 Findings of Fact, Conclusions of Law and Order (Apr. 25, 2011) (hereinafter, "PCHB Final Order"). One of the issues in that appeal is whether Condition S8 is consistent with the statutory presumption of compliance in RCW 90.48.555. Modification of Condition S8 prior to a decision from the Court of Appeals would be premature, unless Ecology is prepared to adopt permit language or policies that fully implement the statutory presumption of compliance contained in the statute. Modification of Condition S8 corrective actions prematurely could subject permittees to a whip saw of permit changes, not only in response to the Court of Appeals' decision on Boeing's ISGP appeal, but also to the Thurston County Superior Court's ruling on Boeing's administrative appeal of Ecology's ISGP "Frequently Asked Questions" document. Moreover, as discussed below, the proposed modifications to the permit are inconsistent with a key aspect of the PCHB ruling addressing implementation of adaptive management. Withdrawing the proposed Condition S8 corrective action modifications will ensure that permittees are subjected to the least disruption and can best protect the environment. Boeing is open, as noted above, to revised permit language that addresses the Board's intent by incorporating an effective, efficient and enforceable adaptive management process into the permit that recognizes presumption of compliance with a narrative standard. Boeing provides some suggestions below on how this outcome feasibly could be achieved.

2. ***The proposed additional requirements for annual reporting contained in Condition S8.D is inconsistent with the PCHB Final Order on the consolidated ISGP appeals.*** In the PCHB Final Order, the PCHB held that "Quarterly discharge monitoring reports. . are likely inadequate in more complex situations such as Level 3 treatment BMPs." The PCHB ordered Ecology to refine Condition S8.D to reflect an "iterative exchange and evaluation of BMPs" between Ecology and a permittee. To accomplish this the PCHB directed Ecology in Condition S8.D to "require the use of monitoring, assessment, or evaluation information as a basis **on which Ecology** and the permittee may determine whether further modification of the BMPs or additional BMPs are necessary to meet the goal of achieving the applicable benchmarks in future discharges." PCHB Final Order, pp 71-72 (emphasis added). Implicit in any such iterative process is a determination whether a permittee must meet permit benchmarks to demonstrate its compliance with water quality standards.

The language proposed by Ecology to modify Condition S8.D does not establish the iterative process required by the PCHB Final Order. Ecology's proposed language merely requires vague additional information about monitoring and assessment in an annual report. There is no meaningful process for Ecology review and feedback in which Ecology and the permittee can work together to determine whether further modification of BMPs is necessary. If anything, the proposed language makes it more ambiguous as to when and what corrective actions are necessary. In addition, Ecology's reliance on permit waivers and time extensions may be insufficient to satisfy the PCHB's requirement of an iterative adaptive management program. Had these existing tools been adequate, in all likelihood the PCHB would not have found it necessary to require Ecology to refine Condition S8 to become involved in the interplay necessary for adaptive management when a risk to water quality might exist.
Ecology needs to address how the proposed modification to annual reports are to address the requirement for engineering reports stated in the March 2011 Frequently Asked Questions document #51.2 In that document Ecology states that any treatment system subject to engineering design requires the preparation of an engineering report as provided in WAC 173-240-130. With respect to this requirement, Ecology should explain:
2 Frequently Asked Question related to this comment letter are contained in appendix 2
o The specific requirements for an engineering report and how that is to be addressed in the proposed modifications to the annual reporting requirements.
o How the annual reporting requirements will address the submission and approval of engineering reports under WAC 173-240-130.
o Does Ecology intend to review and approve engineering reports under the proposed modifications to reporting requirements as required under WAC 173-240-130?
o How will the deadlines in the permit for implementing corrective action be addressed pending Ecology review and approval of engineering reports?
Ecology also needs to address an additional new requirement in the ISGP FAQ Document #50 that permittees in Level 3 corrective action must consider treatment BMPs that are not in Ecology manuals or approved by Ecology and further prepare a demonstrably equivalent analysis if the permittee selects a treatment BMP that has not been approved by Ecology. With respect to this requirement Ecology should explain:
How permittees should incorporate that analysis into the new annual reporting requirements.
If approval is necessary from Ecology before implementing a demonstrably equivalent treatment BMP described in an annual report.

How will Ecology implement the PCHB-required iterative review process for demonstrably equivalent treatment BMPs?
How will a permittee know that it is required to evaluate and implement demonstrably equivalent BMPs?
How, as part of the PCHB required iterative process, will Ecology evaluate the new information required in the annual reporting and determine when demonstrably equivalent treatment BMPs must be considered by a permittee?

Ecology also needs to address how the proposed annual reporting requirements will incorporate the requirement in the ISGP FAQ Document #48 to aggregate discharge exceedances from all outfalls for a specific parameter into a single site value for determination of corrective actions. The resulting corrective action level determination is then applied site-wide. Historically, each discharge at a site was treated as an independent location for purposes of counting exceedances and corrective actions were limited to the basin in which the exceedances occurred. This new theory in counting exceedances results in a greatly increased requirement for corrective actions from facilities with multiple discharges. With respect to this requirement Ecology should explain:
How does the department differentiate between the requirement for a site using a sampling approach as allowed in S3.B.5.b Substantially Identical Outfalls and the approaches described in response to Question 48 contained in the ISGP FAQ Document?
How does the permittee count a sampling exceedance when it occurs at different discharge locations on different sample dates but within the same sampling period?
Do discharges to different receiving waters require aggregation, or are those discharges to be counted independently?
Will a permittee be allowed to average across the same sample points for determination of benchmark reporting value?
3. ***Boeing proposed Level 3 corrective action***. In the event Ecology intends to develop an iterative Level 3 corrective action process as required by the PCHB prior to a final ruling on the petition for judicial review, Boeing recommends the modifying and replacing Condition S8.B through D as follows:
B. Corrective Action
Permittees that exceed any applicable *benchmark* value in Table 2 or Table 3, or an approved *site specific benchmark* in lieu of a permit *benchmark*, shall complete Corrective Action for each parameter exceeded with the following:
a. Review the SWPPP and ensure that it fully complies with Permit Condition S3, and contains the correct BMPs from the applicable *Stormwater Management Manual*.
b. Make appropriate revisions to the SWPPP to include additional *Operational Source Control*, *Structural Source Control*, and *Treatment BMPs* with the goal of achieving the applicable benchmark values in future discharges. The SWPPP may include an *adaptive management plan* for the implementation of BMPs over time as needed based on monitoring results.
c. If the *geometric mean* of monitoring data from any single outfall in the preceding two years or previous eight quarterly samples exceeds any applicable *benchmark* in Table 2 or Table 3, the review and revisions of the SWPPP must be conducted by a *stormwater professional* and specifically consider *Treatment BMPs*. The *stormwater professional* shall conduct a comprehensive review of the SWPPP and select BMPs that fully implement *AKART* with the goal of eliminating or reducing pollutants to meet *benchmarks.* The *stormwater professional*

shall design and stamp the portion of the SWPPP that addresses *stormwater treatment* structures or processes.

d. In considering *Treatment BMPs* the *stormwater professional* should consider all known, available and reasonable *Treatment BMPs.* The review should not be limited to *Treatment BMPs* identified or incorporated by reference in an applicable *Stormwater Management Manual.* The SWPPP revision and *Treatment BMP* design do not require the preparation or submission of an engineering report under WAC 173-240-130 but must include a summary of the review and analysis that the existing and selected BMPs are technologically available and economically achievable in light of the best industry practice. The Permittee is not required, however, to document that any *Treatment BMP* selected for corrective action is *demonstrably equivalent* under Condition S3.A.3.d.

e. The Permittee may apply for a *site specific benchmark* based on available data or request additional time to collect data to establish a *site specific benchmark.* The corrective actions required under Condition S8.B.c and d shall be based on the goal of meeting approved *site specific benchmarks.*

f. Summarize Corrective Actions (planned or taken) in the Annual Report (Condition S9.B).

g. **Corrective Action Deadlines:** The Permittee shall fully implement any additional or modified *Operational Source Control BMPs* and related revisions to SWPPP as soon as possible but no later than the DMR due date for the quarter the *benchmark* was exceeded. The Permittee shall fully implement any additional or modified *Structural Source Control or Treatment BMPs* and related revisions to SWPPP as soon as possible but no later than July 30th the following year unless *Ecology* has granted a request for a *site specific benchmark*, an *adaptive management plan,* a time extension or waiver.

