



Spokane Tribal Natural Resources

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October 15, 2012

Toxics Cleanup Program
Adrienne Dorrah
PO Box 47600
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RE: The Spokane Tribe's Department of Natural Resources Comments on the Proposed Amendments to the Sediment Management Standards (sent via email: RuleUpdate@ecy.wa.gov)

Dear Ms. Dorrah:

Please accept these comments on behalf of the Spokane Tribal Natural Resources Department ("Department"). The Department wishes to thank the Washington Department of Ecology ("DOE") for the opportunity to provide comment on these consequential proposed amendments to the State of Washington's Sediment Management Standards ("SMS").

Background

The health and well-being of the waters that flow through the Spokane Tribe's reservation are a paramount interest of the Tribe. The Tribe is concerned not only with the health of the Rivers and creeks within its Reservation, but also with the entirety of these waters as they flow through the Tribe's ancestral lands. The Tribe's Reservation was established in 1877, after the Tribe was removed by force from its domain. *Northern Pac. Ry. Co. v. Wismer*, 246 U.S. 283, 288 (1918). The Tribe's ancestral lands include the entirety of the Spokane River within what is now Washington State. *Spokane Tribe of Indians v. United States*, 163 Ct. Cl. 58, 2 (1963). The Reservation's southern boundary is set to the south bank of the Spokane River, the Western Boundary is set by the West Bank of the Columbia River and the Eastern Boundary is set to the East Bank of Tshimikain Creek, the borders were set in this manner to protect the Tribe's subsistence and cultural uses of these waters.

Unfortunately, for many decades the Tribe's subsistence use of its waters have been thwarted by upstream pollution, raised water temperatures, and during certain times of the year portions of the River are uninhabitable for aquatic life due to depressed oxygen levels and high levels of total dissolved gas ("TDG"). Additionally, PCBs and other toxins make fish consumption potentially dangerous to human health and negatively affect the Tribe's use of the River's fishery. In response to the infringement on the Tribe's fishing, cultural, and agricultural rights in its waters, the Tribe applied for and received treatment in the same manner as a state status ("TAS") under the Clean Water Act ("CWA"), 33 U.S.C. § 1377, on July 23, 2002. The Tribe's first water quality standards were approved on April 22, 2003. However, projects to improve water quality and control water pollution within the Reservation have not been

successful in bringing its waters back to health due to upstream pollution and hydropower facilities within its waters. The State of Washington's Sediment Management Standards have the potential to greatly affect the Tribe's waters because several significant current and future clean-up projects are upstream from Reservation waters.

Improvements in the Tribe's water quality depend almost entirely on improvements upstream. Low dissolved oxygen during the summer months in portions of the lower arm of the Spokane River and elevated levels of PCBs and other toxins violate the Tribe's EPA approved water quality standards. Additionally, once fish passage is achieved at Grand Coulee Dam it will be critically important for the waters to be clean and safe for the return of anadromous fish. The Tribe's goal of preparing Tribal waters for the return of anadromous fish to the Spokane and Columbia Rivers becomes more and more difficult as water quality continues on a downward trend due to upstream pollution. The State's proposed amendments to its Sediment Management Standards could cause further degradation to the Tribe's waters. Below are the Department's specific concerns regarding these amendments.

COMMENTS

1.) Lack of Default Fish Consumption Rate

The proposed SMS fail to establish a default Fish Consumption Rate (FCR), despite Ecology's public commitments to set a default FCR by rule. Similarly, the proposed SMS decline to establish key exposure parameters, for example, a default Fish Diet Fraction (FDF) of one. Instead, Ecology leaves these numbers up for argument at each cleanup site. This "site-specific" approach guarantees that actual cleanup will be delayed. Responsible parties will maneuver and potentially litigate to have low FCRs, and lenient interpretations of Ecology's guidance applied to their respective cleanup sites. Moreover, scarce Ecology time and money will be devoted to rehashing the science and policy debates at every site. This will leave the Spokane Tribe in a position where they have to spend limited resources to ensure Ecology is doing its job and protecting the public from toxic pollution and ensuring the Tribe's standards are being honored at every cleanup site in the watersheds that affect the Tribe and its membership. The State could remedy this environmental injustice by setting an appropriate default FCR in the SMS that does not include methods for the reduction of the default rate at each site.

2.) Application of Federal, State, Local and Tribal Cleanup Requirements.

