Response to Comments

Chief Joseph Dam, WA0026891
May 18, 2023

Summary

On January 13, 2022, the U.S. Environmental Protection Agency Region 10 (EPA) issued a public notice for the proposed issuance of a National Pollutant Discharge Elimination System (NPDES) permit for Chief Joseph Dam (WA0026891). The public comment period was scheduled to close on February 28, 2022. EPA received a request to extend the public comment period. EPA granted this request and extended the public comment period to March 30, 2022.

On January 13, 2022, EPA also requested Clean Water Act (CWA) § 401 certifications (401 certifications) from the Washington Department of Ecology (Ecology) and from the Confederated Tribes of the Colville Reservation (Colville Tribes). EPA received requests to extend the deadline for receipt of the 401 certifications. EPA granted these requests and extended the deadline to September 30, 2022. EPA received 401 certifications with conditions from Colville Tribes on September 29, 2022 and from Ecology on September 30, 2022.

On October 11, 2022, EPA submitted a Biological Evaluation (BE) to the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) as required by the Endangered Species Act (ESA). In the BE, EPA determined that the permitting action was not likely to adversely affect (NLAA) any ESA-listed species or designated critical habitat that occur or may occur within the action area. EPA requested that the Services concur on this determination. On February 1, 2023, EPA received concurrence from USFWS. On December 1, 2022, NMFS notified EPA that it did not concur with the NLAA determination for Upper Columbia River (UCR) Steelhead, and, thus, formal consultation was required. On May 10, 2023, EPA received a Biological Opinion (BiOp) from NMFS which included reasonable and prudent measures (RPMs) and nondiscretionary terms and conditions that EPA is required to comply with to minimize the incidental take of listed species as a result of the proposed action.

This document presents EPA's response to comments received during the public comment period, identifies conditions incorporated into the permit as the result of the 401 certifications, and identifies conditions incorporated into the permit as the result of ESA consultation.

Changes in response to public comment:

EPA received comments from the following entities:

- Bonneville Power Administration (BPA)
- Columbia Riverkeeper (CRK)
- Confederated Tribes and Bands of the Yakama Nation (Yakama)
- Army Corps of Engineers (Corps)

EPA has summarized similar comments from different entities in this document when developing its responses. The full comments received can be viewed at https://www.epa.gov/npdes-permits/npdes-permit-chief-joseph-dam-washington.

As a result of comments received, the following revisions were made to the permit:

- EPA has modified Permit Part II.E.3 to the following (see bold): "The CWIS Annual Reports must demonstrate that BTA has been properly operated and maintained and that no changes to **the CWIS or equipment related to the BTA or CWIS** have been made unless documented."
- EPA has changed the reference in Permit Part II.E.2 from "Appendix A: BMP Plan" to "Appendix B: BMP Plan."
- EPA has modified Permit Part II.E.3. to the following (see bold): "an evaluation of additional operations or technologies to minimize fish impingement and entrainment, **where feasible. If the permittee determines the evaluation of certain operations or technologies are not feasible, the permittee must provide an explanation in the CWIS Annual Report."**
- EPA has changed footnote 1 in Tables 1, 3, and 4 of the permit to replace the word "detection(s)" with "exceedance".
- EPA has changed Table 1 and Table 3 in the permit to: "During the first 12 months after the effective date of the permit, the required monitoring frequency is 1/week. In subsequent years, the required monitoring frequency is 1/month."
- EPA has changed the footnote for oil and grease monitoring frequency in Table 1 and Table 3 of the permit to: "During the first 12 months after the effective date of the permit, the required monitoring frequency is 1/week. If there are exceedances in the first 12 months after the effective date of the permit in an outfall, the frequency will remain 1/week for that outfall. If there are no exceedances in an outfall, the required monitoring frequency is reduced to 1/month for that outfall."
- EPA has added a table (Table 2) to the permit specifically for outfall 38, which does not include limits or monitoring for oil and grease and pH.
- The reference to Part I.10 in Permit Part I.B.14 (previously I.B.12) has been corrected to read Part I.B.12 (previously I.B.10)
- EPA has updated the reference in Permit Part I.B.13(a) to reference Ecology's 2022 publication, *Continuous Temperature Monitoring of Freshwater Rivers and Streams* (22-03-216).
- EPA has changed Permit Part I.B.13(b) to the following (see bold): "Use the temperature device manufacturer's **or compatible** software to generate (export) an Excel file."
- EPA has changed Permit Part II.D.5. to the following (see bold): The file name of the electronic attachment must be as follows: YYYY_MM_DD_WA0026891_PCB_Annual_Report_55099, where YYYY_MM_DD is the date that the permittee submits the **PCB Annual Report**. The PCB Annual Report must be retained on site and made available to EPA, the Colville Tribes, and Ecology upon request
- EPA has changed Permit Part II.B.6 to the following (see bold): "Reporting of BMP incidents. Prepare a written report to EPA and Ecology after the incident has been

successfully addressed, describing the circumstances leading to the incident, corrective actions taken, and recommended changes to operation and maintenance practices and procedures to prevent incident recurrence. **The report must be submitted according to Part III.H."**

- EPA has changed Permit Part III.G. to include a phone number for contacting the Colville Tribes.

Changes in Response to Ecology's and Colville Tribes' Final 401 Certifications

EPA has added all of Ecology's and the Colville Tribes' 401 certification conditions to the permit pursuant to CWA section 401(d). The 401 certifications received for Chief Joseph Dam can be viewed at https://www.epa.gov/npdes-permits/npdes-permit-chief-joseph-dam-washington.

Below are the 401 certification conditions related to general permit conditions, the quality assurance plan (QAP), best management practices (BMPs), Environmentally Acceptable Lubricants (EALs), polychlorinated biphenyls (PCBs), cooling water intake structures (CWIS), temperature and total dissolved gases (TDG). Based on specific language in the certifications, EPA has added language to relevant sections regarding EPA, Ecology and the Colville Tribes review and approval of QAP, BMP, EAL, CWIS, and water quality attainment plan (WQAP) reports and plans. For any plans, or portions of plans, requiring EPA, Ecology or the Colville Tribes approval, plans are considered approved if the agencies do not respond within 30 days after a plan has been submitted. All references to the National Marine Fisheries Service (NMFS) are associated with the Biological Opinion (BiOp) received from NMFS, discussed in more detail below, and are not associated with 401 certification conditions.

General 401 Certification Permit Conditions

The following general 401 certification conditions were added to the permit:

- EPA has added the following condition to Part I.B of the permit in accordance with the Colville Tribes' Certification:
  - "The permittee shall be responsible for achieving compliance with the Water Quality Standards for waters of the Colville Reservation from both point and non-point source discharges."
- EPA has added the following condition to Part I.B of the permit in accordance with Ecology's Certification:
  - "The permittee is not authorized to exceed water quality standards established in chapter 173-201A WAC."
- EPA has renamed Permit Part V.L. 'State **and Tribal** Law' and added the following language to the section in accordance with the Colville Tribes' Certification condition:
  - "The Colville Tribes' certification of this permit does not exempt and is provisional upon compliance with other applicable statutes and codes administered by federal and Colville Tribes agencies. Pursuant to Colville Tribal Law & Order Code Title 4 Natural Resources and Environment, the facility operator may also require a Waste Discharge permit from either Bonneville

Power Administration or the Department as applicable as provided in Chapter 4-8 Water Quality Standards and Chapter 4-10 Water Resources Use and Permitting adopted thereunder."

The Colville Tribe also included the following statements in the 401 certification:

- *"Members of the Confederated Tribes of the Colville Reservation rely heavily on locally caught fish for subsistence and ceremonial uses and have higher consumption rates than the general public. The promulgation of new or amended Water Quality standards or regulations having a direct bearing upon permit conditions or require permit revision, the CTCR may require reopening and modification of the current permit. Other issues that may impact Water Quality Standards for further consideration include:*

  --Reopening certification due to substantial changes in conditions or operations

  --Releasing water stored pursuant to the US-Canada Treaty

  --Implementation of the Columbia River System Operation Environmental Impact Statement preferred alternative

  --Seasonal reservoir drawdowns

  --Columbia River System Operations Biological Opinion(s)

  --Increase water flows for recreation"

EPA will continue to coordinate closely with the Colville Tribes as circumstances in the Columbia River System evolve and will consider modification of the permit in response to the issues identified above. EPA will provide public notice if the permit is modified, unless the modification constitutes a 'minor modification' pursuant to 40 CFR 122.63.

- *"Culture: Cultural sites, (archaeological and traditional places) are adversely impacted by various types of non-point "pollution"; caused by CJD, including but not limited to cultural plants, cultural ceremonies, cultural medicines, cultural foods, and, IN PARTICULAR anadromous aquatic species, sustainers of Native American life, traditions, and physical, mental, emotional, and spiritual well-being. Please see Attachment One: "National Point Discharge Elimination System Cultural Resource Assessment.""*

EPA acknowledges the cultural importance of the Columbia River to the Colville Tribes, and the impacts of Chief Joseph Dam on the cultural resources referenced above. This NPDES permit will regulate the point source discharges from the dam, which is a step towards protecting the cultural resources of the Colville Tribes. The "National Point Discharge Elimination System Cultural Resource Assessment" attachment referenced above can be read in full in the Colville Tribes' 401 certification at:
https://www.epa.gov/npdes-permits/npdes-permit-chief-joseph-dam-washington.

QAP – Related 401 Certification Permit Conditions

- EPA has modified Part II.A and Schedule of Submissions in the permit to add language from Ecology's and the Colville Tribes' 401 certifications related to QAPs (see bold):

- Within 180 days of the effective date of this permit, the permittee must submit **a QAP to EPA for review and approval, and to the Colville Tribes for review**. The permittee may submit **the QAP** as an electronic attachment to the DMR.
- The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedures addressed by the QAP **and submit the revised QAP to EPA for review and approval, and to the Colville Tribes for review**.

BMP – Related 401 Certification Permit Conditions

- EPA has modified Part II.B. and the Schedule of Submissions in the permit to add language from Ecology's and the Colville Tribes' 401 certifications related to BMPs (see bold):
  - The permittee must submit the **BMP Plan to EPA for review and approval, and to the Colville Tribes and NMFS for review,** within 180 days of the effective date of the permit. The permittee may submit the BMP Plan as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ WA0026891_BMP_05899, where YYYY_MM_DD is the date that the permittee submits **the BMP Plan**.
  - Under Signature and BMP Plan Review (Part II.B.4.c), EPA has added the following language: "Within 30 days of such notification from the Director, (or as otherwise provided by the Director), or an authorized representative, the permittee shall make the required changes to the BMP Plan and shall submit to the Director a **revised BMP Plan with the requested changes for review and approval, and to the Colville Tribes and NMFS for review.**
  - Under BMP Plan Modification in Part II.B in the permit, EPA has added the following language: "**The permittee must submit the revised BMP plan to EPA for review and approval, and to the Colville Tribes and NMFS for review.**"
  - **The BMP Annual Report must report sampling data that is designed in a way to quantify source identification and reductions in order to substantiate the adaptive management process. The sample and design and data analysis including methods and method reporting levels, must be included in the QAP (Part II.A.) and updated as necessary.**
  - **The BMP Annual Report must include the adaptive management procedures implemented based on the results of all monitoring used to evaluate BMPs.**

EAL – Related 401 Certification Permit Conditions

- EPA has modified Part II.C. and the Schedule of Submissions of the permit to add language from Ecology's and the Colville Tribes' 401 certifications related to EALs (see bold):
  - "The permittee must submit the **initial** EAL Annual Report by February 28 following the first full calendar year of permit coverage **to EPA and Ecology for**

review and approval, and to the Colville Tribes and NMFS for review. The permittee must submit **subsequent** EAL Annual Reports **to EPA for review and approval, and to the Colville Tribes and NMFS for review,** by February 28 **each year**. **The EAL Annual Reports must be comprehensive, complete, accurate, and concur with the state's interpretation of technical feasibility.** Annual EAL reports must be signed in accordance with Part V.E. ("Signatory Requirement")."

