

AMENDATORY SECTION (Amending WSR 16-16-095, filed 8/1/16, effective 9/1/16)

WAC 173-201A-420 Variance. (1) **General provisions.** Variances for individual facilities, a group of facilities, or stretches of waters may be issued for the criteria and designated uses established in WAC 173-201A-200 through 173-201A-260 and 173-201A-600 through 173-201A-612. The following conditions apply when considering issuance of a variance:

(a) A variance may be considered when the standards ~~are expected to~~ cannot be attained ~~by the end of the variance period~~ or the attainable use cannot be reliably determined ~~but incremental progress can be made by the end of the variance period.~~

(b) The variance applies to specific parameters and all other applicable standards remain in effect for the water body.

(c) The modification must be consistent with the requirements of federal regulations (currently 40 C.F.R. 131.14).

(d) Reasonable progress must be made toward meeting the underlying standards during the variance period.

A variance renewal may be considered if the renewal request meets the above conditions.

Commented [A1]: Not all the language in the authorizing provision (AP) was edited or might be open for public comment, however, if there is an opportunity for revisions EPA has provided suggested edits.

Some of this AP language is contrary to 131.14 and as evidenced in litigation in MT, a litigant could confuse the intention of 131.14,

Commented [A2]: Suggested edit: replace "renewal" with "subsequent" and include "may be adopted and submitted to EPA for review and approval" instead of "may be considered".

(2) **Types of variances.** Upon request or on its own initiative, the department will consider granting the following types of variances to existing water quality standards:

(a) An individual variance is a time-limited designated use and parameter-specific change to the standard(s) of the receiving water body for a specific discharger. The temporary standard(s) only apply at the point(s) of compliance for the individual facility.

(b) A multidischarger variance is a time-limited designated use and parameter-specific change to the standard(s) of any water body that receives discharges from a permitted facility defined within the scope of the multidischarger variance. Any permitted discharger that is defined within the scope of the variance may be covered under the variance that is granted by the department, provided all requirements of the variance for that discharger are met.

(c) A water body variance is a time-limited designated use and parameter-specific change to the standard(s) for a stretch of waters. Any discharger of the specific parameter that is defined within the geographic scope of the water body variance may be covered under the variance that is granted by the department, provided all requirements of the variance for that discharger are met.

Commented [A3]: Suggested edit: Deleting “change to the standard(s)” and using “criterion” instead. This will help counter the argument that a variance will undermine a TMDL, when in reality the variance does not apply (the state uses the underlying designated use and criterion) when identifying threatened and impaired waters under CWA 303(d) and for establishing a TMDL. To make this point clear, suggest adding language to the AP from 131.14(a)(2) about maintaining underlying designated use and criterion. The other option would be to add the language to each of the variances themselves.

(3) **Requirements.** Any entity initiating a variance request or applying for coverage for an individual, multidischarger, or water body variance must submit the following information to the department:

(a) The pollutant-specific criteria and designated use(s) proposed to be modified by the variance, and the proposed duration of the variance.

(b) A demonstration that attaining the water quality standard for a specific pollutant is not feasible for the requested duration of the variance based on 40 C.F.R. 131.14.

(c) An evaluation of treatment or alternative actions that were considered to meet effluent limits based on the underlying water quality criteria, and a description of why these options are not technically, economically, or otherwise feasible.

(d) Sufficient water quality data and analyses to characterize receiving and discharge water pollutant concentrations.

(e) A description and schedule of actions that the discharger(s) proposes to ensure ~~the underlying water quality standard(s) are met or~~ the highest attainable use is attained within the variance period.

Dischargers are also required to submit a schedule for ~~development and~~ implementation of a pollutant minimization plan for the subject pollutant(s).

Commented [A4]: Variance is to the HAC not underlying WQS. If the underlying standard can be met, a compliance schedule is likely more appropriate.

Commented [A5]: Where the HAC is expressed as Option 3, the PMP must be included in the variance language (not developed during the variance), where a PMP is not required by 131.14, the schedule can include "development" of PMP.

(f) If the variance is for a water body or stretch of water, the following information must also be provided to the department:

(i) The results from a pollutant source assessment that quantifies the contribution of pollution from permitted sources and nonpermitted sources;

(ii) All cost-effective and reasonable best management practices for permitted sources that address the pollutant the variance is based upon; and

(iii) Best management practices for nonpermitted sources that meet the requirements of chapter 90.48 RCW.

(g) Any additional information the department deems necessary to evaluate the application.

(4) **Public review and notification.** The decision to grant a variance is a formal rule making subject to a public and intergovernmental involvement process.

(a) The department will provide notice of the proposed variance and consult with Indian tribes or other states that have jurisdiction over adjacent and downstream waters of the proposed variance.

(b) The department shall maintain and make publicly available a list of dischargers that are covered under the variances that are in effect.

