

EPA RESPONSE TO COMMENTS
NPDES Permit #WA-002480-5
Tulalip Tribes of Washington, Marysville, WA

The public comment period on the draft permit for the Tulalip Tribes of Washington wastewater treatment plant (WWTP) began on March 8, 2000 and closed on April 10, 2000. Copies of the Fact Sheet and Draft Permit were made available to the public at the EPA Region 10 office in Seattle, the EPA Washington Operations Office in Olympia, the Washington Department of Ecology Northwest Regional Office in Bellevue, the Marysville Public Library, and the Tulalip Utilities District. These documents were also available via the EPA Region 10 website, or upon request.

Notice of availability of the Fact Sheet and Draft Permit was advertised in the Everett Herald newspaper, which serves nearby Marysville and the Tulalip Indian Reservation. Comments were considered by EPA in establishing proposed final permit conditions. A revised Fact Sheet will not be issued. The following is a summary of substantive comments and corresponding responses from EPA.

Comments 1 through 7 were received from the State of Washington Department of Health, Office of Food Safety and Shellfish Programs (DOH):

Comment 1

Section 1.B, Table 2. The chlorine residuals in the Final Effluent Limitations are extremely low and will be difficult to achieve. Dechlorination of the effluent or UV disinfection may be necessary to meet these proposed chlorine residual limits. Consideration of such a major disinfection system change should be addressed at this time if these stringent limits are to be imposed in twelve months from permit issuance.

Response

Comment noted. EPA cannot direct the permittee to use any particular method for meeting the proposed requirements. However, EPA staff will be available to the permittee for assistance if requested. No changes to the permit were made as a result of this comment.

Comment 2

Section 1.B, Table 2, footnote 1. As recently as last year, the Tulalip STP (Sewage Treatment Plant) operator was not correctly calculating geometric means for fecal coliforms, and instead used arithmetic averages. Also, TNTC ("too numerous to count") results were not listed as fecal coliform results on their DMRs (discharge monitoring reports). These errors should be corrected. Secondly, since five grab samples per week (minimum) is required for fecal coliform analysis, "a minimum of five samples taken over a thirty day period" is not needed for the monthly average. Instead, all fecal coliform results taken in the month should be used for this calculation. Third, the average weekly fecal coliform result should be based on all samples taken during a week. Fourth, the standard of 400 FC/100 ml is considered a technology-based standard for STPs, so that the "ten percent" language does not apply (the ten percent language applies to the water quality standard of 43 FC/100 ml). Please note that this comment (number 2) applies to Table 1 as well.

Response

In response to the first part of this comment, this information was forwarded to the NPDES compliance inspector for this facility. EPA concurs with the second, third, and fourth comments and has modified the appropriate permit sections accordingly.

Comment 3

Section 1.B, Table 2, footnote 2. I believe this footnote should read "...in compliance with the Monthly Average total chlorine effluent limits...". Secondly, it is not clear if the operator assumes a chlorine residual of 0.00 mg/l (in the monthly average calculation) if a grab sample reading is less than 0.10 mg/l.

Response

The footnote referenced in the comment is intended to clarify that the permittee will be considered in compliance with the permit limits for total residual chlorine provided the reported measurement is at or below the minimum level of 0.10 mg/l for total residual chlorine. The minimum level for total residual chlorine was established by EPA to account for the lack of certainty for measurements of total residual chlorine below this level. As such, the minimum level is used as a level of compliance above which EPA can be certain that measured values are accurate. Precise values cannot be determined with confidence below this level. However, the permittee should still report values as measured on the DMR form, even if they are below 0.10 mg/l. For levels measured below both the minimum level *and* the method detection limit, the permittee should report "<ND" or "below method detection limit" on the DMR form. For more discussion about minimum level and method detection limits, please refer to Section VI.D and Appendix C of the Fact Sheet. No changes to the permit were made as a result of this comment.

Comment 4

Section 1.C, Table 3. Daily grab samples for chlorine residual are required. DOH supports this requirement, as it requires staff to monitor the plant operation on a daily basis, which increases the reliability of plant operations.

Response

Comment noted. No changes to the permit were made as a result of this comment.

Comment 5

Section 1.E, Table 5. It would be helpful to include the design Daily Maximum and Peak Hourly flows in this table.