- The permittee may submit the EAL Annual Report as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_WA0026891_EAL_05899, where YYYY_MM_DD is the date that the permittee submits the **EAL Annual Report**.

PCB-Related 401 Certification Permit Conditions

- EPA has modified Part II.D. of the permit to add language from Ecology's and the Colville Tribes' 401 certifications related to PCBs (see bold):
  - The permittee must submit the PCB Management Plan (PMP) to **EPA and Ecology for review and approval, and to the Colville Tribes and NMFS for review,** within one year from the effective date of the permit
  - The PCB Annual Report must be submitted to **EPA for review and approval, and to the Colville Tribes and NMFS for review,** by February 28 following the first full calendar year of permit coverage, and annually thereafter. The file name of the electronic attachment must be as follows: YYYY_MM_DD_ WA0026891_PCB_Annual_Report_55099, where YYYY_MM_DD is the date that the permittee submits the report. The PCB Annual Report must be retained on site and made available to EPA, Ecology and the Colville Tribes upon request.

CWIS – Related 401 Certification Permit Conditions

- EPA has modified Part II.E. of the permit to add language from Ecology's and the Colville Tribes' 401 certification conditions related to CWIS (see bold):
  - The permittee must prepare an initial CWIS Annual Report by February 28 following the first full calendar year of permit coverage and submit it **to EPA and Ecology for review and approval, and to the Colville Tribes for review**. **The initial annual report must include information on all CWIS that address the missing application submittal requirements of 40 CFR 122.21(r)(2) and (3) and applicable provisions of paragraphs (4), (5), (6), (7) and (8).** The permittee must submit **subsequent CWIS Annual Reports to EPA for review and approval, and to the Colville Tribes for review,** by February 28 **each year**.
  - **The Permittee must develop a CWIS operations and maintenance manual that includes procedures for evaluating both impingement and entrainment related to the CWIS. This does not include the intake for hydroelectric generating waters. The permittee must maintain a copy of the manual on site**

at the facility and make it available to EPA or an authorized representative upon request.

- **Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.**

Temperature and TDG – Related 401 Certification Permit Conditions

- EPA has added the following language at Part II.F. and Schedule of Submissions in the permit from Ecology's and the Colville Tribes' 401 certification conditions:
  - (Based on Ecology's and the Colville Tribes' Conditions) The permittee must implement temperature control strategies and meet the load allocations in the Columbia and Lower Snake Rivers Temperature Total Maximum Daily Load (TMDL) and associated implementation plans (RCW 90.48.080 and WAC 173-201A-510(5)).
  - (Based on Ecology's Condition) The permittee must comply with TDG standards in Washington Administrative Code (WAC) 173-201A-200(1)(f), or any future modification to the standards thereof.
  - (Based on Ecology's Condition) The permittee must implement the TDG abatement strategies and meet the load allocation as stated in the Mid-Columbia River and Lake Roosevelt Total Dissolved Gas TMDL issued in June 2004. (see also the TMDL Appendix A: Implementation Plan). (RCW 90.48.080) Compliance with the TDG criterion does not apply when the inflows to the project from Rufus Woods Lake exceed the rate equivalent to the 7Q10 flows as defined in WAC 173-201A-200(1)(f)(i). The 7Q10 exceedance flow for the Columbia River at Chief Joseph Dam is 222 kcfs.
  - (Based on the Colville Tribes' Condition) Except during involuntary spill events, dam operations - including spill to enhance fish passage - should not cause or contribute to exceedance of the applicable TDG water quality criteria or any short-term modification thereto authorized under Washington/ Colville Tribes Water Quality Standards. Dam operations must allow the variance of up to 120% TDG during the spring fish passage period.
  - The permittee must consult with Ecology and the Colville Tribes to develop a WQAP per the conditions below:
    - (Based on Ecology's and the Colville Tribes' Conditions) The WQAP shall include all applicable requirements in WAC 173-201A-510(5) *Compliance schedule for Dams*, and must include a detailed strategy for achieving Washington's and the Colville Tribes' water quality standards for temperature and TDG and associated designated uses.
    - As an element of the WQAP, the permittee must include a TDG monitoring and quality assurance project plan (QAPP). This QAPP is in addition to the quality assurance plan defined in Part II.A. of the permit. At a minimum, the QAPP must contain the following provisions:
      - (Based on Ecology's Condition) A map of the TDG monitoring and compliance locations

- (Based on Ecology's Condition) A description of the monitoring, sampling frequency, equipment and sampling procedures, analytical methods, quality control procedures, data handling and assessment procedures, and reporting protocols.
- (Based on the Colville Tribes' Condition) A description of the frequency, timing and location of field monitoring for gas bubble trauma in fish populations and other forms of vertebrate and invertebrate aquatic life, which must be conducted throughout the fish spill season, including when TDG levels exceed the water quality criteria during flood or involuntary spill events.
- (Based on Ecology's Condition) The permittee must review and update the QAPP annually based on data quality objectives related to evaluation of TDG abatement and control strategies.
- (Based on Ecology's and the Colville Tribes' Condition) Implementation of the monitoring program must begin as soon as Ecology and the Colville Tribes explicitly or implicitly approve their portions of the QAPP. Changes to the QAPP must be provided to Ecology and the Colville Tribes before taking effect.

- The permittee must submit the TDG water quality data and TDG gas bubble trauma data to EPA, Ecology, and the Colville Tribes by February 28 following the first full calendar year of TDG monitoring, and annually thereafter. The TDG Data Report must be sent to EPA as an attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_WA0026891_TDG data_43599, where YYYY_MM_DD is the date that the permittee submits the report. The TDG data must be sent to Ecology and the Colville Tribes at the addresses at Permit Part II.F.7, unless agreed upon by Ecology and the Colville Tribes.
- The permittee must submit the WQAP to the Colville Tribes and Ecology as follows:
  - The permittee must provide the scope of the WQAP to Ecology and the Colville Tribes for review one year after the permit effective date.
  - The permittee must submit the WQAP QAPP to the Colville Tribes and Ecology for review and approval one year after the permit effective date. Ecology will have approval authority for II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).
  - The permittee must provide the final WQAP to Ecology and the Colville Tribes for review and approval within two years of the permit effective date. Ecology will have approval authority for II.F.5(a), II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).
  - The permittee must submit a progress report to Ecology and the Colville Tribes for review and approval within six years of the permit effective date. The permittee must submit a summary report to Ecology and the Colville Tribes for approval within nine years of the permit effective date

and prior to the end of the ten-year dam compliance period. Ecology will have approval authority for II.F.5(a), II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).

- The permittee must submit the WQAP and TDG Data Report to Ecology and the Colville Tribes at the following addresses, unless agreed upon by Ecology or the Colville Tribes:

  Watershed Management Section, WQP-HQ
  Washington Department of Ecology
  PO Box 47600
  Olympia, WA 98504-7600

  Confederated Tribes of the Colville Reservation
  Environmental Trust Department
  ATTN: Watershed Program Manager
  PO Box 150
  Nespelem, WA 99155

Editorial Corrections to the Permit

EPA has corrected the following editorial errors in the Chief Joseph Dam permit.

- EPA has corrected typos, formatting, and punctuation errors and added abbreviations in the permit.
- EPA has narrowed the Temperature Data Report submittal to require only Excel or Excel-compatible file submittals. Permit Part I.B.11(b) now states (see bold): "Use the temperature device manufacturer's **or compatible** software to generate (export) an Excel or Excel-compatible ~~text or electronic ASCII text~~ file."
- EPA has clarified the submittal process for plans and reports in Permit Part III.B.3 and other sections of the permit that refer to plans and reports.
- EPA has updated some submittal requirements to allow for electronic submittal of reports. (See Permit Part III.G, III.I and V.K.)
- EPA updated the penalty amounts in Section IV.B *Penalties for Violations of Permit Conditions* to reflect current amounts at the time of permit issuance.

Reasonable and Prudent Measures (RPMs) from ESA Consultation

On May 10, 2023, EPA received a BiOp from NMFS which included an Incidental Take Statement (ITS) and RPMs for EPA to implement in the permit. The BiOp sets forth RPMs which are considered by NMFS to be "necessary or appropriate to minimize the impact of the amount or extent of incidental take". The BiOp also sets forth Terms and Conditions that "the federal action agency must comply (or must ensure that any applicant complies) with" in order to be "exempt from the prohibitions of section 9 of the ESA."

RPM #1: Revise monitoring frequency for Outfall 45 so that oil and grease discharges to Foster Creek (Outfall 45) are adequately characterized by USACE's monitoring.

To implement RPM #1, NMFS provided the following Term and Condition: To implement RPM 1, EPA will adjust the permit's monitoring frequency for Outfall 45 to better characterize discharges during storm events. Given the seasonality of rainfall and stormwater runoff, EPA will adjust the permit's monitoring frequency to once per week for years 1-3 before allowing USACE to reduce the frequency to once per month if no exceedances are detected.

EPA changed footnote 2 of Table 4 in Permit Part I.B to the following (see bold): "During the first **3** years after the effective date of the permit, the required monitoring frequency is 1/week. If there are exceedances in the first 3 years after the effective date of the permit, the frequency will remain 1/week. If there are no exceedances, the required monitoring frequency is reduced to 1/month." Previously, the permit allowed for decreased monitoring after just one year with no exceedances.

RPM #2: Ensure that the USACE's Best Management Practices Plan includes measures to reduce the likelihood of oil and grease discharges to Foster Creek.

To implement RPM #2, NMFS provided the following Term and Condition: To implement RPM 2, EPA will require that the USACE:

a) Clean solids from the stormwater catch basin that discharges to Outfall 45 two times per year over the 5-year term of the permit, with one clean-out to take place in January or February each year (i.e., before the expected start of spawning in mid-March).

b) Operate, maintain, and inspect the oil-water separator just upstream of this catch basin according to the recommended procedures and applicable sections in the manufacturer's operations and maintenance manual.

c) Maintain inspection and maintenance records for the oil-water separator for 5 years.

EPA added these three requirements to Permit Part I.B.15 (d)-(f).

RPM #3: Make available to NMFS the required BMP, EAL, and PCB Management Plans and monitoring reports.

To implement RPM #3, NMFS provided the following Term and Condition: To implement RPM 3, EPA will make available to NMFS the required BMP, EAL, PCB Management Plans and the monitoring reports generated by these plans to Columbia Hydropower Branch Chief, Interior Columbia Basin Office, West Coast Region, NOAA Fisheries.

