WATER ENVIRONMENT SERVICES

Beyond clean water.

Water Quality Protection
Surface Water Management
Wastewater Collection & Treatment

Michael S. Kuenzi, P.E.
Director

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Revised Water Quality Standards for Human Health Toxic Pollutants and Revised Water Quality Standards Implementation Policies

submitted by e-mail to: ToxicsRuleMaking@deq.state.or.us

Dear Ms. Matzke:

We appreciate the opportunity to provide input to DEQ as it considers modifications to Oregon's water quality standards for human health based on a proposal to increase fish consumption standards.

Water Environment Services (WES) is a department of Clackamas County that manages Clackamas County Service District No. 1 (CCSD#1) and the Tri-City Service District (TCSD) to provide wastewater and stormwater services. CCSD#1 manages the Kellogg Creek, Hoodland, Boring, and Fischer Forest Park WWTP NPDES Permits, and TCSD manages the Tri-City WWTP NPDES Permit. As manager of two directly regulated parties, WES on behalf of CCSD#1 and TCSD hereby submits the following comments:

WES Supports Toxics Reduction

WES, as part of its day-to-day operations provides toxics reduction through: (i) the operation and maintenance of its five wastewater treatment plants; (ii) wastewater collection; (iii) biosolids reuse for seven cities; (iv) two industrial pretreatment programs; (v) surface water management program; and (vi) water quality and stream enhancement projects.

In addition, CCSD#1 and TCSD partnered to make an $80 million upgrade to the Tri-City Waste Water Treatment Plant, increasing its hydraulic capacity from 8 MGD to 12 MGD as well as incorporating the latest treatment technology (Membrane Bio Reactor) that will provide high quality effluent capable of being reused. This should allow the discharge of some of the cleanest effluent in the State of Oregon.

Fish Consumption Standard

The District questions the supporting science and validity of, "175 grams of fish per day" criteria as a basis for establishing human health water quality standards.

A primary and key reference source for determining this consumption rate is the Columbia River Inter-Tribal Fish Commission's (CRITFC) "A Fish Consumption Survey of the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin," completed in October 1994. This survey pointed out that on average, respondents aged 18 years and older consumed 58.7 grams of fish per day while children aged 5 years and younger consumed 19.6 grams fish per day. The overall average fish consumption rate in the survey amounted to 63.5 grams of fish per day. The higher standard of 175 grams per day was established to address the fish consumption pattern of the higher 10% of the surveyed population. This amounts to setting a standard to protect 10% of 2% of Oregon's population based on a study done 17 years ago by the very population that is demanding such preferential consideration in relation to the other citizens of Oregon. WES questions the appropriateness of this overly protective level of precaution in relation to the costs that will be borne by the rest of the state's population, and the continuing validity of a study so out of date. This results in standards that are extremely burdensome for those whom these standards will impact and adds substantial costs to the average ratepayer during a time when unnecessary expenses can be ill-afforded.

The 1994 CRITFC survey also demonstrates that the fish consumption pattern of 65% of the respondents had declined over the previous twenty years. The question then is, how much more has fish consumption declined since this survey was conducted seventeen years ago? If the pattern the DEQ has relied on continued, the appropriate level would be significantly lower at this time.

The survey also demonstrates that the majority of the fish consumed by the respondents are salmon (90%) and trout (70%). In relation to this, another reference, EPA's Columbia River Basin Fish Contaminant Survey, 1996-1998, rainbow trout and salmon contained the lowest concentration of pesticides. Sturgeon, consumed by 25% of the respondents had the highest concentration of pesticides, and the standards were based in large part on Sturgeon consumption. Again, the proposed standards are based on factors that barely relate to each other.

For the reasons stated above, WES does not find the factual or scientific rationales offered as a basis for the FCR regulation persuasive or sufficiently rigorous. We strongly encourage DEQ to update and review its data before continuing down this implementation path.

