From: Kelley, Penny (ECY) [mailto:PKEL461@ECY.WA.GOV]
Sent: Monday, January 12, 2015 4:14 PM
To: Stone, Virginia
Cc: Labib, Foroozan (ECY); Emmett, Kathleen (ECY)
Subject: FW: Request for Reissuance of WSDOTs NPDES Permit WA0030039

Hello Virginia,

Thanks for the phone call this afternoon. Based on our conversation, here is the original e-mail that WSDOT submitted requesting reissuance of WSDOT's NPDES permit, 6 months prior to the permit expiration date. WSDOT coverage will continue under the existing permit until Ecology issues a new general permit. Hope this e-mail provides you with what you need for documentation.

Penny Kelley
WSDOT Liaison
Office: 360-407-7298
pkel461@ecy.wa.gov

From: Schlatter, Ken
Sent: Tuesday, June 03, 2014 2:09 PM
To: Emmett, Kathleen (ECY)
Cc: Kelley, Penny (ECY); Myhr, Gregor; Wolin, Eric
Subject: Request for Reissuance of WSDOTs NPDES Permit WA0030039

Kathleen,

Attached you will find the submittal letter, Form 1, and Form 2D for the reissuance of WSDOT's Bridge and Ferry Terminal Washing NPDES Permit PN WA0039039. Our current permits expires on 1/12/2015. I am also sending you a hard copy of these documents.

Please let me know if there is any errors, or if any additional information is needed, to meet reissuance request requirements.

Thanks!

Ken Schlatter

Issue Date: 12-12-09
Effective Date: 01-12-10
Expiration Date: 01-12-15
Modification Date: March 18, 2013

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA0039039

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.

Washington State Department of Transportation
310 Maple Park Ave SE
PO Box 47331
Olympia, WA 98501

Facility Location: NA Water Body I.D. No.: NA Industry Type: Washing and Pressure Washing of Bridges and Ferry Terminals	Receiving Water: Statewide Fresh and Marine Waters Discharge Location: NA

is authorized to discharge in accordance with the special and general conditions which follow.

Bill Moore, PE
Section Manager
Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.B	Annual Project Completion Report	Annually	Winter 2009/2010
S3.B	Annual Proposed Project List	Annually	Spring 2010
S3.E	Noncompliance Notification	As necessary	
G1.	Notice of Change in Authorization	As necessary	
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G7.	Application for Permit Renewal	1/permit cycle	July 12, 2014
G8	Notice of Permit Transfer	As necessary	
G21	Reporting Anticipated Non-compliance	As necessary	
G22.	Reporting Other Information	As necessary	

SPECIAL CONDITIONS

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

In the event that the Permittee cannot adhere to the conditions of this permit on a specific site or project due to human health or safety reasons, the Permittee may apply for a separate permit for that project from the appropriate regional office of the Department of Ecology.

The discharge of pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit violates the terms and conditions of this permit.

S1. DISCHARGE LIMITATIONS

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge high pressure wash water or low pressure wash water from bridges, ferry terminals and ferry transfer spans in Washington State subject to the following limitations:

A. Bridge Spot Cleaning:

The Permittee periodically inspects bridge structures, which it may spot clean with water in preparation for inspection. This type of washing entails high volume/low pressure washing. Section S1.A only applies to operations performed for inspections and does not apply to operations such as street sweepers which are covered by the Regional Road Maintenance Program Guidelines.

The Permittee is allowed to direct wastewaters to ground at a location near the bridge or transfer span per the most current protocol for ground disposal, initially approved on March 9, 2010 (See Appendix C).

1. The Permittee may only spot clean bridges during the following time periods:
   West of the Cascade Mountain Crest: November 1 to May 31.
   East of the Cascade Mountain Crest: December 1 to June 30.
2. The Permittee may discharge wash water directly to state surface waters only when the stream bed under the part of the structure it is washing is covered with flowing water. If the streambed is exposed or partially exposed the Permittee must provide a mechanism for discharge of wash water directly to the receiving waters. The Permittee may direct wastewaters to ground discharge at a location near the bridge or transfer span per the approved protocol plan for ground disposal.
3. The Permittee must use measures to prevent damage to the vegetation in the riparian (streamside or shoreline) area located within 200 feet perpendicular to the water and adjacent to the structure. The Permittee may use existing parking lots and open managed fields within the riparian for staging work.

4. The Permittee must not work or use equipment below the (OHWM) except to install BMPs to direct the discharge of wash water to flowing water or to adjacent upland/ground as allowed above.

5. The bridge shall be spot cleaned using dry and/or wet methods, such as, but not limited to, hand/dry scraping, sweeping, vacuuming, low pressure high volume washing. The Permittee must use these cleaning methods in combination with Best Management Practices identified in the most current *Regional Road Maintenance Endangered Species Act Program Guidelines* to prevent debris and substances from entering state waters. The Permittee may remove residual grease by hand using degreaser on absorbent material, provided none of this material enters state waters. Examples of debris and substances include, but are not restricted to:

   a. Bird nests and fecal material
   b. Dirt, moss, and sediments
   c. Rust, old paint chips and residue
   d. Petroleum products
   e. Cement chips
   f. Construction materials
   g. Chemicals or any other toxic or deleterious substances

6. If the Permittee uses a filter tarp containment system during spot cleaning activities, the tarp must be a minimum of #100 sieve.

7. During bridge spot cleaning, if debris, substances, or wash water could enter state waters through deck drains, the Permittee must where practicable temporarily block the drains to route water to the landward end(s) of the structure and onto vegetative areas.

8. Debris and substances resulting from bridge spot cleaning shall be collected, contained, and deposited in a site above the limits of flood water or extreme high tide that has the appropriate regulatory approval. The Permittee must not place any debris, marine growth, or substances in road drainages, wetlands, riparian (streamside or shoreline) areas, or on adjacent land where these substances may erode into state waters.

9. The Permittee must wash with clean water and must not use any detergents or other cleaning agents.

10. The Permittee must wash with the minimum water pressure necessary to accomplish the work and prevent the removal of existing paint and subsequent discharge to state waters.

11. The Permittee must not discharge petroleum products, hydraulic fluids, chemicals, or any other polluting substances to state waters.

B. Bridge Routine Maintenance Cleaning and Washing:

The Permittee washes structures on a 1-5 year cycle to remove dirt and other material and to extend the life of the paint. This type of washing entails high volume/low pressure washing. Section S1.B only applies to operations described in the fact sheet intended to remove dirt and other material from structures to extend the life of the paint and does not apply to operations such as street sweepers which are covered by the Regional Road Maintenance Program Guidelines.

The Permittee is allowed to direct wastewaters to ground at a location near the bridge or transfer span per the most current protocol for ground disposal, initially approved on March 9, 2010 (See Appendix C). .

1. The Permittee may only conduct bridge routine maintenance cleaning and washing during the following time periods:

   West of the Cascade Mountain Crest: November 1 to May 31.
   East of the Cascade Mountain Crest: December 1 to June 30.

2. The Permittee may discharge wash water directly to state surface waters only when the stream bed under the part of the structure it is washing is covered with flowing water. If the streambed is exposed the Permittee must provide full or partial containment with no discharge to a dry river/stream/creek bed (the area of channel below the OHWM). The Permittee may direct wastewaters to ground discharge at a location near the bridge or transfer span per the approved protocol plan for ground disposal.

3. The Permittee must use measures to prevent damage to the vegetation in the riparian (streamside or shoreline) area located within 200 feet perpendicular to the water and adjacent to the structure. The Permittee may use existing parking lots and open managed fields within the riparian for staging work.

4. The Permittee must not work or use equipment below the (OHWM) except to install BMPs to direct the discharge of wash water to flowing water paragraph 2 above).

5. For bridges that are washed within a 2-5 year cycle, the bridge shall be cleaned in the dry prior to washing. The Permittee shall use dry methods and equipment (scraping, sweeping, vacuuming) that will prevent debris and substances from entering state waters.

   Examples of debris and substances include, but are not restricted to:
   a. Bird nests and fecal material
   b. Dirt, moss, and sediments
   c. Rust, old paint chips and residue
   d. Petroleum products
   e. Cement chips
   f. Construction materials
   g. Chemicals or any other toxic or deleterious substances

Bridges washed on an annual cycle (1 year), only require dry methods of cleaning prior to washing if the bridge has nesting colonies of birds. There must be a minimum river flow of 412 CFS (cubic feet per second) at the time of washing. The Permittee shall use dry methods and equipment (scraping, sweeping, vacuuming) that will prevent bird nests and fecal material from entering state waters.