(5) **Period during which the variance is in effect.** A variance is a time-limited designated use and criterion.

(a) Each variance will be granted for the minimum time estimated to meet the highest attainable condition~~underlying standard(s)~~ or, if during the period of the variance it is determined that a designated use cannot be attained, then a use attainability analysis (WAC 173-201A-440) will be initiated.

(b) The ability to apply a variance in permits or other actions may be terminated by the department as a result of a mandatory interim review.

(c) Variances are in effect after they have been incorporated into this chapter and approved by the USEPA.

(6) **Contents of a variance.** At a minimum a variance adopted into rule will include the following:

(a) The time period for which the variance is applicable.

(b) The geographic area or specific waters in which the variance is applicable.

(c) A description of the permitted and unpermitted dischargers covered by the variance.

(d) (~~Identification of~~) A pollutant minimization plan identifying required actions and a schedule, including any measurable

Commented [A6]: Suggested edit: Add a requirement that the specific pollutant must be identified in the variance.

milestones, for all pollution sources (permitted and unpermitted) subject to the variance. Dischargers are required to use adaptive management to fine-tune and update actions, schedules, and milestones in order to achieve the goals of the variance.

(e) A provision allowing the department to reopen and modify any permits and to revise BMP requirements for unpermitted dischargers as a result of the mandatory interim review of the variance (see subsection (8) of this section).

(7) **Variance permit conditions.** The department must establish and incorporate into NPDES permits all conditions necessary to implement and enforce an approved variance, including:

(a) Effluent limits that represent ~~currently achieved or achievable effluent conditions~~the highest attainable condition, or effluent limits that are sufficient to meet the underlying water quality standard upon expiration of the variance;

(b) Monitoring and reporting requirements; and

(c) A provision allowing the department to reopen and modify the permits based on the mandatory interim review of the variance.

(8) **Mandatory interim review.** The department will conduct an interim review of each variance at least once every five years after the variance is adopted into this chapter and approved (~~to determine~~

Commented [A7]: A “but not limited to” may be implied, but it doesn’t list the PMP as one of the elements here which is required for a HAC 3.

Commented [A8]: Assuming this means if the variance ends mid-permit term, the permit will include two QBELS (80 FR 51040)?

Commented [A9]: EPA only requires reevaluations for variances with a term greater than five years. WA may consider adding “For variances with a term of longer than five years...”

Commented [A10]: Each variance needs to lay out a more specific time frame for the reevaluation. At least every five years isn’t specific enough but can work here in the AP language as long as the individual variances each have more specific timing. The other option is that the AP specify upfront the exact timing (example would be four years after EPA approval and every five years after that).

~~that~~) by the USEPA. The interim review will evaluate whether the conditions of the variance are being met and (~~to evaluate~~) whether the variance is still necessary. The department will provide public notice of the interim review ~~results~~ and opportunity for public comment.

Commented [A11]: The results need to be submitted to EPA but using "results" in this context could be perceived as not affording the public the opportunity to inform the interim review (i.e. HAC).

(a) Review process for individual discharger and multidischarger variances:

Commented [A12]: Insert language here about "the variance will no longer be the applicable WQS for CWA purposes if the department does not conduct the interim review consistent with this section, or does not submit the results to EPA within 30 days of completion."

(i) The interim review shall be coordinated with the public review process of the permit renewal if the variance is being implemented in a permit. The public comment period for the variance interim review will occur prior to or coincide with the review period for the permit renewal.

Commented [A13]: Suggested edit: "The interim review shall be conducted at the frequency specified in the variance, to be at least once every five years, and may be coordinated with the public review process for the permit renewal."

The "at least every five years" language is generally ok here, but the variance must then specify a more specific timing. It's problematic to say "shall be coordinated with permit renewal" because if the permit renewal is delayed, it could be longer than 5 years.

(ii) The interim review will be focused on the discharger's compliance with permit conditions that are required by the variance as well as an evaluation of whether the variance is still necessary.

(iii) The interim review will include an evaluation of the highest attainable condition. The resulting highest attainable condition must be either the condition at the time of adoption or a more stringent condition identified during the interim review.

Commented [A14]: Could also consider adding the provision about "if the reevaluation is not completed or submitted to EPA..." here instead of above

(b) Review process for water body variances:

~~((i))~~ Variances for stretches of waters will be reviewed ~~((in a public process conducted by the department every five years after the variance is adopted into this chapter and approved by the USEPA.~~

~~((ii) The review will))~~ to evaluate whether the variance is still necessary, any new information on sources of the pollutant that indicates that reductions could be made that would allow water quality standards a more stringent highest attainable condition could to be met in a shorter time frame during the variance term, ~~((as well as any))~~

and new information that indicates water quality improvements may require more time.