Ecology may grant a request for a *site specific benchmark* or schedule to implement a sampling and monitoring plan to develop information to support a *site specific benchmark* by approving a *Modification of Permit Coverage*. A request for a *site specific benchmark* must be supported by an analysis by a *stormwater professional* documenting the basis for a *site specific benchmark* or a proposed sampling and monitoring plan and data analysis plan for calculating a *site specific benchmark.*

If installation of necessary *Structural Source Control or Treatment BMPs* cannot be completed by September 30th of the following year, *Ecology* may approve additional time, by approving a *Modification of Permit Coverage*.

The application for an extension may include an *adaptive management plan*. Ecology may approve additional time as provided in the *adaptive management plan* by approving a *Modification of Permit Coverage*.

If installation of necessary *Structural Source Control* or *Treatment BMPs* is not feasible or necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* shall waive the requirement for additional *Structural Source Control* or *Treatment BMPs* by approving a *Modification of Permit Coverage*.

To request a *site specific benchmark*, a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a *Modification of Permit Coverage* form to *Ecology* and complete public notice in accordance with Condition S2.B, by April 1st prior to the September 30th deadline applicable to the facility. The application *Modification of Permit Coverage* shall be approved denied or automatically commence as provided in Condition S2.C.

h. Additional corrective action is not necessary in the following year, where a waiver has been granted, or during the term of any approved extension or *adaptive management plan*.

Boeing offers this suggested language as an adaptive management approach that creates an iterative process between Ecology and a permittee as required by the PCHB. It is also consistent with the concept of adaptive management in program management and LEAN manufacturing systems as composed of four distinct phases:
Plan: Identify the need and actions / equipment needed to resolve the identified or anticipated problem. In this case, the focus would be using the sampling data to identify where additional BMPs or other actions may be warranted to reduce pollution or flows.
Do: Implement the plan by installing, operating, maintaining and inspecting BMPs and by taking such additional actions, such as engineering sampling, to further refine the effectiveness of the pollution control effort.
Check: Conduct sampling, flow monitoring, inspections and other action that collect data useful in evaluating the effectiveness of the BMPs and supporting actions.
Act: Using the data collected in the check phase revise the plan to focus on areas where improvement has been insufficient to consistently meet discharge goals. The use of data (*i.e.*, metrics) is a critical element in adaptive management. As noted during the PCHB hearing data collection for a stormwater effort is fraught with challenges due to high variability in weather patterns, industrial activities and sources of pollutants.
The adaptive management process should be a continuous effort in which a permittee collects data on a regular basis and compares the results to the desired outcome. The "plan-do-check-act" cycle described here is repeated until the desired results are attained or feasibility conditions preclude additional actions.
Here is a more detailed summary of the voluntary alternative corrective action approaches that Boeing is proposing:
Geometric mean. Boeing proposes that Ecology use the same statistical analysis, geometric mean, evaluated over eight quarter, used in the EPA's Multi-Sector General Permit, to address the high variability of stormwater discharges.3 The Boeing proposed permit language will still trigger Level 3 corrective action, but a determination not to implement additional treatment BMPs could be made on the basis of geometric mean assessment of the monitoring data. This option provides an important tool when assessing quarterly monitoring data. Each sampling quarter is an independent meteorological regime. Rainfall patterns differ throughout the year and there are different exposed industrial activities during each quarter. The combination of quarter specific rainfall patterns and activities will result in different pollutants and pollutant loadings being discharged from any given facility when compared to other quarters in the year. Thus a permittee's facility cannot be reasonably characterized on one year's worth of data since each quarter's data is not representative of any other quarter in that year. Weather patterns in Washington State are often significantly different from year to year which further complicates the comparison of quarterly data.
Allowance for geometric mean assessment of monitoring data over eight quarters is consistent with the PCHB ruling that at least seven quarters of data is necessary to determine if a facility can consistently attain benchmarks. And as the PCHB ruled, four quarterly samples are likely to be inadequate to determine whether additional treatment BMPs are necessary at a facility. PCHB Final Order at 71.

Site Specific Benchmarks. The permit should include a simplified mechanism to apply for a site specific benchmark using the same general criteria used to generate the permit benchmarks using more site specific data and receiving water data to create the site specific benchmark. This is not a new concept as the current permit requires waivers when additional treatment BMPs are not necessary to prevent a discharge from causing or contributing to a violation of water quality standards. Boeing is merely proposing a formal and explicit process for developing information that can be used on an iterative basis by Ecology and the permittee to determine whether additional treatment BMPs are necessary. In other words, Ecology would have to approve the equivalent of site specific benchmarks, developed by the permittee, to grant a waiver under the current permit. Boeing recommends that a probabilistic modeling approach be used in developing a site specific benchmark in recognition of the high variability of rainfall and receiving water conditions. This value would not be an effluent limit as the use of probabilistic models and limited parameters considered would not constitute a reasonable potential analysis. It would, however, be far more representative of the impact that a particular discharger would have on the receiving water. This would be the basis for creating an effective adaptive management system approach to attaining consistent protection of the receiving waters. Inclusive in the analysis for a site specific benchmark would be consideration of a technology based benchmark applicable to the facility. If that discharge value was lower than the water quality based value then the discharge value would be used as the new site specific benchmark.
Adaptive Management Plan. A facility at which the statistical average for the discharge is above the benchmark for the two years could report that fact in its annual report, together with an adaptive management plan prepared by a stormwater professional. The adaptive management plan would be subject to Ecology approval as an addition to the SWPPP in S3. A permittee choosing this option would be required to commence implementation of source, structural and treatment BMPs on the approved adaptive management schedule and provide an annual progress report on implementation to the department. The permit should be clear that upon completion of the adaptive management plan approved by Ecology that the permittee has attained the statutory presumption of compliance based on the narrative standard applicable to the ISGP. Should Ecology have information that shows that the permittee is adversely affecting water quality attainment then the department could exercise its authority under RCW 90.48.555 to require the permittee to obtain an individual or alternative general permit. Time extensions as provided under the current permit can be cumbersome and set artificial deadlines. Permittees should have the ability to submit plans that provide the necessary time and decision making tools to reduce stormwater pollution in the most effective, efficient and least resource demanding approach.

Response: Ecology has decided not to defer modifications to Condition S8, due the nature of the ongoing litigation. The suggested framework and language is inconsistent with state and federal laws, regulation and relevant case law. Furthermore, the suggested remedies are overly complex, labor intensive and unworkable for a general permit in Washington or any other state in the country.