In all cases, the Permittee may remove residual grease by hand using degreaser on absorbent material, provided none of this material discharges to state waters.

6. During bridge cleaning and low pressure washing, if debris, substances, or wash water could enter state waters through deck drains, the Permittee must where practicable temporarily block the drains to route water to the landward end(s) of the structure and onto vegetative areas.

7. The Permittee may only collect, contain and deposit debris and substances resulting from bridge maintenance cleaning in a site above the limits of flood water or extreme high tide that has the appropriate regulatory approval. The Permittee must not place any debris, marine growth, or substances in road drainages, wetlands, riparian (streamside or shoreline) areas, or on adjacent land where they may erode into state waters.

8. The Permittee must wash with clean water and must not use detergents or other cleaning agents.

9. The Permittee must wash with the minimum water pressure necessary to accomplish the work that prevents the removal of existing paint and subsequent discharge to state waters.

10. After completing dry cleaning methods, the Permittee may flush debris accumulations remaining in the drains with clean water.

11. The Permittee must not discharge any petroleum products, hydraulic fluids, chemicals, or any other polluting substances to state waters.

C. Ferry Transfer Span & Over-Water Metal Structures Maintenance Cleaning and Washing and Marine Growth Removal

1. The Permittee must use measures to prevent damage to the vegetation in the riparian (streamside or shoreline) area located within 200 feet perpendicular to the water and adjacent to the structure. The Permittee may use existing parking lots and open managed fields within the riparian area for staging work.

2. The Permittee must not work or use equipment below the ordinary high water mark (OHWM), except it may use a temporary floating work platform for marine growth removal.

3. The Permittee must not disturb the shoreline when it places or removes a temporary floating work platform.

4. Ferry transfer spans and over water metal structures shall first be cleaned using dry methods and equipment (scraping, sweeping, vacuuming) that will prevent debris and substances from entering state waters. The Permittee may remove residual grease by hand using degreaser on absorbent material, provided none of this material enters state waters. Examples of debris and substances include, but are not restricted to:

   a. Bird nests and fecal material
   b. Dirt, moss, and sediments
   c. Rust, old paint chips and residue
   d. Petroleum products
   e. Cement chips
   f. Construction materials
   g. Chemicals or any other toxic or deleterious substances

5. If debris, substances, and/or wash water could enter state waters through drains, the Permittee must, where practicable, temporarily block drains to route water to the landward end of the ferry terminal and onto vegetative areas.

6. The Permittee must use methods and tools that minimize removal of the creosote or treated wood fibers when it removes marine growth from creosote or any other treated wood.

7. The Permittee may discharge removed marine growth to state waters provided the marine growth shall not accumulate or be spoiled on the sea bed.

8. Debris and substances resulting from this cleaning project shall be contained and deposited above the limits of extreme high tide that has the appropriate regulatory approval. The Permittee must not place any debris, marine growth, and substances in road drainages, wetlands, riparian (shoreline) areas, or on adjacent land where they may erode into state waters.

9. The Permittee must wash with clean water and must not use detergents or other cleaning agents.

10. The Permittee must wash with the minimum water pressure necessary to accomplish the work that prevents the removal of existing paint and subsequent discharge to state waters.

11. The Permittee may flush debris accumulations remaining in the drains with clean water after completing dry cleaning methods.

12. The Permittee must not discharge any petroleum products, hydraulic fluids, chemicals, or any other polluting substances to state waters.

D. Bridge Preparatory Washing (Pre-painting)

1. For bridges over lakes and wetlands or over rivers, listed on the 303(d) list for copper, zinc or lead - No discharge to surface waters.

   For rivers with flows of 157 cfs or less in Eastern Washington or 356 cfs or less in Western Washington at the time of washing – No discharge to surface waters.

   For condition 1. above, and in situations where the minimum CFS needed to discharge waste water is not present (see below), these wastewaters may be directed to ground discharge at a location near the bridge or transfer span if the soils and slope are suitable for infiltration. The Permittee must filter these wastewaters with #100 sieve fabric prior to discharge to ground and must submit a plan or protocol to Ecology for review and approval prior to any discharge to ground. , The plan or protocol must describe the methods the Permittee will use to determine if discharge to ground is appropriate.

   Eastern Washington
   See statewide conditions 4-27 for additional requirements

2. The Permittee must not operate more than six pressure washers simultaneously.

   The authorization for flow limitations on the east side is contingent upon a timely completion of the compliance schedule. The river flow in eastern Washington must meet or exceed the flow rate listed below dependant on the number of pressure washers in use.

   - If operating 6 pressure washers (18 gpm), minimum CFS needed = 959
   - If operating 4/5 pressure washers (15 gpm), minimum CFS needed = 719
   - If operating 3 pressure washers (9 gpm), minimum CFS needed = 480
   - If operating 2 pressure washers (6 gpm), minimum CFS needed = 312
   - If operating 1 pressure washer (3gpm), minimum CFS needed = 157

   The information on the number of pressure washers and minimum CFS is based on using a pressure washer with a discharge of 3 gallons/minute. If the Permittee uses a pressure washer that discharges less than 3 gallons/minute, that information can be provided to Ecology along with the proposed number of pressure washers being used, minimum river flow needed, and verification of river flow at the project location. This information shall be submitted to Ecology at least 10 days prior to starting the project.

   This authorization for flow limitations on the east side is contingent upon a timely completion of the compliance schedule.

Western Washington

See statewide conditions 4-27 for additional requirements

3. The number of pressure washers operating simultaneously shall not exceed 6 pressure washers:
    - If operating 6 pressure washers (18 gpm), minimum CFS needed = 2030
    - If operating 4/5 pressure washers (15 gpm), minimum CFS needed = 1522
    - If operating 3 pressures washers (9 gpm), minimum CFS needed = 1015
    - If operating 2 pressure washers (6 gpm), minimum CFS needed = 660
    - If operating 1 pressure washer (3 gpm), minimum CFS needed = 356

    The information on the number of pressure washers and minimum CFS is based on using a pressure washer with a discharge of 3 gallons/minute. If the Permittee uses a pressure washer that discharges less than 3 gallons/minute, that information can be provided to Ecology along with the proposed number of pressure washers being used, minimum river flow needed, and verification of river flow at the project location. This information shall be submitted to Ecology at least 10 days prior to starting the project.

    State wide Conditions

4. The Permittee must submit information to the permit manager and the regional Ecology Water Quality office per condition S.3.A1at least 10 working days prior to starting the project. The information must include plans for the appropriate number of pressure washers and, if it plans to discharge to ground, the Permittee must specify the approximate location and the soil suitability for infiltration.

5. The Permittee must filter wash water and debris resulting from pressure washing, including but not restricted to dirt and old paint chips, through a filter tarp of a minimum of #100 sieve before discharge to surface waters.

6. The Permittee must use measures to prevent damage to the vegetation in the riparian (streamside or shoreline) area located within 200 feet perpendicular to the water and adjacent to the structure. The Permittee may use open managed fields and lots within the riparian area for staging work.

7. The Permittee must not work or use equipment below the ordinary high water mark (OHWM) except the use of a temporary, floating work platform.

8. The Permittee must not disturb the stream banks or shoreline when placing or removing a temporary floating work platform.

9. Bridges shall first be cleaned using dry methods and equipment (scraping, sweeping, vacuuming) that will prevent debris and substances from entering state waters. The Permittee may remove residual grease by hand using degreaser on absorbent material, provided none of this material enters state waters.

Examples of debris and substances include, but are not restricted to:
a. Bird nests and fecal material
b. Dirt, moss, and sediments
c. Rust, old paint chips and residue
d. Petroleum products
e. Cement chips
f. Construction materials
g. Chemicals or any other toxic or deleterious substances

10. During bridge preparatory cleaning, if debris, substances, or wash water could enter state waters through deck drains, the Permittee must where practicable temporarily block the drains to route water to the landward end(s) of the structure and onto vegetative areas.

11. The Permittee must provide a containment structure capable of collecting all such debris and substances when it conducts work that results in debris and substances entering state waters. The debris and substances include but is not restricted to dirt, abrasive blasting medium, old paint chips, and new paint.

12. The Permittee must remove debris and substances collected in the containment or filter structure from the structure daily or whenever accumulations may place the structure at risk and whenever it moves or removes the structure.

13. Work must not occur when weather conditions would place the containment or filter structure at risk, or result in loss of contained material or the loss of filtering function.

14. The Permittee must routinely inspect and repair any containment or filter structure as necessary to ensure its function.