(c) A variance that applies to a permit will be shortened or terminated if the review determines that:

(i) The conditions and requirements of the variance and associated permit requirements have not been complied with unless reasons outside the control of the discharger prevented meeting any condition or requirement; or

(ii) Water quality standards could be met in a shorter time frame, based on new information submitted to the department.

(9) Approved variances in effect for Washington. Variances to the existing water quality standards that meet the requirements of WAC

Commented [A15]: The end point of the variance is the HAC, so the reevaluation is about whether a more stringent HAC can be achieved in the same variance timeframe, which is the minimum of what the reevaluation should address. The state could choose to also include "and whether the HAC could be met in a shorter time frame" but adding that provision then means they would be terminating the variance per the section below.

Commented [A16]: More time doesn't allow the variance to be extended. If more time is needed, that would require a subsequent variance which would require a new rulemaking.

Also the more stringent HAC requirement that was added above for individual dischargers should also be applicable to waterbody variances.

Commented [A17]: The term can't be shortened/alterd, but the variance could be terminated. Recommend striking the "shortened or".

Commented [A18]: This language is not required in 131.14 but the state has the discretion to terminate a variance where a discharger is not meeting its requirements.

Commented [A19]: Does this mean the underlying designated use and criterion here or the highest attainable condition? Either could work, but good to clarify.

173-201A-420 (1) through (8) are described in WAC 173-201A-620.[Statutory Authority: RCW 90.48.035, 90.48.605 and section 303(c) of the Federal Water Pollution Control Act (Clean Water Act), C.F.R. 40, C.F.R. 131. WSR 16-16-095 (Order 12-03), § 173-201A-420, filed 8/1/16, effective 9/1/16. Statutory Authority: RCW 90.48.035. WSR 11-09-090 (Order 10-10), § 173-201A-420, filed 4/20/11, effective 5/21/11. Statutory Authority: Chapters 90.48 and 90.54 RCW. WSR 03-14-129 (Order 02-14), § 173-201A-420, filed 7/1/03, effective 8/1/03.]

NEW SECTION

WAC 173-201A-620 Variances for Washington waters. Variances for the criteria and designated uses in WAC 173-201A-200 through 173-201A-260 and 173-201A-600 through 173-201A-612 may be established according to WAC 173-201A-420. The following variances for individual facilities, groups of facilities, and stretches of waters have been approved by the department.

[]

NEW SECTION

WAC 173-201A-622 Table 622—Approved individual discharger

variances in effect for Washington waters. (1) Table 622 lists individual discharger variances that have been adopted by the department and will be used for permit purposes when approved by the USEPA. Variances with time periods longer than five years will be applied to permits if the mandatory interim review determines that the conditions of the variance are being met and the variance is still necessary.

Commented [A20]: Somewhere it needs to state a more specific reevaluation schedule in the variance rule language. It could be something like “will be conducted four years after EPA approval and every five years thereafter.”

If edits to AP above are not made with regard to the more stringent HAC and the variance terminating if the reevaluation is not done every 5 years and the results submitted to EPA, then those elements need to be added to the individual variances.

Commented [A21]: Suggested edit: delete this sentence and add “..adopted by the department consistent with Sections 1-8, and will be used for NPDES permit purposes when approved by the USEPA.”

The way it’s currently worded seems to imply that variances with term of >5yrs aren’t applied to permits unless the interim review says they are, which isn’t accurate. The suggested wording references to all variances being adopted pursuant to their state regs as described above.

Or if this is trying to reiterate that the state can terminate the variance, then consider editing to say so.

Table 622 - Approved Individual Discharger Variances in Effect for Washington Waters

