

RESPONSE TO COMMENTS
Town of Coulee Dam
NPDES Permit #WA-002028-1
July 18, 2008

On June 11, 2008 the U.S. Environmental Protection Agency (EPA) issued a public notice for the Town of Coulee Dam draft National Pollutant Discharge Elimination System (NPDES) Permit No. WA-002028-1 for discharges from the sewage treatment plant. This Response to Comments provides a summary of significant comments and provides corresponding EPA responses. Where indicated, EPA has made appropriate changes to the final NPDES Permit.

Barry Peacock of the Town of Coulee Dam commented.

1. **Comment:** Flow line was eliminated in table, request it be included.

Response: Flow is neither a water quality criteria nor a categorical standard as is the case with the other parameters in Table 1. However, it is a useful measurement to determine the impacts of the other parameters to the Columbia River. Therefore the effluent limitation for flow is removed but monitoring will be returned to Table 1.

2. **Comment:** Request returning the 24 hour composite sampling as the compliance method for BOD₅ and TSS.

Response: The 24 hour composite sampling is returned to the permit eliminating the typographical error of grab sampling.

3. **Comment:** It is also noted that there is no consistency between page 5 Table of the permit and Table 2 of Fact Sheet pages 11-13.

Response: EPA does not understand the comment. The Table on page 5 of the permit and Table 2 of the Fact Sheet each list six parameters with identical effluent limitations.

4. **Comment:** What is a quality assurance plan? Where does the Town find examples? What paperwork is required for completion of this plan? Does this plan require an engineer to complete? Can it be completed within the 90 days requirement?

Response: A Quality Assurance Plan (QAP) refers to a total program for ensuring the reliability of data by utilizing administrative and technical procedures and policies regarding personnel, resources, and facilities. QA is required for all functions bearing on environmental measurements and includes activities such as project/ study definition; sample collection and tracking; laboratory analysis; data validation, analysis, reduction, and reporting; documentation; and data storage systems. Thus, the QA program is designed to

evaluate and maintain the desired quality of data. Quality Control (QC), a function of QA, is the routine application of procedures for controlling the accuracy and precision of the measurement process and includes the proper calibration of instruments and the use of the appropriate analytical procedures.

The 40 *Code of Federal Regulations (CFR)* Section 122.41(e) (conditions applicable to all permits), requires adequate laboratory and process controls, including appropriate QA procedures. Each permittee's laboratory must have a QA/QC program. The laboratory must document the QA program in a written QA/QC manual and the lab should make it available to all personnel responsible for sample analyses. The manual must clearly identify the individuals involved in the QA program and document their responsibilities. The laboratory's standard operating procedures must meet user requirements in terms of specificity, completeness, precision, accuracy, representativeness, and comparability of the required testing procedures. The laboratory should devote approximately 10 to 20 percent of their resources to their QA/QC program.

The quality assurance plan prepared by the Town of Coulee Dam in compliance with Condition III. E. Operation and Maintenance of the current permit can be used as a basis:

“Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures.”

During an inspection on July 7, 2007 Town of Coulee Dam plant operator Tim Lynch provided some quality assurance procedures to EPA inspectors. These included calibration procedures, frequency and quality control for the pH meter, balance and other laboratory instruments. EPA also reviewed operational procedures for the composite sampler. The Town of Coulee Dam can review the EPA guidance documents and revise the existing quality assurance procedures in a written plan within the 90 day requirement.

The Town of Coulee Dam must utilize the procedures in Condition II.B.2 and 3 of the permit:

2. Throughout all sample collection and analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5). The QAP must be prepared in the format that is specified in these documents.

<http://www.epa.gov/quality/qs-docs/r5-final.pdf>

<http://www.epa.gov/quality/qs-docs/g5-final.pdf>

3. At a minimum, the QAP must include the following:
 - a) Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
 - b) Map(s) indicating the location of each sampling point.
 - c) Qualification and training of personnel.

Guidance is available in the National Pollutant Discharge Elimination System Compliance Inspection Manual, Chapter 7, Laboratory Procedures and Quality Assurance.

<http://www.epa.gov/Compliance/resources/publications/monitoring/cwa/inspections/npdesinspect/npdesinspect7.pdf>

For detailed information concerning laboratory QA, refer to Environmental Protection Agency's (EPA's) *Handbook for Analytical Quality Control in Water and Wastewater Laboratories* (USEPA 1979a). Further information is also available in the U.S. Environmental Protection Agency's (EPA's) *NPDES Compliance Monitoring Inspector Training Laboratory Analysis Module* (April 1990).

