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RE: Washington Department of Ecology's Preliminary Proposed Rulemaking for PCB

Variances on the Spokane River—Issues Arising Under the State Environmental Policy

Act and Clean Water Act

I. INTRODUCTION AND SUMMARY OF CONCLUSIONS

The Gonzaga Environmental Law Clinic has asked our firm to evaluate the legality of the Washington Department of Ecology's preliminary proposed rulemaking for PCB variances on the Spokane River. Specifically, you asked us to assess the legality of the proposed rulemaking under Washington's State Environmental Policy Act ("SEPA"), Chapter 43.21C RCW, and the federal Clean Water Act, 33 U.S.C. § 1251 et seq. We discuss these issues below.

With respect to SEPA, this memo concludes that the Preliminary DEIS:

- Fails to properly define the no-action alternative;
- Fails to consider a reasonable range of alternatives;
- Fails to explain Ecology's rejection of other, non-variance alternatives; and
- Fails to use the proper framework for assessing environmental impacts.

With respect to the Clean Water Act, this memo concludes the proposed variances:

- May violate the Clean Water Act's prohibition on the removal or downgrading of existing uses;
- Fail to explain why PCB levels in the Spokane River "cannot be remedied," as required for a variance.
- Fail to require Inland Empire and Kaiser Aluminum to implement Best Available Technology as a necessary prerequisite to receiving a variance;

- Are based on incomplete data and analysis by the variance applicants; and
- Fail to explain why the municipal dischargers covered by the variances—*i.e.*, Liberty Lake, Spokane County, and the City of Spokane—cannot do a better job of removing PCBs from their effluent and the Spokane River.

In preparation for this memo, we reviewed Ecology's preliminary draft rule language, preliminary draft state technical support document ("TSD"), preliminary draft environmental impact statement ("Preliminary DEIS"), and preliminary draft implementation plan, all of which are available on Ecology's rulemaking website at https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC173-201A-variances. We also reviewed the variance applications submitted by the five facilities at issue in Ecology's proposed rulemaking, available at https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-quality-standards/Updates-to-the-standards.

II. SEPA ISSUES

A. Overview of SEPA

SEPA represents Washington's State's policy regarding the environmental impacts of government decisions, and the mandate that government actors timely and thoroughly consider those impacts in the decision-making process. *See, e.g., Stempel v. Dept. of Water Res.*, 82 Wn.2d 109, 118, 508 P.2d 166 (1973) (describing purposes of SEPA); *ASARCO, Inc. v. Air Quality Coal.*, 92 Wn.2d 685, 707, 601 P.2d 501 (1979) (same). In essence, SEPA is an environmental full-disclosure law. *Norway Hill Pres. & Prot. Ass'n v. King County Council*, 87 Wn.2d 267, 272, 552 P.2d 674 (1976). It requires state agencies and other government bodies to assess potential impacts of their decisions up front, and if those impacts might be significant, to undertake a thorough environmental study known as an Environmental Impact Statement ("EIS"), where those impacts must be analyzed and disclosed, and where alternatives and mitigation measures must be considered. *See generally* RCW 43.21C.030; WAC 197-11-400 to -440. By requiring government actors to evaluate environmental impacts and alternatives up front, SEPA aims to ensure that environmental consequences are adequately evaluated, disclosed, and considered during the decision-making process. In this way, SEPA represents "an attempt by the people to shape their future environment by deliberation, not default." *Stempel, supra*,82 Wn.2d at 118.

The Department of Ecology's SEPA regulations emphasize that "[a]n EIS shall provide impartial discussion of significant environmental impacts and shall inform decisionmakers and the public of reasonable alternatives, including mitigation measures, that would avoid or minimize adverse impacts or enhance environmental quality." WAC 1970-11-400(2). An EIS must "provide a reasonably thorough discussion of the significant aspects of the probable environmental consequences of the proposed action." Weyerhaeuser v. Pierce County, 124 Wn.2d 26, 37, 873 P.2d 498 (1994). A decision made based upon inadequate environmental analyses is unlawful. Leschi Imp. Council v. Wash. State Highway Comm'n, 84 Wn.2d 271, 284-85, 525 P.2d 774 (1974).

SEPA, like its federal counterpart (NEPA), requires agencies to take a "hard look" at environmental issues. *PUD No. 1 of Clark County v. PCHB*, 137 Wn. App. 150, 158, 151 P.3d 1067 (2007) (citing *Nat'l Audubon Soc'y v. Dep't of Navy*, 422 F.3d 174, 184 (4th Cir. 2005)). SEPA does not require every single environmental effect to be considered, but an EIS "must include a reasonably through discussion of the significant aspects of the probable environmental consequences of the agency's decision." *City of Des Moines v. Puget Sound Reg'l Council*, 98 Wn. App. 23, 35, 988 P.2d 27 (1999). *See also Weyerhaeuser v. Pierce County*, 124 Wn.2d 26, 37, 873 P.2d 498 (1994); *Gebbers v. Okanogan County PUD*, 144 Wn. App. 371, 379, 183 P.3d 324 (2008). What is "reasonably thorough" is a function of the nature of the decision at hand. SEPA requires "a level of detail commensurate with the importance of the environmental impacts and the plausibility of alternatives." *Klickitat County Citizens Against Imported Waste v. Klickitat County*, 122 Wn.2d 619, 641, 860 P.2d 390 (1993).