Name of permittee	Parameter	Waterbody at point of discharge	Time-limited designated uses	Federal factor(s) used to issue the Variance 40 C.F.R. 131.10(g)	Duration of the Variance upon EPA approval	Highest attainable condition (HAC) 40 C.F.R. 131.14(b)(1)(ii)(A)	
						Quantifiable expression ²	Pollutant minimization plan (PMP)
City of Spokane - Riverside Park Water Reclamation Facility	PCB	Spokane River (47.69357/ - 117.47247)	Limited fish harvest and limited water supply at the point of discharge	Factor 3 ¹	20 years	HAC #3 (40 C.F.R. 131.14(b)(1)(ii)(A)(3)): Minimum percent removal efficiency of 95%	See Table (2)(b)(i). For full details go to Ecology Publication 20-10-020
Spokane County Regional Water Reclamation Facility	PCB	Spokane River (47.69357/ - 117.36284)	Limited fish harvest and limited water supply at the point of discharge	Factor 3 ¹	20 years	HAC #3 (40 C.F.R. 131.14(b)(1)(ii)(A)(3)): Minimum percent removal efficiency of 97.6%	See Table (2)(b)(ii). For full details go to Ecology Publication 20-10-020
Kaiser Aluminum Washington, LLC - Trentwood Works	PCB	Spokane River (47.68604/ - 117.22379)	Limited fish harvest and limited water supply at the point of discharge	Factor 3 ¹	10 years	HAC #2 (40 C.F.R. 131.14(b)(1)(ii)(A)(2)): Minimum percent removal efficiency of 85%	See Table (2)(b)(iii). For full details go to Ecology Publication 20-10-020
Inland Empire Paper Company	PCB	Spokane River (47.68911/ - 117.27923)	Limited fish harvest and limited water supply at the point of discharge	Factor 3 ¹	20 years	HAC #3 (40 C.F.R. 131.14(b)(1)(ii)(A)(3)): Minimum percent removal efficiency of 85.7%	See Table (2)(b)(iv). For full details go to Ecology Publication 20-10-020
Liberty Lake Sewer and Water District - Water Reclamation Facility	PCB	Spokane River (47.67808/ - 117.11782)	Limited fish harvest and limited water supply at the point of discharge	Factor 3 ¹	20 years	HAC #3 (40 C.F.R. 131.14(b)(1)(ii)(A)(3)): Minimum percent removal efficiency of 97.0%	See Table (2)(b)(v). For full details go to Ecology Publication 20-10-020

¹Human health criterion for PCBs cannot be attained for the fish harvest use in segments of the Spokane River. Human caused conditions or sources of PCBs prevent the attainment of the fish harvest use.

²The highest attainable condition (HAC) percent removal efficiency is calculated as [(inflow – effluent) / inflow] x 100

(2) Pollutant minimization plans for Spokane River PCB variances.

(a) **State pollutant minimization plan.** The following state actions for PCBs are included in addition to the individual discharger variance pollutant minimization plans listed in (b)(i) through (v) of this subsection. Additional details on these state actions can be found within Ecology Publication 20-10-020.

(i) Implement the following federal programs that address PCBs: Federal NPDES program, which regulates dischargers and stormwater pollution, Clean Water Act pretreatment program, clean air permits and the Resource Conservation and Recovery Act, which regulates hazardous waste management.

(ii) Implement the state Model Toxics Control Act, chapter 70.105D RCW.

(iii) Implement the state Model Toxic Pollution Act, chapter 70.365 RCW.

(iv) Implement the *PCB Chemical Action Plan* (Ecology Publication 15-07-002), developed under chapter 173-333 WAC, Persistent bioaccumulative toxins.

(v) Implement department of enterprise services purchasing policy DES-280-00 for preferences for product packaging that does not contain PCBs.

Commented [A22]: Since Section (b) describes the HAC requirements for dischargers consider renaming to HAC requirements for Spokane river PCB variances?

Commented [A23]: More specificity here would be good. For example saying what activities are being implemented under the Model Toxics Control act in (ii), similar to how (v) describes what the purchasing policy entails for reducing PCBs.

(vi) Continue to support efforts of the Spokane River regional toxics task force (SRRTTF) to find and reduce PCBs in the Spokane River.

(vii) Implement existing total maximum daily loads (TMDLs) nonpoint pollution control strategies designed to identify sources of pollution and implement suites of best management practices (BMPs) to address those sources of pollution in the Spokane River and its tributaries, including Hangman Creek and the Little Spokane River.

Commented [A24]: What TMDLs? TMDLs aren't discussed in the section on NPS reduction in the supporting doc (pg. 55), so more specificity would be helpful.

(b) Actions for individual discharger Spokane River PCB variances.

Commented [A25]: Suggested edit: "Requirements for..." instead of "actions for..."

(i) **City of Spokane - Riverside park water reclamation facility (City of Spokane).** PCB treatment technology is in the process of being installed at the time of the approved variance. The interim effluent condition reflecting the greatest level pollutant reduction achievable for PCBs will be measured as a percent removal efficiency based on after the completion and optimization of the installed treatment technology. Percent removal efficiency is calculated as the influent PCB concentration subtracted from the effluent concentration divided by the influent concentration. The highest attainable condition also includes implementation of the See City of Spokane Pollutant Minimization Plan (PMP) in Table 622(2)(b)(i). Additional details on

Commented [A26]: Approved by WA?

Commented [A27]: The changes in this paragraph should be mirrored for each discharger with HAC3

the listed actions in the pollutant minimization plan and a schedule
for actions are described in Ecology Publication 20-10-020.

Commented [A28]: Suggested edit: "When implementing the PMP, the discharger must implement the additional details on the listed actions as described in...".

As written, this language does not make the Ecology Publication 20-10-020 binding and it needs to be in order to rely upon it the way the document currently reads. Also, WA should include the publication date when referencing the Publication in rule. (e.g. "published on X-Y-2020")

It is unclear whether WA wants the supporting doc to be binding and incorporated by reference. That decision will determine if additional edits to the variance rule language would need to be made vs. being covered in the supporting doc. See comment in the supporting document on pg. 24.

