SPOKANE RIVER
REGIONAL TOXICS TASK FORCE

COLLABORATION INNOVATION PROGRESS

To: Catherine Gockel, Permit Writer, Environmental Protection Agency
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From: Spokane River Regional Toxics Task Force

Date: March 28, 2016

Subject: Response to Draft National Pollutant Discharge Elimination System (NPDES) permit No. WAG-130000, the Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country.

Dear Catherine Gockel,

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 Ecology's 303(d) list as impaired for PCB (polychlorinated biphenyls). Because PCB pollution in the watershed is derived from a complex combination of point sources, non-point sources, stormwater, ground water and potential airborne sources, the problem is being addressed by an innovative implementation process 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 NPDES permittees, agencies and stakeholders so as to identify roles, process, and responsibilities by which the effort would proceed. SRRTTF membership and participation includes federal and state agencies, local departments of health, dischargers under NPDES wastewater and MS4 stormwater permits, non-profit organizations, public advocates and others. Participation in the SRRTTF is a requirement in the eight individual NPDES permits on the Spokane River in Washington and Idaho. The goal of the Task Force is to address this complex issue by developing a comprehensive plan and to make measurable progress towards bringing the Spokane River into compliance with applicable water quality standards for PCBs. The comprehensive plan is currently being developed and will identify PCB loads, sources, pathways of 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 toxic chemicals to the river. In that context, 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 requests that Discharge Monitoring Reports (DMRs) and full data sets are accessible and publicly available as they work towards meeting applicable water quality standards. The SRRTTF is using test methods to evaluate PCBs on a congener basis to help identify potential sources and better understand the relationship between PCBs in air, water, sediments and fish tissue.

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 2 parts per million under FDA regulations. This allowance is orders of magnitude above the applicable water quality standard goals of the SRRTTF. 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:

SRRTTF comments are directed 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 Water Resource Inventory Area (WRIA) 54, which is a portion of the Lower Spokane River listed as Category 5 on the EPA approved section 303(d) list for Washington of impaired water bodies for PCBs. 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 SRRTTF as they endeavor to achieve water quality standards.

What follows are specific elements that should be included in additional permitting conditions for 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. 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 10 pg/L per congener method detection limit, or lower. This requirement should include effluent from raceways, rearing ponds and waste settling basins.
- 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 sample and test whole fish for PCBs if they are to be stocked in the Spokane River Watershed. This sampling should use 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 conduct testing of fish food for PCBs using EPA method 1668C. The analysis should include a representative composite sample from each batch of differing fish meals fed to the hatchery fish.

- Both hatcheries should monitor total suspended solids (TSS) in the hatchery effluent 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 10 pg/L method detection limit, or lower, for all PCB congeners.
- 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 than two years after the permit is issued.

Recommended Best Management Practices Requirements:

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 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.
- Within two years, prepare a plan for removal of these materials and create timelines for removal.
- Identify/Inventory any areas that may contain contaminated soils, sediments or storm water entering or leaving both facilities.

The SRRTTF recommends that the Permit require implementation of PCB BMPs to reduce or preferably eliminate concentrations in fish food within two years from the effective date of the permit. 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 make publically available monitoring results as well as the progress of BMP implementation to the EPA as well as the SRRTTF (such that it is usable to the SRRTTF and can be utilized in the Comprehensive Plan). This reporting is based on the findings of the 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:

- Report the results of PCBs in effluent tests/analysis for all 209 congeners
- Report the results of PCBs found in fish meals for all 209 congeners
- Report the results of the total suspended solids PCB monitoring
- 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 reissuance of this NPDES Permit should provide an opportunity for the Environmental Protection Agency and the Washington Department of Ecology to encourage the participation of the Spokane Tribe and the Washington Department of Fish and Wildlife (WDFW) as a full members 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 into the Spokane River
- 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,

The Spokane River Regional Toxics Task Force

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