Ecology has made significant revisions to the Level 2 and 3 requirements in S8, based on public comments, including more Ecology involvement at Level 3 through the review of engineering reports for treatment systems that involve site specific design or sizing.

Final permit language for Condition S8.D is included in Response to Comment #41, on page 35.

City of Longview

51.

The six-month window to identify and implement all capital BMPs is less than the typical select-design-bid-build project cycle for such investments. It is far less than the one- to five-year capital budget cycles of most Permittees. Perhaps acknowledging the imposition of such a deadline, Ecology has provided a mechanism for extensions (per S8.B.4.c). However, the mechanism is a permit modification, a two-month process which must be initiated no more than three months into the six-month project. This is a ridiculous solution to the impractical deadline.
We understand that the Pollution Control Hearings Board (PCHB) ordered Ecology to shorten the deadline for completing a Level 2 corrective action; but reducing the deadline from September 30th to July 30th the following year slashes precious sunshine off the construction season (e.g. not much roofing, paving, excavation, and painting done in April). This problem is exacerbated if the Level 2 corrective action is triggered late in the previous year. The April 1st deadline to request an extension occurs too early in the corrective action cycle, and should be pushed deep into summer. Plus, why should every prudent project manager have to do a complete Modification of Coverage including public notice requirements just to hedge against weather or other common project delays. This highly compressed schedule will inevitably inflate contract costs at a time when public dollars are scarce. Zinc and copper measurements are inherently erratic and the permit limits for them are tough to meet even by the cleanest, best intentioned business; so it is imperative that the corrective action process be realistic, have a simpler process for obtaining a time extension, and extend into the good weather months of August & September for structural controls.
Also, where is Table 6? The permit should summarize the corrective actions required and their associated timelines in Table 6.

Response: Based on public comments, and consideration of 1) wet-weather construction constraints, 2) environmental impacts of working during the wet season (erosion, fish windows, wet weather paving, etc.), and 3) the potential for increased workload from Level 2 extension requests, Ecology has decided to implement the PCHB ruling by shortening the Level 2 deadline from September 30th, to August 31st (beginning in 2013). This deadline may be extended on a case by case basis by submitting a Modification of Coverage request by May 15th prior to the Level 2 deadline. This deadline coincides with the Annual Report due date, and the 1st quarter DMR, and allows enough time for Ecology to review the request and make a decision in advance of the Level 2 implementation deadline. The problem with "Footnote 4" has been resolved with new language in S8.C.4.d. Table 6 was proposed in 2008 to summarize corrective actions and deadlines, but Ecology has determined that it is no longer required.

The final language is:

> **Level 2 Deadline:** The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than <u>August 31st</u> the following year[4].
>
> a. If installation of necessary *Structural Source Control BMPs* is not feasible by August 31st the following year, *Ecology* may approve additional time, by approving a *Modification of Permit Coverage*.

[4] <u>For Level 2 Corrective Actions triggered in 2011 and due in 2012, the Level 2 Deadline is September 30, 2012</u>.

b. If installation of *Structural Source Control BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* may waive the requirement for additional *Structural Source Control BMPs* by approving a *Modification of Permit Coverage*.

c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a *Modification of Coverage* form to *Ecology* in accordance with Condition S2.B, by May 15th prior to Level 2 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.

d. For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

Dawson Consulting LLC

52.

S8.C. and D. Corrective Actions, Level Two and Level Three

At the Seattle workshop Ecology noted that under the current permit, a facility that triggers a Level Two Corrective Action and then a Level Three Corrective Action (same calendar year) can skip the Level Two and continue with the Level Three Corrective Action. This makes sense, particularly for facilities that have exhausted their Level Two BMPs but continue to exceed a benchmark. If we heard this correctly, which permit provision allows the permittee to skip Level Two? This isn't clear. The proposed revision also does not clearly address this. An additional sentence or two would be helpful, as well as an explanation and example in the Fact Sheet addendum. It would be helpful also for Ecology to confirm that Level Two can be skipped without the permittee having to obtain a waiver to do so.

In requiring further refinement of S8., the Pollution Control Hearings Board seemed to intend a joint effort on the part of the permittee and Ecology in determining whether further BMP modifications or additional BMPs are necessary at a facility to meet the goal of achieving benchmarks in future discharges. The proposed permit revisions add the requirement for the permittee to include "monitoring, assessment or evaluation information" in its Annual Report, to be used as the basis for Ecology and the permittee to make BMP determinations. However, the proposed revisions do not specify when and how Ecology will provide feedback on this monitoring, assessment or evaluation information. Meaningful and timely feedback from Ecology may be necessary for the permittee to confirm it is meeting Ecology expectations for taking "all the steps required by the adaptive management process."

Additional language is needed in the permit and in the Fact Sheet addendum to explain the mechanisms by which Ecology will participate, as necessary, in determining the required adaptive management process. This could include timely agency feedback on the Annual Report information submitted by the permittee.

Response: Ecology confirms that permittees do not have to do a Level 2 corrective action if they have to do a Level 3 corrective action for the same parameter. Additional language has been added to S8.D to clarify that a Level 2 is not required when a Level 3 is triggered.

> S8.D: Permittees that exceed an applicable *benchmark* value (for a single parameter) for any three quarters during a calendar year shall complete a Level 3 Corrective Action in accordance with S8.D. A Level 2 Corrective Action is not required.

Also, a sentence has been added to S8.C that allows permittees who exceed the benchmark during only 2 quarters to skip Level 2 (without a waiver), and go directly to the implementation of a Level 3 Corrective Action:

> S8.C: Permittees that exceed an applicable *benchmark* value (for a single parameter) for any two quarters during a calendar year shall complete a Level 2 Corrective Action in accordance with S8.C. Alternatively, the permittee may skip Level 2 and complete a Level 3 Corrective Action in accordance with Condition S8.D.

Examples:

- If a permittee exceeds the zinc benchmark during (only) 2 quarters during a calendar year (not 3 or 4 quarters), a Level 2 corrective action is required.
  - The permit also allows facilities subject to a Level 2 the ability to do a Level 3 (instead of a Level 2) without obtaining a waiver. Sometimes Level 3 treatment is more appropriate, effective, and/or inexpensive than Level 2 source control.
- If a permittee exceeds the zinc benchmark during 3 quarters during a calendar year, a Level 3 corrective action is required, but a Level 2 corrective action is not required.
- However, the Level 3 SWPPP revision must include additional operational and/or structural source control BMPs if necessary for proper performance and maintenance of Treatment BMPs.

Also, Ecology has made significant revisions to the Level 2 and 3 requirements in S8, based on public comments, including more Ecology involvement at Level 3 through the review of engineering reports for treatment systems that involve site specific design or sizing.
Final permit language for Condition S8.D is included in Response to Comment #41, on page 35.

Dawson Consulting LLC

53.