15. The Permittee must collect and contain debris and substances from this project in a site above the limits of flood water or extreme high tide that has the appropriate regulatory approval. It must not place any debris and substances in road drainages, wetlands, riparian (streamside and shoreline) areas, or on adjacent land where they may erode into state waters.

16. The Permittee must wash with clean water and must not use detergents or other cleaning agents.

17. The Permittee may flush debris accumulations remaining in the drains with clean water after completing dry cleaning methods.

18. The Permittee must not clean any painting or other equipment or mix or store paint and other polluting materials and substances over the water or in an area where a spill would result in these materials and substances entering state waters.

19. For brush and/or roller paint application methods, painters must use pails containing a maximum of two (2) gallons of paint to minimize the impact of accidental spillage.

20. The Permittee must not discharge any cleaning solvents or chemicals utilized for tool or equipment cleaning to the ground or water. The Permittee must not clean painting and maintenance equipment in state waters or allow any resultant cleaning runoff to enter state waters. It must not allow paint cans, lids, brushes, or other debris to enter state waters.

21. The Permittee must store and mix all liquid products on impervious surfaces in secure and contained location to eliminate the potential for spills into state waters.

22. The Permittee must use drip pans or other protective devise for all paint mixing and solvent transfer operations.

23. The Permittee must suspend drip tarps below paint platforms to prevent spilled paint, buckets, brushes, etc., from being lost to state waters.

24. The Permittee must treat paint and solvent spills as oil spills and prevent them from reaching storm drains and subsequent discharge into the water. It must immediately report any such spill to the appropriate Ecology Regional Office.

25. The project Engineer or Inspector must be on site or on call, and be readily accessible to the site at all times while cleaning and painting activities are occurring that may affect the quality of surface water of the state.

26. The Permittee must not discharge any petroleum products, hydraulic fluids, chemicals, or any other polluting substances to state waters.

13. The Permittee must minimize the duration of pressure washing of concrete structures to maintain structural integrity.

E. Ferry Transfer Span & Overwater Metal Structures, Preparatory Washing

1. The Permittee must not conduct preparatory washing activities at the Colman Dock Ferry Terminal that cause a discharge to surface waters. The Permittee may submit a request in writing to Ecology to conduct monitoring/sampling in this location to demonstrate that ambient conditions of receiving waters are below the water quality criteria as specified in WAC 173-201A-240(3). Ecology must review and approve the proposed monitoring/sampling plan prior to conducting the monitoring or sampling. The Permittee must submit analytical results from the monitoring/sampling conducted in this location to Ecology for review and must obtain written approval from Ecology prior to discharging at the Colman Dock Ferry Terminal.

2. Washing during spring, summer and fall seasons shall only be done at time of maximum daily tidal flows. Maximum tidal flows occur from one hour after high or low slack tide to one hour prior to the next high or low slack tide.

3. The Permittee must submit information at least 10 working days prior to starting the project to the permit manager and the regional Ecology Water Quality office per condition S.3.A1. The information must include plans for the appropriate number of pressure washers and, if it plans a discharge to ground, the Permittee must specify the approximate location and the soil suitability for infiltration.

4. The Permittee must filter wash water and debris resulting from pressure washing, including but not restricted to dirt and old paint chips, through a filter tarp of a minimum of # 100 sieve before discharge to surface waters.

5. The number of pressure washers at any time must be four or less.

6. The Permittee must use measures to prevent damage to the vegetation in the riparian (streamside or shoreline) area located within 200 feet perpendicular to the water and adjacent to the structure. The Permittee may use existing parking lots and open managed fields within the riparian area for staging work.

7. The Permittee must not conduct any work or use equipment below the ordinary high water mark (OHWM) except it may use a temporary floating work platform for marine growth removal and activities authorized under condition S.6.C of this permit.

8. The Permittee may discharge removed marine growth to state waters provided the marine growth shall not accumulate or be spoiled on the sea bed.

9. The Permittee must not discharge petroleum products, hydraulic fluids, chemicals, or any other polluting substances to state waters.

10. The Permittee must not disturb the shoreline when placing or removing a temporary floating work platform.

11. Ferry transfer spans & overwater metal structures shall first be cleaned using dry methods and equipment (scraping, sweeping, vacuuming) that will prevent debris and substances from entering state waters. The Permittee may remove residual grease by hand using degreaser on absorbent material, provided none of this material enters state waters. Examples of debris and substances include, but are not restricted to:
    a. Bird nests and fecal material
    b. Dirt, moss, and sediments
    c. Rust, old paint chips and residue
    d. Petroleum products
    e. Cement chips
    f. Construction materials
    g. Chemicals or any other toxic or deleterious substances

12. If debris, substances, and/or wash water could enter state waters through drains, the Permittee must where practicable temporarily block drains to route water to the landward end of the ferry terminal and onto vegetative areas.

13. The Permittee must provide a containment structure capable of collecting all such debris and substances when it conducts work that results in debris and substances entering state waters. The debris and substances include but is not restricted to dirt, abrasive blasting medium, old paint chips, and new paint.

14. The Permittee must remove debris and substances collected in the containment or filter structure from the structure daily or whenever accumulations may place the structure at risk and whenever it moves or removes the structure.

15. Work must not occur when weather conditions would place the containment or filter structure at risk, result in loss of contained material or loss of filtering function.

15. The Permittee must routinely inspect and repair any containment or filter structure as necessary to ensure its function.

16. The Permittee must collect and contain debris and substances from this project in a site above the limits of extreme high tide that has the appropriate regulatory approval. It must not place any debris and substances in road drainages, wetlands, riparian (streamside and shoreline) areas, or on adjacent land where they may erode into state waters.

17. The Permittee must wash with clean water and must not use detergents or other cleaning agents.

18. The Permittee may flush debris accumulations remaining in the drains with clean water after completing dry cleaning methods.

19. The Permittee must not clean any painting or other equipment or mix or store paint and other polluting materials and substances over the water or in an area where a spill would result in these materials and substances entering state waters.

20. For brush and/or roller paint application methods, painters must use pails containing a maximum of two (2) gallons of paint to minimize the impact of accidental spillage.

21. The Permittee must not discharge any cleaning solvents or chemicals utilized for tool or equipment cleaning to the ground or water. The Permittee must not clean painting and maintenance equipment in state waters or allow any resultant cleaning runoff to enter state waters. It must not allow paint cans, lids, brushes, or other debris to enter state.

22. The Permittee must store and mix all liquid products on impervious surfaces in secure and contained location to eliminate the potential for spills into state waters.

23. The Permittee must use drip pans or other protective device for all paint mixing and solvent transfer operations.

24. The Permittee must suspend drip tarps below paint platforms to prevent spilled paint, buckets, brushes, etc., from being lost to state waters.

25. The Permittee must treat paint and solvent spills as oil spills and prevent them from reaching storm drains and subsequent discharge into the water. It must immediately report any such spill to the appropriate Ecology Regional Office.

26. The project Engineer or Inspector must be on site or on call, and be readily accessible to the site at all times while cleaning and painting activities are occurring that may affect the quality of surface water of the state.

F. Mixing Zone Descriptions for D. and E. above

An acute mixing zone is authorized for Bridge Preparatory Washing over rivers. The maximum allowance for the mixing zone is defined as follows:

Acute – 2.5% of the river flow at the time of washing

The dilution factor from this mixing zone varies with the number of pressure washers and the river flow at the time of washing.

An acute mixing zone is authorized for Ferry Transfer Span & Overwater Metal Structures Preparatory Washing over marine waters. The maximum boundary of the mixing zone is as follows:

Acute – Twenty feet around the point of discharge.

The dilution factor resulting from this mixing zone varies with the number of pressure washers and receiving water current velocity.

S2. MONITORING REQUIREMENTS

A.Wash Water and Pressure Wash Water Monitoring

The Permittee must monitor and report wash and pressure wash water as follows:

1. Bridge and Ferry Transfer Span & Overwater Metal Structure Maintenance Routine Washing
   The Permittee must monitor one representative project (bridge or ferry transfer span) per year. The Permittee must collect a composite sample of effluent and a composite sample of receiving water (also referred to as background) and analyze for the parameters as listed below.

