RESPONSE TO COMMENTS

Federal Aquaculture Facilities and Aquaculture Facilities
Located in Indian Country
Within the boundaries of the State of Washington
NPDES Permit Number WAG130000
June 1, 2016

On December 23, 2015, the U.S. Environmental Protection Agency (EPA) issued a public notice for the reissuance of the Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country within the boundaries of the State of Washington National Pollutant Discharge Elimination System (NPDES) Permit, No. WAG130000 (General Permit). This Response to Comments document provides a summary of the significant comments on the General Permit and provides the corresponding EPA responses. The EPA thanks all of the commenters for taking the time to provide thoughtful comments on this General Permit.

The EPA has corrected an inconsistency in the permit regarding the deadline by which permittees must develop and implement, or review and update, their quality assurance plans. Quality assurance plans must be developed and implemented, or reviewed and updated, within 90 days of the reissuance of this General Permit. See Section IV.F of the General Permit.

The EPA has also updated the permit's reporting requirements for facilities that discharge to waters of the Lummi Nation, the Swinomish Indian Tribal Community, and the Tulalip Tribes based on the requirements in those Tribes' respective Clean Water Act Section 401 final certifications.

The EPA received comments from:

1. Northwest Indian Fisheries Commission
2. United States Fish and Wildlife Service – Pacific Region
3. Spokane River Regional Toxics Task Force
4. Lincoln Loehr

Note: As discussed in the public noticed fact sheet for this General Permit, the draft South Fork Nooksack River draft TMDL contains a temperature wasteload allocation for the Skookum Creek Fish Hatchery. Because the TMDL has not been finalized and approved by the EPA prior to the reissuance of this General Permit, the final permit does not include a temperature permit limit for the facility based on that wasteload allocation. Once the TMDL is finalized and approved by EPA, a subsequent NPDES permit for the Skookum Creek Fish Hatchery will include a temperature consistent with assumptions and requirements of the TMDL. The EPA has included a requirement for temperature monitoring for Skookum Creek Fish Hatchery in the final permit because the hatchery discharges to a receiving water that is impaired for temperature.

1. Comments from Northwest Indian Fisheries Commission:

Comment Regarding Drug and Chemical Use Report Contents (Appendix D): Chemical Log Sheet: Tribes understand the need to maintain good records of drug and chemical use at their hatcheries. However, the records that are kept have to make sense for the drug or chemical being used and their method of application. The information asked for on the Chemical Log Sheet in Appendix D is pertinent to external treatments (flow through or static bath) but not for drugs top dressed onto feeds or injected into fish. Any attempt to determine the effluent concentration of drugs used in those manners is purely a paper exercise and does not reflect what is actually being released into the effluent. We recommend that the chemical log sheet be revised to reflect only meaningful information and that permitted facilities not be required to provide EPA with effluent concentrations for treatments involving medicated feeds or antibiotic injections.

EPA Response: The EPA agrees that the information required on the Chemical Log Sheet is relevant only to external/water-borne treatments, but not medicated feeds or drugs that are injected into fish. The EPA amended the Chemical Log Sheet accordingly.

Comment Regarding Solid Waste Disposal Reporting (Page 3 of Annual Report): Tribes question the need to report to EPA on solid wastes if they are disposed of over land and are not part of a facility's discharge. The current General Permit does not require permitted facilities to specify the quantity of solid wastes that are disposed. The permit only asks the method of disposal and when and where the solid wastes are disposed. In the new draft general permit, EPA has requested that permitted facilities report the quantity of solid waste disposed. In many cases, this amount would be highly subjective given how it is removed from pollution abatement ponds (pumping, scooping, etc.). Tribes recommend removing the requirement to report solid waste disposal entirely from the new permit. At a minimum, Tribes recommend keeping the current reporting requirements and eliminating any reference to volume disposed.

EPA Response: The EPA recognizes that it may be problematic for permittees to report the volume of solid waste disposed of in upland disposal sites, and will maintain the current reporting requirements. The EPA removed the requirement to report the volume of solid waste disposed from the Annual Report.

