



TO: Rick Eichstaedt, Director, Gonzaga Environmental Law and Land Use Clinic
FROM: Gayle Killam, Principal, Water Policy Pathways LLC
DATE: July 23, 2020
RE: Informal comment period on Washington Department of Ecology’s preliminary draft PCB variance rule and supporting documents

Water Policy Pathways LLC (WPP) has been engaged by Gonzaga Environmental Law and Land Use Clinic to provide comments on the following documents released by the Washington Department of Ecology (Ecology) on June 10th for informal “feedback”:

- Preliminary Draft Variance Rule Language (Draft Variance Rule);
- Preliminary Draft State Technical Support Document (Draft Technical Document);
- Preliminary Draft Environmental Impact Statement (DEIS);
- Preliminary Draft Implementation Plan (Draft Implementation Plan).

To assist in the review of these documents, WPP has examined the five discharger variance applications, documents and notes from the Spokane Regional Toxics Task Force, federal and state variance and water quality standards regulations, Montana’s variance guidance document, PCB Total Maximum Daily Loads within Washington state and in other states, and Washington’s impaired waters list.

Gayle Killam has more than 25 years of water policy and regulatory experience at the federal state and local levels in the Pacific Northwest and across the country.

Gayle has worked with non-profit organizations, landowners, local, state and federal government staff, individuals, trade associations and the private sector over the years to improve implementation and functionality of water programs, policies and laws. Her work includes state and federal policy analysis, training, facilitation, testimony, and 1-on-1 consultation.

Gayle was the editor and primary author of the second edition of River Network’s “The Clean Water Act Owner’s Manual.” She created River Network’s Clean Water Act program and online course and co-authored two field guides on pollution permits and TMDL restoration plans. Prior to establishing her business, Gayle worked for River Network, Oregon Environmental Council, the Army Corps of Engineers, Resources for the Future and economic consulting firms in the Boston area. Gayle received her Masters’ degree in resource economics and policy from Duke University’s Nicholas School of the Environment and Earth Sciences and her Bachelors’ degree in economics from Yale University.

General Comments

- **Significant change to target water quality criterion**

Review of these documents is limited because all of them refer to 7pg/L as the water quality criterion for PCBs. Because this criterion is now 170pg/L, all the targets, discussions of shortcomings of technology, and logic behind the need and defense of variances are no longer relevant.

- **Variance for persistent bioaccumulative toxin**

There is no precedent for allowing a variance for PCBs or other PBTs. Since allowing any amount of these contaminants to be discharged into the environment is exacerbating the known danger to human and ecological health with long term, generational consequences, developing a variance that authorizes 10-20 years of leeway in dealing with the problem is not the responsible way to address the uncertainty around treatment technology.

- **EPA promoting variance use**

With the adoption of the 2015 changes to federal water quality standards regulations that included more detail about how variances can be used, EPA has developed the WQS Variance Building Tool¹ and seems to be pushing states and dischargers to use variances. There are damaging implications nationally for this approach especially with respect to bioaccumulative contaminants.

- **Tribal and other downstream uses and criteria**

In federal and state water quality standards regulations, protecting downstream uses from harm is the legal requirement², yet the downstream Spokane Tribe's PCB water quality criterion of 1.5pg/L is only briefly mentioned in the Draft Technical Document (p.7). The exact language of this requirement, "shall ensure that ... water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters" would properly lead to greater attention at least in the DEIS if it had been adequately considered.

- **Accountability for PCB reduction in Pollutant Minimization Plans (PMPs)**

Neither the Draft Variance Rule nor the Draft Implementation Plan make clear the dischargers' accountability to measurable commitments for reducing PCBs in their Pollutant Minimization Plans (PMPs). More detail about setting and reporting on milestones in a publicly transparent way (available on a website) and on a more frequent basis is needed in the variance itself. In addition, it needs to be more clear which actions and schedules, if not all, in the PMPs will be incorporated into NPDES permits as enforceable conditions. See sections below for more detail.

- **Highest Attainable Condition (HAC)**

There is some confusion about whether the HAC refers to the attainable condition with current technology or that which is being pursued by the time of the interim review. In the federal regulation³, HAC can be the "...greatest pollutant reduction achievable with

¹ <https://www.epa.gov/sites/production/files/2017-07/documents/variance-building-tool-faqs.pdf>.

² 40 C.F.R. § 131.10(b).