Response

EPA NPDES permit limitations are based on average monthly design flow. To avoid confusion, EPA believes only this value should be reflected in the referenced table. Other design flows were used in the mixing zone modeling process and can be found in Appendix C of the Fact Sheet. No changes to the permit were made as a result of this comment.

Comment 6

Section 1.F. The Department of Ecology requires an outfall evaluation be conducted once every permit cycle for all NPDES permittees with outfalls. Such evaluations (among other benefits) ensure that the outfall and diffuser configurations assumed by the permit writer for dilution zone analyses are correct. We recommend that a similar requirement be placed in NPDES permits issued by the EPA for outfall discharges near shellfish growing areas.

Response

Comment noted. At this time, EPA does not have a similar requirement that a permittee conduct an outfall evaluation for each permit cycle. However, States do have authority under Section 401 of the Clean Water Act to request that such evaluations be included in EPA-issued NPDES permits if they chose, and provided such a request is consistent with water quality standards. No changes to the permit were made as a result of this comment.

Comment 7

Section II, G.1. The Department of Ecology requires immediate notification to DOH of any sewage bypasses or disinfection failures from STPs discharging to or near marine waters (in addition to notification to Ecology). This requirement is placed into NPDES permits in a “Shellfish Notification” clause, and reads as follows:

“Unauthorized discharges such as collection system overflows, plant bypasses, or failure of the disinfection system, shall be reported immediately to the Department of Ecology and the Department of Health, Shellfish Program. The Department of Ecology’s Northwest Regional Office 24-hour number is (425) 649-7000, and the Department of Health’s Shellfish 24-hour number is 360-753-5992.”

We request that this DOH notification clause be placed in all NPDES permits with discharges into or near marine waters.

Response

EPA agrees this is an important safeguard for State of Washington programs. This provision has been added to the permit as II.G.3.

Comments 8 through 15 were received from the permittee, Tulalip Tribes of Washington:

Comment 8

Interim Effluent Limitations. The Tribes object to the requirement that the old WWTP plant be put in service within one year as a permit condition. Under the draft permit, the interim effluent limitations are effective until the return to service of the old plant, at which time the final limitations become effective. We have no objection to the interim limitations remaining in effect until the Tribes voluntarily place the new plant on-line, or until at least one year after the permit’s effective date.

Response

EPA agrees to remove the one year time limit for return to service of the old WWTP from the permit. The interim permit limitations shall apply until such time as the permittee has returned the old plant into service and notified EPA of such activity. Upon returning the old plant into service, the permittee shall comply with the final limitations which are based on the design flow of both plants operating together.

Comment 9

Interim Effluent Limitations (Table 1). The Tribes plant operator filed DMRs (Discharge Monitoring Reports) in 6/00 with EPA, reporting on fecal coliform using the “geometric mean” requirement in Table 1, footnote 1, even though the permit is still in draft. EPA personnel called back, requesting the information under the #/100 unit of measurement. We are prepared to report using the geometric mean if EPA staff is ready to receive the information in that form. Also, does EPA want the Tribes to report total residual chlorine (TRC) on the DMRs?

Response

The permittee should report fecal coliform as #of colonies/100 ml on the DMR form for daily maximum, weekly average, and monthly average. The numbers for the weekly and monthly averages should be calculated as geometric means, as opposed to arithmetic averages. EPA will work with the plant operator to ensure the numbers are being calculated and reported in this manner. The Tribes should also be reporting TRC on the DMR form.

Comment 10

Final Effluent Limitations (Table 2). The draft permit imposes an interim limitation for TRC of 0.87 (daily maximum), and a final limitation of 0.017 (daily maximum). This is a drastic reduction, and presumably a typo. Fecal coliform will be difficult if not impossible to control at the proposed final level. We believe EPA intends this final limitation to be 0.17 (daily maximum), since at present we try to maintain a 0.15 to 0.25 residual. The final TRC limitation should be the high-end of this range, to allow for effective control of fecal coliform.

Response

The proposed final limitation of 0.017 mg/l (17 µg/l) is correct. This limit is based on Washington Water Quality Standards for total residual chlorine in a marine environment, and available dilution within the mixing zone as allowed by the State. The reason water quality standards for chlorine have been developed at such low levels reflects the particularly toxic effect that chlorine has on aquatic life, such as shellfish and salmon. Refer to Appendix B, Part C.5 of the Fact Sheet for a complete description of how these limits were derived. EPA recognizes that dechlorination or an alternative means of disinfection may be necessary to meet the proposed limits. As such, a one-year compliance schedule has been included in the permit to allow the permittee to explore these options before the final limitation for total residual chlorine becomes effective. If requested, EPA staff will be available to the permittee to assist with questions related to these issues.