Comment Regarding Fish Mortalities Reporting (Page 3 of Annual Report): Tribes question the value to EPA in requiring permitted facilities to report on mass mortalities if all of the mortalities are removed of and disposed of on land. In addition, the 5% threshold is a totally arbitrary level that has no significance to pollutants discharged in the hatchery effluent.

EPA Response: It is important that permittees provide information on mass mortalities at facilities covered by this permit. Facilities presumably already track these data as part of normal hatchery operations (and to prevent future disease outbreaks), so this requirement should not create an added burden for permittees. Fish mortalities of more than 5% per week could have negative effects on water quality downstream of the facility. For example, fish mortalities may be an indication that there is a chemical or pollutant in the effluent/water at the hatchery that will have negative effects on water quality. In addition, in its Upland Fin-Fish Hatching and Rearing General Permit, the Washington State Department of Ecology also uses 5% fish mortality as the

threshold for the reporting requirement in its permittees' Solid Waste Management Plans; thus, EPA also included this requirement to ensure similar requirements between federal and state permittees. The EPA did not make any changes to the permit as a result of this comment.

Comment Regarding Aquaculture Drug and Chemical Reporting (Pages 5-7 of Annual Report): Description under the table heading is confusing as to drugs/chemicals that tribal hatcheries are required to report if used. We recommend adding language clarifying that the permittee is only required to report drugs used during the past calendar year in a manner that allowed them to be discharged to public waters. EPA has already stated that they are not interested if a drug or chemical is used at a facility but is discharged onto land rather than into effluent water.

EPA Response: The EPA is requiring permittees to report on their use of the aquaculture drugs and chemicals listed on page 5 of the Annual Report, plus any other drugs or chemicals that could be discharged to surface waters by the facilities. While the EPA acknowledges that discharges into surface waters of medicated feeds and drugs injected into the fish are likely insignificant in their impact to water quality (see the Biological Evaluation for more detail), the EPA permitting authority still needs to know which drugs and chemicals are being used at a given facility. This information may be required in future Endangered Species Act Section 7 consultations. The General Permit does not require reporting on chemicals that are used by the facility in such a manner that they could not be directly discharged to surface waters (e.g. disinfectants used in a laboratory which drains to a sewer system, or glass cleaner and paper towels which are disposed of in a dumpster). The EPA did not make any changes to the permit as a result of this comment.

Comment Regarding Annual Report Template: The proposed annual report template forms (pages 6 and 7) regarding aquaculture drugs and chemicals are not concise, clear, or efficient. Fish hatcheries in general undertake multiple and sometimes many individual applications of drugs and/or chemicals throughout the year. Applications vary greatly by fish health circumstance, time frame, application method, vessels treated, flows, quantity of product used, etc. The specificity of the information requested on pages 6 and 7 of the Annual Report does not lend itself to summary. Consequently, in most circumstances, many pages would have to be added to the annual report to account for treatments that have slightly different particulars. Furthermore, the format is very difficult to read. The result would be inefficient use of time on the part of hatchery staff preparing the Annual Report and the end product would be very difficult to decipher and utilize by the EPA. The additional forms filled out explicitly would become more like a convoluted log than a summary. Permit requirements already stipulate that logs/records of drug and chemical use must be maintained, thus the forms are also redundant. We recommend that this issue be resolved by altering the annual report template so that drug and chemical use can be summarized in a concise and useful manner.

EPA Response: The EPA included the reporting requirement about aquaculture drug and chemical use to satisfy Endangered Species Act Section 7 requirements, and to inform the next Biological Evaluation which will be required as part of the next permit cycle. This information is critical to the risk assessments that comprise the Biological Evaluation; the toxicological assessments are based on maximum concentrations of each disease treatment chemical in the

effluent compared to the concentrations that will elicit negative effects in species. For more detail, see the Biological Evaluation for this permit at https://www3.epa.gov/region10/pdf/permits/npdes/wa/WA_Hatchery_GP_WAG130000_BE.pdf.