The "heart" of an EIS is its discussion of alternatives to the proposed action. *Oregon Natural Desert Ass'n v. Bureau of Land Mgmt.*, 531 F.3d 1114, 1121 (9th Cir. 2008) (quoting 40 C.F.R. § 1502.14). SEPA itself requires every EIS to contain a "detailed statement" regarding "alternatives to the proposed action." RCW 43.21C.030(c)(iii). "The required discussion of alternatives to a proposed project is of major importance, because it provides a basis for a reasoned decision among alternatives having differing environmental impacts." *Weyerhaeuser, supra*, 124 Wn.2d at 38. "Pursuant to WAC 197-11-440(5)(b), the reasonable alternatives which must be considered are those which could 'feasibly attain or approximate a proposal's objectives, but at a lower environmental cost or decreased level of environmental degradation." *Id.* (quoting WAC 197-11-440(5)(b). The EIS must also inform decision makers of the impacts that would be associated with alternative levels of development. The EIS must "devote sufficiently detailed analysis to each reasonable alternative to permit a comparative evaluation of the alternatives including the proposed action." WAC 197-11-440(5)(c)(v). Finally, "[t]he 'no-action' alternative shall be evaluated and compared to other alternatives." WAC 197-11-440(5)(b)(ii).

Ultimately, the EIS "must indicate that the agency has taken a searching, realistic look at the potential hazards and, with reasoned thought and analysis, candidly and methodically addressed those concerns." *Conservation Nw. v. Okanogan County*, 2016 WL 3453666, *31 (June 16, 2016) (quoting *Found. on Econ. Trends v. Weinberger*, 610 F. Supp. 829, 841 (D.D.C. 1985)). "SEPA seeks to ensure that environmental impacts are considered and that decisions to proceed, even those completed with knowledge of likely adverse environmental impacts, are 'rational and well documented." *Columbia Riverkeeper v. Port of Vancouver, USA*, 188 Wn.2d 80, 92, 392 P.3d 1025 (2017) (quoting 24 Wash. Practice: Environmental Law and Practice § 17.1, at 192).

In this case, Ecology's Preliminary DEIS contains a number of deficiencies under SEPA.

A. Failure to Properly Define the "No-Action" Alternative

First, the Preliminary DEIS fails to properly define the no-action alternative—*i.e.*, the alternative of not granting *any* variances for the five dischargers discussed in Ecology's proposed rulemaking. Below, we refer to these dischargers—Liberty Lake Sewer and Water District, Kaiser Aluminum,

Inland Empire Paper Company, Spokane County Regional Water Reclamation Facility, and the City of Spokane—as the "covered facilities."

In essence, the Preliminary DEIS defines the no-action alternative as simply re-issuing the covered facilities' NPDES permits under the federal Clean Water Act, with an effectively unenforceable requirement to meet the state's current PCB water quality criterion of 7 ppq. See Preliminary DEIS at 9. We say "unenforceable" because, as Ecology explains, compliance with such a requirement would be evaluated using EPA's "Method 608.3," which "only measures down to 50,000 ppq." Id. In other words, while the permits themselves would require the covered facilities to meet the 7 ppq PCB limit, the facilities would effectively be allowed to discharge up to 50,000 ppq due to Ecology's view that reliably testing for lower PCB concentrations is not feasible.

However, Ecology's assessment of this issue mis-states the law. While it may be true that Method 608.3 would need to be used to evaluate compliance with any re-issued NPDES permits, it does not follow that the permits must be issued in the first place. The Clean Water Act generally forbids the issuance of any NPDES permit that would cause or contribute to a violation of water quality standards. See, e.g., 40 C.F.R. § 122.4(d) ("No permit may be issued: . . . When the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States[.]"); RCW 90.48.520 ("In no event shall the discharge of toxicants be allowed that would violate any water quality standard, including toxicant standards"). In this case, Ecology has admitted that the covered facilities cannot meet the state's PCB criterion of 7 ppq. See, e.g., TSD at 22 (opining that "[t]reatment technology that would reduce PCBs in the Spokane River to levels that achieve the human health criterion necessary to protect for the fish harvest and water supply uses in the river is not presently available."). Thus, a true no-action alternative would not be to reissue permits that Ecology knows will violate water quality standards. Instead, the no-action alternative would be to allow the covered facilities' current NPDES permits to expire, without renewal.

In making this criticism of the Preliminary DEIS, we are fully aware of the Washington Supreme Court's recent decision in *Puget Soundkeeper Alliance v. State, Department of Ecology*, 191 Wn.2d 631, 424 P.3d 1173 (2018). In that case, the Supreme Court approved of Ecology's issuance of an NPDES requiring use of Method 608.3 to test for compliance with Washington's PCB criterion, notwithstanding that Method 608.3 has a much higher quantitation limit. However, notwithstanding its holding on the validity of Method 608.3 for testing, the Court also noted that testing is only one method for ensuring compliance with applicable water quality standards. Instead, "[r]requiring the permittee to implement specific water treatment practices that are designed to reach the required PCB cap is, as logic would dictate, a more effective method of preventing unlawful discharges *before* they can occur than simply to monitor a release of harmful chemicals that has already occurred." *Puget Soundkeeper*, 191 Wn.2d at 641 (emphasis in original). In short, even if Method 608.3 can lawfully be used for compliance testing, it does not

[&]quot;NPDES" stands for National Pollutant Discharge Elimination System, which in turn refers to the federal permitting program under Section 402 of the Clean Water Act, 33 U.S.C. § 1342. We discuss the regulatory elements and requirements for NPDES permits in Section II below.

follow that any new NPDES permits can be issued for the covered facilities unless there is some guarantee that their water treatment practices are sufficient to meet the 7 ppq PCB criterion. Here, where Ecology has admitted that no such water treatment practices exist, any re-issued NPDES would be unlawful.

"No action" means allowing the current permits to lapse. It does not mean issuing new, illegal permits that cannot guarantee compliance with the applicable criterion.