Regional Inequity

Initially, DEQ proposed in May 20, 2004 to revise its human health water quality standards based on the EPA recommended fish consumption rate of 17.5 grams per day. EPA rejected this proposal in June 2010. Consequently, Oregon is now proposing a new rate of 175 grams of fish per day, a tenfold increase. This seems quite unreasonable and inconsistent with past actions. And we would further note that DEQ's original 2004 proposal, made 10 years after completion of the 1994 CRITFC survey, did not include the study as a basis for the regulation nor rely on it in generating its proposal of 17.5 grams per day. We are unclear why the 1994 CRITFC survey, which was clearly insufficient in 2004 for use in generating a regulation, becomes the determining basis for a regulation regarding the same subject in 2011.

The State of Washington and Idaho, both under EPA jurisdiction, are under no such direction to develop and implement water quality standards under similarly strict guidelines despite a similar population

makeup as Oregon. The human health water quality standards for Idaho and Washington are based on 6.5 grams of fish consumption per day. Furthermore, there are no plans by either state to revise these standards. Why is Oregon alone pursuing this extreme standard? At the same time, if Washington and Idaho are not undertaking similar efforts, then Oregon's efforts will have minimal impact on the health of the Columbia River and other shared water bodies. This is particularly relevant since the study upon which DEQ is relying is a study of tribes on the Columbia River Basin.

Meeting Proposed Standards

Currently, Oregon's water quality standards are now based on a fish consumption rate of 6.5 grams per day, same as Washington and Idaho. The proposed increase to 175 grams per day represents a 27-fold increase and the corresponding Human Health Water Quality Standards will be decreased 27-fold. Based on current laboratory methodologies, this will result in a number of individual compounds with standards that are undetectable by the best existing technology. For those cases where effluent results are reported as non-detect, the water quality standard for those compounds will revert to the analytical detection level. As a result, there is an automatic presumption that a discharge of the compound is occurring at levels above the established water quality level. This is a case of being proven guilty without an ability to prove innocence.

Rule Proposals to Implement the New Standards

In addition to new standards and the presumption that being undetectable and are therefore being discharged above the new standards, DEQ is proposing rules to facilitate implementation of the new standards, including:

1. Intake Credits
2. Background Pollutant Allowance
3. Variances
4. Water Quality Standards Revisions and TMDL for Nonpoint Sources

Intake Credits and Background Pollutant Allowance apply mainly to industrial dischargers and would have limited, if any, use for municipal dischargers such as CCSD#1 and TCSD.

Variances is touted as the mechanism for use by municipalities to obtain relief from meeting the new, extraordinarily low standards. WES is opposed to the use of the variance as a tool to obtain relief from the new standards. According to the Clean Water Act, the variance is meant only as a temporary relief from standards that it would be unable to meet, provided that steps are taken to eventually meet the new standards. The variance is only a bureaucratic mechanism meant only to delay or put off the actual task of reducing or eliminating a pollutant. The money spent in this endeavor does nothing towards addressing the actual reduction of the pollutant and can be regarded as ill-spent.

The new standards are so low that the ability to meet them are, if not impossible, then extraordinarily expensive. Note that the key word for variances is, "temporary". At some point, WES and other municipalities will be required to fully meet the new standards.

Typically, variances are valid as long as the permit is valid. Historically, DEQ is significantly behind in renewing NPDES permits (TCSD's NPDES Permit has been under renewal consideration by DEQ for

over 12 years) thus making the variance an ongoing program without a specific end date. In terms of the intent of this tool and its use to eventually meet the new water quality standards, it appears that DEQ is being disingenuous. If DEQ is truly serious about the adoption of new fish consumption standards and truly believe that these standards are necessary to protect that segment of Oregon's population, then implementing these new standards should occur immediately. If that implementation is impracticable, as DEQ's variance strategy tacitly admits, then the rule itself should be changed to work rather than attempt to band-aid it through an arbitrary exception process like waivers.

A Reasonable Potential Analysis (RPA) evaluation by the Oregon Association of Clean Water Agencies demonstrated that most municipalities would be required to apply for a variance to meet the proposed water quality standards. While DEQ is developing an IMD for handling variances, WES is concerned that DEQ is underestimating the impact of this program and, especially given the Governor's recent budget proposal that includes an 18% cut in DEQ's funding, will lack the resources to deal with the workload that will result when the new standards are implemented. In addition, EPA ultimately approves the variances. Given the history of EPA in approving standards and its level of resources, WES feels that this added layer of oversight will further hamper and delay implementation of the variance.