The EPA does not intend for permittees to submit the information required on pages 6 and 7 of the Annual Report for each individual drug or chemical treatment occurrence, and the EPA agrees that such a requirement would be cumbersome and inefficient for all parties involved. Rather, the EPA is requiring permittees to submit only one set of the information required on pages 6 and 7 of the Annual Report for each drug or chemical used by that facility during the calendar year. The EPA is requiring facilities to submit data on a "reasonable worst-case scenario" – in other words, the treatment that would result in the maximum concentration of that disease treatment chemical in the effluent. For medicated feeds and drugs injected into the fish, permittees are required to provide the information on page 6 of the Annual Report. For water-borne treatments, permittees are required to provide the information on both pages 6 and 7. In sum, permittees must provide the information in their Annual Reports for each disease treatment chemical used during that calendar year, but must only provide information on the use scenario that would result in the highest concentration of that chemical in the effluent, such as when the largest amount of formulated product is used. Permittees are still required to maintain records of their drug and chemical use, but are not required to report to the EPA on each individual treatment.

The EPA amended the Annual Report to clarify that facilities must only report the treatment scenario that will result in the maximum concentration of that chemical in the effluent over the course of that calendar year.

2. Comments from the United States Fish and Wildlife Service – Pacific Region

Comment Regarding PCBs in Fish Feed: In regards to the monitoring for PCBs, it is understood that at this time the only facilities impacted by this new reporting requirements are in the Spokane River watershed, but the wording seems to imply that all facilities may be required to report PCB concentrations in fish feed in the next permit cycle five years from now. It is understood that we as an agency must do our best to minimize our footprint while conducting mitigation activities. It is feared that if feed manufacturers are going to be required to screen for PCBs that this might substantially raise the cost of said feed through increased research and development costs, finding new sources for feed, and increase the reliance on plant based ingredients which has been shown to reduce the quality of the feed and subsequently reduce the fitness of anadromous salmonids. In having conversations with industry representatives, these concerns are not overstated and they agree that this could substantially raise the cost of feed, which will be passed down to the consumer. It is already well known that fish feed costs have been increasing annually due to price shifts in commodities markets and, at least with some manufacturers, the ongoing search and acquisition for high quality and sustainable fish meal sources from a global marketplace. A dramatic increase in fish feed prices due to any new regulations may strain hatchery operation budgets even further. This may have serious detrimental effects on operational ability in the future, especially in light of constantly shifting

political realities such as sequestration, or climate change impacting supply chains for feed ingredients and subsequent cost fluctuations or dramatic increases.

EPA Response: The permit requires aquaculture facilities to implement purchasing procedures that give preference for fish food that contains the lowest amount of PCBs that is *economically and practically feasible* (emphasis added). The EPA is aware that the cost of fish feed has been rising in recent years and that plant-based feeds are often insufficient for healthy salmonid growth. Your concerns about rising feed costs have been noted.

If a lower PCB feed becomes available during this permit cycle, facilities are required to preferentially purchase the lower PCB feed, provided that it is priced competitively and that it fulfills the health and growth requirements of salmonids.

The permit only applies to aquaculture facilities; it does not require feed manufacturers to screen for PCBs. The permit also does not require facilities to report PCB concentrations in fish feed, which the EPA acknowledges would be costly. There is virtually no financial cost associated with trying to buy lower PCB feeds (as economically and practically feasible).

Hatchery fish are being raised largely for human consumption, PCBs are ubiquitous legacy pollutants, and PCBs in hatchery fish and their feeds is increasingly an area of focus. This BMP requirement will prompt hatcheries to consider PCB concentrations (if available) as part of their fish feed purchasing calculus. No changes have been made to the permit as a result of this comment.