EPA changed Permit Parts II.B, II.C, II.D, III.B.3 and associated sections of the Schedule of Submissions to include NMFS as a required recipient of these reports.

Response to Comments

The comments are in the following categories: General Comments; CWIS; Permit Conditions – Monitoring, Effluent Limits, and Plans; 401 Certification; and Tribal Consultation and Engagement.

General Comments

Comment 1. In Part I.B.12, *Effluent Limitations and Monitoring* (page 11), the draft permit reads "For outfalls with representative sampling at Part I.10, the monthly average temperature must be calculated using only the continuous temperature monitoring data from representative outfalls and applied to the represented outfalls."

The reference to Part I.10 is incorrect and the Corps recommends that should be corrected to read Part I.B.10. (USACE p. 8)

Response. EPA agrees that the reference is incorrect. The reference to Part I.10 in Permit Part I.B.14 (previously I.B.12) has been corrected to read Part I.B.12 (previously I.B.10)

Comment 2. In Permit Part II.E. *CWIS Requirements*, Paragraph 2, *BTA Implementation* (page 18), the draft permit states "The permittee must implement the BTA (best technology available) to ensure that all trash racks, strainers, and intake screens are checked and cleaned in accordance with the Appendix A: BMP Plan." Appendix A is the Table referencing the "Minimum Levels" for monitoring requirements. The Corps recommends changing the reference to Appendix B; Best Management Practices (BMP) Plan for the BTA being utilized for minimizing adverse impacts from impingement and entrainment (USACE p. 10).

Response. EPA agrees that the reference was incorrect and has changed the reference in Permit Part II.E.4 of the permit from "Appendix A: BMP Plan" to "Appendix B: Best Management Practices (BMP) Plan."

Cooling Water Intake Structures (CWIS)

Comment 3. In Part II.E.4. of the Chief Joseph Dam permit (p. 16), the draft permit states "The CWIS Annual Certification must demonstrate that BTA has been properly operated and maintained and that no changes to the facility have been made unless documented."

The purpose of the CWIS Annual Certification is to verify that the Corps' BTA to minimize impingement and entrainment of fish is being properly operated and maintained. The Corps recommends that EPA clarify this by changing the language of the permit to require the Annual Certification to demonstrate "that no changes to the CWIS have been made unless documented." (USACE p. 11)

Response. The intent of the permit condition is to ensure that no changes are made to the CWIS that would affect BTA in a manner that would increase the amount of entrainment or impingement of organisms. EPA agrees to change the wording because many changes to the facility at large may not impact the CWIS or BTA. EPA has modified Permit Part II.E.4 to the following (see bold): "The CWIS Annual Report must demonstrate that BTA has been properly operated and maintained and that no changes to **the CWIS or equipment related to**

the BTA or CWIS have been made unless documented."

Comment 4. In Permit Part II.E. *CWIS Requirements,* Paragraph. 3*: CWIS Evaluation Report* (page 18), the draft permit states that the CWIS evaluation report must include "an evaluation of additional operations or technologies to minimize fish impingement and entrainment." As EPA recognized in its January 2021 "Framework for Considering Existing Hydroelectric Facility Technologies in Establishing Case-by-Case, BPJ §316(b) NPDES Permit Conditions," for many hydroelectric facilities, "conducting impingement or entrainment sampling at the pipe or intake structure could be very difficult, and even unsafe." Likewise, at Chief Joseph Dam it is not possible to monitor impingement or entrainment at these intake structures, such as inside the scroll case (the spiral casing around the runner of the turbine where water is able to impinge the runner blades) of a unit. These scroll cases are not accessible while a generator unit is operational and can only be accessed when the unit is dewatered to a safe level. In recognition of these challenges, EPA has stated that it "generally does not expect permit writers to seek development of new information or additional studies (e.g., impingement and entrainment studies) to inform the evaluation of this factor."

To the extent that the draft permit suggests that the facility undertake additional impingement and entrainment studies by "evaluating additional operations or technologies to minimize fish impingement and entrainment," this requirement should be eliminated from the permit as infeasible and overly burdensome on agency resources. If the requirement is not removed, EPA should clarify that any evaluation of strainers and fish presence, information on current fish impingement and entrainment, or evaluation of additional technologies should be performed "where reasonable and feasible at the facility" in accordance with similar language in Appendix B: BMP Plan, par. 8 (USACE p. 10-11).

Response. Section 316(b) of the Clean Water Act requires that facilities minimize the entrainment and impingement of organisms on CWIS. In order to assess the impact, the facility is required to develop a CWIS Evaluation Report. However, EPA agrees that certain physical structures and operations may preclude the facility from evaluating particular pathways that might harm aquatic organisms. Therefore, EPA has modified the language at Permit Part II.E.3 to the following (see bold): "an evaluation of additional operations or technologies to minimize fish impingement and entrainment, **where feasible. If the permittee determines the evaluation of certain operations or technologies are not feasible, the permittee must provide an explanation in the CWIS Annual Report."**

Permit Conditions – Monitoring, Effluent Limits and Plans

General Comments

Comment 5. In Permit Part III.A., *Representative Sampling (Routine and Non-Routine Discharges)* (page 19), the draft permit states "Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity." Chief Joseph Dam does not discharge at every outfall 24 hours per day and does not have the capability to run generators in "speed-no-load" condensing mode. Instead, the number of generators running

at any given time are based on power customers' needs and dispatched by BPA to meet load as necessary - with power generation instructions given as frequently as hourly. It is therefore unlikely that a schedule can be developed which would permit sampling of monitored activity (i.e., a discharge) for every outfall that happens to be operating in a given week. It would also be unduly burdensome and unreasonable for environmental compliance personnel to sample an outfall if the generator discharging to that outfall is operating for only a few hours during the week or operating outside of normal working hours. In instances where an outfall discharges but a positive sample cannot be obtained within a reporting period for the above reasons, the Corps will record an entry of NODI.

The Corps will take additional samples at appropriate outfalls "whenever any discharge occurs that may reasonably be expected to cause or to contribute to a violation that is unlikely to be detected by a routine sample." Should the permit sampling frequency be changed to once per month, the Corps is confident that we will be able to take representative samples from all outfalls where generators are operating. But for the reasons stated above, the Corps believes that "[s]amples and measurements taken for the purpose of monitoring must be representative of the monitored activity," where weekly sampling is required, is overly burdensome and does not account for the unique operation of generators at Chief Joseph Dam. Accordingly, the Corps requests that EPA remove this requirement from the permit or replace it with the following: "The permittee shall use its best efforts to ensure that samples and measurements taken for the purpose of monitoring be representative of the monitored activity." (USACE p. 11-12)

Response. See response to comment 9 with regard to the need for weekly sampling during the first year of the permit term. When an outfall does not discharge during a given monitoring period, the Corps should report a NODI code 'C No Discharge' for the outfall. To the extent that the Corps is unable to collect a given sample from an outfall, e.g., the outfall discharges outside of working hours, etc., the Corps should submit a NODI code 'E Failed to Sample/Required Analysis Not Conducted'. The permittee may submit an explanation of their inability to collect the sample to the Enforcement and Compliance Assurance Division (ECAD) with their discharge monthly report (DMR). ECAD may exercise enforcement discretion with regard to uncollected samples. No changes were made to the permit in response to this comment.

PCBs

Comment 6. Riverkeeper supports EPA's decision to require the Permittees to monitor their discharges for PCBs. The Columbia River already contains unsafe levels of PCBs, and lubricants and construction materials at dams on the Columbia contain PCBs that have a history of reaching the river. To generate the best and most relevant information about the Dams' PCB pollution, EPA should require the Permittees to do at least quarterly monitoring with method 1668 or another test sensitive enough to detect PCBs at the level of Washington's water quality criteria. While the proposed 608 testing methodology in the Draft Permits may be useful in some instances, the more sensitive method 1668 test is critical

to understanding the PCB loading caused by the Dams. (CRK p. 7)

Response. Part VI.D of the Fact Sheet (page 42) describes the basis for requiring the use of EPA Method 608.3 for sampling dam discharge water. Method 608.3 is an EPA-approved method for PCBs and analyzes for PCB Aroclors. The range of potential sources of PCBs at dams are likely to exhibit Aroclor patterns if present in discharge water, in contrast to PCB congeners which may indicate background PCBs present in the Columbia River or sources of inadvertently produced PCBs within the dam. Since the PCB requirements in this permit are focused on sources of PCBs from the dams, sampling methods for Aroclors are more appropriate. The reporting limit for this method and matrix is expected to be 0.1 µg/L, which is sufficient to capture PCB discharges associated with PCB sources in the dam.
The permit requires a PCB Management Plan to ensure that any potential PCB releases from Chief Joseph Dam are identified and addressed. To clarify the intent and make the language consistent with other federal dam permits, EPA has added the following language to the PCB Management Plan permit conditions in Part II.D:

- In Part II.D, PCB Management Plan, EPA added the following language (see bold): "A description of actions that will be taken during the remainder of the permit cycle to prevent, **track, and address** releases of PCBs from potential PCB sources listed in Part II.D.1(a), which must include BMPs that will decrease the likelihood of PCB releases."
- In Part II.D, PCB Management Plan, EPA added the following language (see bold): "Progress to date **in implementing the PCB Plan BMPs to** prevent PCB releases."
- In Part II.D, PCB Management Plan, EPA added the following language (see bold): "How **new actions will be taken to optimize effectiveness** during the remainder of the permit cycle."

Comment 7. Bonneville requests EPA to clarify Part I.B.6 of the permit which states, "The permittee is prohibited from discharging polychlorinated biphenyl (PCB) compounds such as those commonly used for transformer fluid." This statement does not provide a clear definition of what constitutes a discharge of PCBs. The statement could be interpreted to mean that PCBs must be discharged at concentrations below the freshwater toxicity criteria, or below the reporting or detection limit for a specific analytical method. Bonneville requests that EPA provide clarification for this statement. (BPA p. 5)

Response. Part I.B.6 of the permit prohibits the discharge of PCBs. The PCB Management Plan, which includes monitoring, planning, and actions, is a means to ensure compliance with the prohibition of PCBs. For this permit, EPA considers PCB concentrations below the EPA Method 608.3 detection limit to be in compliance with the no discharge provision. No changes were made to the permit in response to this comment.

Comment 8. Bonneville requests that all outfalls discharging under 1 million gallons/day (MGD) should be waived from sampling due to their de minimis impact. Bonneville requests that the timing and extent of the monitoring, analysis, and reporting

requirements for pH, temperature, oil and grease, and PCBs be re-evaluated for utility, practicability, and cost effectiveness. Bonneville requests that EPA coordinate directly with the Corps to identify representative monitoring and sampling locations and monitoring frequency that results in data utility, practicability and cost effectiveness.
Costs for implementing Chief Joseph's draft permit, along with costs for implementing the draft NPDES permit for Grand Coulee Dam and EPA's NPDES permits for the four lower Snake and pending four lower Columbia River facilities, will further increase the significant financial impact to Bonneville and the region's ratepayers when less burdensome monitoring and sampling would produce sufficient scientific information. (BPA p. 3)

Response. See the responses to Comment 9 with regard to oil and grease monitoring frequency, Comment 12 with regard to pH monitoring frequency, and Comment 18 with regard to temperature monitoring frequency.