C.4. Level 2 Deadline, new paragraph d. For clarity, Ecology may want to change "a" previous calendar year to "the" previous calendar year if this is the intent.
Ecology proposes to delete footnotes 4 and 5 to clarify how a permittee moves from Level 2 to Level 3. The proposed revision doesn't clarify the requirements, particularly with the reference to Level 3 in the Level 2 deadline provision.
Example 1: Facility exceeds copper benchmark in Q1 and Q2 of 2012; therefore, a Level 2 corrective action is due by July 30th of 2013. If this facility exceeds the copper benchmark in Q4 of 2012, and has begun implementing a structural BMP at this point, then a Level 3 corrective action is *not* triggered in 2012? This would make sense, given that the Level Two corrective action may not have been in place long enough to show its effectiveness. Is it relevant that the facility began implementing the corrective action before the Q4/2012 exceedance?
Example 2: Facility exceeds copper benchmark in Q1 and Q2 of 2012; therefore, a Level 2 corrective action is due by July 30th of 2013. Facility begins implementing a structural BMP in

2012 and completes it before July 30, 2013. Facility exceeds copper benchmark in Q1, Q2 and Q3 of 2013. A Level 2 corrective action is *not* triggered for copper in 2013, correct? Is a Level 3 corrective action triggered for copper in 2013? Which "applicable deadline" applies here?
D. 4. Level 3 Deadline, new paragraph d. For clarity, Ecology may want to change "a" previous calendar year to "the" previous calendar year if this is the intent. As noted for the Level 2 proposed permit revision, the proposed Level 3 provision is confusing.
Example 3: Facility exceeds turbidity benchmark in Q1, Q2 and Q3 of 2012; therefore, a Level 3 corrective action is due by September 30, 2013. Facility begins implementing a treatment BMP. Facility exceeds turbidity benchmark in Q1 and Q2 of 2013. A Level 2 corrective action is *not* triggered for turbidity in 2013, correct? Facility implements the treatment BMP by September 30, 2013, but exceeds the turbidity benchmark in Q4 of 2013. A Level 3 corrective action is *not* triggered for turbidity in 2013, correct?
Example 4: Facility exceeds turbidity benchmark in Q1, Q2 and Q3 of 2012; therefore, a Level 3 corrective action is due by September 30, 2013. Facility implements a treatment BMP in Q4 of 2012, but continues to exceed the turbidity benchmark in Q1, Q2 and Q3 of 2013. Is it correct that Level 2 and Level 3 corrective actions are *not* triggered for turbidity in 2013?
If a facility has implemented (and continues to implement) Level 3 corrective actions for a parameter but continues to exceed the benchmark, under what circumstances is the facility ever required to implement a Level 2 corrective action? If the facility does not implement a Level 2 corrective action, is the facility required to obtain (and repeatedly obtain) a Level 2 waiver from Ecology?

Response: Based on public comments, additional revisions have been made to clarify Ecology's intent that additional Level 2 or 3 corrective actions aren't triggered (accrued) during the calendar year following the calendar year that the permittee triggered a Level 2 or 3 corrective action. However, benchmark exceedances begin counting towards additional Level 2 or 3 corrective actions the year after the Level 2 or 3 deadline. An example is provided below.

The final language is:

S8.C.4.d:
<u>For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.</u>

S8.D.5.d:
<u>For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.</u>

Example:

- Permittee exceeds zinc benchmark during 3 quarters in 2011, therefore a Level 3 corrective action must be completed by September 30, 2012.
- To allow a "time-out" period for the permittee to plan/install/monitor their Level 3 treatment BMPs in 2012, any zinc exceedances in 2012 do not trigger additional Level 2 or 3 corrective actions.
- If the permittee continues to exceed the zinc benchmark in 2013 (calendar year following Level 3 Treatment due date), another Level 3 corrective action is required by September 30, 2014.
- Waivers are available if a permittee can justify that additional treatment BMPs are not feasible or not necessary to prevent discharges that cause or contribute to violations of water quality standards.

Landau Associates, Inc.

54.

Section S8.C.4.d of the Modified Draft Industrial Stormwater General Permit (Draft Permit), states that: "***Permittees do not trigger additional Level 2 or 3 Corrective Actions, if they are already implementing a Level 2 or 3 from a previous calendar year (for the same parameter), and the applicable deadline hasn't passed yet.***"

This is similar to Section S8.C footnote 4 of the current permit which states that: "***Facilities that continue to exceed benchmarks after a Level 2 Corrective Action is triggered, but prior to the Level 2 Deadline, are not required to complete another Level 2 or 3 Corrective Action the following year for the same parameter. However, a Level 1 Corrective Action is required each time a benchmark is exceeded."***

We have found both of these citations difficult to interpret with respect to knowing which data should be used to determine if a new corrective action is needed the following year. Is it Ecology's intent to allow Permittees not to consider benchmark exceedances from quarters that preceded the corrective action deadline when adding up the number of quarters that exceeded a benchmark in a calendar year? If so (and we assume this to be the case), this should be clearly stated. The above citation for the modified permit needs to be changed because the phrase "and the applicable deadline hasn't passed yet" nullifies the entire first half of the citation if a benchmark is exceeded after the applicable deadline. For example, if a Permittee exceeds one or two benchmarks in the third or fourth quarter following implementation of a Level 2 by July 30, they must consider data from all four quarters of that year to determine if a corrective action is needed again the following year. We suggest that this citation be replaced with the following modified citation:

Permittees do not trigger additional Level 2 or 3 Corrective Actions, if they are already implementing a Level 2 or 3 from a previous calendar year (for the same parameter) except that an additional Level 2 Corrective Action is triggered the following year if benchmarks are exceeded in both the third and fourth quarter following implementation of a Level 2 by the applicable deadline.

Note that a similar exception is not needed for implementation of a Level 3 corrective action because only one quarter of data (the fourth quarter) will be collected following the Level 3 deadline and therefore there is no way to trigger a Level 3 in the following year.

Response: Based on public comments, additional revisions have been made to clarify Ecology's intent that additional Level 2 or 3 corrective actions aren't triggered (accrued) during the calendar year following the calendar year that the permittee triggered a Level 2 or 3 corrective action. However, benchmark exceedances begin counting towards additional Level 2 or 3 corrective actions the year after the Level 2 or 3 deadline. An example is provided below. The final language is:

S8.C.4.d:
<u>For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.</u>

S8.D.5.d:
<u>For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.</u>

Example:

- Permittee exceeds zinc benchmark during 3 quarters in 2011, therefore a Level 3 corrective action must be completed by September 30, 2012.
- To allow a "time-out" period for the permittee to plan/install/monitor their Level 3 treatment BMPs in 2012, any zinc exceedances in 2012 do not trigger additional Level 2 or 3 corrective actions.
- If the permittee continues to exceed the zinc benchmark in 2013 (calendar year following Level 3 Treatment due date), another Level 3 corrective action is required by September 30, 2014.
- Waivers are available if a permittee can justify that additional treatment BMPs are not feasible or not necessary to prevent discharges that cause or contribute to violations of water quality standards.

Nisqually Environmental Sampling and Consulting

55.

Reduction of the time to implement a level 2 response should include a provision for those who are currently in a level 2 response from 2011 data. Specifically, a company who is currently expecting to have until September 30th to fully implement a level 2 response from 2011 data now will have 2 months removed from this deadline with little notice. Additionally, with the implementation of this permit modification suggested to be July 1st, and the roll back of the waiver acceptance date to April 1st, it would be difficult for those implementing a level 2 to react and be compliant to the new permit. We think this puts undue burden on those responding to 2011 data. We suggest an exclusion from this provision for those responding to 2011 data, but implementation for those responding to 2012 data.

Response: Ecology agrees that it would be unduly burdensome to shorten the Level 2 Deadline for facilities are currently working on installing Structural Source Control BMPs. These facilities began implementing Level 2 with the expectation that they had until September 30, 2012, and Ecology has decided to make the new Level 2 deadline effective in 2013 (for facilities that

triggered Level 2 based on 2012 sampling data). In the mean time, the current Level 2 deadline of September 30, 2012 remains in effect.