Federal CERCLA (Superfund) cleanup law provide for recognition and incorporation of governmental requirements as relevant to a particular cleanup site that are "applicable, relevant, and appropriate requirements," (ARARs) which can include tribal governments. By contrast the proposed Draft SMS only list "local, state, and federal laws", the Draft SMS does not recognize the duly enacted requirements of tribal governments, such as the Spokane Tribe, that have promulgated otherwise applicable Sediment Management Standards and Water Quality Standards. To exclude tribal governments from the list of recognized governments is an affront to tribal sovereignty and incompatible with the promises inherent to the Centennial Accord. The SMS should be changed to include "tribal governments."

3.) Sediment Cleanup Levels based on Human Health Risk

Ecology withdrew its initial commitment to establish a default FCR in the SMS, and instead Ecology proposes that FCRs will be established on a site-by-site basis. At the same time,

several key exposure parameters in the denominator of the equation used to calculate human health risk based cleanup levels including Fish Diet Fraction (FDF) and Site Use Factor (SUF) are introduced in the Draft SMS with default values of 1.0, meaning any site-specific application of these poorly defined variables will have the effect of decreasing the effective FCR and consequently driving human health risk based cleanup levels towards less protective scenarios.

In general, there is no justification for applying a Fish Diet Fraction (FDF) when most or all of the fish and shellfish in an individual's diet is obtained or has the potential to be obtained in the future from waters affected by a contaminated site - such is the case for tribal fish consumers. While tribes at present obtain most or all of their fish from local sources, it is important to recognize that at the time treaties and executive orders establishing reservations were promulgated, Indian people obtained all of their fish from local waters. Furthermore, tribes' reserved rights under treaties and other legal agreements entitle them to do so in perpetuity. The SMS guidance too narrowly defines the sphere of influence of a contaminated site, referring to fish "from the site or the general vicinity of the site." But clearly, contamination at a site will often have impacts on fish resources beyond the site boundaries. A diet fraction that is selected by reference to Ecology's narrow definition will exclude fish that are adversely affected by contamination at the site, resulting in less protective sediment cleanup standards.

Similarly, use of the Site Use Factor (SUF) introduced in the SMS may effectively diminish the Reasonable Maximum Exposure (RME) scenario by assigning a value of less than 1.0 to the equation used to derive risk based cleanup as a function of "the percentage of time that a fish/shellfish is in contact with contaminants at the site." Ecology's application of the SUF is generally not supportable where tribes' right and resources are affected. For the case of salmon, Ecology's propensity to assert that the contaminants in a salmon's tissue are due "primarily" to sources other than a contaminated site suggests a predisposition to resolve the science and policy questions at issue in a manner that favors Potentially Liable Parties (PLPs) and disfavors protection of human and ecological health. Additionally, to the extent that scientific uncertainties remain about the source of contaminants in fish tissue at a given site, a conservative predisposition towards a more rather than less protective cleanup level would guide against reducing the FCR.

4.) Sediment Cleanup Objective (SCO)

The proposed SMS should set forth an approach in which the Sediment Cleanup Objective (SCO) is cleaning up contamination in Washington's aquatic environments to levels that no longer pose any risks to human and ecological health. The proposed SMS use the term SCO and set this as the "lower bound" for contaminant concentrations permitted to remain in the sediments following cleanup. That is to say, the SCO is the cleanest that we will aim to get our sediments. Thus, an SCO would be expected to equal a level that is protective of human and ecological health – the goal of our cleanup efforts. But the proposed SMS recalibrate this goal, by defining the SCO as the *highest* (i.e., least protective) of a risk-based level; "natural" background (described below), or the Practical Quantitation Limit (PQL), i.e., the level of contaminants detectable with present technology. This removes the goal. As a consequence, not only will PLPs be able to walk away from the contamination they have caused without full cleanup, but the citizens of Washington and affected tribes will be deprived of the means to discover that this is so, as dangerous amounts of contamination left in place will be deemed to be clean. Such lack of transparency is poor governance. It bears emphasis that the PQL, in particular, has no business serving as the *objective* for sediment cleanup; yet, the PQL will in many cases drive the cleanup standards, given the proposed SMS framework's instruction that the *highest* of the options be deemed the SCO.

