

Puyallup Tribe of Indians (Andrew Annanie)

- S4. DISCHARGE LIMITS, B. Bridge Spot Cleaning & C. Bridge Routine Maintenance Cleaning and Washing & D. Bridge Preparatory (Pre-painting) Cleaning and Washing, 2.: This should also be the case for wetlands, lakes, and rivers listed as Category 4 or 5 for fecal coliform and TSS/Turbidity. Bird droppings can contain various fecal coliform bacteria. Though the permit does require that dry cleaning methods be employed on bridges that have nesting colonies of birds, this does not account for structures used by non-nesting/transient birds? It is also likely that some unknown percentage of the birds droppings present will be missed/overlooked when conducting dry cleaning. The WET testing conducted by WSDOT for preparatory washing found that wash water from one of the two washings sampled showed toxicity to flathead minnows, despite exhibiting copper, lead, and zinc concentrations below known toxic thresholds. It was speculated that high turbidity present in the wash water was the primary reason for the observed mortalities.
- S4. DISCHARGE LIMITS, B. Bridge Spot Cleaning & C. Bridge Routine Maintenance Cleaning and Washing, 5.: There should be a provision included here that restricts discharge during periods in which flows are much below normal (percentile range: 5-10) and extremely below normal (percentile range: 0-5) based on USGS daily discharge data.
- S4. DISCHARGE LIMITS, D. Bridge Preparatory (Pre-painting) Cleaning and Washing & F. Ferry Transfer Span & Associated Overwater Metal Structures, Preparatory (Pre-painting) Cleaning and Washing, 1.(D.), 5. (D.), 1. (F.), & 6. (F.): While full encapsulation of a structure such that all wash water runoff can be collected and treated is often cost prohibitive, there are more cost-effective means for significantly reducing the amount of runoff that is discharged into the environment. Vacu-boom spill containment systems can be used to capture runoff that collects on the roadway or any other large, horizontal surface of a structure (or onto an impervious surface laid across the ground beneath a structure if discharging onto exposed soil). For vertical surfaces, pressure washers equipped with built-in waste water recovery systems, such as Mosmatic's Multi-Purpose, Aqua, and Allrounder surface clears, can be used. These systems may not recover 100% of the waste water generated but they will significantly reduce runoff. Rather than relying on preparatory washing to prepare a structure for re-painting, laser ablation/cleaning methods, such as those offered by Adapt Laser, LaserAx, and Laser Photonics, have been proven to be very effective, practical, environmentally friendly, and often less costly than traditional methods. Would it be possible to add a provision to the permit that requires the implementation of such methods?
- S4. DISCHARGE LIMITS, D. Bridge Preparatory (Pre-painting) Cleaning and Washing, 3.: There should be a provision included here that restricts discharge during periods in which flows are much below normal (percentile range: 5-10) and extremely below normal (percentile range: 0-5) based on USGS daily discharge data.
- S4. DISCHARGE LIMITS, E. Ferry Transfer Span & Associated Over-Water Metal Structures (includes the tower, overhead walkways, wingwalls, and dolphins) Routine Maintenance Cleaning and Washing and Marine Growth Removal, 6.: When removing marine growth from creosote or any other treated wood, a containment structure should be required to catch any dislodged creosote or treated wood fibers.
- S4. DISCHARGE LIMITS, G. Mixing Zone Descriptions: When establishing dilution factors and

minimum river flow/tidal exchange limits for the mixing zones, did you take into account the possibility of mixing zone overlap from culverts and other potential discharge points adjacent to the bridge/ferry terminal structure?

•S8. REPORTING AND RECORDKEEPING REQUIREMENTS, A. Reporting, 2.: Why did the wastewater characterization analysis only consider lead, copper, and zinc and not other toxic substances that can be found in paints, primers, sealants, etc. such as chromate (chromium), cadmium, VOC's, 4,5-dichloro-2-n-octyl-4-isothiazolin-3-one (DCOIT), phenols and alkylphenols, phthalates, Isothiazolinones (such as Methylisothiazolinone, Chloromethylisothiazolinone, Benzisothiazolinone, & Octylisothiazolinone) etc? All of these substances are toxic to fish, some highly so. It would seem prudent to understand how much of a danger such chemicals pose at the concentrations observed in the wash wastewater. It is possible that some of these chemicals contributed to the flathead minnow mortality documented in the WET testing.

•S8. REPORTING AND RECORDKEEPING REQUIREMENTS, C. Reporting Permit Violations: Does Ecology have a means of enforcing compliance or penalizing repeat offenders of non-compliance/violations, beyond just revocation of coverage?

•S8. REPORTING AND RECORDKEEPING REQUIREMENTS, E. Notification of fish kill, 3.: State and Tribal biologists should be notified of a fish kill and given the opportunity to collect information on affected fish species, sex, age class, size, hatchery vs wild stock, CWT presence, biological samples (scales/tissue/otolith), etc.

•G5. RIGHT OF INSPECTION AND ENTRY: Does DOE conduct unannounced inspections on a routine basis?

•Ambient background levels for water hardness, copper, lead, and zinc concentrations in western Washington are based on data collected in 2003 and 2009. Is this still representative of current ambient background levels or should this be re-evaluated using more up-to-date data? Is there a requirement to update this information on a regular basis? Are the background receiving water samples that are collected as part of the annual 10% representative bridge maintenance cleaning and flushing projects sampling effort used for this purpose?