Water Quality Standards Revisions and TMDL for Nonpoint Sources deal with addressing nonpoint sources of these pollutants. Based on the recently completed rounds of sampling and analysis of SB737 pollutants in the effluent of Oregon's largest 52 wastewater treatment plants, WES believes that the concern of pollutants discharged by municipal treatment plants are greatly exaggerated and that the focus of controlling these pollutants should be more inclusive and include the active participation of forestry, agriculture, and industrial dischargers.

Direction by the EQC to DEQ

In October 2008, the EQC directed DEQ to:

1. Revise Oregon's toxics criteria for human health based on a fish consumption rate of 175 grams per day;
2. Propose rule language that will allow DEQ to implement the standards in an environmentally meaningful and cost effective manner;
3. Propose rule language or develop other implementation strategies to reduce toxics that are the results of non-point source discharges; and
4. Develop a proposed rule and implementation methods that carefully consider the cost and benefits of the fish consumption rate.

With regard to the above directive and explained previously, WES believes that the proposed rule language is not environmentally meaningful. The focus of the standards applies to municipal dischargers, who have demonstrated through their effluent sampling and analysis that most of these compounds are not present in their discharges. Continuing to attempt to control municipal dischargers would therefore not result in any meaningful decrease of these compounds in the environment. In addition, the inability to detect these compounds in municipal effluents would not provide a quantifiable measure whether a program is effective.

As for toxics reduction strategies for non-point discharges, DEQ's proposed rules are not any stronger than the current rules when it comes to Forestry and Agriculture.

The language in the proposed rule when referring to forestry states, that the best management practices established under the Forest Practices Act are generally deemed not to cause violations of the water quality standards. The phrase, "generally deemed" does not appear to be assertive and does not really give any relief or consequence should there be a violation of water quality standards.

As for agricultural, the proposed rule says only that DEQ will "provide comments" to the Oregon Department of Agriculture on what would be "sufficient" to meet standards. Again, the wording does not appear to be assertive enough to compel compliance with water quality or TMDL standards.

WES feels that toxics reduction is a comprehensive endeavor that must include all sectors equally. Indeed, the testing undertaken pursuant to SB737 shows that municipal dischargers are the last component requiring additional regulation, not the first.

In terms of cost effectiveness, WES has yet to see an analysis of costs that municipalities would have to endure as a result of having to meet the new standards. A superficial, general cost evaluation was presented by DEQ, but it did not provide any insight into specific cost factors, such as treatment technology to meet the new standards, analytical costs, or overall program costs to the municipal permit holder. While DEQ provided a general list of "environmental benefits" (e.g. increased tourism, property value benefits, reduced hazardous waste removal, and cleaner intake water for downstream industries) quantification of the cost benefits of toxics reduction is not provided. Again, as mentioned in the previous paragraph, the inability to measure a number of these compounds in a municipal's effluent will not provide any insight to environmental or cost effectiveness.

WES' Proposal

WES would like to suggest to DEQ the following actions that would be helpful towards establishing and meeting new water quality standards:

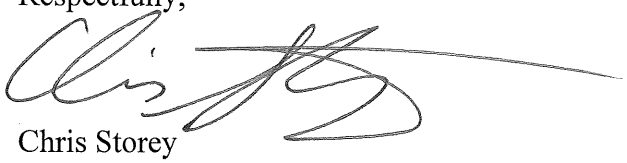
- Establish standards based on good science and current information;
- Establish standards based on classes of pollutants (A number of the pollutants have been banned but are still present in the environment or they are present due to the nature of the products we all use daily. Pollution reduction programs may have some impact, but not reducing to the level of the standards);
- Include meaningful cost analysis in setting standards (For a number of pollutants, treatment technology does not exist or is very expensive to implement);
- Apply standards equally to non-point sources (Municipal dischargers have demonstrated that their pollutant contribution is very small); and
- Provide municipal dischargers with the ability to use implementation tools besides the variance. Those would include intake credits and background pollutant allowance.

Summary

Meaningful reductions in toxics and improving human health cannot be achieved by establishing standards based on unreasonable criteria and regulating only point sources. If DEQ and the EQC are

serious about toxics reduction, they will develop a strategy that incorporates all sources of toxics in Oregon's water quality at the same time adopting criteria that are reasonable.

Respectfully,



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