Comment Regarding Link in Annual Report: The requirements for annual reporting have changed somewhat in regards to the use of common chemical treatments such as formalin, iodine, etc. The link that is provided for calculating effluent concentrations of chemicals used in aquaculture is not operational. It is suggested that this link be updated so it is correct and not misleading. It would be very helpful if the EPA provided such a link/tool for the hatcheries to use when calculating these effluent concentrations and therefore insuring that all facilities are reporting under the same guidelines.

EPA Response: The EPA had included a link to the USFWS disease treatment calculator tool to assist permittees with the reporting requirements. Unfortunately, it appears that the USFWS is no longer maintaining the web-link for the treatment calculator; thus, the link has been removed from the final permit. Regarding the USFWS commenter's request that the EPA provide such a link/tool, this permit regulates wastewater discharges. Developing a fish health treatment tool is beyond the scope of this NPDES permit, and is outside of the EPA Region 10's expertise. Any permittee that applies disease treatment chemicals must do so in accordance with label instructions or under the supervision of a prescribing veterinarian (for approved INAD and extra-label use).

The EPA would like to note that the requirement to calculate the maximum effluent concentration of disease treatment chemicals is not new- the previous permit also required facilities to calculate this concentration. In addition to retaining this requirement, this permit

requires permittees to provide the supporting data to assist with this calculation, particularly for water-borne treatments (see pages 6 and 7 of the Annual Report).

The EPA removed the link to the USFWS treatment calculator tool from the Annual Report.

Comment Regarding Annual Report Template: Proposed annual report template forms in Appendix D (pages 6 and 7) regarding aquaculture drugs and chemicals are not concise, clear, or efficient. Fish hatcheries in general may in some years undertake multiple and sometimes many individual applications of drugs and/or chemicals throughout the year. Applications vary greatly by fish health circumstances, time frame, application method, vessels treated, flows, quantity of product used, etc. The specificity of the information requested on pages 6 and 7 of the annual report does not lend itself to summary.

Consequently, in most circumstances, many pages would have to be added to the annual report to account for treatments that have slightly different or very complicated treatment details. Furthermore, the format is very difficult to read. The result would be inefficient use of time on the part of hatchery staff preparing the annual report and the end product would be very difficult to decipher and utilize by the EPA. The additional forms filled out explicitly would become more like a convoluted log than a summary. Permit requirements already stipulate that logs/records of drug and chemical use must be maintained, thus the forms are also redundant. The recommendation is that this issue be resolved by altering the annual report template so that drug and chemical use can be summarized in a concise and useful manner.

These significant added annual reporting requirements have evolved the reporting function from a manageable reporting requirement into one that is complicated, time consuming, and cumbersome.

EPA Response: See the response to the same comment by Northwest Indian Fisheries Commission, above. The EPA amended the Annual Report to clarify that facilities must only report the treatment scenario that will result in the maximum concentration of that chemical in the effluent over the course of that calendar year.

Comment Regarding Chlorine Monitoring and Testing Requirements: Consolidated from several stations, based on conversations: With the current permit, there was a widely known issue with obtaining readily-available, reasonably-priced meters or test-kits to be able to comply with the very low chlorine detection standard. Meters commonly read down to 20 µg/L when the standard in the permit had been set at 10 µg/L, and this was a frequently encountered problem during EPA site inspections. During site visits by EPA in 2014 with many FWS station managers the issue of chlorine detection capabilities was brought up by many. It is great to see it addressed and very much appreciated to see an adjustment.

It appears in Table-1, footnote-3, page 17, that the permittee is now considered within compliance level if total residual chlorine levels are at or below 'compliance evaluation level of 50 µg/L.' That statement is confusing and leaves it unclear how that then relates to the Average Monthly Limit of 9.0 µg/L and the 18.0 µg/L Maximum Daily Limit. It seems to contradict or over-ride those limits stated in Table-1 by a significant factor. Previously that footnote stated the

compliance evaluation level was 10 µg/L. If a permittee is considered compliant at or below the compliance evaluation level was 50 µg/L why is that not the maximum daily limit rather than 18.0 µg/L? A clarification would help on this. Fact Sheet Appendix page B-8 was not clear on this adjustment and relationship.