Comment 11

Compliance Schedules. The Tribes objects to a permit requirement to renovate the old WWTP. While the Tribes intends to perform these renovations, there is no known legal justification for requiring the renovations as a permit condition. Infrastructure development is a tribal

prerogative, and the timing of these improvements should be geared to the development needs as forecast and determined by the Tribes, not as a permit condition. If EPA still feels this condition is justified, we would like to know the source of its permit authority. Of course, the Tribes will otherwise gladly accept EPA's input on plant renovations on a consulting basis.

Response

See Comment 8. This provision has been removed from the permit by request of the Tribes.

Comment 12

Quality Assurance Plan. The draft permit requires development of a Quality Assurance Plan (QAP) within 120 days after the effective date of the permit. Tribal staff believes this requirement will be difficult to comply with. The Tribes requests at least 12 months from the effective date to develop the QAP.

Response

EPA considers it important to have an updated QAP in place as soon as possible after the permit is issued to ensure proper operating and testing procedures by plant staff. As such, EPA generally requires a QAP to be in completed within 90 to 120 days of the effective date of a permit. However, EPA will agree to allow up to 180 days after the effective date of the permit for the permittee to develop the QAP. EPA considers this to be a reasonable, yet protective, amount of time to comply with this provision. The permit has been modified to incorporate this change.

Comment 13

Sludge Management Requirements. Request that the sentence in Section I.H.4 be amended to read, in relevant part, "...at Renton (Metro-Renton Plant), *or to any other duly authorized disposal facility selected by the Tribes*, for processing and disposal..." This is consistent with Section I.H.5(a) and (b) ("other recipient"), and allows the Tribes the flexibility to contract with other disposal facilities, as needed. Also, please see Section I.H.5(c), which should be rewritten. There are no "state or local" agencies with regulatory authority over sludge management at the Tulalip facility.

Response

EPA has amended Section I.H.4 of the permit to reflect the permittee's ability to select other sludge disposal facilities as appropriate. However, no changes have been made to Section I.H.5(c) because it refers to federal, state, or local agencies with regulatory authority over sludge management at either the generator or recipient facility. It is not EPA's intention to suggest there are state or local agencies with authority over sludge management at the Tulalip facility. However, this provision also includes reference to any recipient facility for sludge disposal, such as the Metro-Renton Plant, which may be subject to regulation by state or local authorities.

Comment 14

Representative Sampling. Under the draft permit, does the Tribes continue to report influent BOD (Biological Oxygen Demand) and suspended solids mg/l and 16/day on the DMRs, or can we delete this reporting?

Response

In accordance with permit limits, the permittee must demonstrate at least 85% removal of BOD and suspended solids (TSS) through the treatment process. In order to do this, both influent and effluent must be sampled and reported. The permit calls for the permittee to sample both influent and effluent for BOD and TSS at least twice per week as 24-hour composite samples. The results of these sampling events should continue to be reported on the DMR forms, and the percent removal should be calculated and reported as well.

Comment 15

Reporting of Monitoring Results. The Tribes will comply with reporting requirements imposed by Federal law, but believes that tribal reporting to the Washington State Department of Ecology is preempted. The Tribes will send courtesy copies of its federal reporting to Ecology if requested. Also, please revise the notification paragraph to reflect the name of the current Chairman, Board of Directors, Tulalip Tribes of Washington, as Stanley G. Jones, Sr.

Response

Although EPA is the permitting authority for this NPDES permit to a Tribal facility, EPA is seeking a certification under Section 401 of the Clean Water Act from the State of Washington to ensure the permit meets State of Washington water quality standards. In this case, EPA remains the permitting and compliance authority, and the Tribes continue to report directly to EPA. Due to potential impacts to Washington waters, the permit provides for the Washington Department of Ecology to receive copies of reporting data and of notifications that are submitted to EPA under the permit.

State of Washington Water Quality Certification

On January 19, 2001, the State of Washington provided certification under Section 401 of the Clean Water Act that the provisions of this permit will not cause violations of WAC 173-201A, the Water Quality Standards of the State of Washington.