The justification for PCB monitoring in the permit can be found in the Chief Joseph Dam Fact Sheet on page 42-43. PCB monitoring is required only at outfalls where the Corps identifies a potential source of PCBs and potential pathways for PCB discharges in the PCB Management Plan. The frequency and duration of characterization monitoring at these outfalls is minimal, and is necessary given the potential PCB pollution pathways that may be identified by the Corps.

With regard to waiving sampling from outfalls discharging under 1 mgd, all outfalls with numeric effluent limits require monitoring to determine compliance with the limits. See 40 CFR § 122.41(j).

Monitoring requirements already reflect the minimum frequency and representativeness to quantify discharge concentrations, based on review of existing data and facility processes. No changes have been made to the permit in response to this comment.

Oil and Grease and pH

Comment 9. In Part I.B., *Effluent Limitations and Monitoring* , Table 1, note 1 and Table 2, note 1, (page 8, 9), the draft permit requires a sampling frequency of once per week for pH and oil and grease for the first year of the permit. For the reasons stated below, the Corps requests sampling of pH and oil and grease occur once per month throughout the permit term.

Chief Joseph Dam generates hydroelectric power with Francis runner (fixed blades) turbines, which involve much less oil interfacing with water than the Kaplan (hydraulically controlled movable blades) turbines used at many other Columbia and Snake River Dams. Francis turbine operations are less likely to involve oil and grease discharges because the distance of lubricated parts to equipment which interfaces with water is much greater than in Kaplan turbines. Accordingly, sampling regimes for projects with Francis turbines should be different from projects with Kaplan turbines, commensurate with the lower likelihood of oil and grease to water interfacing.

Based on the guidance found in the NPDES Permit Writers' Manual (EPA-833-K-10-001) for establishing appropriate monitoring frequency, commenters further ask that EPA consider the following:

- Compliance history
- Frequency of the discharge
- Cost of monitoring

EPA guidance states monitoring frequency "should be determined on a case-by-case basis." While the recently permitted Corps Dams on the Snake River (with Kaplan turbines) are required to provide weekly monitoring for pH and oil and grease, we observe that the Washington Department of Ecology has recently issued a NPDES Permit No. WA0991028 to Wanapum Dam (ten Kaplan turbines) on the Columbia River (River Mile 415.8), that requires once per month oil and grease grab samples from only one (out of twelve) outfall and once per month samples for pH from two (out of twelve) outfalls. Washington Ecology currently has a draft NPDES Permit No. WA0991031 for Wells Dam (ten Kaplan turbines) on the Columbia River (River Mile 515.8), that requires a sampling frequency of once per month for pH and oil and grease for 16 out of 26 outfalls.

Given that Chief Joseph Dam operates Francis turbines, with less potential for oil/grease water interface, the sampling requirements for Chief Joseph Dam are excessive compared to other recently promulgated NPDES permits. Moreover, because it is unlikely that all 27 generators will be operational every week, and thus unlikely that all outfalls will register a discharge, there is a high likelihood that weekly testing will generate multiple NODI readings. To reduce costs without compromising the gathering of complete data, the Corps suggests that a sampling frequency of once per month for pH and oil and grease, consistent with sampling requirements for other Columbia River dams, would suffice to provide a more than satisfactory basis for compliance monitoring

Additionally, commenters requests that all outfalls with maximum daily discharges under 1 million gallons/day (MGD) should be waived from sampling due to their de minimis impact. Bonneville requests that EPA coordinate directly with the Corps to identify representative monitoring and sampling locations and monitoring frequency that results in data utility, practicability and cost effectiveness. (USACE p. 1-3; BPA p. 5)

Response. EPA recognizes that the permit includes numeric limits for a large number of outfalls, which require effluent monitoring to determine compliance with these limits. Since this is the first permit for this facility, the initial cost in both money and employees can be significant (e.g., installing the necessary monitoring equipment). EPA considered these factors when developing monitoring requirements in this permit, while also determining what is necessary to ensure that sufficient data are collected to determine compliance and to characterize effluent in future permits. EPA also coordinated with the Corps in developing the permit monitoring requirements.

All outfalls with numeric effluent limits require monitoring to determine compliance with the limits. See 40 CFR § 122.41(j). The permit requires weekly grab samples for oil and grease in the first 12 months of the effective date of the permit, and monthly grab samples thereafter if there are no exceedances of the effluent limit in the first year. EPA has changed the permit to require weekly grab samples for pH for the first 12 months after the effective date of the permit and monthly grab samples thereafter. See response to Comment 12. As explained in the Chief Joseph Dam Fact Sheet Section V.C. p. 38-39, this level of monitoring is necessary to ensure oil, grease, and pH discharges are appropriately characterized. This is the first NPDES permit for Chief Joseph Dam, and outfall-specific oil and grease and pH data are limited to one to two samples per outfall from the permit application. EPA acknowledges that Francis runner (fixed blades) turbines involve much less oil that interfaces with water than the Kaplan (hydraulically controlled movable blades) turbines in the Lower Columbia and Lower Snake River federal dams, where final permits require weekly sampling for at least the first year. However, weekly monitoring for the first year is needed to provide quantitative, outfall-specific data. EPA considers this to be a reasonable approach to ensure compliance while also allowing for less frequent monitoring during the permit term for pH, and for oil and grease if monitoring shows compliance with the limits in the first year of the permit term. EPA has changed the monitoring frequency for pH in the permit. See response to Comment 12.

Comment 10. Section 301(a) of the Clean Water Act prohibits discharges of oils, greases, lubricants, cooling water, and other pollutants to the Columbia River from the Dams without NPDES permit authorization. Because of the lack of NPDES permits, the Permittees have failed to monitor, report, and reduce pollution discharges pursuant to the Clean Water Act and its state and federal implementing rules for decades. The Dams discharge oils, greases, lubricants, heat, and other pollutants. Some of the pathways by which these pollutants reach the Columbia River—such as oil sumps and cooling water discharge ports—are regulated as point sources in the Draft Permits. Other pollution pathways are not identified or regulated as point sources, including (but not limited to) the following:

- Francis turbines, that leak and discharge oil and grease to the Columbia River;
- Wicket gates, with gate bearings lubricated with grease or another lubricant that is continuously fed into the bearings and discharged directly into the river; and
- Lubricated wire ropes where the lubricant comes into direct contact with river water.

All such discharges occur through point sources and must be addressed as such in the final NPDES permits.

Oil and grease releases from point sources at the Dams are routine. As EPA is aware, and as Riverkeeper detailed in its Notice Letters that caused the Permittees to apply for these permits, Permittees have reported a number of such releases from the Dams. Periodic communications received by Riverkeeper from parties with reason to know about the operations of these Dams suggest that the oil discharges reported by the Permittees are not the only oil releases that have occurred. Discharges at the Dams highlight the need for these

NPDES permits and the important role they will play in reducing pollution in the Columbia Rivers. (CRK p. 5)

Response. As discussed on page 13 of the Chief Joseph Dam Fact Sheet, the proposed permit addresses wastewater discharges from discrete outfalls at the dam. The permit does not authorize waters that flow over the spillway or pass through the turbines. *See National Wildlife Federation v. Consumers Power Company*, 862 F.2d 580 (6th Cir. 1988)*; National Wildlife Federation v. Gorsuch*, 693 F.2d 156 (D.C. Cir. 1982). Accordingly, there are no specific effluent limits or monitoring requirements that apply to the pass-through water associated with the turbines. However, the permit does contain an oil accountability, tracking and reporting BMP requirement that applies to the whole facility, which provides accountability for all oil and grease discharges at the facility. Through this mechanism, the Corps will be accountable for all oil and grease at the dams, even if it isn't directly associated with a permitted outfall. No changes were made to the permit as a result of this comment.

Comment 11. In Part I.B. *Effluent Limitations and Monitoring*, Table 1, note 1; Table 2, note 1, (page 8, 9), the draft permit states that "if there are no exceedances of the pH limit or detection of oil and grease in an outfall, the required monitoring frequency for that pollutant is reduced to 1/month for that outfall. If there are exceedances/detections in the first year of the permit in an outfall, the frequency will remain 1/week for the remainder of the permit term for that outfall."

The minimum detection level for oil and grease (Method 1664) is 1.4 mg/L. The effluent limitation for oil and grease in the permit is 5 mg/L. If EPA does not reduce sampling to once per month, the Corps is concerned that a detection below the permit effluent limitation of 5.0 mg/l as written could be interpreted to not qualify for the reduced sampling after the first year of an outfall not having a permit exceedance. Accordingly, the Corps requests that the word "detection(s)" be removed and be replaced with "exceedance." (USACE p. 4-5; BPA p. 5).

Response. EPA has changed footnote one in Tables 1, 3 and 4 of the permit to replace the word "detection(s)" with "exceedance". If measurements are taken and there are no effluent limit exceedances, the monitoring frequency can be reduced as stated.

Comment 12. The draft permit requires that pH be monitored once per week in the first year of the permit on outfalls 1-38, and then, if there are no exceedances of the pH limit, to once per month.

The Corps requests that pH monitoring be removed as a required sampling parameter from all outfalls where ONLY Non-Contact Cooling Water is discharged (Outfalls 1 to 33, 35 to 38). There are no processes, chemicals, or potential spills from the facility that could potentially affect the pH of the water flowing through either the Thrust Bearing or Air Housing cooling water systems. This water is hard piped to the scroll case via penstock, is "plumbed" from the scroll case, and then joins the cooling water systems. No samples of pH

taken for application submission were less than 6.5 or greater than 8.5 standard units. As EPA has recognized, the measured range of pH from the facility's outfalls is 7.1-8.2, "which falls within the range of Washington and the Federal promulgated Colville Tribal WQS." The Corps acknowledges the potential for spills or other impacts within the facility which may influence the pH of water in drainage sumps or stormwater outfalls. The Corps therefore requests that pH monitoring be removed for outfalls 1 to 33 and 35 to 38 and kept as a requirement only for outfall 34. (USACE p. 4; BPA p. 3-4)

Response. pH can be an indicator for problems with operations and maintenance if large amounts of chemicals or other pollutants are released. EPA concluded that the double-walled cooling water piping reduces the risk of cooling water contact with oil and grease and other pollutants, but it does not remove the risk for equipment failures to cause discharges. In addition, the permit prohibits the discharge of toxics, deleterious materials, and excess nutrients that can cause visible slime growth or other nuisance aquatic growths impairing beneficial uses of the receiving water. pH serves as a proxy for these discharges.

Since EPA's initial conclusion is that pH can be influenced by dam operations, and since there is limited baseline information from permit applications, the permit includes numeric water quality-based effluent limits based on Washington water quality standards for all outfalls, with the exception of Outfall 38 which routes water in pipes through the ambient air in the warehouse away from any equipment to regulate indoor air temperature. EPA, however, believes that weekly sampling during the first 12 months after the effective date of the permit and monthly sampling thereafter will be sufficient to characterize pH in effluent.