EPA Response: As discussed in the Fact Sheet, the water quality based effluent limits for chlorine are 9.0 µg/L (average monthly limit) and the 18.0 µg/L (maximum daily limit). Under the Clean Water Act and implementing NPDES regulations, the EPA is required to put these limits in the permit.

However, although the EPA is required to set the freshwater chlorine permit limit at 9.0 µg/L (average monthly limit) and the 18.0 µg/L (maximum daily limit) to meet water quality standards, as you point out in your comment, the detection capability for most equipment is higher. The permit sets the minimum level for chlorine at 50 µg/L. Therefore, a permittee will be in compliance with the effluent limits for total residual chlorine, provided the total residual chlorine levels are at or below the compliance evaluation level of 50 µg/L. No changes have been made to the permit as a result of this comment.

Comment Regarding Schedule of Submissions: Comments from Lacey Fishery Resource Office: 1. On page 6 it is noted in the introduction that the permittee must complete and/or submit to EPA "some of the items" including Item 10 (pg. 7) that states "oral notification to EPA and to the Spokane Tribe", without specifying the parenthetical note -(as appropriate)- and it appears this same mistake is in Item 13 (pg. 8).

EPA Response: The EPA has incorporated these corrections into the permit.

3. Comments from Spokane River Regional Toxics Task Force (SRRTTF)

Introductory 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.

Comment: 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.

EPA Response: The EPA appreciates the SRRTTF's efforts to make measurable progress on PCBs in the Spokane River, as well as its recommendation to require more aggressive monitoring for PCBs. The General Permit is already requiring all facilities to implement procedures to eliminate the release of PCBs from any known sources in the facility- including paint, caulk, or feed. Facilities must implement purchasing procedures that give preference for fish food that contains the lowest amount of PCBs that is economically and practically feasible. In addition, the WDFW's Ford State Hatchery and the Spokane Tribe's Spokane Tribal Hatchery (i.e., the two facilities in the Spokane River area) must monitor their effluent annually during the calendar month of maximum feeding for all 209 congeners using EPA Method 1668C.

Ecology has recently initiated a study to estimate the PCB loading contributed to the Spokane River by fish planted from both the Troutlodge and Spokane hatcheries and by effluent from the

Spokane Fish Hatchery. For more detail, see the Quality Assurance Project Plan (QAPP) at https://fortress.wa.gov/ecy/publications/SummaryPages/1603104.html (March 2016, Publication No. 16-03-104). Ecology has already begun sampling, and the final report is due on the web in June of 2017.

The Spokane Fish Hatchery is one of the largest rainbow trout brood-stock facilities in Washington State, and as such, presents a reasonable worst-case scenario in terms of PCB discharges from hatcheries in the Spokane area. Since WDFW also operates the Spokane Fish Hatchery, the results of the Ecology study will be transferrable to Ford State Hatchery because WDFW likely has similar management and feed/purchasing procedures for its hatcheries in the Spokane area.

In addition, Ecology's study will evaluate many of the parameters specified in the Task Force's comments. According to the QAPP, Ecology will:

- "Analyze PCBs in whole fish from the Spokane Fish Hatchery and the Troutlodge Fish Hatchery.
- Analyze PCBs in effluent collected from the discharge from the Spokane Fish Hatchery and the end of the slough that drains effluent to the Little Spokane River. Two separate loads will be calculated, a "worst case scenario", the load coming directly from Spokane hatchery discharge pipes, and the load emptying from the drainage slough to the Little Spokane River.
- The drainage slough load estimate will be added to the estimated load from hatchery fish to estimate the total PCB load contributed to the Spokane River from local hatchery operations.
- Analyze PCBs in fish food and TOC and TSS in water to evaluate potential differences in PCB concentrations in hatchery effluent.
- Analyze PCBs in sediment collected from the slough that drains effluent from the Spokane Fish Hatchery to the Little Spokane River.
- Calculate an estimate of the annual PCB load contributed to the Spokane River in hatchery effluent and fish.
- Collect and analyze PCB concentrations in hatchery rainbow trout collected from the Spokane River at Lake Spokane."