Parameter	Units	Minimum Sampling Frequency & Sample Type
Effluent sampling		
Copper (total)	µg/L	one composite sample for one representative project (bridge of ferry transfer span) per year
Copper (dissolved)	µg/L	
Lead (total)	µg/L	
Lead (dissolved)	µg/L	
Zinc (total)	µg/L	
Zinc (dissolved)	µg/L	
Receiving Water sampling (background)		
Total Hardness (freshwater discharge only) as CaCO3	mg/L	one composite sample for one representative project (bridge of ferry transfer span) per year
Copper (total)	µg/L	
Copper (dissolved)	µg/L	
Lead (total)	µg/L	
Lead (dissolved)	µg/L	
Zinc (total)	µg/L	
Zinc (dissolved)	µg/L	

In addition to collecting samples, the Permittee shall record the following information and submit it to Ecology as part of the monitoring report:

a. The date, including year, and time of day samples were collected
b. The location where the sample was collected (both effluent and background samples)
c. The river flow at the time of the project, reported in cubic feet per second (CFS)
d. The total volume of water discharged to surface waters, reported in gallons
e. The number of hours spent actually washing the structure
f. The specified detection limits provided to the lab for analysis
g. Copies of any field notes

2. Bridge and Ferry Transfer Span & Overwater Metal Structure Preparatory Washing
The Permittee must monitor one representative project (bridge or ferry transfer span) per year. Monitoring consists of collecting a composite sample of effluent after passing through the filter tarp and a composite sample of receiving waters (also referred to as background).

Parameter	Units	Minimum Sampling Frequency & Sample Type
Effluent after passing through a filter tarp		
Copper (total)	µg/L	one composite sample for one representative project (bridge of ferry transfer span) per year
Copper (dissolved)	µg/L	
Lead (total)	µg/L	
Lead (dissolved)	µg/L	
Zinc (total)	µg/L	
Zinc (dissolved)	µg/L	

Parameter	Units	Minimum Sampling Frequency & Sample Type
Acute Toxicity	The Permittee must conduct one of the following acute toxicity tests: *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48 hour static test, method: EPA-821-R-02-012).	
Acute Toxicity	The Permittee must conduct the following acute toxicity test: Fathead minnow, *Pimephales promelas* (96 hour static-renewal test, method: EPA-821-R-02-012).	
Receiving Water sampling (background)		
Total Hardness (freshwater discharge only) as CaCO3	mg/L	one composite sample for one representative project (bridge of ferry transfer span) per year
Copper (total)	µg/L	
Copper (dissolved)	µg/L	
Lead (total)	µg/L	
Lead (dissolved)	µg/L	
Zinc (total)	µg/L	
Zinc (dissolved)	µg/L	

In addition to collecting the samples, the Permittee shall record the following information and submit it to Ecology as part of the monitoring report.

a. The date, including year, and time of day samples were collected
b. The location where sample was collected (both effluent and background samples)
c. The river flow at the time of the project, reported in cubic feet per second (CFS)
d. The total volume of water discharged to surface waters, reported in gallons
e. The number of hours spent actually washing the structure
f. The specified detection limits provided to the lab for analysis
g. Copies of any field notes

3. Spot Cleaning:
The Permittee must monitor the volume of wash water used during spot cleaning to estimate the amount of water discharged to waters of the state during this activity and provide that information to Ecology in the annual Project Completion Report.

B. Sampling and Analytical Procedures

Samples and measurements collected to meet the requirements of this permit must represent the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136. Guidance on analytical methods is given in Appendix A.

C. Laboratory Accreditation

The Permittee must ensure that all monitoring data required by Ecology is prepared by a laboratory registered or accredited under the provisions of chapter 173-50 WAC, Accreditation of Environmental Laboratories.

S3. NOTIFICATION, REPORTING, AND RECORDKEEPING REQUIREMENTS

The Permittee must notify, monitor and report in accordance with the following conditions. Notification, as required under S3.A.1 PROJECT NOTIFICATION (below), applies to all activities covered under this permit except ferry transfer span maintenance cleaning and washing. The falsification of information submitted to the Department constitutes a violation of the terms and conditions of this permit.

A. Notification

1. PROJECT NOTIFICATION: The Ecology Regional Office Water Quality Program and Permit Manager must be notified (letter, fax, or e-mail) at least ten (10) working days prior to start of work. Notification must include:

   a. Agency name, contact person, and telephone number
   b. Type of activity
   c. Water body name
   d. Bridge location, including road number, milepost or Ferry terminal name & location.
   e. Starting date and estimated ending date for work

   Appendix A in the fact sheet contains contact information for the regional offices and the permit manager.

2. NOTIFICATION OF FISH KILL, PERMIT VIOLATION, WATER QUALITY PROBLEM: If at any time, as a result of project activities, fish are observed in distress, a fish kill occurs, a water quality problem occurs, or a permit violation occurs the Permittee must:
   a. Immediately take action to stop, contain, and clean up unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any discharge immediately and submit the results to the Department within thirty (30) days after becoming aware of the violation.
   b. Immediately notify the Department of Ecology of the failure to comply.
   c. Submit a detailed written report to the Department of Ecology within thirty (30) days (five [5] days for upsets and bypasses), unless requested earlier by the Department. The report must contain a description of the noncompliance, including

exact dates and times, and if the Permittee has not corrected the noncompliance, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Compliance with these requirements 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.

B. Reporting

The first monitoring period begins on the effective date of the permit.

Annual Proposed Paint Preparatory Project List Report: Each year the Permittee must submit a list of bridges and ferry transfer spans/over water metal structures it expects to pressure wash and paint that year. The Permittee must:

1. Submit the report at least thirty (30) days prior to the start of activity.
2. List the expected projects for that year in the report.
3. Specify the expected monitoring and any special studies which it plans for that year in the report.
4. Submit the report to Department of Ecology, SEA Program, PO Box 47600, Olympia, WA 98504-7600.

Annual Project Completion Report: The Permittee must submit to the Department of Ecology, SEA Program, PO Box 47600, Olympia, WA 98504-7600, a calendar year annual report of Bridge Routine Cleaning and Washing work and Bridge Spot Cleaning by February 28 of the following year. An annual report is also required if no work was conducted. The annual report must include:

1. General: Reporting agency, contact person, address, telephone number, date of report, time period.

2. Summary: Total number of individual projects by region and statewide.

3. Problem(s) encountered: Provision violation, notification, corrective action, impacts to fish life and water quality from problem. If the Environmental Compliance Assurance Procedure (ECAP) was used, what activity triggered the procedure. *[these may be highlighted and specified in this section or included in the full list of projects completed below]*

4. Recommendations for improvement to BMPs and mitigation *[optional]*

5. List of individual projects completed: By region including water body name, bridge name, road number and milepost, latitude and longitude, and date of work.

6. Water Quality Data: All data and analysis required under S2. of this permit for Bridge Routine Cleaning and Washing work.

All laboratory reports providing data for organic and metal parameters must include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), laboratory quantitation limit (QL), reporting units, and concentration detected.

Regional Road Maintenance Endangered Species Act Program Guidelines: The Permittee must notify Ecology of any proposed changes for bridge maintenance within the Regional Road Maintenance Program guidelines and if those changes result in a revision to the current guidelines document.

C. Records Retention

The Permittee must retain records of all monitoring information for a minimum of five (5) years. Such information must include 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. The Permittee must extend this period of retention during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

D. Recording of Results

For each measurement or sample taken, the Permittee must record the following information:

The date, exact place, method, and time of sampling or measurement.

1. The individual who performed the sampling or measurement.
2. The dates the analyses were performed.
3. The individual who performed the analyses.
4. The analytical techniques or methods used.
5. The results of all analyses.

E. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Condition S2 of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's Annual Project Completion Report.

F. Maintaining a Copy of This Permit

A copy of this permit or a document containing relevant conditions must be kept at the project site (bridge and ferry transfer span preparatory washing only) and be made available upon request to Ecology inspectors.

S4. OPERATION AND MAINTENANCE

The Permittee must at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes

adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

S5. SOLID WASTE DISPOSAL

A. Solid Waste Handling

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee must not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee must apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

S6. COMPLIANCE SCHEDULE

A. Waste-Specific Translator – applies to Eastern WA only.

The Permittee is authorized to discharge filtered waste water resulting from pressure washing on the east side of the Cascade Crest to rivers as described in condition S1.D.2.c only if the Permittee is in compliance to complete the translator study as described in the Quality Assurance Project Plan – WSDOT Bridge Washing Waste Translator Study dated May 2006 or comparable assessment that further defines the effluent characteristics or mixing zone effects. The comparable assessment may include conducting a literature search of primary/peer reviewed literature on lead based paint systems and the effects of environmental factors on metal solubility.

B. Mixing Zone Study.

The Permittee may conduct a mixing zone study to determine effective dilution of pressure washing wastewater in marine waters. If the Permittee elects to perform a mixing zone study, the Permittee must submit a study plan for review and approval to the Department of Ecology. The study plan must adhere to guidance given in Ecology publication 92-109.