All outfalls with numeric effluent limits require monitoring to determine compliance with limits. See 40 CFR § 122.41(j). The permit requires weekly grab samples for the first year, and monthly grab samples thereafter. As explained in the Chief Joseph Dam Fact Sheet Section V.C. p. 38 weekly monitoring is necessary to ensure pH discharges are appropriately characterized. This is the first NPDES permit for Chief Joseph Dam, and outfall-specific pH data are limited to one to two samples per outfall from the permit application. Weekly monitoring for the first year is needed to provide quantitative, outfall-specific information data. EPA considers this to be a reasonable approach to ensure compliance while also allowing for less frequent monitoring during the remainder of the permit term.

EPA has changed Table 1 and Table 3 in the permit to: "During the first 12 months after the effective date of the permit, the required monitoring frequency is 1/week. In subsequent years, the required monitoring frequency is 1/month" EPA has changed the footnote for oil and grease monitoring frequency in Table 1 and Table 3 of the permit to: "During the first 12 months after the effective date of the permit, the required monitoring frequency is 1/week. If there are exceedances in the first 12 months after the effective date of the permit in an outfall, the frequency will remain 1/week for that outfall. If there are no exceedances in an outfall, the required monitoring frequency is reduced to 1/month for that outfall."

Outfall-Specific

Comment 13. In Part I.B., *Effluent Limitations and Monitoring*, Table 1: Outfalls 1-16, 18, and 26 (page 8, 9), the draft permit requires sampling from outfalls as listed in Table 1. Due to the configuration of several outfalls at the facility, the final outfall/discharge point to the river is submerged and not accessible for direct sample collection. Accordingly, alternative sampling locations can be found where piping can be accessed and tapped for collection points. The Corps recommends that the cooling water samples for outfalls 1 through 16 and 18 and 26 are taken as flow weighted averaged samples for pH and oil and grease, instead of true grab samples as described in the draft permit.

Since the power generating units create excess heat, each individual generating unit that discharges to outfalls 1 through 16, 18, and 26, has both non-contact air-housing cooling water and non-contact thrust bearing cooling water associated with its operation. The cooling water taken from the turbines' scroll case is diverted into these two process streams, with unequal flows. Approximately 96% of this cooling water is used to cool the air housing the generator (a dry environment) by being sent through a heat exchanger. The remaining 4% is used to cool the Thrust bearing. While the two process streams eventually merge, sampling at that point is not possible because pipes are embedded in concrete and the outfall is submerged.

Based on the unique nature of the cooling water streams that discharge to these outfalls, the Corps recommends that instead of true grab samples as identified in the draft permit, sampling for outfalls 1-16, 18, and 26 be taken as flow weighted averaged samples for pH and oil and grease. This would be a less costly method for the Corps to sample both process streams and provide complete data. (USACE p. 3-4)

Response. EPA understands that the combined discharge water is not accessible for direct sampling in some cases as referenced above. EPA supports the use of a flow-weighted grab sample from two sampling points for outfalls with inaccessible sampling locations as long as the sampling points are "after the last treatment unit" – in this case after being utilized to cool equipment or having any potential contact with oil and grease or other pollutants – and "prior to discharge into the receiving waters", as described in Part I.B.16 of the permit. The permit also states in Part III.A that "samples and measurements taken for the purpose of monitoring must be representative of the monitored activity." A flow-weighted grab sample where sample water is combined at a flow-weighted proportion to represent outfall water quality prior to water quality analysis, is considered by EPA to be representative of a grab sample at the inaccessible outfalls. No changes were made to the permit as a result of this comment.

Comment 14. Since Outfall 45 discharges only stormwater it is unlikely weekly samples will be available on a frequent basis. In Part I.B., *Effluent Limitations and Monitoring*, Table 3, note 1, Outfall 45 (page 10), a sampling frequency of once per month will ensure that a positive sample is gathered for Outfall 45. Accordingly, the Corps requests changing the sampling frequency for oil and grease for Outfall 45 to once per month (USACE p. 5-6).

Response. See response to Comment 9 with regard to the need for weekly sampling during the first year of the permit term. If outfall 45 does not discharge in the entire month, then the Permittee should report a NODI code 'C No Discharge' for that month. During periods where weekly monitoring is required, if outfall 45 discharges for some but not all weeks during the month, the Permittee should enter the maximum of the data values they did collect and include a note regarding how many samples were taken that month [e.g., samples taken on 3rd and 4th weeks of month, no discharge on 1st and 2nd weeks]. See response to Comment 5 with regard to failure to collect required samples and EPA enforcement discretion. EPA did not make any changes to the permit based on this comment.

Comment 15. In Part I.B., *Effluent Limitations and Monitoring*, Table 1, (page 8), the draft permit requires that Outfall 38 be sampled for temperature, pH, and oil and grease. The discharge water from Outfall 38 is from non-contact cooling water used in cooling the Main Warehouse. There is no potential for an oil water interface in this HVAC system. The system typically operates for seven months of the year from April to October. The Corps therefore recommends that the sampling requirement for oil and grease and pH be removed from Outfall 38. If EPA does not remove the requirement, testing for oil and grease and pH should be limited to April through October only. (USACE p. 5)

Response. EPA agrees with this comment. There are no potential oil, grease or pH interfaces associated with this outfall since river water is piped through the warehouse away from any equipment to control the ambient air in the warehouse prior to discharge. EPA has added a new table (Table 2) to the permit specifically for Outfall 38, which does not require oil and grease or pH monitoring. Since there is potential for this water to be heated through the process of cooling the ambient air, the temperature monitoring and heat load limit still apply to Outfall 38.

Comment 16. In Part I.B., *Effluent Limitations and Monitoring*, Table 2 (page 9), the draft permit requires that Outfalls 41 and 42 be sampled for pH and oil and grease. Outfalls 41 and 42 originate from a single sump in the spillway. This sump collects water leakage through the monolith joints in the spillway. This is a water transfer without the potential for addition of any pollutants and should not be included as part of the NPDES permit. The Corps requests removal of all sampling requirements for Outfalls 41 and 42. (USACE p. 5)

Response. Outfalls 41 and 42 were included in the NPDES permit application from the Corps. These outfalls discharge 'equipment and floor drain related wastewater'. In line with how equipment and floor drain related water is treated in other EPA-issued dam permits, the potential for pollutants from elsewhere in the dam to enter the sump pumps is considered a potential pollutant pathway, as well as the oil and grease interface associated with the sump pump itself. No changes were made to the permit as a result of this comment.

Temperature

Comment 17. The EPA's assessment and regulation of temperature impacts are inadequate. The EPA only considered and set controls for the discharge of "wastewater" from

the Facilities. However, it is not apparent that the EPA evaluated, or set controls for, temperature impacts of any wastewater other than cooling water. The EPA must correct this deficiency by evaluating and setting necessary temperature controls for all wastewater discharges.

With respect to cooling water, the EPA minimizes the effect of discharges on water temperature by asserting that these discharges will combine with water passed over the spillways. This ignores the fact that water above the dams is excessively warm, in part because of other upstream dams. Each dam on the Columbia River has a compounding effect on water temperature. Any dilution of the permitted discharges will be offset by the cumulative temperature impact of dams on the Columbia River. The EPA should consider how the Facilities contribute to this cumulative impact and regulate discharges from the Facilities accordingly.

Importantly, the NPDES Permits only regulate "wastewater" from the Facilities and do not "address waters that flow over the spillway or pass through the turbines." This ignores a significant part of the Facilities' contribution to the temperature impairment of the Columbia River: reservoir heat loading. The EPA's Columbia and Lower Snake Rivers Temperature Total Maximum Daily Load ("TMDL") acknowledged that heat loading in dam impoundments contributes a substantially greater temperature impact that any point sources or tributaries in the Columbia River. This finding is supported by the Chief Joseph Dam Fact Sheet, which notes that influent temperature measurements range from 7.8° C to 19.9° C (46° F to 67.8° F) while effluent temperatures range from 18° C to 37.6° C (64.4° F to 100.4° F). This is an increase of approximately 20° to 30° C.

The EPA cites *National Wildlife Federation v. Gorsuch*, 693 F.2d 156 (D.C. Cir. 1982) and *National Wildlife Federation v. Consumers Power Co*., 862 F.2d 580 (6th Cir. 1988) as supporting its decision to not regulate discharges over the spillway and through the turbines. However, "neither case categorically exempts all dams from the discharge permit requirements of the Clean Water Act." They only stand for the proposition that dam operators discharge a pollutant for purposes of the Clean Water Act when they have added pollutants to navigable waters "from the outside world."

The spillways and turbines of the Facilities do add pollutants "from the outside world" into navigable waters. The reservoir for Grand Coulee Dam is a component piece of the greater Grand Coulee Dam facility. The construction of Chief Joseph Dam created the Rufus Woods Lake reservoir. Both reservoirs can be fairly characterized as being part of their respective Facilities. Temperature pollution accumulates in the reservoirs through heat loading. This pollution would not exist, at least in its current levels, but for the existence of the Facilities (i.e., the Facilities add pollution "from the outside world"). The Facilities then move the polluted water over the spillways and through the turbines to discharge into downstream navigable waters. In other words, the Facilities' spillways and turbines do not simply "pass pollution from one body of navigable water into another." The EPA must regulate these

discharges through the NPDES Permits in order to properly address temperature impairment in the Columbia River.

For decades, the U.S. Army Corps of Engineers ("Corps") have operated the Facilities without discharge permits and in exceedance of applicable water quality criteria. The Facilities, as well as the other dams, restrict the natural flow of the Columbia River, which contributes to water temperatures that are harmful or lethal to salmonids.

Climate change is exacerbating these problems. If the EPA continues to ignore the temperature impacts of the Facilities and the other dams on the Columbia River, the target temperatures in the TMDL will not be met and salmon populations will continue to suffer.

Apart from the points described above, YN-DNR offers the following recommendations for improving temperature controls in the NPDES Permits:

- The EPA must ensure that the NPDES Permits are stringent enough to achieve state and tribal water quality standards for temperature and to prevent degradation of surface water quality both upstream and downstream of each Facility.
- The EPA should include stringent conditions in the NPDES Permits to adequately protect downstream state and tribal water quality.
- The EPA should require the Corps to implement additional mitigation measures at the Facilities. These measures could include: drawing down of selected reservoirs; increasing summer flows for temperature and fish migration; and modifying flows for fish habitat.
- The EPA should require the Corps to submit a water quality attainment plan ("WQAP") detailing temperature control strategies for achieving applicable water quality criteria and protecting downstream fish migration and habitat needs. The Corps should provide the WQAP to YN-DNR for review and comment. (Yakama Nation p. 2-4)

Response. Dams increase temperatures in the Columbia and Snake Rivers as both point sources and nonpoint sources. The Columbia River TMDL assigns WLAs to the point source portion of the dams (discharges from outfalls, such as cooling water and sump outfalls) and load allocations (LAs) to the nonpoint source portion of the dams (reservoirs and impoundments). The permit includes heat load limits consistent with WLAs to point sources in the Columbia River Temperature TMDL as required by 40 CFR § 122.44(d).

The 401 certifications from Ecology and the Colville Tribes include conditions that require the permittee to comply with the LA to the dam impoundment in the Columbia River Temperature TMDL, and the Ecology certification requires the permittee to develop a WQAP that complies with the temperature LA for Ecology review and approval, and for Colville Tribes' review.