The EPA Region 10 would like to note that PCB monitoring is expensive, and that Ecology has budgeted approximately $25,000 for its PCB hatchery study. It would be unreasonable to require WDFW and a small tribal hatchery to carry out these monitoring activities, especially when Ecology is conducting a PCB evaluation of a neighboring WDFW hatchery.

In light of the fact that Ecology is undertaking a PCB study at a large Spokane hatchery, it would be duplicative to require facilities covered under this General Permit to perform the Toxics Management Plan activities suggested by the Task Force. And, facilities in the Spokane watershed are already being required to do more on PCBs than are hatcheries elsewhere in the state. Lastly, this type of evaluation is more appropriate for an agency to carry out as part of a formal study rather than to require individual hatcheries to carry out this level of analysis as part of an NPDES General Permit.

Regarding the comment that both hatcheries should record the date, number and location of fish released, the EPA is already requiring all facilities to include the following information in the Annual Report: species, fish produced during that calendar year in gross harvestable weight, the receiving water(s) to which fish were released, and the month released/spawned. See page 2 of the Annual Report.

The EPA is not making any changes to the permit as a result of this comment.

Comment Regarding Recommended Best Management Practices Requirements: The NPDES permit should require both hatcheries to implement PCB Best Management Practices (BMPs) 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.

EPA Response: Rather than impose additional BMP requirements for only the permitted hatcheries in the Spokane River area, the EPA has elected to require PCB-related BMPs for all facilities covered by the General Permit. Many of the BMPs recommended by the Task Force were already incorporated into the draft General Permit for all facilities covered by the permit. The following BMPs are retained in the final permit:

- Permittees adhere to TSS and SS limits and monitoring requirements.
- Document feed amounts and numbers and weights of aquatic animals to calculate feed conversion ratios.
- Document the frequency of cleanings, inspections, maintenance, and repairs.
- Raceways and ponds must be cleaned at such a frequency and in such a manner that minimizes accumulated solids discharged to waters of the U.S.
- Fish feeding must be conducted in such a manner as to minimize the discharge of unconsumed food.
- Fish grading, harvesting, egg taking, and other activities within ponds or raceways must be conducted in such a way as to minimize the discharge of accumulated solids and blood wastes.
- Animal mortalities must be removed and disposed of on a regular basis to the greatest extent feasible.
- Treatment equipment used to control the discharge of floating, suspended or submerged matter must be cleaned and maintained at a frequency sufficient to minimize overflow or bypass of the treatment unit by floating, suspended, or submerged matter; turbulent flow must be minimized to avoid entrainment of solids.
- Procedures must be implemented to prevent fish from entering quiescent zones, full-flow, and off-line settling basins. Fish that have entered quiescent zones or basins must be removed as soon as practicable.
- Facilities must implement procedures to eliminate the release of Polychlorinated Biphenyls (PCBs) from any known sources in the facility- including paint, caulk, or feed. If removing paint or caulk that was applied prior to 1980, refer to the EPA guidance (abatement steps 1-4) at http://www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/caulk/guide/guide-sect4a.htm. Any future application of paint or caulk must be below the allowable TSCA level of 50 ppm. Facilities must implement purchasing procedures that give preference for fish food that contains the lowest amount of PCBs that is economically and practically feasible.
- In addition to the BMP requirements at section IV.C.5.e.(12) of the General Permit, Permittees in WRIAs 54 and 57 must use any available product testing data to preferentially purchase paint and caulk with the lowest practicable total PCB concentrations.

Some of the recommendations in the Task Force's comment (e.g. inventory ink, dyes, and lubricants) are of questionable relevance to fish hatchery operations. These recommendation are not added to the final permit. In response to this comment from the Task Force, the EPA added a requirement in the final permit that facilities in the Spokane River area must also request PCB content information from fish food suppliers and include documentation in their files (see section IV.D). The EPA would like to note that it is simply requiring Spokane permittees to request this

information, and that fish feed suppliers are not regulated by this NPDES General Permit and are under no obligation to provide PCB content information to permittees.