³ 40 C.F.R. § 131.14(b)(ii)(A)(3). If no additional feasible pollutant control technology can be identified, the interim criterion or interim effluent condition that reflects the greatest pollutant reduction achievable with the pollutant

the pollutant control technologies installed at the time the State adopts the WQS variance, and the adoption and implementation of a Pollutant Minimization Program.” Yet some of the preliminary draft documents appear to be using HAC as the pollutant reduction attainable at a period in the future. Is it at the first interim review? Is it at the end of the 10- or 20-year period (depending on the discharger)? This uncertainty needs to be clarified.

Although the federal regulations allow HAC to be developed with current installed pollution control in mind, such an approach does not fit with the intention of the highest attainable condition being better than status quo. Nor does “highest attainable condition” fit with the reality that there are “additional feasible pollutant control technologies” that have yet to be installed at every one of the permitted facilities if combinations of treatment, including greater stormwater pollution controls, are considered. While there is certainly disagreement about what the appropriate water quality standard may be for PCBs, there doesn’t seem to be disagreement about the fact that legacy sources and even non-legacy sources need to decrease with efforts to clean up contaminated areas and remove sources from the waste stream. Add to that the likelihood that treatment technology will continue to improve and defining HAC as the status quo makes little sense.

- **Technology-based effluent limits or effluent limit guidelines**

No federal guidance such as technology-based effluent limits or effluent limit guidelines has been developed for entities discharging PCBs. This is in no small part because, as banned substances, PCBs are not “expected” to be in an active waste stream. As the situation in the Spokane River demonstrates (and likely many other places in Washington and around the country), there is a great need for federal guidance and consistency regarding the state-of-the art technology and multiple treatment options for eliminating the discharge of PCBs into water bodies.

- **Precedent for all PCB-impaired waters in Washington and nationwide**

If the current rule language were to be proposed, adopted by Washington, and approved by EPA, it would immediately set a precedent for all dischargers contributing to Washington’s (or any state’s) PCB-impaired waters through wastewater or stormwater. This may lead to efforts to develop new variances to modify NPDES permits and existing PCB TMDLs that allow up to 20-year extensions of commitments to reducing PCBs in waste streams.

- **TMDL development**

Renewing efforts to develop a legally required TMDL is preferable to the 5 discharger-specific variances. Because the underlying water quality standards are not replaced by the TMDL,⁴ they continue to be impaired and the impaired segments of the river will still legally require development of a TMDL. Finishing that work, even if it takes four more years as stated in the DEIS (p.8), would clarify hotspots and sources, and, perhaps by then, improved detection and treatment technology would allow for greater

control technologies installed at the time the State adopts the WQS variance, and the adoption and implementation of a Pollutant Minimization Program.

⁴ 40 C.F.R. § 131.14(a)(2).

controls and better compliance monitoring to be planned for each of the five dischargers into the Spokane River. In the meantime, returning to and updating the draft NPDES permits from 2016 that employed the 170pg/L in their effluent limits would be the most efficient approach to renewing NPDES permits in 2021.

Federal Water Quality Standards regulation

The 2015 federal update to Water Quality Standards⁵ included changes and details to water quality standards variances. It is important to point out that the changes were intended to prevent dischargers or states from using the Use Attainability Process to permanently downgrade designated uses as stated in the preamble to the regulation:

These two tools [note: referring to variances and compliance schedules] help states and authorized tribes focus on making incremental progress in improving water quality, rather than pursuing a downgrade of the underlying water quality goals through a designated use change, when the current designated use is difficult to attain. (Preamble I.C.).

The change to the federal variance rule led to EPA's development of tools (as mentioned above) and promotion of the use of variances. The development of variance applications by the dischargers to meet the 7pg/L criterion imposed by EPA, and the development of the preliminary draft variance rule and supporting documents by Ecology were supported, if not encouraged by EPA, yet they do not lead to a collective strategy that would be characterized as "making incremental progress."

Preliminary Draft Variance

General language

- **Eligibility**

The language needs a section on eligibility for a variance. Examples of what might belong in that section include the language in Montana's Guidance for Water Quality Standards Variances.⁶ Examples include no jeopardy to endangered species, no unreasonable risk to human health, no removal of an existing use, and that the issuance of the variance conforms with antidegradation policies and procedures.