As a result of the WQAP conditions in the 401 certifications from Ecology and the Colville Tribes, EPA has included the following language to Part II.F. in the permit related to the temperature LAs in the Columbia River Temperature TMDL:

- (Based on Ecology's and the Colville Tribes' Conditions) The permittee must implement temperature control strategies and meet the load allocations in the Columbia and Lower Snake Rivers Temperature TMDL and associated implementation plans (RCW 90.48.080 and WAC 173-201A-510(5)).
- The permittee must consult with Ecology and the Colville Tribes to develop a water quality attainment plan (WQAP) per the conditions below:
    - (Based on Ecology's and the Colville Tribes' Conditions) The WQAP shall include all applicable requirements in WAC 173-201A-510(5) *Compliance schedule for Dams*, and must include a detailed strategy for achieving Washington's and the Colville Tribes' water quality standards for temperature and TDG and associated designated uses.
    - As an element of the WQAP, the permittee must include a TDG monitoring and quality assurance project plan (QAPP). This QAPP is in addition to the quality assurance plan defined in Part II.A. of the permit. At a minimum, the QAPP must contain the following provisions:
        - (Based on Ecology's Conditions) A description of the monitoring, sampling frequency, equipment and sampling procedures, analytical methods, quality control procedures, data handling and assessment procedures, and reporting protocols.
        - (Based on Ecology's and the Colville Tribes' Conditions) Implementation of the monitoring program must begin as soon as Ecology and the Colville Tribes explicitly or implicitly approve their portions of the QAPP. Changes to the QAPP must be provided to Ecology and the Colville Tribes before taking effect.
    - The permittee must submit the TDG water quality data and TDG gas bubble trauma data to EPA, Ecology, and the Colville Tribes by February 28 following the first full calendar year of TDG monitoring, and annually thereafter. The TDG Data Report must be sent to EPA as an attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_WA0026891_TDG data_43599, where YYYY_MM_DD is the date that the permittee submits the report. The TDG data must be sent to Ecology and the Colville Tribes at the addresses at Permit Part II.F.7, unless agreed upon by Ecology and the Colville Tribes.
    - The permittee must submit the WQAP and WQAP QAPP to the Colville Tribes and Ecology as follows:
        - The permittee must provide the scope of the WQAP to Ecology and the Colville Tribes for review one year after the permit effective date.
        - The permittee must submit the WQAP QAPP to the Colville Tribes and Ecology for review and approval one year after the permit effective date. Ecology will have approval authority for II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).
        - The permittee must provide the final WQAP to Ecology and the Colville Tribes for review and approval within two years of the permit effective

date. Ecology will have approval authority for II.F.5(a), II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).

- The permittee must submit a progress report to Ecology and the Colville Tribes for review and approval within six years of the permit effective date. The permittee must submit a summary report to Ecology and the Colville Tribes for approval within nine years of the permit effective date and prior to the end of the ten-year dam compliance period. Ecology will have approval authority for II.F.5(a), II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).

- The permittee must submit the WQAP, QAPP, and TDG Data Report to Ecology and the Colville Tribes at the following addresses, unless agreed upon by Ecology or the Colville Tribes:

Watershed Management Section, WQP-HQ
Washington Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Confederated Tribes of the Colville Reservation
Environmental Trust Department
ATTN: Watershed Program Manager
PO Box 150
Nespelem, WA 99155

Comment 18. Bonneville requests reconsideration of the temperature monitoring frequency proposed in the draft NPDES permit. Many of the outfalls covered by the draft NPDES permit are likely submerged, and the discharges from these outfalls make up a very small percentage of the total flow of the receiving waters.

Because the cooling water impacts are de minimis, the draft NPDES permit requirement that continuous monitoring thermistors be installed at identified discharge points is unnecessarily burdensome due to the uniformity of the effluent. Further, this will lead to needless and excessive costs and will result in duplicative data that will provide little additional utility. Collecting continuous monitoring at the identified discharge points will not provide additional information on river temperature characteristics due to the small percentage of water used for cooling water compared to river flow. This requirement is expensive and overly burdensome resulting in no additional data value –other than to confirm a de minimis impact.

Moreover, EPA proposes year-round monitoring for temperature in the draft NPDES permit. River water temperatures are highly influenced by weather (e.g., high ambient air temperatures). Bonneville recommends replacing the continuous monitoring requirement with monthly monitoring frequency for the permit term. (BPA p. 4)

Response. Since available temperature data are limited to approximately one sample for each

outfall, the permit requires temperature monitoring to assess compliance with the heat limits and to better characterize temperature at these outfalls. While EPA expects that the point source temperature impacts are likely small from Chief Joseph Dam, characterizing temperature is important because effluent data are limited and more information is needed to confirm that temperature impacts are small. In addition, a large number of outfalls discharge cooling water and ESA-listed species are vulnerable to high temperatures. The permit requires a minimum of monthly sampling of temperature at each outfall or continuous temperature monitoring. For outfalls that require continuous monitoring, the permit allows for representative sampling with similar outfalls (i.e., outfalls that discharge the same type of effluent) because the amount of heat released and the resulting effluent temperatures from these outfalls are expected to be similar. For instance, for outfalls 1 through 16, the permit allows the facility to select six out of sixteen identical cooling water outfalls for continuous monitoring as opposed to reporting continuous monitoring at all outfalls, and requires only one of these to conduct influent monitoring. EPA concludes that the sampling frequency and type of temperature monitoring balances the need for accurate and representative data while providing flexibility on the number of outfalls requiring continuous temperature monitoring. No change was made to the permit as a result of this comment.

Comment 19. In Part I.B.11(a), *Effluent Limitations and Monitoring*, (page 11), the draft permit states that "Temperature data must be recorded using a micro-recording device known as thermistors or a device that is consistent with Washington Department of Ecology's 2003 publication, Continuous Temperature Sampling Protocols for the Environmental Monitoring and Trends Section (03-03-052)." The referenced publication is outdated. It has been incorporated and replaced with "EAP080 – Standard Operating Procedures, Version 2.1 for Continuous Temperature Monitoring of Freshwater Rivers and Streams." updated and recertified 03/25/2018. The Corps recommends replacing the guidance document with this updated reference. (USACE p. 6)

Response. EPA agrees with this comment and has identified a more recent reference. Permit Part I.B.13(a) now references Ecology's 2022 publication, *Continuous Temperature Monitoring of Freshwater Rivers and Streams* (22-03-216).

Comment 20. In Part I.B.11(b), *Effluent Limitations and Monitoring* (page 11), the draft permit states "Use the temperature device manufacturer's software to generate (export) an Excel text or electronic ASCII text file." This requirement provides little flexibility to the Corps to procure a temperature manufacturing device that otherwise meets sampling requirements. For instance, a temperature device may produce an analog output that is digitized and stored elsewhere. A specific temperature device manufacturer may not offer software to manipulate and then export sampling data. Additionally, the Corps may need to select certain software based on Department of Defense security measures or other factors, which may necessarily require the use of software from another third-party manufacturer.

Accordingly, the Corps recommends adding the word "compatible" to this requirement, to read: "Use the temperature device manufacturer's or compatible software to generate (export) an Excel text or electronic ASCII text file." (USACE p. 6)

Response. EPA agrees with this comment and has changed Part I.B.11(b) of the permit to read: "Use the temperature device manufacturer's **or compatible software** to generate (export) an Excel or Excel-compatible ~~text or electronic ASCII text~~ file." As described in the editorial changes section, EPA is narrowing this requirement to specify that the submittal must be an Excel or Excel-compatible file and converting other outputs into Excel will be the responsibility of the permittee.

Comment 21. In Part I.B.12 *Effluent Limitations and Monitoring* (page 11), the draft permit states "The permittee must not exceed a facility-wide monthly average heat load of 6.36E+09 kcals/day from June 1 to October 31."

The facility-wide monthly average heat load given to Chief Joseph Dam, 6.36E+09 kcals/day, is incorrect and should be adjusted in accordance with the updated Temperature Total Maximum Daily Load (TMDL) data for Chief Joseph Dam that was submitted to EPA in December 2020.

On May 18, 2020, EPA established the Columbia and Lower Snake Rivers Temperature TMDL as required by Section 303(d) of the Clean Water Act and its implementing regulations. EPA accepted public comments on the TMDL from May 21 through August 20, 2020. In response, the Corps submitted additional TMDL data that more accurately represented the heat load discharges of the hydroelectric facilities on the Lower Columbia and Snake Rivers - by reflecting heat loads during maximum operational capacity, at the highest temperature period of the year. Chief Joseph Dam was on a later schedule with the NPDES permit application process than the 8 lower Columbia and Snake River Dams and thus did not submit specific comments to the initial May 2020 TMDL for the Chief Joseph Dam.

In December 2020, USACE submitted specific TMDL data for Chief Joseph Dam to EPA. This additional TMDL data was consistent with the data previously submitted by the Corps and used by EPA to revise and reissue waste load allocations (WLA) for the 8 lower Columbia and Snake River Dams. On August 13, 2021, EPA transmitted the reissued TMDL to the states of Oregon and Washington. However, the August 2021 re-issuance did not include the revised TMDL data for Chief Joseph Dam. In other words, the WLA given to Chief Joseph Dam in the updated August 2021 TMDL (6.36E+09 kcal/day) was identical to the 18 May 2020 TMDL, while the 8 USACE Lower Columbia and Snake River Dams all had revised WLAs in accordance with the Corps' updated data.

Because the methodology EPA used to change the WLAs for the 8 Lower Columbia and Snake River Dams should be consistent with the methodology EPA will use to establish the WLA for Chief Joseph Dam, the Corps requests that EPA revise the WLA for Chief Joseph Dam in accordance with the data submitted to EPA in December 2020 and transmit the revised heat limit to the Washington Department of Ecology and the Colville Tribes. (USACE p. 6-7)

Response. EPA did not revise the WLA for Chief Joseph Dam in the 2021 Columbia and Lower Snake River Temperature TMDL. NPDES permits must incorporate WLAs into permits consistent with the assumptions and requirements of a TMDL. See 40 CFR 122.44(d)(1)(vii)(B). Therefore, pursuant to 40 CFR 122.44(d)(1)(vii)(B), the heat load for Chief Joseph Dam in the 2021 Columbia and Lower Snake River Temperature TMDL was incorporated into this permit. Since the TMDL has not been modified to account for the new information submitted by the USACE, the WLA that is currently in the TMDL for Chief Joseph Dam is applied in this permit. If the TMDL is modified with a new WLA for Chief Joseph Dam, the heat limit in the permit can be modified in the future. No changes were made to the permit as a result of this comment.

Comment 22. In Part I.B.12, *Effluent Limitations and Monitoring* (page 11), the draft permit states "The permittee must not exceed a facility-wide monthly average heat load of 6.36E+09 kcals/day from June 1 to October 31. The facility-wide monthly average heat load is calculated as the summation of the average monthly heat load for each outfall in accordance with the following equation:

Facility-wide monthly average heat load (kcals/day) = Σoutfalls [(monthly average temperature (°C))outfall x (monthly average flow (MGD))outfall x 3.78E+06 kcals/day/(°C x MGD)]"

Put another way, the heat load calculation specified by the draft permit can be demonstrated by the following:

$$Heat\ Load = \sum_{Outfalls}\left[AVE(Temp\ °C) \times AVE(Flow\ MGD)\ \times \left(3.78 \times 10^{6}\ \left(\frac{kcal}{day}\right)\left(\frac{1}{°C \times MGD}\right)\right)\right]$$

where "AVE(x)" denotes average value.