Comment Regarding PCB 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

EPA Response: Discharge Monitoring Reports (DMRs) data are publically available via the EPA's Enforcement and Compliance History Online (ECHO) database at https://echo.epa.gov/. The DMRs will include monitoring results for PCBs in the Spokane River area. Although they are also publically available, the Annual Reports are not in a format that can be downloaded via ECHO. If the Task Force has additional data needs or requests, it can either contact the two facilities directly or can request the data from the EPA, either informally (via telephone or email) or via a Freedom of Information Act (FOIA) request. The EPA will be pleased to provide the Task Force with the requested data, but is not making any changes to the permit as a result of this comment.

Comment Regarding 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.

EPA Response: The EPA will encourage the participation of the Spokane Tribe and the WDFW in the Task Force, but will not require Task Force participation as part of their coverage under this General Permit.

4. Comments from Lincoln Loehr

Comment Regarding Monitoring for Arsenic and PCBs: These comments are submitted by me as an individual, not on the behalf of any interest group. I have a long background in NPDES permitting and water quality criteria in Washington and Alaska, and I look at regulatory developments from a view of considering how requirements interact, and sometimes I see potential concerns that others miss. That is the context for the following comments.

The permit needs to include some monitoring for arsenic and for PCBs for all the facilities, to include the permitted effluent discharged, and the ambient receiving waters. The methods used should include Method 1668C for PCBs and Method 1632 for Inorganic Arsenic. Because these methods are not promulgated by EPA in 40 CFR 136, the monitoring requirement I request should be just for information gathering purposes. Both of these methods have much lower detection limits.

I request this requirement because of a parallel regulatory action underway with EPA Region 10 in which they have proposed human health water quality criteria for Washington State which includes PCB criteria of 0.000007 ug/L (that is 7 millionths of a billionth) and inorganic arsenic criteria of 0.0049 ug/L that would apply in freshwater and 0.0059 that would apply in salt water. (80 FR 55063, September 14, 2015.)

Natural background arsenic concentrations in surface waters are greater than two orders of magnitude higher than the proposed criteria. Consequently, no dilution benefit can be allowed. The federal permitted facilities, including hatcheries, would need to meet the arsenic criteria at the point of discharge. Similarly, available PCB data of ambient waters using Method 1668C has shown exceedances of EPA's proposed criteria, and salmon returning from the ocean are a source of PCBs that hatcheries would be exposed to.

The economic impact analysis of EPA's proposed rule for human health water quality criteria for Washington ignored PCBs as a cost concern and identified arsenic as the main cost driver. The analysis identified industrial and municipal facilities permitted by the Department of Ecology as affected, but did not identify that federal permitted facilities, including federal and tribal hatcheries, and also tribal municipal wastewater treatment plants as affected.

The monitoring data are needed to better understand the potential for costly compliance issues in the future that result from EPA's proposed water quality criteria for Washington and how the requirements can be triggered if EPA chooses to adopt Methods 1632 and 1668C in 40 CFR 136.

EPA Response: Your comments have been noted. Arsenic is not a pollutant of concern for aquaculture facilities. Therefore, the EPA will not require arsenic monitoring as part of this General Permit. PCB monitoring has been addressed in detail in the EPA's responses to other comments (above).

Your comments included information related to EPA's Proposed Revision of Federal Human Health Criteria Applicable to Washington dated September 14, 2015 (Federal Register Volume 80, Number 177 Pages 55063-55077). Specifically, you provided comments related to the proposed criteria for arsenic and PCBs as well as the Economic Analysis that was developed to

support the proposed rule. To the extent these comments are similar to public comments EPA received on that proposed rule, EPA will provide responses to address those comments in that rulemaking process if the rule is finalized. The EPA is not making any changes to the permit as a result of this comment.