Ecology has added "Footnote 4" to S8.C.4:
For Level 2 Corrective Actions triggered in 2011 and due in 2012, the Level 2 Deadline is September 30, 2012.

Port of Tacoma

56.

S8. Corrective Actions
B.1. Within 14 days of receipt of sampling results that indicate a benchmark exceedance:
a. Conduct an inspection to investigate the cause.

Comment:
This change will inhibit permittees from sampling for water quality purposes through-out the quarter, then average results for the Discharge Monitoring Report. The permit currently requires monthly inspections; facilities will be less inclined to conduct sampling more than once a quarter if a Level One response is required for each sampling event.
Example: A facility begins sampling at the beginning of the quarter and the results indicate they are slightly above benchmarks. They conduct the inspection within 14 days, review, modify and recertify the SWPPP. The facility waits till the end of the quarter before sampling again because they do not have the resources to conduct another "Level One" response, (modify and recertify the SWPPP) more than once in a quarter.

Response: Ecology understands the concern, but is not able to reconcile this issue in light of the PCHB order. As such, no change will be made in response to this comment.

Port of Tacoma

57.

S8.C.4. ***Level 2 Deadline:*** *The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable Stormwater Management Manual as soon as possible, but no later than September July 30th the following year.*
Comment:
This proposed change will jeopardize constructability during the driest months of the year; requiring facilities to begin construction during the wettest season; and increasing the potential for turbid runoff during construction activities. The Port is a public agency and therefore has a very public and lengthy process for procurement of engineering firms, Commission approvals for projects, design-bid-build process for hiring contractors, etc. If the permittee reaches a Level Two Corrective Action and starts the public process at the beginning of the year, July 30th does not allow sufficient time to coordinate and construct the required Level Two Structural Source Control BMPs and concurrently eliminates the ability to construct the BMP during the summer months.
This issue will require the permittee to apply for a permit modification for time extension and subsequent Administrative Order. As discussed in an earlier section, the modification for

extension requires the facility to have a "technical basis". If the intent of this permit is to improve the quality of stormwater discharges, the permittee needs the appropriate amount of time to:

1. Analyze the problem;
2. Investigate potential solutions;
3. Initiate a project scope;
4. Perform the cost analysis;
5. Get budget approval (for public entities this process is lengthy)
6. Contract with a design engineer
7. Apply for and obtain permits
8. Contract with general contractor
9. Complete construction

This process takes more than 4 to 7 months to complete. The permittee would rather complete the Level 2 Corrective Action in a timely manner, without having to be under an Administrative Order. This would also reduce the amount of time Ecology would have to spend for the administration of the Order.
If the appropriate amount of time is not allotted to a permittee, the consequences would be that the source control BMP that was chosen in haste to meet the permit deadline does not work and the permittee will repeat the same process the next year, causing undue costs and constraints to the facility, to Ecology and will not provide a quality or efficient corrective action solution.

Response: Based on public comments, and consideration of 1) wet-weather construction constraints, 2) environmental impacts of working during the wet season (erosion, fish windows, wet weather paving, etc.), and 3) the potential for increased workload from Level 2 extension requests, Ecology has decided to implement the PCHB ruling by shortening the Level 2 deadline from September 30th, to August 31st (beginning in 2013). This deadline may be extended on a case by case basis by submitting a Modification of Coverage request by May 15th prior to the Level 2 deadline. This deadline coincides with the Annual Report due date, and the 1st quarter DMR, and allows enough time for Ecology to review the request and make a decision in advance of the Level 2 implementation deadline.

Ecology wants to clarify that a permittee requesting a Level 2/3 time extension is not required to submit complete information on the specific BMPs that will be implemented to address the corrective action; often the permittee hasn't selected the BMPs at this stage in the process. However, the permittee is likely aware of the project management issues that can affect the completion date. Therefore the permittee's "technical basis for extension" (modification application) must include as much detail as possible regarding the proposed timeline for completion and describe issues that affect completion date; for example, state/local permits, study, design, financing, professional services and contracting, etc.

Condition S8.C.4 will be revised as follows:

Level 2 Deadline: The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than August 31st the following year[4].

a. If installation of necessary *Structural Source Control BMPs* is not feasible by August 31st the following year, *Ecology* may approve additional time, by approving a *Modification of Permit Coverage*.

b. If installation of *Structural Source Control BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* may waive the requirement for additional *Structural Source Control BMPs* by approving a *Modification of Permit Coverage*.

c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a *Modification of Coverage* form to *Ecology* in accordance with Condition S2.B, by May 15th prior to Level 2 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.

d. For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

Port of Tacoma

58.

S8.C.5. ***Additional Corrective Actions May Be Required:*** *Permittees that continue to exceed benchmark values after a Level 2 Corrective Action has been completed must complete additional corrective actions per S8.B, C or D.*

Comment:

The permittee should be allotted the appropriate amount of time to investigate and implement the appropriate Level Two Corrective Action BMP to avoid being required to repeat the process as discussed above.

S8.D.5. ***Additional Corrective Actions May Be Required:*** *Permittees that continue to exceed benchmark values after a Level 3 Corrective Action has been completed must complete additional corrective actions per S8.B, C or D.*

Comment:

The Level 3 Corrective Action is due to be completed by September 30. This does not allow enough time to monitor/assess/evaluate the success of the newly treatment BMP. If the goal is to achieve benchmarks in all future discharges, the permittees need sufficient time for monitoring after implementation.

The Port suggests allowing Level 3 Corrective Action due date to be extended to **November 30th** to allow for construction during the dry season and completing the necessary assessment and monitoring of the new system during the "First fall storm event", per Section S4.B.1.b., General Sampling Requirements, of the current permit. This will allow permittees to determine any modification(s) necessary to protect future discharges prior to the Level 3 deadline.

[4] For Level 2 Corrective Actions triggered in 2011 and due in 2012, the Level 2 Deadline is September 30, 2012.

The proposed changed do not address whether a permittee that has completed the Level 3 Corrective Action (installed treatment) begins the next sampling event with a "clean slate" or restarts the clock at the stage before a Level 1 Corrective Action is reached.
Example: If the permittee completes implementation of treatment and samples for the first quarter, the data shows the facility to be above benchmarks, the permittee then completes a Level 1 Corrective Action and in done until the following quarter. OR does the permittee remain in the Level 3 Corrective Action?

The Port requests clarification as to whether installing treatment completes the Level 3 Corrective Action and restarts the clock for future sampling events.

Response: Based on public comments, additional revisions have been made to clarify Ecology's intent that additional Level 2 or 3 corrective actions aren't triggered (accrued) during the entire calendar year following the calendar year that the permittee triggered a Level 2 or 3 corrective action. However, benchmark exceedances begin counting towards additional Level 2 or 3 corrective actions the year after the Level 2 or 3 deadline. An example is provided below.
The final language is:

S8.C.4.d:
<u>For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.</u>

S8.D.5.d:
<u>For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.</u>

Example:

- Permittee exceeds zinc benchmark during 3 quarters in 2011, therefore a Level 3 corrective action must be completed by September 30, 2012.
- To allow a "time-out" period for the permittee to plan/install/monitor their Level 3 treatment BMPs in 2012, any zinc exceedances in 2012 do not trigger additional Level 2 or 3 corrective actions.
- If the permittee continues to exceed the zinc benchmark in 2013 (calendar year following Level 3 Treatment due date), another Level 3 corrective action is required by September 30, 2014.
- Waivers are available if a permittee can justify that additional treatment BMPs are not feasible or not necessary to prevent discharges that cause or contribute to violations of water quality standards.