B. Failure to Include a Reasonable Range of Alternatives

Second, the Preliminary DEIS fails to include a discussion of a reasonable range of alternatives, in addition to the no-action alternative. In general, the Preliminary DEIS describes the range of alternatives as being effectively binary—either Ecology denies the variances, and re-issues the NPDES permits which will not meet applicable water quality standards; or, alternatively, Ecology can grant the variance requests and issue the specific variances described the agency's draft rulemaking. *See* Preliminary DEIS at 10 (description of Alternative 2). However, this binary approach fails to address many issues relevant to determining a reasonable range of alternatives.

First, the Preliminary DEIS and proposed rulemaking would establish the variances for 20 years (10 years in the case of Kaiser Aluminum). This is an exceedingly long time, and the Preliminary DEIS fails to analyze any alternatives to the proposed duration of the variances. This failure is especially problematic since, under Washington law, a variance may only be granted "for the minimum time estimated to meet the underlying standard(s)." WAC 173-201A-420(5)(a). There is no discussion in the Preliminary DEIS of how long that period might be, or if a shorter period would be more appropriate.

Second, under the Clean Water Act, variances may take a number of forms. Specifically, pursuant to 40 C.F.R. §131.14, they may be expressed as the "highest attainable interim criterion" or as the "interim effluent condition that reflects the greatest pollutant reduction achievable." 40 C.F.R. § 131.14(b)(1)(ii)(A)(1-3). In turn, this second option can be expressed in a number of ways, including as a numeric effluent condition or as a percent reduction of pollutants in the applicant's effluent. See 80 Fed. Reg. 51048, 51037 (Aug. 21, 2015). In this case, all five proposed variances would be expressed as percent reductions in PCB discharges, under the "greatest reduction achievable" options at 40 C.F.R. § 131.14. However, it appears that for at least two facilities (Liberty Lake and City of Spokane), this way of expressing the variance was selected due to a lack of data. See TSD at 49. For all facilities, the Preliminary DEIS should assess all available options for expressing the proposed variances and, if data is missing, should comply with the requirements of WAC 197-11-080—i.e., Ecology should assess the costs of obtaining the missing data and, if the costs are exorbitant, assess the relative costs and benefits of moving forward at this time. Ecology should also consider the risks and benefits of proceeding at the current time, rather than waiting until later after the covered facilities provide more data. See also WAC 197-11-440(c)(vi) (EIS must "[d]iscuss the benefits and disadvantages of reserving for some future time the implementation of the proposal, as compared with possible approval at this time").

Relatedly, the TSD explains that other methods of expressing the variance were rejected due to reliability issues with EPA testing method 1668. See TSD at 49. But notwithstanding those issues, Ecology reports that method 1668 will be used under the variances for source investigation, identification, and determining the effectiveness of actions taken under the proposed "pollution minimization plans" or "PMPs." Id. at 58. The TSD also reports that method 1668 is effective at measuring PCBs at low concentrations in ambient water. Id. at 15. The Preliminary DEIS should analyze whether the variance might be expressed as an interim ambient water quality criterion, as measured using method 1668.

Third, the pollution minimization plans associated with the proposed variances contain many terms and conditions aimed at ensuring that the covered facilities make reasonable progress toward eventually meeting Washington's 7 ppq PCB water quality criterion. But even there, the Preliminary DEIS is entirely silent on whether alternatives exist for the PMPs, or if the current terms of the PMPs could be strengthened to better ensure eventual compliance with the PCB criterion.

For example, each of the PMPs require the permit holder to "[s]ubmit a proposed schedule for performing and completing PMP actions." Why could this schedule not be developed now, as part of the rulemaking itself? The Preliminary DEIS does not explain why this schedule cannot be developed before the variances are granted, not after. The public would also be far more capable of commenting on the adequacy of the PMPs if they knew how long it would take to complete them.

Similarly, several of the PMPs require the covered facilities to undertake such tasks as "[e]valuate infiltration and inflow (I/I) to collection systems," "[i]mplement measures to optimize operation and maintenance and to reduce PCBs discharged in final effluent," "[e]valuate and optimize the solids dewatering and storage processes," "[i]ncorporate adaptive management to identify and reduce sources of PCBs through active participation in the Spokane River regional toxics task force (SRRTTF)," and "[i]nvestigate Technical, Legal and Policy Solutions through the federal Toxics Substance Control Act (TSCA)." *See* Preliminary Draft Rule Language at 13–20. For these and similar provisions, the Preliminary DEIS fails to discuss whether (a) specific timelines and milestones can be established for the various PMP elements, and included in the final rule, to ensure they are completed in a timely manner, and (b) whether the details of any of these elements can be clarified, delineated, or shortened before the variances are granted.² Ecology should not be giving the covered facilities any more time than necessary to take all steps toward complying with the variances and underlying PCB criterion.

The proposed variance rule does note that more information about the PMPs may be found in "Ecology Publication 20-10-020." However, the proposed variances do not identify what this document is. Nor were we able to find it online. Regardless, if there are any additional details relating to the PMPs that Ecology proposes to treat as binding, they should be identified and disclosed in the draft rule language, so that the public can meaningfully comment and the covered facilities may be held accountable to them as such.

At the very least, Ecology should explain why it believes no greater detail can be provided at this time regarding the specifics of each PMP component, or why these details should not be included in the proposed rule language. Ecology should also explain why none of the steps can be performed now, or why no binding milestones can be established now to judge the reasonableness of progress made by the covered facilities over the terms of the variances.³

C. Failure to Explain Rejection of Other, Non-Variance Alternatives—TMDL and Compliance Schedule

At pages 8 to 9 of the Preliminary DEIS, Ecology rejects two alternatives suggested during the DEIS scoping phase—the first is to address PCBs in the Spokane River through a Total Maximum Daily Load ("TMDL"), the second is to issue compliance schedules to the covered facilities rather than variances. The Preliminary DEIS rejects the TMDL alternative because TMDLs are "not self-implementing and therefore would not meet the objective of issuing the NPDES permits by fall 2021." The Preliminary DEIS rejects the compliance schedule option because "[a] compliance schedule can only be used when it is shown that a discharger can meet effluent limits at the end of the compliance schedule period," whereas here, "it was clear [to Ecology] that all dischargers could not meet the final end of pipe effluent limit of 7 ppq within the timeframe of a compliance schedule due to technology limitations." Preliminary DEIS at 9.

