

**U.S. Environmental Protection Agency
Region 10**

**Response to Comments
City of Coeur d'Alene Wastewater Treatment Plant
NPDES Permit #: ID-002285-3**

Background

On August 19, 2003, EPA proposed to modify the National Pollutant Discharge Elimination System (NPDES) Permit for the City of Coeur d'Alene wastewater treatment facility. The Public Notice of the draft permit initiated a public comment period which expired on September 20, 2003. The EPA received comments on the draft permit from the City of Coeur d'Alene and the Washington State Department of Ecology. No other comments were received.

This document summarizes the comments received on the draft permit modification, and EPA's response to the comments. The document provides a record of the basis for changes made from the draft permit modification to the final permit modification. The Fact Sheet that accompanied the draft permit modification was not revised because it is already a final document that provides a basis for the draft permit modification.

1. Comment: The Washington State Department of Ecology requested that the numeric criteria for cadmium, lead and zinc specified in the Washington State water quality standards be addressed when determining whether or not to modify the effluent limits for these metals.

Response: The state water quality standards for both Washington and Idaho are based on the same numeric criteria specified in federal regulations at §40 CFR 131.36 (also known as the National Toxics Rule). Therefore, the reasonable potential analysis to determine if the discharge from the City would cause an exceedance of state water quality standards addresses both Washington and Idaho. In addition, the effluent monitoring frequency for metals will remain the same to assist in the future evaluation of water quality-based effluent limits for the City.

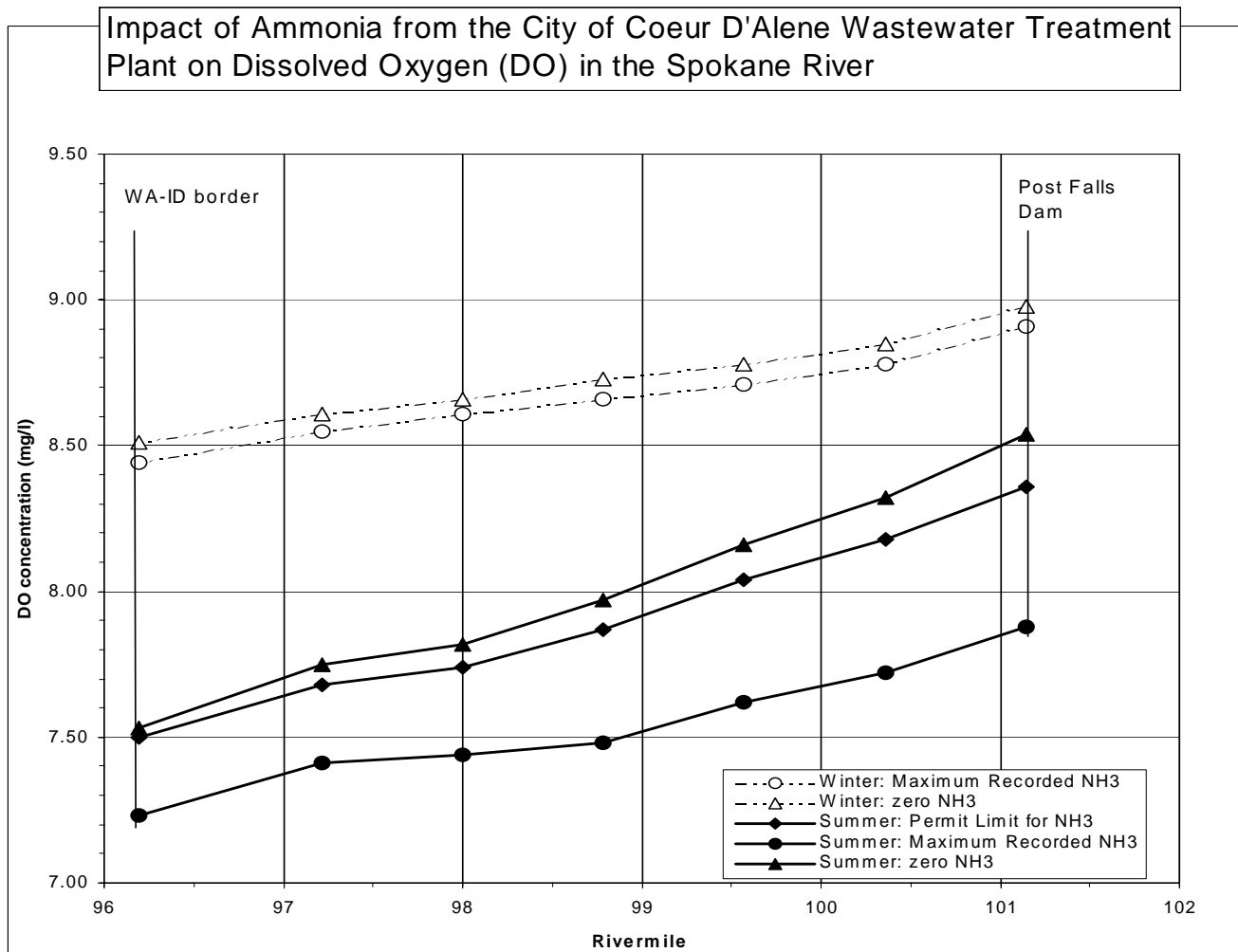
2. Comment: The Washington State Department of Ecology requested that an evaluation of the far field impacts on dissolved oxygen be conducted prior to modifying the effluent limits for ammonia. The department stated that a significant portion of the oxygen demand in the Spokane River is caused by high ammonia nitrogenous biological oxygen demand (BOD) and excessive algal growth stimulated by phosphorus. The department indicated that a specific river model called CEQUAL W2 has been developed to assess the dissolved oxygen concentrations in the Spokane River and should be used when determining whether or not to modify the effluent limits for ammonia.