Table 622(2)(b)(i) - City of Spokane Pollutant Minimization Plan (PMP)

Objective	Action	
PMP Organization	Identify cross functional team responsible for developing and implementing PMP	
	Identify procedures and methods for PMP effectiveness tracking	
	Submit proposed schedule for performing and completing PMP actions	
Source Investigation and Identification	Submit a quality assurance project plan (QAPP) for PCB sampling	
	Conduct influent and effluent sampling and calculate loading of PCBs entering and exiting the treatment facility for evaluation of HAC	
	Characterize PCBs in waste streams, solids, products, and other sources	
	Evaluate infiltration and inflow (I/I) to collection systems	
	Administer industrial pretreatment programs by working with facilities to identify and reduce or eliminate sources of influent loading of PCBs	
Mitigation or Reduction of Sources	Serve on ecology and other committees for addressing PCBs in commerce	
	Implement measures to optimize operation and maintenance to reduce PCBs discharged in final effluent	
	Reduce contributions of PCBs to the final effluent from raw materials, chemicals, and additives used at facility	
	Conduct periodic review of procurement policies to promote purchase of products that reduce new PCBs to the environment	
	Evaluate and optimize the solids dewatering and storage processes	
	Conduct periodic literature review to identify emerging treatment technologies	
	Submit a scope of work for conducting bench scale/pilot studies on PCB technologies, as identified in literature reviews	
	Conduct bench scale/pilot studies on emerging PCB treatment technologies, as appropriate	
	Conduct periodic review of alternative actions and implement feasible actions to reduce PCB loading to the environment	
	Regional Coordination	Work collaboratively to implement the comprehensive plan and incorporate adaptive management to identify and reduce sources of PCBs through active participation in the Spokane River regional toxics task force (SRRTTF)
Identify and collect additional information to assist Ecology in preparing measurable progress towards achieving applicable water quality standards for PCBs and the effectiveness of the variance		
Work collaboratively through the SRRTTF to collect and analyze in-river water samples for PCBs using EPA Method 1668 (as revised), as needed, to evaluate progress toward achieving the PCB water quality standard. Alternatively, each individual discharger will collect in-river samples within 300 feet downstream of their outfall to evaluate progress toward achieving the water quality standard. In-river PCB concentrations shall be submitted in an annual report by January 30		
Investigate Technical, Legal and Policy Solutions through the federal Toxic Substance Control Act (TSCA)		
Hold workshops to address various PCB issues, such as analytical techniques, Spokane River ambient monitoring data, and TSCA reform		
Educate the Spokane community on PCBs in the Spokane River and reducing sources of PCBs		
Reporting and Adaptive Management		Prepare and submit annual report that documents pollutant minimization efforts and progress
		Report influent/effluent PCB testing data for evaluation with HAC (using EPA Method 1668, as revised)
	Report results from additional testing of waste streams and raw materials	

Commented [A29]: For HAC3 the PMP needs to be an included component of the variance, so would already need to be developed. Suggest deleting "developing and"?

Commented [A30]: For HAC3, the schedule needs to be an included component of the PMP that can be reviewed and approved.

Commented [A31]: Overall, much of the work in these first two objectives categories should be accomplished prior to the variance adoption and the PMP should start with the Mitigation objectives for an HAC3. As tasks such as identifying sources, characterizing PCBs or evaluating I/I are part of justifying the variance, it would be good to understand what additional steps will be taken to continue to identify sources and why they couldn't be identified prior to the variance. Perhaps these two objectives are to continue the work done already or are needed to be able to identify the facility-specific mitigation and reduction activities? More specificity is required.

Commented [A32]: And implement measures recommended by the committees, unless deemed infeasible by [the department]?

Commented [A33]: Suggest adding more detail here on what measures or types of measure this could include.

Commented [A34]: Suggested edit: "and implement technologies, unless deemed infeasible by [the department]."

Commented [A35]: Suggested edit: "and implement measures to reduce sources."

Commented [A36]: Does this mean collect information to inform the interim review? If so, should say that, if not clarify what it is for.

Objective	Action
	Evaluate and update schedule of PMP actions
	Evaluate and update PMP based on source tracking and PMP effectiveness monitoring
	Prepare and submit PMP implementation review prior to each mandatory interim review of the variance

(ii) **Spokane county regional water reclamation facility (Spokane County)**. No additional feasible PCB treatment technology exists at the time of the approved variance. The greatest **level** for PCBs will be measured as a percent removal efficiency based on the optimization of the current treatment technology. Percent removal efficiency is calculated as the influent PCB concentration subtracted from the effluent concentration divided by the influent concentration. See Spokane County Pollutant Minimization Plan Table 622(2)(b)(ii). Additional details on the listed actions in the pollutant minimization plan and a schedule for actions are described in Ecology Publication 20-10-020.