Regarding Ecology's rejection of the TMDL alternative, we agree that TMDLs are, in a sense, "not self-implementing." In general, a TMDL sets a pollution budget for the affected waterbody, and then distributes that budget among various point and nonpoint sources of pollution. *See generally* 33 U.S.C. § 1313(d); 40 C.F.R. § 130.7. Once the pollution budget is established, however, the TMDL does not technically force Ecology or any other state, municipal, or private actors to implement the pollution budget as it applies to nonpoint sources of pollution, such as forestry and agriculture. In this sense, TMDLs are not self-implementing; but they certainly still have value to the extent that the state actually cares of about reducing nonpoint sources of pollution. *See, e.g., Pronsolino v. Nastri*, 291 F.3d 1123, 1129 (9th Cir. 2002) ("TMDLs are primarily informational tools that allow the states to proceed from the identification of waters requiring additional planning to the required plans. As such, TMDLs serve as a link in an implementation chain that includes federally-regulated point source controls, state or local plans for point and nonpoint source pollution reduction, and assessment of the impact of such measures

It also bears note that, at page vi of the Preliminary DEIS, Ecology describes the proposed variance rulemaking as a "non-project" action under SEPA. In general, the phrase "non-project" refers to "actions which are different or broader than a single site specific project, such as plans, policies, and programs." WAC 197-11-774. However, it is unclear why that term would apply here, since the purpose of the proposed rulemaking would be to set individual effluent requirements for five specific facilities. Moreover, even if this were a non-project action, that would not reduce the agency's duty to provide a full analysis under SEPA. *See, e.g.,* Washington Department of Ecology, State Environmental Policy Handbook, 2018 Updates, *available at* https://ecology.wa.gov/DOE/files/4c/4c9fec2b-5e6f-44b5-bf13-b253e72a4ea1.pdf (explaining that "[t]he procedural requirements of SEPA for review of a nonproject proposal are basically the same as a project proposal.").

on water quality, all to the end of attaining water quality goals for the nation's waters.") (internal citation omitted).

The situation is different, however, for point sources of pollution governed by the Clean Water Act's NPDES permit program. For those sources, they may only discharge pollutants n accordance with a valid NPDES permit issued under Section 402 of the Clean Water Act. See 33 U.S.C. §1311(a). And every NPDES permit must be consistent with the pollution budget allocated by a TMDL covering the same waterbody, if any. See 40 C.F.R. § 122.44(d)(1)(vii)(B); 40 C.F.R. § 130.2(h). In this sense, a TMDL may not be "self-implementing," but it would certainly have regulatory effect and would be helpful when issuing any new or revised permits to the covered facilities, to ensure they collectively meet the 7 ppq PCB criterion.

Further, even if a TMDL could not be a stand-alone alternative to the proposed variances, it is unclear why the covered facilities cannot or should not be required to fund the creation of a PCB TMDL to help aid future pollution reduction work in the Spokane River, as a required element of the variance. Such a requirement would clearly be of the same spirit as many other requirements of the proposed PMPs, such as working with the Spokane River Regional Toxics Task Force to find and reduce PCBs in the Spokane River. Funding a TMDL could be a very important part of that work. In other words, while the Preliminary DEIS rejects the creation of a TMDL as a standalone alternative *to* the proposed variances, it does not consider requiring a TMDL as a required component *of* the proposed variances.

As for the Preliminary DEIS's rejection of the compliance schedule alternative, Ecology's stated rationale would appear to apply equally to the proposed variances. It is true, as Ecology observes, that a compliance schedule cannot be granted unless there is some guarantee that the facility will be capable of complying with applicable water quality standards at the end of the schedule period. See WAC 1730-201A-510(4)(b) ("Schedules of compliance shall be developed to ensure final compliance with all water quality-based effluent limits and the water quality standards as soon as possible."). But the same rule also applies to variances. See WAC 173-201A-420(5)(a) ("A variance is a time-limited designated use and criterion. . . . Each variance will be granted for the minimum time estimated to meet the 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 . . . will be initiated.") (emphasis added).

Ultimately, if it is true that the covered facilities cannot be expected to come into compliance with Washington's PCB criterion over any reasonable period of time, then not only should the compliance schedule alternative be rejected, so should the variance alternative. The Preliminary DEIS fails to explain why one of these alternatives is available, but not the other, when both require assurances that water quality standards will be achieved at the end of the timeline.

Finally, the Preliminary DEIS contains no discussion of other options for reducing PCB discharges such as beneficial reuse and land application of the covered facilities' effluent. These alternatives are discussed briefly in Ecology's TSD. But they should be given a full evaluation under SEPA based on up-to-date information. Inland Empire also should be required to evaluate the option of ending its use of recycled paper, which appears to be the source of the PCBs at that facility. In

Inland Empire's variance application, it opines that "preservation of recycling provides enormous environmental benefits." *See* Inland Application at 6. But it is unclear whether such benefits would actually outweigh the environmental harm of continued PCB discharges to the Spokane River. This issue should be analyzed by Ecology under SEPA.

D. Failure to Consider Environmental Impacts of the Alternatives

Finally, throughout the Preliminary DEIS, the variance alternative is presented as having no adverse environmental impacts whatsoever, and as having only positive environmental impacts. In large part, this appears to be due to Ecology's artificial comparison of the variance alternative to the false no-action alternative (issuing new NPDES permits that fail to achieve water quality standards). Viewed through that lens, the Preliminary DEIS states that granting the variances will be environmentally beneficial in comparison to simply reissuing the permits without variances, with no ability to ensure compliance with the 7 ppq PCB criterion.