Further guidance is found at the following website:

<http://www.epa.gov/rgytgrnj/qa/qahelphints.htm>

An engineer is not required to complete the plan.

5. **Comment:** What is required in the operation and maintenance plan? Are there samples or a specific format which EPA will require? Does this plan require an engineer to complete?

Response: Wastewater collection and treatment systems must provide reliable service and avoid equipment breakdowns. Most equipment breakdowns can be avoided if system operators inspect the equipment, including sewer lines and manholes, regularly. Preventive maintenance uses data obtained through the inspections in a systematic way to direct maintenance activities before equipment failures occur. A good program will reduce breakdowns, extend equipment life, be cost effective, and help the system operators better perform their jobs.

This question indicates the Town of Coulee Dam does not currently maintain an operation and maintenance plan. An operation and maintenance plan is required in Condition III.E. and on page 2 of the current permit. If the Town of Coulee Dam has a plan it can be used as a basis. This existing plan should be reviewed,

updated and expanded to include changes in operating the facility to insure compliance with the effluent limits and to minimize the discharge of pollutants to the Columbia River. If the Town of Coulee Dam does not maintain an operation and maintenance plan the citation below can be used to develop this essential working document.

EPA's "Guide for Evaluating Capacity, Management, Operation, and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems" can provide the Town of Coulee Dam much of the guidance it needs to revise the current operation and maintenance plan.

http://www.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf

This comprehensive document includes guidance on collection system management, equipment and collection system maintenance and capacity evaluation including testing and inspections. The guidance also includes a checklist for conducting evaluations of wastewater collection system capacity, management, operation, and maintenance programs.

This plan does not require an engineer.

6. **Comment:** What is required in the Emergency Response and Public Notification Plan? Are there samples or a specific format which EPA will require? Does this plan require an engineer to complete?

Condition II.C. outlines what is required in the Emergency Response and Public Notification Plan. The Town of Coulee Dam's existing procedures as required in your current permit, Condition II. G. Twenty-four Hour Notice of Noncompliance Reporting can be used as the basis for the Emergency Response and Public Notification Plan.

This plan does not require an engineer.

7. **Comment:** The sludge management and disposal activities in the fact sheet are out of date.

Response: The sludge management and disposal process is updated in the fact sheet:

The sludge is removed from the treatment process at approximately three feet below the surface of the oxidation ditch and then is pumped to a twelve bag Drimad de-watering machine where polymer is injected into the sludge then dewatered through porous bags. The bags are then removed to an asphalted area and continue to dry on wooden pallets for approximately four to six months depending on weather conditions.

Biosolids are then removed from bags and hauled to the town's local municipal solid waste landfill where biosolids will be used as bulk interim cover, which is not top covering but mixed under the top cover.

8. **Comment:** Request the fecal coliform requirement be eliminated, due to Enterococci Bacteria test is a more stringent test and provides very similar information.

Response: The Town of Coulee Dam submitted no documentation to support this conclusion.

The beneficial uses of the Columbia River are:

In 40CFR31.35(f)(2):

Recreation (primary contact recreation, sport fishing, boating and aesthetic enjoyment).

In Chapter 4-8-6 of the Colville Tribal Water Quality Standards for the surface waters:

Recreation (primary contact recreation, sport fishing, boating and aesthetic enjoyment).

Fecal coliform is a parameter regulated to protect these beneficial uses:

- a. To protect this beneficial use in fresh water the Department of Ecology in Water Quality Standards for Surface Waters of the State of Washington WAC 173-201A-210 requires fecal coliform be limited to no more than 100 colonies /100 mL, with not more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained for calculating the geometric mean value exceeding 200 colonies /100 mL.
- b. EPA requires monitoring and effluent limits for fecal coliform at the Wastewater Treatment Plant at Grand Coulee Dam. The Washington State Department of Ecology requires these limits and monitoring in NPDES permits for sewage treatment plants for Bridgeport, Brewster, Chelan, Rocky Reach Hydroelectric Project Wastewater Treatment Facility and Wenatchee all to protect these beneficial uses of primary contact recreation, sport fishing, boating and aesthetic enjoyment in the Columbia River.
- c. Finally, the Colville Business Council adopted water quality standards requiring that the Columbia River meet fecal coliform levels of 14 organisms/100mL, with not more than 10 percent of

samples exceeding 43 organisms/100mL deemed necessary by the tribe to support the beneficial uses of the Columbia River.

Fecal Coliform will remain as a parameter for consistency with all these permits and regulations designed to protect the beneficial uses of the Columbia River. Sampling in Ecology permits is two to three times per week. This permit requires sampling once per month. The analytical cost is less than \$40 per sample.