Commented [A37]: Comments above apply to all of the same instances, below for the other dischargers

Table 622(2)(b)(ii) - Spokane County Pollutant Minimization Plan (PMP)

Objective	Action
PMP Organization	Identify cross functional team responsible for developing and implementing PMP
	Identify procedures and methods for PMP effectiveness tracking
	Submit proposed schedule for performing and completing PMP actions
Source Investigation and Identification	Submit a quality assurance project plan (QAPP) for PCB sampling
	Conduct influent and effluent sampling and calculate loading of PCBs entering and exiting the treatment facility for evaluation of HAC
	Characterize PCBs in waste streams, solids, products, and other sources
	Evaluate infiltration and inflow (I/I) to collection systems
Mitigation or Reduction of Sources	Administer industrial pretreatment programs by working with facilities to identify and reduce or eliminate sources of influent loading of PCBs
	Serve on ecology and other committees for addressing PCBs in commerce
	Implement measures to optimize operation and maintenance to reduce PCBs discharged in final effluent

Commented [A38]: Comments above apply to all of the same instances, below for the other dischargers

Objective	Action
	Reduce contributions of PCBs to the final effluent from raw materials, chemicals, and additives used at facility
	Conduct periodic review of procurement policies to promote purchase of products that reduce new PCBs to the environment
	Evaluate and optimize the solids dewatering and storage processes
	Conduct periodic literature review to identify emerging treatment technologies
	Submit a scope of work for conducting bench scale/pilot studies on PCB technologies, as identified in literature reviews
	Conduct bench scale/pilot studies on emerging PCB treatment, as appropriate
	Conduct periodic review of alternative actions and implement feasible actions to reduce PCB loading to the environment
Regional Coordination	Work collaboratively to implement the comprehensive plan and incorporate adaptive management to identify and reduce sources of PCBs through active participation in the Spokane River regional toxics task force (SRRTTF)
	Identify and collect additional information to assist ecology in evaluating measurable progress towards applicable water quality standards for PCBs and the effectiveness of the variance
	Work collaboratively through the SRRTTF to collect and analyze in-river water samples for PCBs using EPA Method 1668 (as revised), as needed, to evaluate progress toward achieving the water quality standard. Alternatively, each individual discharger will collect in-river samples within 300 feet downstream of their outfall to evaluate progress toward achieving the water quality standard. In-river PCB concentrations shall be submitted in an annual report by January 30
	Investigate Technical, Legal and Policy Solutions through the federal Toxic Substance Control Act (TSCA)
	Hold workshops to address various PCB issues, such as analytical techniques, Spokane River ambient monitoring data, and TSCA reform
	Educate the Spokane community on PCBs in the Spokane River and reducing sources of PCBs
Reporting and Adaptive Management	Prepare and submit annual report that documents pollutant minimization efforts and progress
	Report influent/effluent PCB testing data for evaluation with HAC (using EPA Method 1668, as revised)
	Report results from additional testing of waste streams and raw materials
	Evaluate and update schedule of PMP actions
	Evaluate and update PMP based on effectiveness tracking
	Prepare and submit PMP implementation review prior to each mandatory interim review of the variance

(iii) Kaiser Aluminum Washington, LLC - Trentwood Works (Kaiser).

Additional feasible PCB treatment technologies will be identified during the variance. The interim effluent condition that reflects the greatest pollutant reduction level achievable for PCBs will be measured as the percent removal efficiency after completion of the installation and optimization of treatment technology. Percent removal

Commented [A39]: Under HAC2, the interim effluent condition is the value expected once the technology is installed and optimized, but it must be calculated upfront, not determined after installation.

efficiency is calculated as the influent PCB concentration subtracted from the effluent concentration divided by the influent concentration.

See Kaiser Pollutant Minimization Plan Table 622(2)(b)(iii).

Additional details on the listed actions in the pollutant minimization plan and a schedule for actions are described in Ecology Publication 20-10-020.