C. Ferry Terminal Painting:

The Permittee is authorized to conduct painting activities on ferry terminal steel pilings, dolphins, wing walls and ladders, including those areas of the structure that are below the OHWM, only if the permittee is in compliance with the following condition.

The Permittee must:

1. Collect water quality samples to conduct acute toxicity testing in order to determine if there are any toxic effects from paint products being used on ferry terminal steel pilings, ladders, and dolphin, wing walls.

2. Submit a sampling plan to Ecology for review and approval prior to conducting any painting below the OHWM on ferry terminal steel pilings, ladders, or dolphin wing walls.

3. Collect samples within the first tidal inundation after a piling, ladder or wing wall has been painted and the location of the sample must be within 3 feet down-current of the painted structure.

4. Collect samples from one representative project a calendar year beyond the five year period of this permit **(Effective 01/18/10 – Expires 01/18/15)**.

5. Send the samples to an accredited laboratory for the toxicity tests and the results from those tests must be included in a report submitted to the Ecology permit manager.

6. Use EPA method 1669 for sampling and EPA method 821-R-02-012, *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition* dated October 2002 for marine acute toxicity protocol and as modified by Ecology in *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria,* Publication no. WQ-R-95-80 revised in December 2008.

The report shall also include the following information:

a. The name of the Ferry Terminal
b. The location where the sample was collected
c. The time of day or night the sample was collected and date/year
d. The time the piling, wing wall or ladder was painted
e. Name and contact information of the person collecting the sample(s)
f. The paint product that was used (include the full paint system)
g. The temperature of the receiving water
h. The temperature of the air at the time the structure was being painted
i. The temperature of the air at the time the sample was collected
j. Copies of the chain of custody forms
k. A brief narrative describing the project/work that was completed
l. Photos of the sampling location/work area

S7. HAZARDOUS SPILL PREVENTION AND CONTROL

The Permittee must:

A. Not use or discharge any petroleum products, wet cement, lime, concrete, chemicals - including emulsifiers, dispersants or cleaning solvents used for tool or equipment cleaning, or other toxic or deleterious materials in or immediately adjacent to waters of the state.

B. Maintain equipment that enters the state's waters to prevent any visible sheen from petroleum products from appearing on the water. It must deploy containment measures for a sheen if a visible sheen is observed. If the Permittee observes a sheen, it must cease work, remove all leaking or dirty equipment from the water and fix the source of the sheen prior to reentering the water.

C. Store all oil, fuel or chemical storage tanks or containers in a manner that provides appropriate containment in the event of a spill thereby reducing impacts to surface water or groundwater.

D. Check fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., regularly for drips or leaks, and maintain and store them properly to prevent spills into state waters. Proper security must be maintained to prevent vandalism.

E. Transport concentrated waste or spilled chemicals off site for disposal at a facility approved by Ecology or the appropriate County Health Department. These materials must not be discharged to any sewer without approval of the local sewer authority.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

A. All permit applications shall be signed by either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.

B. All reports required by this permit and other information requested by the Department 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 Department.
   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. (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 paragraph 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 B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
   1. 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.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of the Department, 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 must 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 monitoring 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.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
   1. Violation of any permit term or condition.
   2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
   3. A material change in quantity or type of waste disposal.
   4. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
   5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].
   6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
   7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
   1. A material change in the condition of the waters of the state.
   2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
   3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
   4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
   5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR part 122.62.
   6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
   7. Incorporation of an approved local pretreatment program into a municipality's permit.

The following are causes for modification or alternatively revocation and reissuance:
   1. Cause exists for termination for reasons listed in A1 through A7, of this section, and the Department determines that modification or revocation and reissuance is appropriate.

2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

G4. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, but no later than sixty (60) days prior to the proposed changes, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants 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.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

G6. 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.

G7. DUTY TO REAPPLY

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

G8. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

A. Transfers by Modification
Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR

122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G9. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G10. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G11. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department 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 the Department upon request, copies of records required to be kept by this permit.

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

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

G14. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

G15. 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 ten thousand dollars ($10,000) and costs of prosecution, or by imprisonment in 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 a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars ($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.

G16. 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 S3 and 4) the Permittee complied with any remedial measures required under S4 of this permit.

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

G17. PROPERTY RIGHTS

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

G18. 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.

G19. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants 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.

G20. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring 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 by imprisonment of not more than four (4) years, or by both.

G21. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least one hundred and eighty (180) 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 the Department.

G22. 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 the Department, it shall promptly submit such facts or information.

G23. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

APPENDIX A

EFFLUENT AND RECEIVING WATER CHARACTERIZATION FOR POLLUTANTS THIS LIST INCLUDES EPA REQUIRED POLLUTANTS (PRIORITY POLLUTANTS) AND SOME ECOLOGY PRIORITY TOXIC CHEMICALS (PBTs)

The following table with analytical methods and levels is to be used for effluent characterization and receiving water studies in NPDES permit applications, applications for permit renewal, and monitoring required by permits.

The objective of this appendix is reduce the number of analytical "non-detects" in permit applications or receiving water studies and to measure effluent concentrations near or below criteria values where possible at a reasonable cost. If a Permittee knows that an alternate, less sensitive method (higher DL and QL) from 40 CFR Part 136 is sufficient to produce measurable results in their effluent or receiving water, that method may be used for analysis.

	Pollutant & CAS No. ***(if available)***	**Recommended Analytical Protocol**	**Detection (DL)[1]** ***µg/L unless specified***	**Quantitation Level (QL)[2]** ***µg/L unless specified***
	CONVENTIONALS			
	Biochemical Oxygen Demand	SM5210-B		2 mg/L
	Chemical Oxygen Demand	SM5220-D		10 mg/L
	Total Organic Carbon	SM5310-B/C/D		1 mg/L
	Total Suspended Solids	SM2540-D		5 mg/L
	Total Ammonia (as N)	SM4500-NH3- GH		0.3 mg/L
	Flow	Calibrated device		
	Dissolved oxygen	4500-OC/OG		0.2 mg/L
	Temperature (max. 7-day avg.)	Analog recorder or Use micro-recording devices known as thermistors		0.2° C
	pH	SM4500-H^+ B	N/A	N/A
1	**NONCONVENTIONALS**			
	Total Alkalinity	SM2320-B		5 mg/L as CaCo3
	Chlorine, Total Residual	4500 Cl G		50.0
	Color	SM2120 B/C/E		10 color unit
	Fecal Coliform	SM 9221D/E	N/A	N/A
	Fluoride (16984-48-8)	SM4500-F E	25	100
	Nitrate-Nitrite (as N)	4500-NO3- E/F/H		100
	Nitrogen, Total Kjeldahl (as N)	4500-NH3-C/E/FG		300
	Ortho-Phosphate (PO_4 as P)	4500- PE/PF	30	100
	Phosphorus, Total (as P)	4500-PE/PF	30	100

	Pollutant & CAS No. *(if available)*	Recommended Analytical Protocol	Detection (DL)[1] *µg/L unless specified*	Quantitation Level (QL)[2] *µg/L unless specified*
	Oil and Grease (HEM)	1664A		5,000
	Salinity	SM2520-B		3 PSS
	Settleable Solids	SM2540 -F		100
	Sulfate (as mg/L SO_4)	SM4110-B		200
	Sulfide (as mg/L S)	4500-S^2F/D/E/G		200
	Sulfite (as mg/L SO_3)	SM4500-SO3B		2000
	Total dissolved solids	SM2540 C		20 mg/L
	Total Hardness	2340B		200 as CaCO3
	Aluminum, Total (7429-90-5)	200.8	2.0	10
	Barium Total (7440-39-3)	200.8	0.5	2.0
	Boron Total (7440-42-8)	200.8	2.0	10.0
	Cobalt, Total (7440-48-4)	200.8	0.05	0.25
	Iron, Total (7439-89-6)	200.8	12.5	50
	Magnesium, Total (7439-95-4)	200.8	10	50
	Molybdenum, Total (7439-98-7)	200.8	0.1	0.5
	Manganese, Total (7439-96-5)	200.8	0.1	0.5
	Tin, Total (7440-31-5)	200.8	0.3	1.5
	METALS, CYANIDE & TOTAL PHENOLS			
	Antimony, Total (7440-36-0)	200.8	0.3	1.0
	Arsenic, Total (7440-38-2)	200.8	0.1	0.5
	Beryllium, Total (7440-41-7)	200.8	0.1	0.5
	Cadmium, Total (7440-43-9)	200.8	0.05	0.25
	Chromium (hex) dissolved (18540-29-9)	SM3500-Cr EC	0.3	1.2
	Chromium, Total (7440-47-3)	200.8	0.2	1.0
	Copper, Total (7440-50-8)	200.8	0.4	2.0
	Lead, Total (7439-92-1)	200.8	0.1	0.5
	Mercury, Total (7439-97-6)	1631E	0.0002	0.0005
	Nickel, Total (7440-02-0)	200.8	0.1	0.5
	Selenium, Total (7782-49-2)	200.8	1.0	1.0
	Silver, Total (7440-22-4)	200.8	0.04	0.2
	Thallium, Total (7440-28-0)	200.8	0.09	0.36
	Zinc, Total (7440-66-6)	200.8	0.5	2.5
	Cyanide, Total (57-12-5)	335.4	5	10
	Cyanide, Available	SM4500-CN G	5	10
	Phenols, Total	EPA 420.1		50
	DIOXIN			
	2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16)	1613B	1.3 pg/L	5 pg/L