This method of calculation is overly specific, and overestimates heat load by performing the monthly averaging before multiplying temperature and flow. It is unlikely that temperature and flow will be perfectly correlated, so this method will likely overestimate heat load. Assuming continuous data exists for both temperature and flow, the permit should allow us to do the multiplication step before the averaging step - that is, allow us to multiply each temperature data point with the corresponding flow data point, average each outfall over the month, and then add up all the average heat loads for each outfall.

The Corps recommends changing the permit to allow calculation of the monthly plant-wide heat load as a sum of individually calculated heat loads, rather than averaging the facility-wide monthly temperature and facility-wide monthly flow separately, and then multiplying those monthly averages. Since the Corps will likely have continuous measurements or calculations for both temperature and flow, in those instances the Corps can more accurately calculate heat load by calculating instantaneous heat load measurements at each outfall and averaging those over the month.

Accordingly, the Corps requests that EPA allow a second formula for calculating facility-wide monthly average heat load, to provide flexibility for a more accurate calculation where the data permits. This proposed second formula is represented by the following equation:

$$Heat\ Load = \sum_{Outfalls}\left[AVE\left((Temp\ °C) \times (Flow\ MGD)\right) \times \left(3.78 \times 10^{6}\ \left(\frac{kcal}{day}\right)\left(\frac{1}{°C \times MGD}\right)\right)\right]$$

(USACE p. 7-8)

Response. EPA worked closely with the Corps during the development of this permit, as well as during the development of the Lower Snake River and Lower Columbia River Dam permits. For consistency between these permits for the first permit cycle, EPA did not alter the equation used for calculating heat loads. The method for calculating heat load may be re-considered for future permit cycles. No changes were made to the permit as a result of this comment.

Comment 23. In Appendix A, *Minimum Levels* (page 38), the Appendix requires the Minimum Level (ML) for devices monitoring temperature accuracy to be 0.2º C. Taking this to mean that the temperature measurement accuracy must be within ±0.2° C, this requirement is an overly burdensome and unnecessarily tight limitation. This requirement equates to about a ±0.5% accuracy requirement on temperature (at 38° C). The actual limited effluent is heat load, which requires multiplying temperature by flow. The accuracy of the heat load calculation is wholly dependent on whichever factor has worse accuracy, which will be flow, not temperature, regardless of the type of sensor the Corps uses. Based on the Corps' market research, even a high-quality flow meter, which we do not have on any discharge point, will only provide flow measurement accuracy of about ±1.5%. Actual feasibility with existing piping arrangements and sensors at Chief Joseph Dam will likely not allow for better than ±10% accuracy on flow measurement.

Because accuracy of the heat load calculation (heat x flow) is determined solely by the accuracy of the least accurate factor, and flow accuracy will, at best, be about ±1.5%, it is not practicable to spend agency resources to purchase and maintain calibration on costly temperature measurement devices with accuracy within 0.2° C. Such high-sensitivity devices would not change the accuracy of the heat load calculation at all because the flow measurement will be much more inaccurate.

A temperature measurement device within ±0.5° C would equate to approximately ±1.3% accuracy (at 38° C), and thus would still provide more accurate temperature readings than a high-quality flow meter would provide for flow. This means that the use of a ML 0.5° C monitoring device would provide the same heat load accuracy as a ML 0.2° C monitoring device but would be much less costly to purchase and implement. Therefore, the Corps requests that the ML for devices monitoring temperature be increased to 0.5° C. (USACE p. 12-13)

Response. For compliance purposes, the temperature data collected will be multiplied by flow and presented to EPA as a heat load as described above. The permittee will also compile a Temperature Data Report as described in Permit Part I.B.11(b). EPA and others will rely on the temperature data directly to characterize the discharge, which may include analyzing heating relative to influent temperature measurements. Being able to rely on temperature measurements to a finer degree than ±0.5° C will be necessary for these purposes. No changes were made to the permit as a result of this comment.

QAP, BMP and PCB Plans

Comment 24. In the *Schedule of Submissions*, the NPDES Permit provides that the Corps must submit: Quality Assurance Plans within 180 days of the effective permit dates; Best Management Practices Plans within 180 days of the effective permit dates; and PCB Management Plans within one year of the effective permit dates. YN-DNR supports the EPA's decision to require these important plans. However, the EPA's timelines for submission are excessive and will stall implementation of the plans. YN-DNR recommends that the EPA shorten the submission timelines before finalizing the NPDES Permits. (Yakama Nation p. 4)

Response. During the first year of the permit cycle, the Permittee will be responsible for developing a number of different plans, as referenced above. The permittee will also be developing and implementing a broad monitoring program and will be responsible for analyzing and reporting monitoring results. While EPA recognizes the importance of moving towards implementation of these permit conditions quickly, EPA also recognizes the importance of providing sufficient time for the Permittee to develop these plans thoughtfully and effectively. No changes were made to the permit as a result of this comment.

Comment 25. EPA Cannot Abdicate its Regulatory Authority Over the EAL, BMP, and PCB Plans: The Final Permits must ensure that EPA retains authority over the Permittees' selection and use of Environmentally Acceptable Lubricants (EAL), Best Management Practices (BMP), and PCB management measures at the Dams. While the proposed EAL, BMP, and PCB plans would constitute technology-based effluent limits, the Draft Permits do not meet the Clean Water Act's standards for setting technology-based limits. Because the Draft Permits do not provide any review or approval mechanism for EPA after the Permittees submit the required plans, EPA is illegally abandoning its regulatory role with respect to the EAL, BMP, and PCB plans. Further, because these plans would constitute effluent limits, EPA must afford the public an opportunity to review and comment on the EAL, BMP, and PCB plans. Riverkeeper supports EPA's decision to require the Permittees to produce EAL, BMP, and PCB plans, but the Final Permits must provide for EPA's review and approval, and give Riverkeeper and the public the opportunity to comment on these plans as well. Unless it retains authority to review and modify the EAL, BMP, and PCB plans, EPA is authorizing an illegal self-regulatory scheme. (CRK p. 6)

Response. Pursuant to CWA Section 401(d) and 40 CFR § 124.55(a), EPA has incorporated conditions into the final permit based on Ecology's and the Colville Tribes' 401 Certifications related to review and approval related to the plans referenced above (See *Changes in Response to Ecology's and Colville Tribes' 401 Certifications* on Page 1 of this document). EPA also notes that these plans are meant to supplement and support the effluent limits applied in this permit, but the plans themselves do not constitute effluent limits. For instance, the purpose of the BMP Plan is to identify actions and practices that the facility should implement to ensure that the numeric effluent limits are achieved. These actions and practices are not effluent limits or permit conditions; instead, they are actions and/or practices that will ensure that the facility meets the enforceable effluent limits in the permit. No changes have been made to the permit in response to this comment.

Comment 26. EPA Should Revise the Permit to Increase the Frequency of BMP, EAL, and PCB Plan Compliance Reporting. All NPDES permits must include monitoring and reporting requirements sufficient to ensure compliance with the permits' limitations. The Draft Permits require the Permittees to submit BMP, EAL, and PCB reports once per year. Annual reporting undercuts EPA's oversight and ability to prioritize inspections based permit violations. EPA's reporting requirement also undercuts the public's ability to understand pollution discharges from the facilities and review permit compliance in a timely manner. Citizen action is a "proven enforcement tool" that "Congress intended [to be used...] to both spur and supplement government enforcement actions." Commenters urge EPA to revise the Draft Permit to increase the EAL, BMP, and PCB reporting frequency to at least four times per year. (CRK p. 6)

Response. The permit establishes numeric effluent limits and requires frequent monitoring to ensure compliance with the limits. The facility is required to submit monthly DMRs which will identify whether the facility has had any effluent limit violations in a given month. Compliance with these limits are available at EPA's Enforcement and Compliance History Online website: https://echo.epa.gov/ This provides the public real-time opportunities to ensure compliance with permit effluent limits.

The purpose of the BMP Plan is to identify actions and practices that the facility should implement to ensure that the numeric effluent limits are achieved; the BMP Plan does not document numeric effluent limit violations. In addition, the BMP Plan conditions in the permit are designed to prevent oil spills and take actions to identify and improve on reducing oil spills. The BMP Plan requires the facility to develop an Oil Accountability Plan, track its oil uses, and report to EPA and Ecology if there is an oil release that is not accounted for (Appendix B of the permit). The purpose of the EAL Plan is for the facility to assess where lubricants are used and require EALs, unless infeasible. The permit conditions for EAL Plans require the Corps to shift all lubricants to biodegradable substances which will reduce the harmful impacts to aquatic species. Neither plan contains enforceable effluent limits. Annual reporting is appropriate for these plans since the permittee must evaluate the effectiveness of plans and recommend improvements for the subsequent year's actions. Quarterly reporting is

insufficient time to complete this evaluation. No changes were made to the permit as a result of this comment. See also Response to Comment 25.

Comment 27. In Part II.D.5, *PCB Management Plan* (page 18), the draft permit states "The permittee must submit the PCB Annual Report to EPA, Colville Tribes, and Ecology as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows:

YYYY_MM_DD_WA0026891_PCB_Annual_ Report_55099, where YYYY_MM_DD is the date that the permittee submits the written notification. The PCB Annual Report must be retained on site and made available to EPA, Colville Tribes, and Ecology upon request."

The Corps requests clarification that written notification is submission of the PCB Report. A separate requirement to provide written notification of submittal of the Annual PCB Report, along with the Annual PCB Report, is redundant and overly burdensome. Submission of the PCB Annual Report should be sufficient to provide notice to EPA, Colville Tribes, and Ecology. (USACE p. 9-10)

Response. EPA agrees with this comment and has changed Permit Part II.D.5. as follows (see bold): The file name of the electronic attachment must be as follows: YYYY_MM_DD_WA0026891_PCB_Annual_Report_55099, where YYYY_MM_DD is the date that the permittee submits the **PCB Annual Report**. The PCB Annual Report must be retained on site and made available to EPA, Colville Tribes, and Ecology upon request.

Comment 28. In Part II.B.2, *Best Management Practice (BMP) Plan* (page 14), the draft permit states:
a. The BMP Plan . . . shall provide for compliance with the terms of the permit and the BMP Plan, no later than within 180 days from the effective date of the permit.
b. . . . submit written notice . . . that the BMP Plan has been developed and implemented within 180 days of the effective date of the permit.
c. . . . The permittee must submit the BMP Plan within 180 days of the effective date.

The requirement to submit the BMP Plan and also submit Notification that the Plan has been developed is redundant and overly burdensome. The Corps believes that submittal of the Plan as directed (and other similar documents) is sufficient and recommends that the redundant "Notification" of the Plan should be removed as a required permit submission. (USACE p. 9)

Response. EPA agrees with this comment. The intent of this provision was for notification to EPA, not a submittal. However, given Ecology's and the Colville Tribes' Section 401 certification conditions, the permit now requires the submittal of the BMP Plan to EPA for review and approval. It should be noted that if EPA has not approved the plan within 30 days of receipt of the plan, the plan is deemed approved. Accordingly, EPA has changed Permit Part II.B.2.b. as follows due to the 401 certification conditions (see bold):
The permittee must submit a **BMP Plan to EPA for review and approval, and to the Colville Tribes for review,** within 180 days of the effective date of the permit. The permittee may submit the BMP Plan as an electronic attachment to the DMR. The file name

of the electronic attachment must be as follows:
YYYY_MM_DD_WA00XXXXX_BMP_05899, where YYYY_MM_DD is the date that the permittee submits **the BMP Plan**.