Table 622(2)(b)(iii) - Kaiser Pollutant Minimization Plan (PMP)

Objective	Action
PMP Organization	Identify cross functional team responsible for developing and implementing PMP
	Identify procedures and methods for PMP effectiveness tracking
	Submit proposed schedule for performing and completing PMP actions
Source Investigation and Identification	Submit a quality assurance project plan (QAPP) for PCB sampling
	Conduct influent and effluent sampling and calculate loading of PCBs entering and exiting the treatment facility for evaluation of HAC
	Characterize PCBs in waste streams, solids, products, and other sources
	Identify and reduce or eliminate PCBs within the industrial sewer system by cleaning out the north sewer
Mitigation or Reduction of Sources	Serve on ecology and other committees for addressing PCBs in commerce
	Implement measures to optimize operation and maintenance to reduce PCBs discharged in final effluent
	Reduce contributions of PCBs to the final effluent from raw materials, chemicals, and additives used at facility
	Conduct periodic review of procurement policies to promote purchase of products that reduce new PCBs to the environment
	Refurbish PCB containing electrical equipment
	Conduct leak detection and prevention activities for electrical equipment
	Develop site specific best management practices (BMP) plan to minimize contributions during site demolition and remodeling
	Evaluate and optimize the solids dewatering and storage processes
	Implement flow reduction projects
	Identify and evaluate treatment technologies
	Evaluate and install emerging PCB treatment technologies by conducting bench-scale/pilot studies, as appropriate
	Submit final engineering design documents for selected treatment technology
	Install and optimize selected treatment technology
Regional Coordination	Work collaboratively to implement the comprehensive plan and incorporate adaptive management to identify and reduce sources of PCBs through active participation in the Spokane River regional toxics task force (SRRITF)

Objective	Action
	Identify and collect additional information to assist ecology in preparing measurable progress towards achieving applicable water quality standards for PCBs and the effectiveness of the variance
	Work collaboratively through the SRRTTF to collect and analyze in-river water samples for PCBs using EPA Method 1668 (as revised), as needed, to evaluate progress toward achieving the water quality standard. Alternatively, each individual discharger will collect in-river samples within 300 feet downstream of their outfall to evaluate progress toward achieving the water quality standard. In-river PCB concentrations shall be submitted in an annual report by January 30
	Investigate Technical, Legal and Policy Solutions through the federal Toxic Substance Control Act (TSCA)
	Hold workshops to address various PCB issues, such as analytical techniques, Spokane River ambient monitoring data, and TSCA reform
	Educate the Spokane community on PCBs in the Spokane River and reducing sources of PCBs
Reporting and Adaptive Management	Prepare and submit annual report that documents pollutant minimization efforts and progress
	Report influent/effluent PCB testing data for evaluation with HAC (using EPA Method 1668, as revised)
	Report results from additional testing of waste streams and raw materials
	Evaluate and update schedule of PMP actions
	Evaluate and update PMP based on effectiveness tracking
	Prepare and submit PMP implementation review prior to each mandatory interim review of the variance

(iv) **Inland Empire Paper Company (Inland Empire)**. PCB treatment technology is in the process of being installed at the time of the approved variance. The greatest level achievable for PCBs will be measured as a percent removal efficiency and is based on the completion of the installation and optimization of treatment technology. Percent removal efficiency is calculated as the influent PCB concentration subtracted from the effluent concentration divided by the influent concentration. See Inland Empire Pollutant Minimization Plan Table 622(2)(b)(iv). Additional details on the listed actions in the pollutant minimization plan and a schedule for actions are described in Ecology Publication 20-10-020.

Commented [A40]: See same edits from above

Table 622(2)(b)(iv) - Inland Empire Pollutant Minimization Plan (PMP)

Objective	Action
PMP Organization	Identify cross functional team responsible for developing and implementing PMP
	Identify procedures and methods for PMP effectiveness tracking
	Submit proposed schedule for performing and completing PMP actions
Source Investigation and Identification	Submit a quality assurance project plan (QAPP) for PCB sampling
	Conduct influent and effluent sampling and calculate loading of PCBs entering and exiting the treatment facility for evaluation of HAC
	Characterize PCBs in waste streams, solids, products, and other sources
Mitigation or Reduction of Sources	Serve on ecology and other committees for addressing PCBs in commerce
	Implement measures to optimize operation and maintenance to reduce PCBs discharged in final effluent
	Reduce contributions of PCBs to the final effluent from raw materials, chemicals, and additives used at facility
	Continue work with manufacturers associations to reduce or eliminate PCBs used in newsprint/packaging in inks and dyes
	Continue work with EPA for revision of allowable PCB levels in products under federal Toxic Substances Control Act (TSCA)
	Continue to present concerns with the PCB allowances in TSCA to both in-state and out-of-state groups
	Develop site specific best management practices (BMP) plan to minimize contributions during site demolition and remodeling
	Conduct periodic review of procurement policies to promote purchase of products that reduce new PCBs to the environment
	Evaluate and optimize the solids dewatering and storage processes
	Conduct periodic literature review to identify emerging treatment technologies, as appropriate
	Submit a scope of work for conducting bench scale/pilot studies on PCB technologies, as identified in literature reviews
	Conduct bench scale/pilot studies on emerging PCB treatment technologies
Regional Coordination	Work collaboratively to implement the comprehensive plan and incorporate adaptive management to identify and reduce sources of PCBs through active participation in the Spokane River regional toxics task force (SRRTTF)
	Identify and collect additional information to assist ecology in preparing measurable progress towards achieving applicable water quality standards for PCBs and the effectiveness of the variance
	Work collaboratively through the SRRTTF to collect and analyze in-river water samples for PCBs using EPA Method 1668 (as revised), as needed, to evaluate progress toward achieving the water quality standard. Alternatively, each individual discharger will collect in-river samples within 300 feet downstream of their outfall to evaluate progress toward achieving the water quality standard. In-river PCB concentrations shall be submitted in an annual report by January 30
	Investigate Technical, Legal and Policy Solutions through TSCA
	Hold workshops to address various PCB issues, such as analytical techniques, Spokane River ambient monitoring data, and TSCA reform
	Educate the Spokane community on PCBs in the Spokane River and reducing sources of PCBs
Reporting and Adaptive Management	Prepare and submit annual report that documents pollutant minimization efforts and progress
	Report influent/effluent PCB testing data for evaluation with HAC (using EPA Method 1668, as revised)