But as discussed above, the comparison is false; a true no-action alternative would be to allow the covered facilities' NPDES permits to lapse without renewal, thus ending the discharges altogether. Compared to that alternative, allowing the covered facilities to continue to discharge (with variances) may indeed have adverse impacts, since allowing any continuing discharge of PCBs is no doubt more harmful than completely eliminating them.

The Preliminary DEIS should be revised so that it compares (a) the environmental impacts of issuing the variances with (b) the environmental impacts of ending the discharges because the covered facilities cannot comply with applicable water quality standards. We cannot say at this time what the results of such an analysis would be. But comparing the proposed variances to a false no-action alternative does not constitute the type of "hard look" mandated by SEPA.

III. CLEAN WATER ACT ISSUES

A. Overview of the Clean Water Act

The objective of the Clean Water Act is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters," and to achieve "wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water." 33 U.S.C. § 1251(a) and (a)(2). To these ends, the Act makes it unlawful for any person to discharge any pollutant to any river, lake, or similar surface waterbody unless the discharge is authorized under, and compliant with, an NPDES permit issued under Section 402 of the Act, 33 U.S.C. § 1342. Such permits are the Act's primary tool for regulating and reducing the discharge of harmful pollutants from point sources such as Kaiser Aluminum, Inland Empire, and the municipal dischargers currently requesting variances from Washington's 7 ppq PCB criterion (Liberty Lake, Spokane County, and the City of Spokane).

NPDES permits, in turn, have two essential components—technology-based effluent limitations (also known as "TBELs"), and water-quality based effluent limitations (also known as "WQBELs"). In essence, the former (TBELs) require the permittee to install and comply with

increasingly stringent water treatment technology so that the level of pollution reduction continues to improve as advances in technology are made. TBELs are supposed become stricter and stricter over time, as new pollution reduction technology becomes available.⁴ For example, for toxic pollutants like PCBs discharged from private facilities like Kaiser and Inland, these TBELs generally must require the permittee to comply with a standard known as "Best Available Technology" or "BAT." As one court has explained, BAT is "the CWA's most stringent standard' for setting discharge limits for existing sources." *Sw. Elec. Power Co. v. United States Envtl. Prot. Agency*, 920 F.3d 999, 1016 (5th Cir. 2019) (citing 33 U.S.C. §§ 1311(b)(2), 1314(b)(2). In essence, BAT requires each facility to install the water treatment technology used by the "single best-performing plant in [its] industrial field," which acts as "a beacon to show what is possible." *Id.* at 1018. BAT is a "best of the best" standard, reflecting the great harm that can be done by discharging toxic pollutants to surface waters of the United States.

WQBELs, in contrast, represent any *additional* permit limits over and above technology-based limits that are needed to comply with state water quality standards. In general, water quality standards consist of "designated uses," which set out, for each waterbody, the environmental objectives that the state seeks to achieve (*i.e.*, maintaining water quality suitable for swimming or fishing); water quality criteria, the purpose of which is to define minimum water quality conditions necessary to protect the designate use; and an antidegradation policy, the purpose of which is to provide a framework for maintaining and protecting water quality that has already been achieved. *See* 40 C.F.R. 131.3(b, e, h). For example, the topic of this memo concerns Washington's PCB criterion of 7 ppq, the purpose of which is to protect the designated uses of human fish consumption and water supply in the Spokane River.

The Clean Water Act generally requires all polluting discharges to comply with these basic requirements, and forbids any discharge that would violate state water quality standards. *See, e.g.,* 33 U.S.C. § 1342(b)(1)(C) (requiring, "[n]ot later than July 1, 1977, any more stringent [permit] limitation . . . to implement any applicable water quality standard established pursuant to this chapter."). However, the Act also contains limited mechanisms for allowing a discharger to avoid compliance with these requirements on a time-limited, temporary basis.

One such mechanism is a variance, which is defined under the Clean Water Act as "a time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition during the term of the WQS variance." 40 C.F.R. § 131.3(o). In essence, a variance is a temporary change to a state's water quality standards, the purpose of which is to allow a particular permittee to continue discharging, notwithstanding that the discharge violates applicable standards. The ultimate purpose of a variance is to give the permittee time to come into compliance, not simply to excuse non-compliance in perpetuity. For this reason,

See, e.g., Nat. Res. Def. Council, Inc. v. U.S. E.P.A., 822 F.2d 104, 123 (D.C. Cir. 1987) (observing, "the most salient characteristic of [the CWA], articulated time and again by its architects and embedded in the statutory language, is that it is technology-forcing").

Washington's own regulations make clear that a variance should only be granted "for the minimum time estimated to meet the underlying standard(s)." WAC 173-201A-420(5)(a). During the variance period, the permittee must also attain the "highest attainable condition," which generally means it must do the best it can to attain applicable standards. See 40 CFR § 131.14(b)(1)(ii).

In this case, the variances proposed by Ecology would effectively allow the five covered facilities to continue discharging PCBs to the Spokane River, in violation of the state's 7 ppq PCB criterion for human fish consumption and water supply. The variances have essentially two components. First, the variances would replace the state's "fish harvesting" and "water supply" designated uses for the Spokane River with new designated uses called "limited fish harvest" and "limited water supply." In other words, in order to allow the covered facilities to continue discharging, these designated uses will be downgraded for the next 20 years (the term of the variances), supporting only "limited" consumption and water supply over that period of time.

Second, the variances establish a framework for each covered facility to make steps toward ultimate compliance with the 7 ppq PCB criterion over the next 20 years. These steps are discussed in the Pollution Minimization Plans (or PMPs) referenced above. In part, the PMPs require each facility covered by the proposed variances to study possible new technologies during the variance period, to evaluate their effectiveness at removing PCBs, and to gather data on PCB levels in the Spokane River. If more effective technologies are found during the 20-year variance period, the variances would allow Ecology to require their ultimate installation and use.