Port of Tacoma

59.

S8. D.2. Make appropriate revisions to the SWPPP to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. The revisions shall

be based upon monitoring, assessment or evaluation information to determine whether further modification of the Level 3 Treatment BMPs or additional BMPs are necessary to meet the goal of achieving the applicable benchmark value(s) in future discharges.

S8. D.3. Summarize the Level 3 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B). Include information on how monitoring, assessment or evaluation information was (or will be) used to determine whether further modification of the BMPs or additional BMPs are necessary to meet the goal of achieving the application benchmark value(s) in future discharges.

Comment:
The Level 3 Corrective Action is due to be completed by September 30. This does not allow enough time to monitor/assess/evaluate the success of the newly installed treatment BMP. If the goal is to achieve benchmarks in all future discharges, the permittees need sufficient time for monitoring after implementation.
The Port suggests allowing the Level 3 Corrective Action due date to be extended to November 30 to allow for construction during the dry season and assessment and monitoring of the new system during the "First fall storm event", per Section S4.B.1.b., General Sampling Requirements, of the current permit. This will allow permittees to determine any modification(s) are necessary to protect future discharges prior to the Level 3 deadline.
S8. D.4.c To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to Ecology in accordance with Condition S2.B, by ~~June~~ April 1st prior to the Level 3 Deadline. Ecology will approve or deny the request within 60 days of receipt of a complete Modification of Coverage request.

Comment:
This proposed change for the due date of the modification will inhibit the ability of the permittee to complete an appropriate analysis of potential source control Best Management Practices (BMPs). Ecology's *Modification of Permit Coverage Form*, ECY 070-361 (Rev. 04/2011), requires the Level 2/ Level 3 extensions requests provide a "technical basis for extension" and include a "proposed timeline for completion and describe issues that affect completion date; for example, state/local permits, study, design, financing, professional services and contracting, etc." Reducing the submission schedule does not allow enough time to provide all of the technical information that is needed for selecting BMPs that will solve the problem, provide source control and improve water quality.
The Port suggests that Ecology not change the application due date to ensure there is adequate time for facilities to investigate/analyze the problem, select appropriate source control BMPs and support the intent of this permit, which is to improve water quality stormwater discharges at industrial facilities.

Response: Ecology has decided not to extend the Level 3 implementation deadline to November 30th as suggested; once the treatment system is installed, testing and adjustments can occur during the remainder of the year (September 30-December 31) without accruing any new Level 2 or 3 corrective actions. Ecology has considered public comments and the pros and cons associated with various deadlines and scheduling constraints, and has decided make the

Modification of Coverage deadline (for Level 2/3 waiver or extension requests) consistent with the current Annual Report due date: May 15th. This is also the due date for the 1st quarter DMR, and there are administrative efficiencies gained by making these all due on the same date.

Ecology wants to clarify that a permittee requesting a Level 2/3 time extension is not required to submit complete information on the specific BMPs that will be implemented to address the corrective action; often the permittee hasn't selected the BMPs at this stage in the process. However, the permittee is likely aware of the project management issues that can affect the completion date. Therefore the permittee's "technical basis for extension" (modification application) must include as much detail as possible regarding the proposed timeline for completion and describe issues that affect completion date; for example, state/local permits, study, design, financing, professional services and contracting, etc.

Condition S8.D.5.c will be revised as follows:

To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to *Ecology* in accordance with Condition S2.B, by May 15th ~~June 1st~~ prior to the Level 3 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.

Port of Tacoma

60.

Overall Comment:
The Port is concerned that the proposed modifications and schedule of implementation does not give the permittees adequate time to prepare and budget for the changes in operations necessary to ensure compliance with the new permit. Modifying the permit as part of the regular permit cycle would have allowed facilities to adapt their operations to prepare for implementation and provide enough time for facilities to plan/update their program budgets to account for the additional sampling, staff/consultant time for inspections, the shortening of the implementation schedule for Modification applications and Level 3 Corrective Action deadlines.

The Port feels these mid-cycle/mid-budget year proposed modifications will be difficult and costly to permittees and limit their ability to plan for effective source control solutions.

Response: Based on public comments, and consideration of 1) wet-weather construction constraints, 2) environmental impacts of working during the wet season (erosion, fish windows, wet weather paving, etc.), and 3) the potential for increased workload from Level 2 extension requests, Ecology has decided to implement the PCHB ruling by shortening the Level 2 deadline from September 30th, to August 31st (beginning in 2013). This deadline may be extended on a case by case basis by submitting a Modification of Coverage request by May 15th prior to the Level 2 deadline. The problem with "Footnote 4" has been resolved with new language in S8.C.4.d.

The final language is:

Level 2 Deadline: The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than August 31st the following year[4].

a. If installation of necessary *Structural Source Control BMPs* is not feasible by August 31st the following year, *Ecology* may approve additional time, by approving a *Modification of Permit Coverage*.

b. If installation of *Structural Source Control BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* may waive the requirement for additional *Structural Source Control BMPs* by approving a *Modification of Permit Coverage*.

c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a *Modification of Coverage* form to *Ecology* in accordance with Condition S2.B, by May 15th prior to Level 2 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.

d. For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project

61.

Condition S8.B.

The commenters support the proposed modification of S8.B. to include a 14-day timeline for commencement of a Level One Corrective Action.

However, the commenters suggest a further modification to provide for summary reporting of Level One Corrective Actions on discharge monitoring reports. The modified S8.B. would continue to limit reporting requirements for Level One to summarization in the annual report. Additional reporting on the discharge monitoring report forms (or in a brief submission accompanying electronically-filed DMRs) would encourage compliance by reminding permittees of the Level One requirements and would facilitate Ecology regulation by providing more timely indications of permittee compliance. As written, an Ecology inspector or facility manager, or a member of the public, has no way to know whether a permittee has performed a Level One Corrective Action before reviewing an annual report without either asking the permittee or conducting an inspection.

Response: Ecology considered this suggestion but has decided not to require permittees to summarize their Level 1 corrective actions on their Discharge Monitoring Reports (DMRs). Under the previous permit, DMRs were generally not reviewed by Ecology inspectors because they are kept at Ecology headquarters for data entry and filing; the discharge monitoring data is hand-entered in the Ecology's PARIS database, but the information in the DMR comments section (where Level 1 corrective actions were summarized prior to 2010) is not entered into PARIS due to database and resource issues. Ecology believes the Annual Reports are a better

[4] For Level 2 Corrective Actions triggered in 2011 and due in 2012, the Level 2 Deadline is September 30, 2012.

way to track and review Level 1 summaries because they are scanned and uploaded into PARIS, making the entire Annual Report available to permittees, inspectors and the public.

Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project

62.

Condition S8. Footnotes and S8.C.4.d., S8.C.5., S8.D.4.d., and S8.D.5.
The commenters support the removal of the confusing footnotes 4 and 5. However, while the proposed new language in S8.C.4.d. and S8.D.4.d. certainly represents an improvement in clarity, we suggest the following language for S8.C.4.d. and S8.D.4.d., which is yet more clear: Permittees do not trigger additional Level 2 or 3 Corrective Actions if they are already implementing a Level 2 or 3 Corrective Action (for the same parameter) triggered the previous calendar year and the applicable Level 2 or 3 implementation deadline has not yet passed.
The new language in S8.C.5. and S8.D.5. is also helpful for clarification. We suggest further clarification by inserting the words "or after the applicable deadline for Level 2 implementation has passed," after "has been completed" in S8.C.5., and "or after the applicable deadline for Level 3 implementation has passed," after "has been completed" in S8.D.5. This is important to notify permittees that failure to meet the implementation deadlines does not afford them additional time to exceed benchmarks without triggering a new Level Two or Level Three Corrective Action.