	Pollutant & CAS No. *(if available)*	Recommended Analytical Protocol	Detection (DL)[1] *µg/L unless specified*	Quantitation Level (QL)[2] *µg/L unless specified*
	VOLATILE COMPOUNDS			
	Acrolein (107-02-8)	624	5	10
	Acrylonitrile (107-13-1)	624	1.0	2.0
	Benzene (71-43-2)	624	1.0	2.0
	Bromoform (75-25-2)	624	1.0	2.0
	Carbon tetrachloride (56-23-5)	624/601 or SM6230B	1.0	2.0
	Chlorobenzene (108-90-7)	624	1.0	2.0
	Chloroethane (75-00-3)	624/601	1.0	2.0
	2-Chloroethylvinyl Ether (110-75-8)	624	1.0	2.0
	Chloroform (67-66-3)	624 or SM6210B	1.0	2.0
	Dibromochloromethane (124-48-1)	624	1.0	2.0
	1,2-Dichlorobenzene (95-50-1)	624	1.9	7.6
	1,3-Dichlorobenzene (541-73-1)	624	1.9	7.6
	1,4-Dichlorobenzene (106-46-7)	624	4.4	17.6
	Dichlorobromomethane (75-27-4)	624	1.0	2.0
	1,1-Dichloroethane (75-34-3)	624	1.0	2.0
	1,2-Dichloroethane (107-06-2)	624	1.0	2.0
	1,1-Dichloroethylene (75-35-4)	624	1.0	2.0
	1,2-Dichloropropane (78-87-5)	624	1.0	2.0
	1,3-dichloropropylene (mixed isomers) (542-75-6)	624	1.0	2.0
	Ethylbenzene (100-41-4)	624	1.0	2.0
	Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0
	Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0
	Methylene chloride (75-09-2)	624	5.0	10.0
	1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0
	Tetrachloroethylene (127-18-4)	624	1.0	2.0
	Toulene (108-88-3)	624	1.0	2.0
	1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0

	Pollutant & CAS No. *(if available)*	Recommended Analytical Protocol	Detection (DL)[1] *µg/L unless specified*	Quantitation Level (QL)[2] *µg/L unless specified*
	1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0
	1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0
	Trichloroethylene (79-01-6)	624	1.0	2.0
	Vinyl chloride (75-01-4)	624/SM6200B	1.0	2.0
	ACID COMPOUNDS			
	2-Chlorophenol (95-57-8)	625	1.0	2.0
	2,4-Dichlorophenol (120-83-2)	625	0.5	1.0
	2,4-Dimethylphenol (105-67-9)	625	0.5	1.0
	4,6-dinitro-o-cresol (534-52-1) (2-methyl-4,6,-dinitrophenol)	625/1625B	1.0	2.0
	2,4 dinitrophenol (51-28-5)	625	1.0	2.0
	2-Nitrophenol (88-75-5)	625	0.5	1.0
	4-nitrophenol (100-02-7)	625	0.5	1.0
	Parachlorometa cresol (59-50-7) (4-chloro-3-methylphenol)	625	1.0	2.0
	Pentachlorophenol (87-86-5)	625	0.5	1.0
	Phenol (108-95-2)	625	2.0	4.0
	2,4,6-Trichlorophenol (88-06-2)	625	2.0	4.0
	BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
	Acenaphthene (83-32-9)	625	0.2	0.4
	Acenaphtylene (208-96-8)	625	0.3	0.6
	Anthracene (120-12-7)	625	0.3	0.6
	Benzidine (92-87-5)	625	12	24
	Benzyl butyl phthalate (85-68-7)	625	0.3	0.6
	Benzo(*a*)anthracene (56-55-3)	625	0.3	0.6
	Benzo(j)fluoranthene (205-82-3)	625	0.5	1.0
	Benzo(r,s,t)pentaphene (189-55-9)	625	0.5	1.0
	Benzo(*a*)pyrene (50-32-8)	610/625	0.5	1.0
	3,4-benzofluoranthene (Benzo(b)fluoranthene) (205-99-2)	610/625	0.8	1.6
	11,12-benzofluoranthene (Benzo(k)fluoranthene) (207-08-9)	610/625	0.8	1.6
	Benzo(*ghi*)Perylene (191-24-	610/625	0.5	1.0

	Pollutant & CAS No. *(if available)*	Recommended Analytical Protocol	Detection (DL)[1] *µg/L unless specified*	Quantitation Level (QL)[2] *µg/L unless specified*
	2)			
	Bis(2-*chloroethoxy*)methane (111-91-1)	625	5.3	21.2
	Bis(2-*chloroethyl*)ether (111-44-4)	611/625	0.3	1.0
	Bis(2-*chloroisopropyl*)ether (39638-32-9)	625	0.3	0.6
	Bis(2-*ethylhexyl*)phthalate (117-81-7)	625	0.1	0.5
	4-Bromophenyl phenyl ether (101-55-3)	625	0.2	0.4
	2-Chloronaphthalene (91-58-7)	625	0.3	0.6
	4-Chlorophenyl phenyl ether (7005-72-3)	625	0.3	0.5
	Chrysene (218-01-9)	610/625	0.3	0.6
	Dibenzo (a,j)acridine (224-42-0)	610M/625M	2.5	10.0
	Dibenzo (a,h)acridine (226-36-8)	610M/625M	2.5	10.0
	Dibenzo(a-*h*)anthracene (53-70-3)(1,2,5,6-dibenzanthracene)	625	0.8	1.6
	Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0
	Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0
	3,3-Dichlorobenzidine (91-94-1)	605/625	0.5	1.0
	Diethyl phthalate (84-66-2)	625	1.9	7.6
	Dimethyl phthalate (131-11-3)	625	1.6	6.4
	Di-n-butyl phthalate (84-74-2)	625	0.5	1.0
	2,4-dinitrotoluene (121-14-2)	609/625	0.2	0.4
	2,6-dinitrotoluene (606-20-2)	609/625	0.2	0.4
	Di-n-octyl phthalate (117-84-0)	625	0.3	0.6
	1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	1625B	5.0	20
	Fluoranthene (206-44-0)	625	0.3	0.6
	Fluorene (86-73-7)	625	0.3	0.6
	Hexachlorobenzene (118-74-1)	612/625	0.3	0.6
	Hexachlorobutadiene (87-68-	625	0.5	1.0