Below, we identify several problems with the proposed variances under the Clean Water Act.

B. Failure to Evaluate Whether Full "Fish Harvest" and "Water Supply" Are Existing Uses

First, Ecology fails to discuss whether the designated uses of full fish harvesting and water supply, currently designated for the Spokane River, are also "existing uses" as that term is used in the Clean Water Act. In general, an existing use is one that was "actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards." 40 C.F.R. 131.3(e). In turn, this definition refers the date of EPA's first adopted regulations under the Clean Water Act, in which EPA established that "no further water quality degradation which would interfere with or become injurious to existing instream water uses is allowable." *See* 40 C.F.R. § 130.17(e)(1) (1978); 40 Fed. Reg. 55336 (Nov. 28, 1975). The upshot of this issue is that the Clean Water forbids the removal or downgrading of any designated use that is also an existing use under the Act. *See* 40 C.F.R. § 131.10(h) ("States may not remove designated uses if . . . [t]hey are existing uses, as defined in § 131.3, unless a use requiring more stringent criteria is added."); 40 C.F.R. § 131.12(a)(1) ("Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."). The idea is that beginning on November 28, 1975, water quality would only improve, and any uses existing on that date would be maintained.⁵

This concept is also expressed in Washington's Tier I Antidegradation rules, which apply

In this case, Ecology proposes to downgrade the Spokane River's fish harvest and water supply uses on the basis of 40 C.F.R. § 131.10(g), which enumerates a series of factors that may be used for the removal or downgrading of designated uses. In particular, Ecology relies on 40 C.F.R. § 131.10(g)(3), which allows a designated use to be downgraded when "[h]uman 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."

However, the preamble to the (g)(3) factor makes clear that it cannot be used to remove or downgrade a designated use that is also an existing use. See 40 C.F.R. §131.10(g) (states may only "remove a use that is not an existing use" based on factors) (emphasis added). Applied here, the Spokane River has undoubtedly been used for fish harvesting and water supply since before November 28, 1975. Yet, the various documents supporting Ecology's proposed variances provide no assessment of whether the current designated uses (full fish harvesting and full water supply) are also existing uses under the Act. Ecology should evaluate this issue and, if it is determined that the current designated uses are also existing uses, then Ecology's current proposal to downgrade the uses for 20 years is very arguably illegal.

C. Failure to Demonstrate that PCB Levels in the Spokane River "Cannot be Remedied"

Even if Ecology could remove or downgrade the current fish harvesting and water supply designated uses, it has not shown that PCB levels in the Spokane River cannot be remedied by implementing available technology and nonpoint source controls. Citing 40 C.F.R. §131.10(g)(3), Ecology argues that meeting the 7 ppq PCB criterion in the Spokane River is not "feasible" and would be too expensive. On this basis, Ecology asserts that PCB levels in the Spokane River "cannot be remedied" within the meaning of 40 C.F.R. §131.10(g)(3).

But on its face, 40 C.F.R. §131.10(g)(3) does not contain a feasibility component. Other 131.10(g) factors do contain such a component.⁶ But the (g)(3) factor does not. Instead, it asks only whether the harmful conditions "*cannot* be remedied"—an absolute standard.

Ecology should either assess the validity of the proposed variances under other factors at 40 C.F.R. § 131.10(g)—*i.e.*, factors other than (g)(3)—or it should explain why PCB levels in the Spokane River truly cannot be remedied even with the various technologies and nonpoint source control methods rejected in the TSD as being too expensive. This analysis should include possible actions by Washington to reduce PCB loading from Idaho, which currently accounts for 30% of the load. *See* TSD at 10. Under the Clean Water Act, Washington can object to any NPDES permit issued in Idaho that would cause or contribute to violations of Washington's 7 ppq PCB criterion. *See*,

to the Spokane River. *See* WAC 173-201A 310(1) (providing that "[e]xisting . . . uses *must* be maintained and protected") (emphasis added).

See 40 C.F.R. § 131.10(g)(4) (allowing designated use to be removed or downgraded when "[d]ams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition") (emphasis added).

e.g., Arkansas v. Oklahoma, 503 U.S. 91, 112 S.Ct. 1046 (1992); 40 C.F.R. § 122.4(d) (NPDES permits shall comply with water quality standards "of all affected states"). Such actions should be part of any analysis of whether violations of that criterion "cannot be remedied" within the meaning of 40 C.F.R. §131.10(g)(3).

D. Ecology's "Variance to the Variance" Approach to Kaiser and Inland Empire

PCBs are toxic pollutants under the Clean Water Act. See 40 C.F.R. § 401.15. The regulations set out at 40 C.F.R. § 125.3 describe the technology standard that applies to private industrial dischargers of PCBs like Kaiser Aluminum and Inland Empire. As discussed above, that technology standard is "Best Available Technology" or "BAT." 40 C.F.R. § 125.3(a)(2)(iii). Yet, neither Kaiser nor Inland appear to be complying with the BAT requirement. No variances should be granted until after they do so.

For example, Kaiser Aluminum is using a filtration system based on walnut shells, which it installed 18 years ago in 2002. The facility is currently exploring two other candidate technologies for removing PCBs from its effluent: ultraviolet treatment coupled with advanced oxidation processes ("UV/AOP") and a membrane bioreactor ("MBR"). But as Ecology states in its Technical Support Document, Kaiser "has not yet installed the best available pollutant control technologies that provide the greatest pollutant reduction achievable." TSD at 47. In other words, Kaiser is not currently meeting BAT.