Response: Based on public comments, additional revisions have been made to clarify Ecology's intent that additional Level 2 or 3 corrective actions aren't triggered (accrued) during the calendar year following the calendar year that the permittee triggered a Level 2 or 3 corrective action. However, benchmark exceedances begin counting towards additional Level 2 or 3 corrective actions the year after the Level 2 or 3 deadline. An example is provided below.

The final language is:

S8.C.4.d:
For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

S8.D.5.d:
For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

Example:

- Permittee exceeds zinc benchmark during 3 quarters in 2011, therefore a Level 3 corrective action must be completed by September 30, 2012.
- To allow a "time-out" period for the permittee to plan/install/monitor their Level 3 treatment BMPs in 2012, any zinc exceedances in 2012 do not trigger additional Level 2 or 3 corrective actions.

- If the permittee continues to exceed the zinc benchmark in 2013 (calendar year following Level 3 Treatment due date), another Level 3 corrective action is required by September 30, 2014.
- Waivers are available if a permittee can justify that additional treatment BMPs are not feasible or not necessary to prevent discharges that cause or contribute to violations of water quality standards.

Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project

63.

Condition S8.C.4.

While the modifications to the Level Two Corrective Action timing requirements represent an improvement over the current permit language, they do not satisfy the PCHB's order. The modifications simply move up by two months the deadlines for implementation of Level Two Corrective Actions and for waiver or time extension requests. The PCHB rejected the Level Two timeline because it provides "a permittee up to one and one half years of the five year permit cycle to implement a Level 2 corrective action, depending on when during the calendar year the benchmark exceedences occur." *Copper Dev. Ass'n v. Ecology*, PCHB No. 09-135, Findings of Fact, Conclusions of Law, and Order (4/25/11) at 67. This deficiency is not adequately addressed by taking two months off the schedule – leaving a permittee with up to one year and four months of the five year permit cycle to implement a Level 2 corrective action if it is triggered in the second quarter of a calendar year. Ecology probably must depart from its dependence on the calendar year-based Level 2 implementation schedule to satisfy the PCHB's order. We suggest that the permit allow six months from the second benchmark exceedence to implement the additional structural source control BMPs required for Level 2, or until the next July 30, whichever is later, if necessary construction work can only be legally performed during the dry season.

Response: Based on public comments, and consideration of 1) wet-weather construction constraints, 2) environmental impacts of working during the wet season (erosion, fish windows, wet weather paving, etc.), and 3) the potential for increased workload from Level 2 extension requests, Ecology has decided to implement the PCHB ruling by shortening the Level 2 deadline from September 30th, to August 31st (beginning in 2013). Conditions S8.C & D have been clarified with respect to Level 2 and 3 for a parameter being mutually exclusive. Permittees need to consider data from the entire calendar year to determine if a Level 2 or Level 3 is required for a parameter. As such, the August 31st deadline allows 8 months to complete a Level 2 corrective action. The problem with "Footnote 4" has been resolved with new language in S8.C.4.d.

The final language is:

> **Level 2 Deadline:** The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than August 31st the following year[4].

[4] For Level 2 Corrective Actions triggered in 2011 and due in 2012, the Level 2 Deadline is September 30, 2012.

a. If installation of necessary *Structural Source Control BMPs* is not feasible by August 31st the following year, *Ecology* may approve additional time, by approving a *Modification of Permit Coverage*.

b. If installation of *Structural Source Control BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* may waive the requirement for additional *Structural Source Control BMPs* by approving a *Modification of Permit Coverage*.

c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a *Modification of Coverage* form to *Ecology* in accordance with Condition S2.B, by May 15th prior to Level 2 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.

d. For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

Puget Soundkeeper, Columbia Riverkeeper, Waste Action Project

64.

Condition S8.D.

The commenters are concerned that the additional language in S.8.D.2. makes yet less clear what is required for a Level Three Corrective Action. We worry that the addition of this language is likely to seriously complicate efforts to enforce Level Three Corrective Action requirements, a crucial part of the ISGP scheme. We support the additional language in S8.D.3. and believe that the inclusion of this language would suffice to comply with the PCHB's order that Level Three "should *also* require the use of monitoring, assessment or evaluation information as a basis on which Ecology and the permittee may determine whether *further* modifications of the BMPs or additional BMPs are necessary" and the inclusion of this information in the annual report. *Id.* at 71 – 72 (emphasis added). In its order on this point, the PCHB was addressing Boeing's complaint about Level Three with a mandate for feedback and iterative evaluation to avoid an endless do-loop of successive Level Three Corrective Actions. *Id.* at 39, 71 – 72. The PCHB did not tell Ecology to remove or lessen the requirement to implement additional treatment BMPs as part of a Level Three Corrective Action, which is a possible interpretation of the confusing and contradictory new language in S8.D.2.

The existing S8.D.2. language provides unequivocally that Level Three entails revision to the SWPPP to include additional treatment BMPs. The proposed additional language muddies this relatively clear direction by stating that the SWPPP revisions are to be based on monitoring, assessment or evaluation "to determine whether further modification of the Level 3 Treatment BMPs or additional BMPs are necessary …." Does this mean, as permittees and their lawyers are likely to assert, that the SWPPP revision need not include additional treatment BMPs unless this monitoring, assessment or evaluation information indicates that such are necessary? If it does, what is the standard for determining the necessity of the additional treatment (or other) BMPs? This interpretation of this additional language would render S8. inadequate to ensure that discharges do not cause or contribute to violations of water quality standards, as Ecology intended it to do. The proposed language should be removed from S8.D.2.

How does the proposed modification to S8. substantively change what a permittee must do to satisfy the Level Three Corrective Action requirement? How are the two sentences of S8.D.2. reconciled with each other?

Response: Ecology agrees that the proposed revisions to S.8.D.2 (draft) could have introduced confusion and made it less clear what is required a Level 3. Ecology did not intend this section to mean that the SWPPP revision need not include additional treatment BMPs unless this monitoring, assessment or evaluation information indicates that such are necessary. Ecology has always intended Level 3 Corrective Actions to include additional treatment BMPs (e.g., modification of existing treatment BMPs, or installation of new treatment BMPs) unless the requirement is waived through a Modification of Coverage. Ecology has made significant revisions to the Level 2 and 3 requirements in S8, based on public comments, including more Ecology involvement at Level 3 through the review of engineering reports for treatment systems that involve site specific design or sizing.

Final permit language for Condition S8.D is included in Response to Comment #41, on page 35.

Washington Refuse and Recycling Association

65.