- **Accountability for PCB reduction in Pollutant Minimization Plans**

In both the federal and existing state regulatory language, the interim review timeframe is "at least" or "no less frequently than" every five years. The following elements should be included within the variance language to better ensure accountability, transparency and enforceability of the actions committed to by the dischargers. Some of the elements are described in the Draft Implementation Plan and/or the Draft Technical Document, however, they need to be explicitly included in the variance.

⁵ <https://www.epa.gov/wqs-tech/final-rulemaking-update-national-water-quality-standards-regulation>.

⁶ <https://www.pca.state.mn.us/sites/default/files/wq-wwprm2-10a.pdf>, p.4-5.

- Incorporate entire PMPs and schedules into NPDES permits as permit conditions⁷ (WAC 173-201A-240(7)).
- Include required annual reporting on PMPs (already in Draft Technical Document).
- Provide online public access to annual reporting (WAC 173-201A-240(4)).
- Clarify beginning of interim review a year or more before beginning of the application process for the NPDES permit (Draft Implementation Plan p.9). This timing allows for the permittees to include the results of that review in the application process that is required 180 days ahead of expiration. The public should be involved right away. Draft variance rule language reads that the interim review will be coordinated with the public review process of the permit renewal (WAC 173-201A-240(8)(i)). That is confusing based on your timeline in the Implementation Plan.
- Allow for annual public process to submit new information relevant to any variance and allow for public to petition to reopen permits if new information so warrants (WAC 173-201A-240(7)(c)).
- Prohibit the administrative delay of a variance interim review even if the NPDES permit is administratively continued.

Specific language for proposed variances

- **Human health criterion transformed into a technical feasibility analysis**

This process has turned the protections of existing and designated uses through water quality criteria, effluent limitations in NPDES permits, Total Maximum Daily Loads and best management practices into a technological debate and discussion of affordability. Even discussing the health of tribal members and members of the Eastern European, Asian and Pacific Islander communities who eat more than 175 grams of fish from the Spokane River as “existing and designated uses” is a dehumanizing way to characterize the required protections of the Clean Water Act. The entities contributing PCBs to the Spokane River in any way must take responsibility for their impact on the lives of populations dependent on fish from the Spokane River.

- **Justification for variance**

In Table 622, “Factor 3” is listed as the justification for each of the variances. While the footnote explains that human caused conditions or sources prevent the attainment of the fish harvest use,” the actual “Factor 3” listed in federal regulations reads:

Human caused conditions or sources of pollution prevent the attainment of the use and *cannot be remedied* or would cause more environmental damage to correct than to leave in place;⁸ (emphasis added)

Humans have and continue to cause PCB pollution, but to apply this factor, there must be a demonstration that the pollution “cannot be remedied,” and that has not been accomplished. There may not be an available technology to get to 7pg/L today, but there are sampling results that show that some of the dischargers’ effluent is sometimes below 170pg/L. What do we know about when those samples were taken? Does that

⁷ EPA preamble to the 2015 WQS Rulemaking: As part of the applicable WQS, the permitting authority must use the PMP (along with the quantifiable expression of the “greatest pollutant reduction achievable”) to derive NPDES permit limits and requirements. <https://www.regulations.gov/document?D=EPA-HQ-OW-2010-0606-0288> ; 40 C.F.R. § 131.14(c).

⁸ 40 C.F.R. § 131.10(g)(3).

information help with identification of reduction strategies? There are several examples in the variance applications that demonstrate that the dischargers have looked at strategies for decreasing pollutant discharge through land application, groundwater injection and source reduction (improving pretreatment, changing what products are recycled and using groundwater for cooling). These documents have not evaluated numerous scenarios that combine current treatment approaches. With time and investment, emerging treatment technologies are likely to prove successful as well.

- **Highest Attainable Condition**

Include in Table 622 how each discharger is defining HAC. For example, Spokane County defines it as what their current technology can achieve, whereas the City of Spokane is defining it as what can be achieved in two years when the construction for Next Level Treatment is completed.

Given the discussion above about the need to address the applications toward 170pg/L, and that treatment technology to get to that level does exist, the appropriate HAC would comply with 40 C.F.R. §131.14(b)(1)(ii)(A)(2) “The interim effluent condition that reflects the greatest pollutant reduction achievable.” However, the Ecology Draft Variance Rule does not fully comply with the federal regulations regarding HAC in allowing for HAC to be “either the condition at the time of adoption or a more stringent condition identified during the interim review.”⁹ This discrepancy needs to be addressed.