Comment 29. In Part II.B.5., *Best Management Practice (BMP) Plan* (page 15), the draft permit states "Prepare a written report to EPA, Colville Tribes and Ecology due within seven (7) calendar days after the incident has been successfully addressed, describes the circumstances leading to the incident, corrective actions taken, and recommended changes to operation and maintenance practices and procedures to prevent incident recurrence."

The Corps believes that reporting of BMP incidents should fall into the category of "other non-compliance reporting" (Part III.H) and be reported with monitoring reports as described in Part III.B. This will limit the number of required report submittals, lowering the cost of compliance, without impacting discharge.

The Corps also recommends adding the following language to the permit for clarification. "An incident is described in this permit as "spills or other discharges" that results in or contributes to an exceedance of any effluent limitation in the permit," in accordance with Appendix B.2.l. (USACE p. 9)

Response: A BMP incident in this permit is defined as any incident that is not in accordance with the BMPs laid out in the facilities BMP Plan. This includes incidents that in isolation do not directly result in or contribute to an exceedance of any effluent limitation in the permit, as proposed above. With regard to non-compliance reporting, EPA agrees and has changed Permit Part II.B.5 as follows (see bold):

Reporting of BMP incidents. Prepare a written report to EPA, the Colville Tribes and Ecology, due within seven (7) calendar days after the incident has been successfully addressed, describing the circumstances leading to the incident, corrective actions taken, and recommended changes to operation and maintenance practices and procedures to prevent incident recurrence. **The report must be submitted according to Part III.H.**

401 Certification

Comment 30. There are limitations to the conditions that may be imposed through EPA's draft NPDES permit. As recognized by EPA in its Fact Sheet for the draft NPDES permit for Chief Joseph Dam (EPA Fact Sheet) and consistent with Clean Water Act (CWA) case law, this draft NPDES permit does not address water flowing through the facility's spillway or passing through turbines. *See National Wildlife Federation v. Consumers Power Company*, 862 F.2d 580 (6th Cir. 1988); *National Wildlife Federation v. Gorsuch*, 693 F.2d 156 (D.C. Cir. 1982).

As discussed above, Chief Joseph Dam is a multi-purpose dam. Therefore, any conditions imposed by the draft NPDES permit and Washington Department of Ecology's (Ecology) 401 certification should not interfere with the Corps' ability to operate this facility for the

multiple purposes authorized by Congress. See National Wildlife Federation v. U.S. Army Corps of Engineers, 384 F.3d 1163 (9th Cir. 2004). Commenters also request a second comment period on the draft NPDES permit for Chief Joseph Dam if any substantive requirements are added to the permit as a result of the issuance of a CWA Section 401 certification by the Washington Department of Ecology or the Colville Tribes. (BPA p. 2-3; USACE p. 13)

Response. CWA Section 401(d) states that "[a]ny certification ... shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure [compliance] with any applicable effluent limitations and other limitations [set forth in one of the enumerated CWA sections] and with any other appropriate requirement of State law ... and shall become a condition [of the permit]." 33 U.S.C. § 1341(d); *see also* 40 CFR § 124.55(a) ("no final permit shall be issued … Unless the final permit incorporates the requirements [i.e., conditions] specified in the certification under § 124.53(e)."). In addition, 40 CFR § 124.53(e) requires that a state certification include conditions which are necessary to assure compliance with the applicable provisions of CWA Sections 208(e), 301, 302, 306, and 307 and with appropriate requirements of State law. For any certification condition that is more stringent than the conditions in the NPDES permit, the State must include the CWA or State law reference(s) upon which the condition is based. 40 CFR § 124.53(e)(2). The federal permitting authority does not have discretion to alter or reject conditions included in a state 401 certification. *See City of Tacoma, Wash. v. FERC*, 460 F.3d 53, 67 (D.C. Cir. 2006); *Am. Rivers v. FERC*, 129 F.3d 99, 107 (2d Cir. 1997) ("FERC may not alter or reject conditions imposed by the states through 401 certificates."). Since CWA Section 401(d) requires EPA to include conditions from a 401 certification, providing an additional public comment period on the incorporation of the conditions into the permit serves no purpose. *See Lake Carriers Assn. v. EPA*, 652 F.3d 1, 10 (DC Cir. 2011). Instead, if an entity disagrees with a condition in a CWA Section 401 certification, that entity's recourse is to follow the state appeal process for the 401 certification.

Here, Ecology's and the Colville Tribes' 401 certifications contain conditions that EPA must incorporate as permit conditions pursuant to CWA section 401(d). The commentor generally states that the conditions cannot interfere with the Corps' ability to operate the dams. To the extent that one of the conditions does interfere with the operation of the dam, the commentor had the ability to appeal that condition in the state/tribal appeals process. Neither of these certifications were challenged and the conditions in the certifications are final. Therefore, EPA incorporated the conditions of the certifications into the permit pursuant to Section 401(d) of the CWA.

Comment 31. Where a federally permitted activity has the potential to discharge into navigable waters, Section 401 of the Clean Water Act provides that the state or tribe where the discharge originates must certify the federal permit. These certifications may include provisions necessary to ensure the permitted activity will comply with water quality standards and other appropriate requirements. Each of these provisions "shall become a condition" on the federal permit. States can therefore condition their certifications such that federally permitted activities do not cause adverse temperature impacts to water quality.

Per the Fact Sheet, the NPDES Permit triggered the state of Washington's ("State") and the Confederated Tribes of the Colville Reservation's ("Colville") Section 401 authority. The State has initiated the Section 401 certification process for the NPDES Permit.

The EPA must incorporate any State or Colville Section 401 water quality conditions into the NPDES Permit. The EPA should encourage the State and the Colville to coordinate with each other to ensure that their respective conditions do not conflict with one another or create confusion. Finally, given that the conditions will attach to the NPDES Permits, the EPA should re-release drafts of the NPDES Permits for feedback from YN-DNR and the public once the State and the Colville complete their Section 401 certifications. Otherwise, YN-DNR and other commenters can only provide feedback on an incomplete version of the NPDES permits (Yakama Nation p. 5; CRK p. p. 7).

Response. EPA has included all of the conditions in Ecology's and the Colville Tribes' 401 certifications into the final permit. See response to Comment 30 with regard to EPA holding a second public comment period. No changes were made to the permit as a result of this comment.

Tribal Consultation and Engagement

Comment 32. YN-DNR appreciates the Environmental Protection Agency's ("EPA") November 4, 2021 letter regarding an opportunity for consultation on the NPDES Permits. However, as discussed below, the ongoing Section 401 certification and Endangered Species Act ("ESA") consultation processes could affect the provisions in the NPDES Permits. This creates uncertainty and frustrates the ability of YN-DNR technical staff to adequately brief the Yakama Nation Tribal Council regarding the consultation opportunity. Accordingly, we request a technical meeting with the EPA to discuss the permits and the implications of the ongoing Section 401 and ESA processes. Such a meeting would assist with the Yakama Nation Tribal Council's determination on whether to initiate consultation with the EPA. The NPDES Permits have the potential to affect Treaty-reserved fisheries resources. YN-DNR accordingly has a significant interest in ensuring that the EPA acts in a manner that is consistent with applicable law and adequately protective of water quality and fish populations.

Currently, the Fact Sheets' environmental justice section is lacking a meaningful analysis of how the Facilities and the NPDES Permits impact the Yakama Nation, our members, and our Treaty-reserved rights. It is critical that the EPA properly incorporate the Yakama Nation's perspectives regarding such impacts into the NPDES Permits. Further engagement between the EPA and YN-DNR will facilitate that effort. (Yakama Nation p. 2)

Response. Meaningful consultation is part of EPA's government-to-government commitment to meeting treaty obligations. EPA has met with staff and management from Yakama Nation during the development of the Lower Columbia and Lower Snake dam NPDES permits. EPA reached out to the Tribe on multiple occasions to set up a technical meeting regarding Chief Joseph Dam, and continues to be available for a technical meeting

to discuss environmental justice, and the implications of the Section 401 and ESA processes. This ongoing engagement with tribal entities, including Yakama Nation, is critical to addressing environmental justice issues obligated under Executive Order 12898.
EPA shared the 401 certifications with Yakama Nation and other entities upon receipt, but since EPA does not have discretion around the inclusion of 401 conditions, engagement or further public comment on these conditions will not result in differences to the permit and will not be meaningful (See response to Comment 31). See response to Comment 33 regarding ESA consultation coordination with Yakama Nation.

EPA is available to discuss environmental justice (EJ) issues with Yakama Nation as mentioned above. Executive Order 12898 discusses addressing environmental justice in federal actions. EPA's Region 10 environmental justice program seeks to integrate principles of environmental justice in the Agency's core work, including for the NPDES permits program. EPA uses a set of indices (EJ Screen) to determine whether the surrounding community constitutes an environmental justice community. These indices include a variety of factors related to race, income, education, and age, among other factors. EPA is interested in discussing EJ concerns regarding this permit and future permits. However, in regard to the Fact Sheet language around EJ in this permit, EPA does not revise fact sheets after the public comment period, and therefore will not be adding to or revising EJ language in the Fact Sheet. No changes were made to the permit as a result of this comment.

Comment 33. YN-DNR understands that the EPA will engage in ESA with NOAA Fisheries and the U.S. Fish & Wildlife Service regarding the potential effects of the NPDES Permits on listed species. We request that the EPA involve YN-DNR in this process so that our staff can provide input and expertise on potential effects to listed salmon populations. Furthermore, if ESA consultation might result in changes to the NPDES Permits, the EPA should re-release drafts of the NPDES Permits for feedback from YN-DNR and the public once consultation is complete. Otherwise, YN-DNR and other commenters can only provide feedback on an incomplete version of the NPDES permits. (Yakama Nation p. 5)

Response. On December 15, 2022, NMFS sent a letter to Yakama Nation requesting any information, input or traditional knowledge that the Tribe wishes to share for consideration in the NMFS BiOp that was under development at the time. Based partially on information provided by the Colville Tribes, monitoring and best management practices were made more stringent for one outfall from Chief Joseph Dam (see *Changes based on ESA Consultation Section* on page 5 of this document). EPA reached out to the Yakama Nation multiple times to offer a technical meeting and remains available for such a meeting. No changes were made to the permit as a result of this comment.

Comment 34. In Part III.G.3, *Twenty-four Hour Notice of Noncompliance Reporting* (page 22), the draft permit states "The permittee must contact the Colville Tribes within 24 hours by telephone" in regard to circumstances that requiring timely notification. There is no phone number provided for the Coville Tribes. The Corps requests a phone number to contact the Colville Tribes for Twenty-four Hour Notice of Noncompliance Reporting.

(USACE p. 12)

Response. EPA has changed Part III.G. of the permit to include a phone number for contacting the Colville Tribes.