Similarly, Ecology's TSD reports that Inland Empire is currently testing a new Membrane Pilot System, which may achieve a PCB removal rate of 99%. TSD at 50 (Table 21). However, that system has not been fully implemented and only limited effluent sampling data from the new system is reported in the TSD. It is possible that Inland's new membrane system will constitute BAT, and based on information provided in the TSD, it appears to do a better job of removing PCBs than the current system. But like Kaiser, it appears that the Inland facility is not currently in compliance with the Clean Water Act's BAT requirement.

For both Kaiser and Inland, the proposed variances would allow them time to determine how to upgrade their facilities, and what currently-available technologies they will use to better remove PCBs from their discharges—despite that even those newer technologies likely will not meet the state's 7 ppq PCB criterion. In other words, the variances do not simply provide time to figure out how to meet the applicable criterion. Instead, they appear to provide time for these facilities to figure out even how to begin making initial steps toward that ultimate goal.

Importantly, this "variance from the variance" or "plan to make a plan" approach was recently rejected by the United States District Court for the District of Montana. See Upper Missouri Waterkeeper v. United States Envtl. Prot. Agency, 377 F. Supp. 3d 1156 (D. Mont. 2019). In that case, the court held that a variance is not a grace period to determine what initial steps a facility must take towards even partial compliance with water quality standards. Rather, the variance period must begin with the facility already doing all that is possible to achieve applicable water quality standards. Then, if standards still cannot be achieved even after those initial steps are taken,

a variance may be granted to allow the facility time to figure out how ultimately to comply with the standards. The court held:

Congress contemplated that attainment of a state's base WQS would not always be attainable immediately. The regulations effectuate this purpose by allowing dischargers time-limited variances to reach base criteria. . . . Defendants acted arbitrarily and capriciously when they set forth a seventeen-year timeline after their first triennial review merely to meet the relaxed criteria of the Current Variance Standard. The CWA does not contemplate the ability of a state to adopt a variance from the variance.

Upper Missouri Waterkeeper, 377 F. Supp. 3d at1169–70.

In short, variances are not supposed to give polluters time to work *toward* a highest attainable condition or BAT. Rather, they allow a facility a limited amount of time to work *from* that condition to achieve the base water quality standards—here, the state's 7 ppq PCB criterion.

The newer technologies cited in Ecology's TSD appear to be available to Kaiser and Inland now. Allowing them several years even to identify that technology and take other steps toward attaining a highest attainable condition violates the rule above. Ecology should require these facilities to demonstrate, prior to issuing any variances, that they have already implemented BAT and that they have already attained the highest attainable condition within the meaning of EPA's variance rules. Only after they meet those standards should Ecology consider granting a variance.

E. Kaiser's and Inland Empire's Failure to Provide Sufficient Water Quality Data

To grant a variance, Ecology's regulations require the applicant to submit "[s]ufficient water quality data and analyses to characterize receiving and discharge water pollutant concentrations." WAC 173-201A-420(3)(d). This data is then used by Ecology to determine the facility's particular variance requirements and highest attainable condition. Neither Kaiser nor Inland Empire has satisfied this requirement.

Ecology recognizes that Kaiser did not provide sufficient data and analysis in its variance application. For example, Ecology states: "In developing Kaiser's [variance], Ecology considered setting a numeric interim effluent condition reflecting the greatest pollutant reduction achievable. Setting an effluent loading value or minimum percent removal efficiency through the treatment system will depend on a number of variables (reduction of effluent flows and influent loadings, and type of treatment system ultimately installed) which Ecology cannot predict with certainty at this time." TSD at 52. But under WAC 173-201A-420(3)(d), data and analysis regarding effluent flows, influent loadings, and the type of treatment system installed is the kind of information that should ordinarily accompany a complete variance application.

This lack of information from Kaiser is again shown in Table 23 of the TSD. For example, Note 6 to Table 23 states that PCB levels in Kaiser's effluent are "[e]stimated using existing Kaiser effluent TSS data," presumably because Kaiser did not supply data and analysis regarding actual PCB levels. Similarly, Notes 7–9 to Table 23 further state: "Specific studies would be needed on Kaiser's effluent to verify the feasibility and removal efficiencies of [granular activated carbon, powdered activated carbon, and advanced oxidation]." These studies should already have been conducted and the data and analysis from them supplied to Ecology with Kaiser's variance application. After Kaiser implements BAT, Ecology should require Kaiser to provide sufficient data and analysis of the efficacy of its new treatment system, in order to allow Ecology to determine the highest presently achievable condition (post-BAT). Only then should a variance be considered.

In turn, the TSD notes that setting a variance for Inland Empire "presented a challenge due to the limited number of samples for percent removal obtained from both the wastewater treatment system and membrane systems[.]" TSD at 50. Inland provided only two paired samples, notwithstanding that the minimum number required by Ecology is 10. See TSD at 47. As above with Kaiser, the answer to this problem is not to reward Inland with a variance based on incomplete information. Instead, the remedy should be to deny the variance until all necessary sampling has been completed, and sufficient data has been submitted to Ecology. Instead of refining Inland Empire Paper's variance as its "treatment system comes online and additional data are collected," TSD at 51, Ecology should require Inland to provide a minimum of ten or more paired samples at the outset.

Until Kaiser Aluminum and Inland Empire install and implement BAT, and provide sufficient data and analysis to characterize receiving and discharge water pollutant concentrations as required by WAC 173-201A-420(3)(d), any consideration of a variance is premature.

F. Failure to Show that the Municipal Dischargers Cannot Do a Better Job of Removing PCBs From Their Effluent

With respect to the municipal dischargers (Liberty Lake, Spokane County, and the City of Spokane), Ecology has not provided sufficient information to show that they are taking all feasible steps toward meeting the state's 7 ppq PCB criterion. Such a showing is necessary, since a variance must demonstrate that the recipient is achieving the "highest attainable condition" short of full compliance. See 40 C.F.R. § 131.14(b)(1)(ii). To meet that standard, these facilities must show that they are making "the greatest pollution reduction achievable," and that they are doing so "with the pollutant control technologies installed at the time [the variance is granted]." *Id.* at (b)(1)(ii)(A)(3).

