DRAFT COMMENTS BY SRRTTF

The following comments on the draft National Pollutant Discharge Elimination System (NPDES) permit No. WAG-130000, the Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country are being made on behalf of the Spokane River Regional Toxics Task Force (SRRTTF).

**Background:**

The Spokane River is currently listed on the EPAs 303(d) list as impaired for PCB (polychlorinated biphenyl’s). Because PCB pollution in the watershed is derived from a complex combination of point sources, non-point sources, ground water and potential airborne sources, the problem is being addressed by a “Direct to Implementation” called the Spokane River Regional Toxics Task Force (SRRTTF). The SRRTTF was conceptualized in 2011 and is a highly cooperative effort that was formalized in 2012 with a Memorandum Of Agreement that was signed by permitees, agencies and stakeholders so as to identify roles, a process, responsibility’s by which the effort would proceed. As such, The SRRTTF is composed of federal and state agencies, Departments of Health, dischargers under NPDES permits, those with Stormwater permits, non-profit, public advocates and others. It is an NPDES permit requirement of all entities discharging PCBs into the Spokane River that they participate in the SRRTTF. The goal of the Task Force is to address this complex issue by developing a comprehensive plan and to make measurable progress in bringing the Spokane River into compliance with applicable water quality standards for PCBs. The comprehensive plan is currently being constructed and will identify PCB loads, identify sources, pathways of those PCBs into the Spokane River and finally, it will recommend PCB control options and/or Best Management Practices (BMPs) to prevent the transport of these toxins. In that spirit, the SRRTTF is intensely focused on any and all sources, means of transportation and the fate of (all 209 congeners) PCBs inside this watershed. The SRRTTF is also interested in the analysis of PCB congeners that are associated with this process, with ensuring that the results for effluent monitoring and Discharge Monitoring Reports (DMRs) are accessible and usable for the SRRTTF as they work with the EPA towards meeting applicable water quality standards. Understanding the full suite of congeners is vitally important as these all have public health implications when bio-accumulated in the fish that people catch and eat. It should be noted that all dischargers and stakeholders are endeavouring to meet applicable Water Quality Standards for the State of Washington that are 170 picograms/Liter, and that the SRRTTF must work towards meeting the more protective and rigorous Spokane Tribal standard of 1.3 pg/L.

Recently, fish hatcheries have come under increased scrutiny for their contributions to the PCB loading into the waters they service with reared fish, and into the water bodies that they discharge into. A 2006 Washington Department of Ecology study indicated that “PCBs tended to be highest in hatchery fish whose food had comparatively high PCB concentrations” (Ecology, 2006). Clearly, fish food and the bioaccumulation of PCBs in the trout that are reared (and spawned) in the hatcheries is a delivery mechanism if they are planted into 303 (d) listed bodies. This problem is exacerbated by the fact that PCB concentrations in commercially prepared fish food are permitted up to a ceiling of 50 parts per million under the Toxic Substance Control Act. This is orders of magnitude over the water quality standards that all for the Spokane River Basin are trying to get to. The SRRTTF has identified fish hatchery effluent and potentially reared trout as a source of PCB loading into the Spokane River and will endeavour to address this pathway as the Comprehensive Plan is implemented.

**SRRTTF Comments:**

As such, SRRTTF comments pertain to Section D, IV (pages 23-24)-*Effluent Limitations and Monitoring Requirements-PCB Monitoring for Facilities in the Spokane Watershed.* This portion of the federal permit covers the Ford State Hatchery and the Spokane Tribal Hatchery that discharge into WRIA 54, which is a portion of the Lower Spokane River listed as category 5 on the 303d list for PCB impairment. SRRTTF comments pertain directly to these two facilities inside WRIA 54. The SRRTTF believes that the proposed hatchery permit needs the additional requirement of a **Toxics Management Plan** that addresses the following:

* Identification of PCB sources brought through, stored on or produced inside the hatcheries.
* A monitoring program to understand the magnitude of contributions of both hatchery facilities to the watershed.
* Implementation of Best Management Practices (BMPs) that control the transport of PCBs by eliminating their presence and/or the pathways to Chamokane Creek and the Spokane River.
* A reporting framework and schedule for sharing the results of the proposed permit requirements so that they can be used by the SRRFFT as they endeavour to achieve water quality standards.

What follows are specifics that are grounded in these four points.