The modification to S8. **Corrective Actions**
We believe that the changes of the deadline for completing Level 2 corrective measures is just not reflective of the true building/construction period available in which construction can take place in our state, specifically western Washington. Most Western Washington residents live by the saying "summer starts on July 5th", and that is true for the period of time for much of our construction activities as well. The losing of August and September for months to comply with a problem identified the previous year seems unrealistic to many of our companies.
Proposed Revisions
3. Pg 5 #4 Level 2 Deadline: The Permittees shall fully implement the revised SWPPP according to permit condition S3 and the applicable Stormwater Management Manual as soon as possible, but no later than August 30th the following year.
Reason: Footnote 4 and 5 has been deleted, thereby reducing the amount of exceedances that can be registered. To shorten or remove both the months of August and September, from the construction calendar in the rainy state of Washington is extremely burdensome on the facility owner. Many of the BMP's need a dry preparation and installation period i.e. painting, re-sealing, paving etc.

Response: Based on public comments, and consideration of 1) wet-weather construction constraints, 2) environmental impacts of working during the wet season (erosion, fish windows, wet weather paving, etc.), and 3) the potential for increased workload from Level 2 extension requests, Ecology has decided to implement the PCHB ruling by shortening the Level 2 deadline from September 30th to August 31st, and allowing facilities to implement a Level 3 corrective action in lieu of a Level 2 corrective action. Ecology also clarified that a Level 2 corrective action is not *required* if a permittee has triggered a Level 3 corrective action.

The final language is:

Level 2 Deadline: The Permittee shall fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than August 31st the following year[4].

a. If installation of necessary *Structural Source Control BMPs* is not feasible by August 31st the following year, *Ecology* may approve additional time, by approving a *Modification of Permit Coverage*.
b. If installation of *Structural Source Control BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* may waive the requirement for additional *Structural Source Control BMPs* by approving a *Modification of Permit Coverage*.
c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a *Modification of Coverage* form to *Ecology* in accordance with Condition S2.B, by May 15th prior to Level 2 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.
d. For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

Washington Refuse and Recycling Association

66.

The Modification to S8.c.4 and S8.D.4

We believe that Ecology's proposed revisions allow some leeway for permitees that are still in the process of installing Level 2 and 3 Corrective Actions from an exceedance during the prior year. Specifically, proposed revisions state "Permittees do not trigger additional Level 2 or 3 Corrective Actions, if they are already implementing a Level 2 or 3 Corrective Action from a previous calendar year (for the same parameter) and the applicable deadline hasn't passed." This is a reasonable consideration, allowing permittees to complete Corrective Actions before additional penalties are incurred. However, many Corrective Actions will likely have a favorable impact on other parameters as well. We think that the exception to avoid additional penalties should not be limited to just the same parameter so long as the permittee can reasonable demonstrate that the Corrective Action being installed will have a favorable impact on the new parameter(s) that are exceeding limits.

Proposed Revisions

4. Pg. #6- Level 2 and Level 3 Corrective Actions: Permittees do not trigger additional Level 2 or 3 Corrective Actions, if they are already implementing a Level 2 or 3 Corrective Action from a previous calendar year (for the same parameter) and the applicable deadline hasn't passed. If additional parameters have triggered Corrective Action during the calendar year of a Corrective Action installation, and the permittee can demonstrate that those parameters can reasonably be expected to be addressed by the Corrective Action being installed, Ecology may grant an exception allowing sufficient time to determine if the Corrective Action is effective for the additional parameters.

[4] For Level 2 Corrective Actions triggered in 2011 and due in 2012, the Level 2 Deadline is September 30, 2012.

Response: Based on public comments, additional revisions have been made to clarify Ecology's intent that additional Level 2 or 3 corrective actions aren't triggered (accrued) during the calendar year following the calendar year that the permittee triggered a Level 2 or 3 corrective action. However, benchmark exceedances begin counting towards additional Level 2 or 3 corrective actions the year after the Level 2 or 3 deadline. An example is provided below.

The final language is:

S8.C.4.d:
For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

S8.D.5.d:
For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

Example:

- Permittee exceeds zinc benchmark during 3 quarters in 2011, therefore a Level 3 corrective action must be completed by September 30, 2012.
- To allow a "time-out" period for the permittee to plan/install/monitor their Level 3 treatment BMPs in 2012, any zinc exceedances in 2012 do not trigger additional Level 2 or 3 corrective actions.
- If the permittee continues to exceed the zinc benchmark in 2013 (calendar year following Level 3 Treatment due date), another Level 3 corrective action is required by September 30, 2014.
- Waivers are available if a permittee can justify that additional treatment BMPs are not feasible or not necessary to prevent discharges that cause or contribute to violations of water quality standards.

Weyerhaeuser

67.

S8.C.2. and D.2. – Level Two and Level Three Corrective Actions – The current permit language demands that "additional" BMPs be identified and implemented in pursuit of the goal of achieving the applicable benchmark values. This directive is counter to RCW 90.48.555(6) which states that, at all times, "all applicable and appropriate best management practices" be selected, implemented and maintained. Ecology needs to recognize that responsible Permittees have been adjusting their SWPPPs with an "adaptive management" approach for quite a number of years by now. At some point in the Corrective Action process a Permittee is likely to conclude that all applicable and appropriate BMPs have been implemented in the pursuit of the "goal" of achieving the benchmark value(s). As such, a demand for serial "addition" of BMPs may be hollow. The agency would more appropriately reference the "all applicable and appropriate" language.

Response: Ecology disagrees with the suggestion that S8.C.2 and D.2. are counter to RCW 90.48.555(6). Ecology believes Condition S8 contains an "enforceable adaptive management mechanism" that is consistent with the intent and requirements of the PCHB order and applicable state and federal water quality laws and regulations.

Waivers are available if a permittee can justify that additional treatment BMPs are not feasible or not necessary to prevent discharges that cause or contribute to violations of water quality standards.

Weyerhaeuser

68.

S8. C.5. and D.5. – Additional Corrective Action May Be Required – The subsection heading indicates additional corrective actions "may" be required; the section text says "must." What permit requirement does Ecology intend?
The comment offered above for S8.C.2. and D.2. applies to C.5. and D.5. as well.
S8. D.2. – The last sentence demands Level 3 Treatment BMPs or additional BMPs necessary to "meet" the goal of achieving the applicable benchmark value(s). The permitting concepts and language are really strained at this point (with no thanks to the PCHB). The permit pushes to treat benchmark values as numeric effluent limits, but not really as they are just goals, but then unending activity needs to continue if the goals are not consistently achieved (ala effluent limits). With this nuanced approach and outcome, Ecology needs to be prepared to accept Permittee judgments on BMP adequacy as equally credible as agency determinations.

Response: Based on public comments, additional revisions have been made to clarify Ecology's intent that additional Level 2 or 3 corrective actions aren't triggered (accrued) during the calendar year following the calendar year that the permittee triggered a Level 2 or 3 corrective action. However, benchmark exceedances begin counting towards additional Level 2 or 3 corrective actions the year after the Level 2 or 3 deadline. An example is provided below.
The final language is:

S8.C.4.d:
<u>For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.</u>

S8.D.5.d:
<u>For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedences (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.</u>

Example:

- Permittee exceeds zinc benchmark during 3 quarters in 2011, therefore a Level 3 corrective action must be completed by September 30, 2012.
- To allow a "time-out" period for the permittee to plan/install/monitor their Level 3 treatment BMPs in 2012, any zinc exceedances in 2012 do not trigger additional Level 2 or 3 corrective actions.

- If the permittee continues to exceed the zinc benchmark in 2013 (calendar year following Level 3 Treatment due date), another Level 3 corrective action is required by September 30, 2014.
- Waivers are available if a permittee can justify that additional treatment BMPs are not feasible or not necessary to prevent discharges that cause or contribute to violations of water quality standards.