- **Length of variances too long**

Twenty years is an excessive length for four of the proposed variances. It is not clear to the reader why the agency adopted the lengths proposed by the dischargers. Such a pre-determined length, even with multiple interim reviews, sets an expectation that the status quo, currently installed technology and efforts to reduce PCBs from influent (in the case of the sewage treatment plants) is sufficient and that as long as things don't get worse, they will be allowed to carry on as is. A 20-year variance creates a legal authorization of the status quo which everyone agrees is detrimental to human health, (especially vulnerable communities dependent on fish for subsistence) and the ecological health of a river that is legally defined as impaired and for which Ecology is legally required to develop a TMDL because the underlying standards are not replaced by the variance.

- **Percent removal is not sufficient for quantifiable expression**

The permittees approach to quantifying the HAC needs to include the pg/L concentrations of their effluent. Percent removal from a really high load will still be a really high amount of PCBs being discharged into the river. The estimates of what their current (or soon to be installed) technology can remove are included in their applications. These numbers need to be included in the variance. Whatever pollutants are discharging out of the pipe are discharger responsibility even if they are significantly coming from upstream sources in influent.

⁹ WAC 173-201A-240(8)(a)(iii).

- **Codify milestones and timelines**

Greater detail on milestones and timelines from the PMPs is needed in each discharger's Table 622.

Preliminary Draft Implementation Plan

- The preliminary draft Implementation Plan echoes several areas addressed in general comments or in comments on the variance language. These areas include:
 - clarify incorporation of PMPs as enforceable conditions into the permits (p.8);
 - codify dischargers' plans to report on PMP annually and include that requirement in the Implementation Plan (p.8);
 - solicit readily available information relevant to the variance from the public annually (p.4);
 - quantifiable portion of the HAC should include a concentration, not just percent removal (p.5); and
 - public involvement should be encouraged throughout the interim review and prior to permit renewal and should not depend on the public appeal provisions of the permit (p.9).
- All other relevant programs must be included.
There is inadequate attention to existing stormwater permits and nonpoint sources associated with each of the dischargers' facilities and operation.
- The State PMP, milestones and timelines should be described, even if the details are in the Draft Technical Document.

Preliminary Draft Environmental Impact Statement

- Evaluation of the positive and negative impacts of only two alternatives is not a sufficient examination of options available to the state. Examples of missing options include:
 - Not reissuing any one or all of the NPDES permits and allowing them to expire until discharge of PCBs can be properly controlled to meet downstream uses (which should be the "No Action" alternative).
 - Completion of the TMDL either instead of or in addition to the variance;
 - No variances, shorter variances or different-length variances for each discharger based on their individual treatment technology situation;
 - Different mixes of actions, measurables and timelines
 - Development of technology-based effluent limitations; and
 - Coordinating emerging technology research and pilot studies across dischargers.
- The significant environmental impact of the options above deserve analysis against (a) each discharger variance alternative (which should be evaluated separately) and (b) the different No Action alternative of letting the permits expire. If different treatment options of each discharger are not evaluated for their environmental impact during the DEIS, when would that occur?
- Why did Ecology inform the applicants that the rulemaking would proceed on June 12, 2019 before any DEIS was performed (p.iv)? Would the rulemaking not be contingent on the favorable result from an EIS?

Preliminary Draft Technical Report

Several of the comments from above are echoed in the review of the Draft Technical Document. The following areas are worthy of note or emphasis:

- No mixing zone should ever be allowed (p.10-11);
- State Pollutant Minimization Plan doesn't include stormwater permits (municipal, construction or industrial) when PCBs are clearly carried by stormwater onto each facility and into the treatment systems of the publicly-owned treatment works and Kaiser (p 54-57); and
- Required annual reports need to be in Draft Variance Rule and Draft Implementation Plan (p.60).

Recommendations

The preliminary draft documents have not demonstrated sufficient justification for water quality standards variances for these five dischargers. The use of the variance, especially for the long timeframes proposed, is a de facto “not-so-temporary” downgrading of uses that many would argue are existing uses, and existing uses may not be downgraded.

The following work must proceed before any further action on this draft rule and the variance applications is taken:

1. All analysis – sampling, evaluation of technology and best management practices, and calculation of highest attainable condition - must focus on 170 pg/L as the target water quality criterion and protection of all downstream uses.
2. Work on the Draft Spokane River TMDL must be revived and the draft itself made available to the public again.
3. Draft 2016 NPDES permits for the dischargers should be revived and made available to the public again.