**Recommended Toxics Management Plan Requirements:**

* The Toxics Management Plan for both hatcheries should require **PCB monitoring of effluent** for **all 209 PCB congeners**. This monitoring should use the SRRTTF QA/QC . Both hatcheries should monitor effluent discharged from their facilities for **total PCBs in pg/L units Quarterly** , based on a 24-hour composite sample. The test method for PCBs shall be EPA test method 1668C or comparable test method that achieves a 50 pg/L method detection limit, or lower. This requirement should include effluent from raceways, rearing ponds and waste settling basins.
* **All 209 congeners must be submitted and documented in the DMRs (rather than as an attachment).**
* Both hatcheries should record the date, number and location of fish released by WDFW and the Spokane Tribe into the Spokane River, Little Spokane River, Lake Spokane or any water body that ultimately drains to the Spokane River.
* Both hatcheries should conduct annual testing of whole fish for PCBs using EPA method 1668c. This should include fish that are in any age classes that are released (Ex: fingerling, yearlings or brood stock) and should look for and report out any and all of the 209 PCB congeners found.
* Both hatcheries should monitor Chamokane Creek sediments from downstream of the hatchery facilities (within one mile) for total PCBs (all 209 congeners) in pg/L units once every 12 months. The test method for PCBs shall be EPA test method 1668C or comparable test method that achieves a 50 pg/L method detection limit, or lower, **for all PCB congeners**. This monitoring requirement should be discontinued in subsequent permit cycles if PCB concentrations in sediments are found to be below 110 ug/kg.
* Timetable: the Toxics Management Plan for both hatcheries should be submitted to EPA no longer than one year after the permit is issued and implemented no later two years after the permit is issued.

**Recommended Best Management Practices Requirement’s:**

The NPDES permit should require both hatcheries to implement PCB Best Management Practices within two years from the effective date of the permit regarding source control and **elimination of PCBs in from facility/site materials that are immediately adjacent to/or exposed to the Raceways rearing or holding ponds.**

* **Identify/Inventory** electrical equipment and components containing insulating or dielectric oil manufactured prior to May 31, 1979, including but not limited to transformers, capacitors, regulators, reactors, circuit breakers, switch gear and fluorescent lighting ballasts.
* **Identify/Inventory** construction material including but not limited to paints and caulking near/exposed to raceways and/or rearing and holding ponds.
* **Identify/Inventory** the presence of commercial materials including but not limited to ink, dyes and lubricants that are near/exposed to raceways and/or rearing and holding ponds
* Submit a **report of the inventory** of above materials, their locations and proximity to raceways or Chamokane Creek to the SRRTTF so that they can use this information as they move ahead with the Comprehensive Plan.
* Prepare a **plan for removal** of these materials and **create timelines for removal (within the two year window)** – submit this plan to SRRTTF for review so that the SRRTTF can use this information as they move ahead with the Comprehensive Plan.
* Identify/Inventory any areas that may contain contaminated soils, sediments or storm water entering or leaving both facilities.
* **Execute the removal** of materials as per the timelines developed above.

The SRRTTF recommend that the Permit requires implementation of PCB BMPs with regards to fish food within **two years from the effective date of the permi**t. Facilities must implement purchasing procedures that give **preference** for fish food that contains the lowest amount of PCBs possible. These BMPs should be in place with the eventual goal of eliminating PCBs from fish food used in both hatcheries. The permit should contain the following elements, at a minimum:

* **Document and implement purchasing procedures** that give preference for fish food that contains the lowest amount of PCBs possible.
* **Document and implement fish feeding practices** that minimize the discharge of unconsumed food.
* **Document and implement methods to reduce and remove accumulated fish feed** regularly to keep feed out of the discharge.
* Permittees must **request PCB content information** from fish food suppliers and include documentation in the Toxics Management Plan.
* Provide **containment for raceway food/fish waste** so that it does on enter Chamokane Creek.

**Recommended Reporting requirements:**

The Permit must require **Reporting** (in addition to DMRs) of both monitoring findings as well as the progress of BMP implementation to the EPA as well as the SRRTTF (such that it is usable to the SRTTF and can be utilized in the Comprehensive Plan). This reporting is based on the findings of above BMPS and Toxics Management Plan

Both Hatcheries (Spokane Tribal Hatchery and the Ford WA Hatchery) operating in WRIA 54 should be required to compile and **report the following annually by June 1st every year** of operation and submit/present this report to this SRRTTF:

* Report the results of PCBs in effluent tests/analysis for all 209 congeners
* Report the results of Chamokane Creek PCB sediment monitoring tests.
* Report the test results of annual PCB levels in whole fish (both yearling and brood stock)
* Report the numbers of fish released into the Spokane River Watershed.
* Report the results of the materials, caulks and paints disposal; summary of effectiveness – report the results (amounts) of pre-1979 caulks and paints removed and replaced with PCB free tested products.

**Participation in the Spokane River Toxics Task Force:**

The Permittee shall participate as a member of the Spokane River Regional Toxics Task Force under the terms and conditions of the January 23, 2012, Memorandum of Agreement in their endeavor to construct a comprehensive plan to:

* identify PCB sources and pathways of PCB loading.
* identify best management practices to control PCB pollution.
* make measurable progress in bringing the Spokane River into compliance with the applicable water quality standards for PCBs.

The nature, transport and fate of PCB pollution in the Spokane River is of the utmost importance to all stakeholders in the Spokane River Watershed. Millions of dollars are being spent to research and to make measurable progress in meeting water quality standards in the basin, and we feel that the above recommendations are in line with the gravity of this issue. Thank you very much for the opportunity to comment on NPDES permit No. WAG-130000.

Respectfully,

**References:**

Persistent Organic Pollutants in Feed and rainbow Trout from Selected Trout Hatcheries. Washington State Department of Ecology, April 2006, Publication No. 06-03-017