Response: As stated in Appendix C *Basis for Effluent Limitations* of the Fact Sheet which accompanied the draft permit modification, a reasonable potential analysis for ammonia was conducted to address the numeric criteria specified in Idaho water quality standards 58.01.02.250.02.d. This near-field analysis addressed the potential toxic effects of ammonia in the City's wastewater effluent on cold water biota in the Spokane River. Subsequently, the reasonable analysis indicates the discharge from the City's wastewater treatment facility will not cause a violation of Idaho's state water quality standards.

Pursuant to Section 301(b) of the Clean Water Act, the model CEQUAL W2 was used to assess

the potential far field impacts of modifying the ammonia limits in the City's NPDES permit. The model has been set up to simulate 2001 conditions and was downloaded from the following website: <http://www.ce.pdx.edu/w2/spokane/>. Using the facility's current design flow of 6 million gallons per day, both summer and winter conditions were modeled. For the winter conditions, the modeling included ammonia concentrations of 0 mg/l and the maximum reported value of 12.8 mg/l. The current permit does not include an effluent limit for ammonia during the winter. For the summer months, the modeling included ammonia concentrations of 1) 0 mg/l, 2) the current permit limit of 21 mg/l and 3) the maximum reported level of 42.9 mg/l. The maximum reported levels represent conditions in which the permit would not include any effluent limits for ammonia.

The following graph summarizes the results of the model. During the winter months, there is no significant or measurable difference in dissolved oxygen concentrations in the Spokane River at the Washington-Idaho state border. The current sensitivity for measuring dissolved oxygen using EPA approved methods is ± 0.2 mg/l. For the summer months, the model indicates that there is a significant/measurable difference in dissolved oxygen concentrations when the facility is discharging at the maximum reported ammonia concentrations compared to ammonia concentrations of 0 and 21 mg/l. Given these results, the final permit modification will retain the current ammonia limits for the summer months.



3. Comment: The City requested clarification on the biosolids requirements proposed in the permit modification. Specifically, the City requested clarification on whether EPA considered the treatment works facility and the composting facility as two separate facilities under the federal regulations in 40 CFR Part 503.

Response: As specified in the Fact Sheet (see Appendix D), EPA considers the wastewater treatment plant and the composting facility two separate facilities. Federal regulations in 40 CFR Part 503 apply to both facilities, however certain regulations will apply to the wastewater treatment facility while others will only apply to the composting facility. For example, the annual reports specified in 40 CFR §503.18 pertain only to publicly-owned treatment works (POTWs) with an annual design flow greater than 1.0 million gallons per day. Therefore, the City's wastewater treatment facility, not the composting facility, is required to submit an annual report to EPA.

In regards to sampling frequency, the sewage sludge generated by the City's wastewater treatment plant must be analyzed twice per year as specified in Section III.K.1 of the NPDES permit prior to any physical, chemical or biological modification. If the sewage sludge is modified physically, chemically or biologically at the composting facility which includes blending with sewage sludge from other wastewater treatment plants, then the composting facility is responsible for ensuring that all applicable federal regulations under Part 503 are addressed including the required amount of sampling. The most current sewage sludge permit application for the composting facility (dated June 12, 1998) specifies a biosolids generation rate of 700 dry metric tons. Pursuant to federal regulations at 40 CFR §503.16, the composting facility must sample the modified sewage sludge (i.e. compost) on a quarterly basis. The final permit modification will retain the proposed revisions for Part III.A. and III.J.