	Pollutant & CAS No. *(if available)*	Recommended Analytical Protocol	Detection (DL)[1] *µg/L unless specified*	Quantitation Level (QL)[2] *µg/L unless specified*
	3)			
	Hexachlorocyclopentadiene (77-47-4)	1625B/625	0.5	1.0
	Hexachloroethane (67-72-1)	625	0.5	1.0
	Indeno(*1,2,3-cd*)Pyrene (193-39-5)	610/625	0.5	1.0
	Isophorone (78-59-1)	625	0.5	1.0
	3-Methyl cholanthrene (56-49-5)	625	2.0	8.0
	Naphthalene (91-20-3)	625	0.3	0.6
	Nitrobenzene (98-95-3)	625	0.5	1.0
	N-Nitrosodimethylamine (62-75-9)	607/625	2.0	4.0
	N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0
	N-Nitrosodiphenylamine (86-30-6)	625	0.5	1.0
	Perylene (198-55-0)	625	1.9	7.6
	Phenanthrene (85-01-8)	625	0.3	0.6
	Pyrene (129-00-0)	625	0.3	0.6
	1,2,4-Trichlorobenzene (120-82-1)	625	0.3	0.6
1	**PESTICIDES/PCBs**			
	Aldrin (309-00-2)	608	0.025	0.05
	alpha-BHC (319-84-6)	608	0.025	0.05
	beta-BHC (319-85-7)	608	0.025	0.05
	gamma-BHC (58-89-9)	608	0.025	0.05
	delta-BHC (319-86-8)	608	0.025	0.05
	Chlordane (57-74-9)	608	0.025	0.05
	4,4'-DDT (50-29-3)	608	0.025	0.05
	4,4'-DDE (72-55-9)	608	0.025	0.05[10]
	4,4' DDD (72-54-8)	608	0.025	0.05
	Dieldrin (60-57-1)	608	0.025	0.05
	alpha-Endosulfan (959-98-8)	608	0.025	0.05
	beta-Endosulfan (33213-65-9)	608	0.025	0.05
	Endosulfan Sulfate (1031-07-8)	608	0.025	0.05
	Endrin (72-20-8)	608	0.025	0.05
	Endrin Aldehyde (7421-93-4)	608	0.025	0.05
	Heptachlor (76-44-8)	608	0.025	0.05
	Heptachlor Epoxide (1024-57-3)	608	0.025	0.05

	Pollutant & CAS No. *(if available)*	Recommended Analytical Protocol	Detection (DL)[1] *µg/L unless specified*	Quantitation Level (QL)[2] *µg/L unless specified*
	PCB-1242 (53469-21-9)	608	0.25	0.5
	PCB-1254 (11097-69-1)	608	0.25	0.5
	PCB-1221 (11104-28-2)	608	0.25	0.5
	PCB-1232 (11141-16-5)	608	0.25	0.5
	PCB-1248 (12672-29-6)	608	0.25	0.5
	PCB-1260 (11096-82-5)	608	0.13	0.5
	PCB-1016 (12674-11-2)	608	0.13	0.5
	Toxaphene (8001-35-2)	608	0.24	0.5

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.
2. Quantitation Level (QL) is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points. These levels were published as proposed in the Federal Register on March 28, 1997.

APPENDIX B--GLOSSARY

Acute Toxicity--The lethal effect of a compound on an organism that occurs in a short period of time, usually 48 to 96 hours.

AKART – The acronym for "all known, available, and reasonable methods of prevention, control and treatment." AKART is a technology-based approach to limiting pollutants from wastewater discharges which requires an engineering judgment and an economic judgment. AKART must be applied to all wastes and contaminants prior to entry into waters of the state in accordance with RCW 90.48.010 and 520, WAC 173-200-030(2)(c)(ii), and WAC 173-216-110(1)(a).

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Best Management Practices (BMPs)--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. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

Bypass--The intentional diversion of waste streams from any portion of a treatment facility.

Chlorine--Chlorine is used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Chronic Toxicity--The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

Clean Water Act (CWA)--The Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling—A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations. In addition it includes as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Ecology may conduct additional sampling.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--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, or industrial buildings, and demolition activity.

Continuous Monitoring –Uninterrupted, unless otherwise noted in the permit.

Critical Condition--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Detection Limit – See Method Detection Level.

Dilution Factor (DF)--A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction e.g., a dilution factor of 16 means the effluent comprises 6.25% by volume and the receiving water comprises 93.75% (DF = 1/0.0625)

Engineering Report--A document which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report must contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Fecal Coliform Bacteria--Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.

Grab Sample--A single sample or measurement taken at a specific time or over as short a period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the pollutant concentration is above zero and is determined from analysis of a sample in a given matrix containing the pollutant.

Mixing Zone--An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The area of the authorized mixing zone is specified in a facility's permit and follows procedures outlined in state regulations (chapter 173-201A WAC).

National Pollutant Discharge Elimination System (NPDES)--The NPDES (Section 402 of the Clean Water Act) is the Federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the State of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both State and Federal laws.

OHWM-- Ordinary high water mark" on all lakes, streams, and tidal water is that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the department: PROVIDED, That in any area where the ordinary high water mark cannot be found, the ordinary high water mark adjoining salt water shall be the line of mean higher high tide and the ordinary high water mark adjoining fresh water shall be the line of mean high water;

pH--The pH of a liquid measures its acidity or alkalinity. It is the negative logarithm of the hydrogen ion concentration. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Pressure Washer – a mechanical device that uses high pressure water at 3000 psi (discharge of 3 gallons/minute).

Quantitation Level (QL)-- The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision &bias) achieves the objectives of the intended purpose. This may also be called Minimum Level or Reporting Level.

Reasonable Potential — A reasonable potential to cause a water quality violation, or loss of sensitive and/or important habitat.

Technology-based Effluent Limit--A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to receiving waters may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Solid waste -- All putrescible and non-putrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater--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 storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Upset--An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the facility. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into receiving waters.

APPENDIX C – WSDOT PROTOCOL FOR WASHWATER EFFLUENT DISPOSAL TO UPLAND AREAS FROM THE BRIDGE PAINT PREPARATORY WASHING AND BRIDGE MAINTENANCE WASHING ACTIVITIES

WSDOT PROTOCOL FOR WASHWATER EFFLUENT DISPOSAL TO UPLAND AREAS FROM BRIDGE PAINT PREPARATORY WASHING and BRIDGE MAINTENANCE WASHING ACTIVITIES

February 4, 2010
Revised February 8, 2013

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INTRODUCTION

On December 18, 2009 the Department of Ecology re- issued the Washington State Department of Transportation (WSDOT) a National Pollution Discharge Elimination System (NPDES) Wastewater Discharge Permit No. WA-00039039. This permit covers the wash water disposal for bridge and ferry terminal washing activities. Under Section S.1 A, B, and D, of the permit WSDOT is required to develop a plan or protocol describing the methods they will use to determine if discharging bridge washing effluent to ground is appropriate. When the permit was first issued April 3, 2004, WSDOT was authorized, through a compliance schedule, to discharge bridge washing effluent associated with bridge preparation for painting to ground provided WSDOT conducted a groundwater study to determine if effluent had the potential to violate groundwater standards. The study was required because of the potential need to discharge effluent to ground where discharge to surface waters was not allowed.

WSDOT hired John Lenth of Hererra Environmental Consultants, Inc. to prepare the report. The final report, titled ***WATER QUALITY IMPACT EVALUATION – Ground Disposal of Effluent from WSDOT Preparatory Bridge Washing, January 2008*** was submitted to Ecology that same month for review.. Based on information from that study, the new permit includes more restrictive criteria for discharging bridge washing effluent to the upland and dry stream bed areas. The new permit also expands the ground water discharge limitations to apply to bridge maintenance washing activities under S.1. A and B. WSDOT and Ecology agreed to develop a protocol to clarify how to implement the new ground water discharge limitations in the field for the three types of bridge washing activities. The following protocol captures multiple scenarios that occur for preparatory washing, maintenance washing and spot cleaning washing.

The permit covers three different activities for bridges and ferry terminals. The focus of this plan is on bridges.

(1) Factors to consider in Preparatory Washing – Bridge Painting:
- 303(d) listing for metals
- Surface Water flows at the time of washing
- Near shore area – boundary and existing condition
- Exposed area between the OHWM and actual flowing water

(2) Factors to consider in Maintenance Washing:
- 303(d) listing for metals
- Near shore area – boundary and existing condition
- Exposed area between OHWM and actual flowing water

(3) Spot Cleaning:
- 303(d) listing for metals
- Near shore area – boundary and existing condition

- Exposed area between OHWM and actual flowing water

BACKGROUND INFORMATION

PREPARATORY WASHING – BRIDGE PAINTING SCENARIOS

The groundwater study showed the dissolved metal concentrations in the bridge washing effluent for preparatory washing had the potential to violate groundwater standards. The study also developed criteria to use in determining if the effluent would result in a violation based on soil type, slope of ground, and distance of sheet flows to infiltrate wash water. The study concluded that discharges to an upland area where the groundwater table was at least 1.5 feet below the surface didn't have the potential to impact ground water.

303(d) listing: If a project occurs over a water body that is 303(d) listed for any of the metals of concern (copper, lead, zinc) the permit does not allow discharge of the bridge effluent to surface waters. In this scenario, WSDOT could discharge all the wash water to ground. WSDOT would have to identify an area where the groundwater depth is at least 1.5 feet below ground or meets the criteria outlined in the groundwater study based on soil type, slope of the ground and distance water can sheet flow over the surface. In all cases, BMPs would be utilized, if necessary, to contain the water to this area to allow for infiltration and prevent the discharge from reaching the near shore areas (where groundwater is less than 1.5 feet to surface) or reaching any exposed area below the OHWM or reaching surface waters.