5.) “Natural” and “Regional” Background

The proposed SMS allow the Sediment Cleanup Objective to be set equal to “natural background,” if this turns out to be the least protective among the options for SCO (see discussion above). Ecology then defines this term to incorporate contamination that is anything but natural, for example, PCBs, potent carcinogens that are the result of human-caused pollution. The proposed SMS state that “‘natural background’ means the concentration of a hazardous substance consistently present in the environment that has not been influenced by localized human activities.” For example, several metals and radionuclides naturally occur in the bedrock, sediment, and soil of Washington state due solely to the geologic processes that formed these materials and the concentration of these hazardous substances would be considered natural background. Also low concentrations of some particularly persistent organic compounds such as polychlorinated biphenyls (PCBs) can be found in surficial soils and sediment throughout much of the state due to global distribution of these hazardous substances. These low concentrations would be considered “natural background.” While it makes sense to refer to substances that “naturally occur” “due solely to the geologic processes that formed these materials” as natural background, the remainder of Ecology’s definition redefines the word “natural.” Moreover, if Ecology is permitted to redefine natural background in this manner, it will alter our environmental baseline forever. If the “new natural” includes PCBs and other human caused and created pollutants, all future cleanups will aim, at best, to reduce contamination to this new (contaminated) baseline.

The proposed SMS, as noted above, will permit greater concentrations of contaminants to be left in place than would be protective of human health, by allowing adjustments upward from the SCO, up to the *highest* of three levels, one of which is the level of current contamination present in the area – a concept called “regional background.” “Regional background” is defined as “the concentration of a contaminant within a department-defined geographic area that is primarily attributable to diffuse nonpoint sources, such as atmospheric deposition or storm water, not attributable to a specific source or release.” This definition is unsettling for its indeterminacy, leaving the relevant geographic area to be defined by Ecology at some point and by some means it deems appropriate (the SMS guidance leaves considerable detail regarding this key concept to be filled in at a later date, containing, as it does, a “placeholder”). Unfortunately, experience suggests that Ecology is prepared to consider areas that harbor significant contamination to serve as reference points for determining this sort of regional “background.” Moreover, the remainder of the definition incorporates significant ongoing contamination (e.g., from nonpoint sources, from storm water), rather than assuming a future in which source control is taken seriously.

The Department has significant concerns that Ecology is already on the wrong path regarding “regional background” in the waters that affect the Tribe’s waters. For example, in a recent report, Background Characterization for Metals and Organic Compounds in Northeast Washington Lakes, Part 2: Fish Tissue, Ecology characterizes the waters of the study as, “[t]he study focused principally on lakes whose quality was not believed to be influenced by notable human-oriented activities that are known to jeopardize environmental quality.”¹ The study utilizes samples taken from Sullivan Lake. The use of Sullivan Lake raises serious doubts about Ecology’s methods and motivations for attempting to define “regional background” as a cleanup standard. A simple web search reveals that the area around Sullivan Lake indicates that it has obviously been “influenced by notable human-oriented activities that are known to jeopardize

¹ Available at <https://fortress.wa.gov/ecy/publications/publications/1103054.pdf> (Last visited October 10, 2012).

environmental quality.”² This redefinition of what natural is causes the Tribe serious concerns. This potential method of defining what clean is not only leaves open far too many avenues for manipulation by PLPs and Ecology when the political will for cleanup is lacking. Accordingly, the Tribe requests that the regional background be deleted as a method of measuring cleanup standards.

6.) Practical Quantitation Limit (PQL)

The proposed SMS recognize that, for some pollutants, concentrations that are protective of human health and the environment are at levels lower than the limits of current detection capabilities. Having recognized as much, Ecology inappropriately substitutes our current limitation in this respect for our ultimate cleanup objective (the SCO). The cleanup levels would then be set at not what is safe, but what we can detect. For example, under the Tribe’s WQS PCBs in the water column are set to a level of 3.37 part per quadrillion. Current, testing methods are unable to detect to this level, but this current limitation is absolutely no excuse to set cleanup standards or WQS to the current PQL. If a safe level of a toxic pollutant is zero then cleanup levels should be set to zero. If this creates regulatory uncertainty for PLPs so be it, regulatory certainty for the entities and individuals that create the pollution problems should not be a priority or goal of the SMS, cleaning up toxic pollution must be.

Ecology compounds this unacceptable move by using a method to determine PQL that aims for mediocrity and fails to harness market forces to encourage improvements in detection technology. Ecology’s PQL guidance inappropriately equates PQL with levels detectable by the mid-performing labs, jettisoning the results of the best-performing labs. Ecology also commits to reevaluate the PQL only every 3-5 years, removing incentives for more rapid improvements in detection technology by private labs. While it is appropriate to recognize current limitations on our ability to detect contaminants in the environment, Ecology’s approach forsakes technological innovators and permits our cleanup standards to lag what is actually achievable – to the detriment of human and ecological health.