Objective	Action
	Report results from additional testing of waste streams and raw materials
	Evaluate and update schedule of PMP actions
	Evaluate and update PMP based on effectiveness tracking
	Prepare and submit PMP implementation review prior to each mandatory interim review of the variance

(v) **Liberty Lake sewer and water district - Water reclamation facility (Liberty Lake)**. No additional feasible PCB treatment technology exists at the time of the approved variance. The greatest level achievable for PCBs will be measured as a percent removal efficiency. Percent removal efficiency is calculated as the influent PCB concentration subtracted from the effluent concentration divided by the influent concentration. See Liberty Lake Pollutant Minimization Plan Table 622(2)(b)(v). Additional details on the listed actions in the pollutant minimization plan and a schedule for actions are described in Ecology Publication 20-10-020.

Commented [A41]: See edits from above

Table 622(2)(b)(v) - Liberty Lake Pollutant Minimization Plan (PMP)

Objective	Action
PMP Organization	Identify cross functional team responsible for developing and implementing PMP
	Identify procedures and methods for PMP effectiveness tracking
	Submit proposed schedule for performing and completing PMP actions
Source Investigation and Identification	Submit a quality assurance project plan (QAPP) for PCB sampling
	Conduct influent and effluent sampling and calculate loading of PCBs entering and exiting the treatment facility for evaluation of HAC
	Characterize PCBs in waste streams, solids, products, and other sources
	Evaluate infiltration and inflow (I/I) to collection systems
Mitigation or Reduction of Sources	Administer industrial pretreatment programs by working with facilities to identify and reduce or eliminate sources of influent loading of PCBs
	Serve on ecology and other committees for addressing PCBs in commerce
	Implement measures to optimize operation and maintenance to reduce PCBs discharged in final effluent
	Reduce contributions of PCBs to the final effluent from raw materials, chemicals, and additives used at facility

Objective	Action
	Conduct periodic review of procurement policies to promote purchase of products that reduce new PCBs to the environment
	Evaluate and optimize the solids dewatering and storage processes
	Conduct periodic literature review to identify emerging treatment technologies
	Conduct bench scale/pilot studies on emerging PCB treatment technologies, as appropriate
	Submit a scope of work for conducting bench scale/pilot studies on PCB technologies, as identified in literature reviews
	Conduct periodic review of alternative actions and implement feasible actions to reduce PCB loading to the environment
Regional Coordination	Work collaboratively to implement the comprehensive plan and incorporate adaptive management to identify and reduce sources of PCBs through active participation in the Spokane River regional toxics task force (SRRTTF)
	Identify and collect additional information to assist ecology in preparing measurable progress towards achieving applicable water quality standards for PCBs and the effectiveness of the variance
	Work collaboratively through the SRRTTF to collect and analyze in-river water samples for PCBs using EPA Method 1668 (as revised), as needed, to evaluate progress toward achieving the water quality standard. Alternatively, each individual discharger will collect in-river samples within 300 feet downstream of their outfall to evaluate progress toward achieving the water quality standard. In-river PCB concentrations shall be submitted in an annual report by January 30
	Investigate Technical, Legal and Policy Solutions through the federal Toxic Substance Control Act (TSCA)
	Hold workshops to address various PCB issues, such as analytical techniques, Spokane River ambient monitoring data, and TSCA reform
	Educate the Spokane community on PCBs in the Spokane River and reducing sources of PCBs
Reporting and Adaptive Management	Prepare and submit annual report that documents pollutant minimization efforts and progress
	Report influent/effluent PCB testing data for evaluation with HAC (using EPA Method 1668, as revised)
	Report results from additional testing of waste streams and raw materials
	Evaluate and update schedule of PMP actions
	Evaluate and update PMP based on effectiveness tracking
	Prepare and submit PMP implementation review prior to each mandatory interim review of the variance

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