Addressing this standard, Ecology's Technical Support Document discusses the current treatment technologies currently used at two of the municipal facilities covered by the proposed variances, and notes that the City of Spokane has plans to similarly upgrade its facility by 2021. See TSD at 25–30. These technologies include a "step-feed nitrification/denitrification membrane bioreactor that utilizes chemical phosphorus removal" at Spokane County; a "chemical coagulation and membrane ultrafiltration system" at Liberty Lake; and "tertiary membranes with microfiltration"

planned for the City of Spokane. After providing a brief synopsis of each facility, the TSD concludes its discussion of these technologies with the following paragraph:

PCBs are hydrophobic with low water solubility and they generally adhere to suspended solids, organic matter, and oils present in domestic and industrial wastewater. The municipal wastewater treatment facilities are designed to treat or remove both solids and organics. This results in PCB removal efficiencies of greater than 95%. Spokane County and Liberty Lake have installed and operate advanced treatment facilities. The City of Spokane is currently installing systems that include physical and chemical treatment processes, which when combined, provide the greatest pollutant reduction available for PCBs. Currently, there are no demonstrated technologies implemented at full scale for municipal wastewater treatment systems that can achieve the current water quality criteria for PCBs (7 ppq).

TSD at 30.

It appears from context that Ecology intends the paragraph above to mean that each of these facilities is currently making "the greatest pollution reduction achievable," or will do so in the near future. However, with respect to Liberty Lake and Spokane County, that conclusion does not follow from the text of the paragraph quoted above. For example, use of an "advanced" system that can remove 95% of PCBs does necessarily mean that a facility is making "the greatest pollution reduction achievable." Nor is it relevant that no identified technology can meet the 7 ppq PCB standard when implemented at full scale. Other technologies might represent the "greatest possible reduction" even without meeting the criterion (they might just do a better job).

Later, the TSD includes a discussion of various physical, chemical, biological, and thermal technologies for treating PCB-contaminated effluent, concluding that none of them currently represents a complete solution to the problem. TSD at 34–35. But even if "no available full-scale technology exists to meet the current human health criterion" on its own (TSD at 34), a treatment train of several technologies—for example, combining physical, chemical, biological, *and* thermal technologies—could be effective in treating effluent and protecting existing uses and public health. This treatment train solution would also confer significant co-benefits for public health, because the same technologies that are effective in PCB treatment are effective in removing a host of other dangerous chemicals. There is no analysis of this issue in the TSD.

The TSD also discusses possible alternative methods for reducing the level of PCBs discharged from these facilities, such as beneficial reuse and evaporation, but concludes that none provides a complete solution. See TSD at 39–45. For example, Ecology rejected evaporation because of the large "minimum amount of area, in acres, required for each of the facilities to be able to remove their entire discharge from the river and use evaporative lagoons exclusively for disposal of effluent." TSD at 45 (emphasis supplied). Similarly, the TSD rejects beneficial reuse, in part, because "it is unlikely that either [Spokane County or the City of Spokane] would be able to

completely remove their discharges from the Spokane River without impairing downstream water rights." TSD at 41 (emphasis added). Noticeably lacking is any assessment of whether these alternatives could be effectively used as a partial solution, either alone or in conjunction with the other treatment methods discussed in the TSD, to better approximate the state's 7 ppq PCB criterion For example, could the municipalities use membrane filtration to send "clean" effluent to the river, thereby reducing the volume of water that remains contaminated with PCBs, and then using evaporation lagoons for that reduced volume of contaminated effluent? The TSD does not assess this or any other ways that the various alternatives might be combined.

Ultimately, lacking from Ecology's analysis is whether any of the various alternative technologies and methods can be used either (a) to provide a better partial solution to the PCB problem; or (b) in conjunction with each other to provide a more complete solution.

G. Failure to Require Sufficient Data From the Municipal Dischargers and Rewards for Doing Less

Last, like Kaiser and Inland, it does not appear that the three municipal dischargers supplied sufficient effluent sampling data to support a variance. The TSD focuses on Spokane County's data, because it is the only facility currently implementing technologies that Ecology characterizes as the "greatest available pollutant reduction control." Liberty Lake has not yet optimized the technology it installed 2017, "resulting in variability in their data set" and insufficient data to conduct statistical evaluations. TSD at 48. The City of Spokane apparently provided no data whatsoever. *Id*.

Due to lack of data, the TSD looks to Spokane County's data to set the percent removal standard for Liberty Lake and the City of Spokane. But in doing so, Ecology does not hold them to the same standard. While Ecology proposes to hold Spokane County to a percent removal standard of 97.6%, Liberty Lake is proposed to have a lower minimum removal efficiency of 97%, and the City of Spokane, which provided no data, is rewarded with a minimum removal efficiency of 95%. TSD at 50, Table 20. In effect, Spokane County is punished for doing more in support of its application, while Liberty Lake and the City of Spokane are rewarded for doing less. These variance applications are the first of their kind in the state and more are likely to follow. Ecology is sending the wrong message and creating an incentive for dischargers of toxic pollutants to do as little implementation and analysis as possible, in order to increase the amount of uncertainty that Ecology has to contend with, resulting in lower minimum removal efficiencies at the beginning of the variance period.

Ecology should require the municipal dischargers to fully implement the technology that will result in the greatest achievable pollutant reduction. After full implementation of this technology, the municipalities should collect and analyze data regarding the efficiency of the new treatment technology and supply that data to Ecology in conjunction with a complete, properly supported variance application. All of this should be done before any variances are granted.