7.) Separation of SMS from Water Quality Standards

The separation of the sediment management standards from water quality standards is unprecedented. The standards are inconsistent and lead to arbitrary procedures and fail to protect human health in freshwater and marine environments. The SMS should be reviewed as and cross referenced to state water pollution control standards. The applicability of both the Clean Water Act and Model Toxics Control Act should be specified. These SMS amendments and changes should be reviewed as water quality standards, as has been done in the past. Additionally, the SMS rule should cite specific sections where WQS and requirements apply, including sections 300 and 500. At the beginning of the SMS rule they cite the state Water Pollution Control Act generally, but they split out section 500 as MTCA only. Rule language should add CWA requirements in Section 500, or copy 500 to 300. Freshwater tables in the SMS rule are not being promulgated as WQ standards, but Ecology may use them and is not calling them standards. In contrast, marine and estuarine waters are promulgated as WQ standards. This is just one example of the need for consistency between freshwater and marine/estuarine environments as WQ standards so that Ecology can add areas to the 303d list of impaired water bodies and take action as necessary. Given that rivers are sources of sediment for marine and estuarine areas, the freshwater numbers should apply as WQ standards. Unlike freshwater, marine/estuarine site

² http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=9216 (Last visited October 10, 2012).

cleanup standards are determined based on ecological risk. Under the proposed standards, freshwater environments are evaluated for aquatic life, but not for human health. This approach is inconsistent. If standards apply to insects and benthic organisms then they should apply to fish and human health. The differences in the applicability of standards inappropriately put the burden of proof on those who are seeking to protect human health.

8.) Reasonable Maximum Exposure (RME)

The proposed SMS changes state that cleanups will be set to protect residents that will be most exposed and impacted by the site by measuring present and future “uses” of a site. This level of protection is captured by the concept of Reasonable Maximum Exposure (RME) in Section 561. The proposed SMS correctly recognize that tribal members are likely to be the most exposed among us. However, as various fish consumption reports suggest many population segments in the State are high consumers of fish and shellfish from waters that are within what is now Washington State. Regardless, the proposed SMS defines RME by reference to tribal exposures which is reasonable given that the Tribes of the State have the most current and accurate data on fish consumption in their respective fishing, collecting, and hunting grounds.

The RME is to be determined by reference to “historical, current, and future tribal use of fish and shellfish,” which appropriately recognizes the relevance of tribes’ historical practices and future aspirations for more robust consumption in a context of tribal health and well-being. But the proposed SMS then provide myriad ways to undermine protection for the actual people represented by this exposure scenario, and thus to depart from a true RME. First, the proposed SMS allow Ecology to substitute an “alternate” exposure scenario for the RME, by reference to a process that makes no mention of the word “tribal.” This leaves tribes to fight to secure appropriate levels of cleanup at each site. Second, Ecology’s SMS guidance undermines the intended protectiveness of the RME concept by suggesting that an RME scenario is reasonable because it is comprised of a mix of high-end and average or median values for the various exposure parameters. This formulation misstates the derivation and of point RME. An RME scenario is reasonable when it reflects actual exposures of real people, under realistic present or future conditions. For tribes and their members, actual exposure is described by very high-end values for most exposure parameters. Actual tribal people live here and harvest and consume fish here – and do so for their entire lives. Additionally, for the Tribe’s future conditions include restoration of the anadromous fish and shellfish resources on which they historically depended and that Tribe’s membership will once again be able to consume fish at unsuppressed, historical rates, as they are legally entitled to do. Third, the proposed SMS go on to provide numerous tools for whittling away at those high-end values that are employed as part of the RME scenario. Thus, even if Ecology were to select a relatively protective FCR for a site, it could potentially slash this number by means of the Fish Diet Fraction (FDF) or the Source Use Factor (SUF). Ultimately, by these means, the supposed protectiveness of the RME concept in theory stands to be undermined at each site in practice.

CONCLUSION

Ecology’s proposed changes to the SMS will threaten the Tribe’s ability to protect its waters from upstream and off-Reservation pollution sources. Furthermore, these proposed changes will make the Tribe’s goal of preparing its waters for the return of anadromous fish more difficult. The Department sincerely hopes that Ecology will take a hard look at the Department’s comments and make the appropriate changes to close the damaging loopholes created in the State’s SMS proposed changes. If you have any questions, feel free to contact me at (509)-626-4427.

Sincerely,



B.J. Kieffer
Director
Spokane Tribal Natural Resources Department

Cc: Rudy Peone, Chairman, Spokane Tribal Business Council
Dennis McLerran, EPA Region 10 Administrator