Sufficient Surface Flow: If a project occurs over a water body where the flows (CFS) are sufficient for a mixing zone as outlined in the NPDES permit Section D, then WSDOT will evaluate the areas underneath those portions of the bridge structure that are over land and determine if they can discharge in this location or not. The discharge to surface waters is allowed and discharge to ground where the depth to ground water is at or greater than 1.5 feet is also allowed or the protocol outlined in the report are followed to determine infiltration based on soils, slope, and sheet flow distance. Where the near shore area is soil but groundwater is within 1.5 feet of the surface, no discharge of wash water is allowed. For those areas, WSDOT would have to direct the discharge to identified upland locations where discharge to ground is allowed or direct the discharge directly to the surface waters where mixing can occur. If the near shore area is riprap or some other impermeable surface that traps and holds wash water, no discharge – direct discharge to identified areas where discharge to ground is allowed or direct discharge to surface waters. For any areas below the OHWM that are exposed, i.e. not covered with flowing water, no discharge – direct discharge to areas where discharge to ground is allowed or direct discharge to surface waters.

MAINTENANCE WASHING SCENARIOS:

The permit does not have flow restrictions of the receiving water body for maintenance washing, does not require the use of a permeable tarp to filter maintenance wash water and has a timing window for conducting maintenance washing. The boundary for the near shore area will have to be defined based on the ground water depth. WSDOT demonstrated from the data collected to date that dissolved metal concentrations in

maintenance washing effluent do not have the potential to violate the groundwater standards, and is allowed to discharge to ground in the near shore area. However, WSDOT is still not allowed to discharge to exposed riverbed (areas between the OHWM and physical flow) where surface water quality standards apply which are more stringent than ground water standards and there is no mixing occurring in this area.

When discharging to the ground above the OHWL (referred to as upland area), there can be surface runoff traveling across the ground that could reach the river. In cases where there is no potential for violating groundwater standards, this runoff is allowed to discharge to the river provided there is no violation of the turbidity standards at the point of discharge. Visual monitoring the turbidity levels will be performed or BMPs will be used to control turbidity to ensure compliance with the standards. Overland runoff is not allowed to discharge to an area below the OHWM where there is no flow for reasons stated above.

If the maintenance wash water is shown to exceed groundwater standards, then over land discharge to the receiving water is not allowed. The discharge would have to be directed to areas of upland where groundwater is at, or greater than, 1.5 feet below the surface or directly to the water body where water is flowing or discharged to flowing water.

303(d) listing: If maintenance washing occurs over a water body that is 303(d) listed for any of the metals of concern (copper, lead, and zinc) there can be no discharge of the bridge effluent to surface waters. In this scenario, WSDOT could discharge all the wash water to ground or capture and dispose of offsite. WSDOT must identify an area where the groundwater depth is at least 1.5 feet below ground or meets the soil type, ground slope, and sheet flow distance as outline in the Ground *Disposal of Effluent from WSDOT Preparatory Bridge Washing, January 2008.* If necessary, BMPs are employed to contain the water to this area to allow for infiltration and prevent the discharge from reaching near shore areas (where groundwater is less than 1.5 feet to surface) or reaching any exposed area below the OHWM or reaching surface waters.

SPOT CLEANING:
The groundwater plan or protocol developed for maintenance washing also applies to spot cleaning. However, it should be noted that the permit currently requires WSDOT to collect data on the volume of water used to conduct spot cleaning. At the end of the 5 year cycle, volume data can be compiled and compared to the maintenance wash volumes. If the data from maintenance washing shows that dissolved metal concentrations are not a concern and the volume of water used for maintenance washing is higher than spot cleaning, the same scenarios described under maintenance washing would apply here. Note that this activity also uses BMPs where WSDOT may utilize full containment of the discharge during washing activities.

303(d) listing: If a project occurs over a water body that is 303(d) listed for any of the metals of concern (copper, lead, and zinc) there can be no discharge of the bridge effluent to surface waters. In this scenario, WSDOT may consider discharging all the wash water to ground. To do so, WSDOT must identify an area where the groundwater depth is at 1.5 feet below ground or greater. They also have to employ BMPs that contain the water to

this area to allow for infiltration and prevent the discharge from reaching near shore areas (where groundwater is less than 1.5 feet to surface) or reaching any exposed area below the OHWM or reaching surface waters.

Process for establishing if wash water effluents can be discharged to uplands

Preparatory Washing:
Preparatory Washing is typically done by a contractor. If this work is included in a contract, WSDOT will investigate the upland areas adjacent to the bridge structure to determine if ground disposal of the wash water meets the soil, slope, and distance requirements outlined in the *Ground Disposal of Effluent from WSDOT Preparatory Bridge Washing, January 2008* report. The pertinent portions of the report will be included in the contract specifications, including no discharge of effluent to impervious surfaces such as riprap adjacent to the waterbody and no discharge to the any portion of a dry bed. In lieu of following the soil, grade, and distance criteria for infiltration, WSDOT may elect to establish that the groundwater table is at least 1.5 feet below the surface where wash water would be deposed of in the upland areas. This is done through field verification by digging a series of holes where the water will be discharged. If no water is found standing in the hole after 30 minutes, then it is presumed the water table is deeper than 1.5 feet below the surface at that location. If standing water is visible in the bottom of the hole, another hole will be dug three feet up slope and process repeated until an upland area is found where the groundwater is deep enough for ground discharge of the wash water. In areas where riprap or other impervious services are under the structure or where the water level is below the OHWL exposing parts of the stream bed, tarps will be utilized to direct the wash water to an acceptable upland area or directly into the receiving water. BMPs will be installed to contain surface runoff from reaching the riprap or the exposed stream bed.

Maintenance Washing and Spot Cleaning:
The bridge crew will review plans of the bridge structure to be washed to determine if part of the bridge is located outside the OHWL. If it is, they will field verify the ground water depth by digging a series of holes at least 1.5' deep just up slope of the OHWL. If no water is found standing in the hole after 30 minutes, then it is presumed the water table is deeper that 1.5 below the surface at that location. If standing water is visible in the bottom of the hole, another hole will be dug three feet up slope and process repeated until it is established where the groundwater is deep enough for ground discharge of the wash water.

If the slope under the structure has been covered with an impervious material, such as a concrete slap or interconnected pavers, tarps will be installed to either direct the wash water into an acceptable upland area, or directly discharge the wash water into the waterbody.

If wash water is discharged to the upland above the impervious area, BMPs will be installed to contain the water and allow it infiltrate into the ground.

If at the time the bridge washing occurs the water level of the receiving water is below the ordinary high water line leaving an area of exposed bed, the same process used for riprap areas will be utilized.

If there is no impervious surface, and the water level is at, or above, the OHWL the wash water discharged to the upland area will be allowed to sheet flow into the water body. When this is done, the area where the water enters the water body will be visually monitored to insure no erosion is happening and there is no sediment discharge to the water. Appropriate BMPs will be installed, if necessary, to control erosion and sediments.

OVERLAND DISCHARGE OF MAINTENANCE WASH WATER

The data submitted to date on maintenance washing indicates that discharges to ground would not result in a violation of the groundwater standards. Table 1 shows the data collected on dissolved metal concentrations from four bridge washing projects. WSDOT proposes to continue discharge of maintenance wash water to ground for those portions of the structure that are located over upland areas. In addition to the data collected to date, this proposal is also based on the reasonable potential analysis completed by Ecology showing that past maintenance projects have not resulted in a violation of water quality standards. This proposal does not include discharging to impervious surfaces (such as riprap) in the near shore area, or exposed areas located below the OHWM. The practices described above for maintenance washing would still apply to 303(d) listed waterbodies and, on all projects, WSDOT would visually monitor any overland discharge to ensure no erosion is occurring. Appropriate BMPs will be installed if necessary to control erosion and sediments.

Table 1 : Maintenance Wash Data from 2000 to 2005

	I-5, Skookumchuck River 2004	US 101, Hoquiam River 2006	Interstate 5, Cowlitz River 2007	US 12, Wiskah River 2008	Ground Water Criterion
Dissolved Copper	.022 mg/L	.006 mg/L	.24 mg/L	ND mg/L	1.0 mg/L
Dissolved Lead	.048 mg/L	.04 mg/L	.76 mg/L	ND mg/L	0.05 mg/L
Dissolved Zinc	3.20 mg/L	.06 mg/L	1.3 mg/L	ND mg/L	5.0 mg/L