

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

**Response to Comments
City of Nezperce
Permit No. ID-002039-7**

Background

On September 18, 2003, EPA proposed to reissue the National Pollutant Discharge Elimination System (NPDES) Permit for the City of Nezperce wastewater treatment facility. The Public Notice of the draft permit initiated a public comment period which expired on October 27, 2003. The EPA received comments on the draft permit from the City. No other comments were received.

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

Comment 1

The 5-day biochemical oxygen demand (BOD₅) and total suspended solids (TSS) discharge limits of 30/45 mg/L (average monthly/average weekly) and 85% removal criteria are too restrictive for the city's waste stabilization treatment pond. This category of treatment system is recognized in the Fact Sheet as "Treatment Equivalent to Secondary."

Furthermore, the Idaho Water Quality Standards has established effluent limits for BOD₅ and TSS in accordance with 40 CFR 133.03(c) and 133.05. These requirements are found at IDAPA 58.01.02 and state that "Sewage wastewater discharges from facilities using lagoons as the principal treatment process must have the following characteristics:

- i. BOD₅ - not to exceed a thirty (30) day average concentration of 45 mg/L; and
- ii. Suspended solids - not to exceed a thirty (30) day average concentration of 70 mg/L."

The previous NPDES permit for the city included a monthly average effluent limit of 32 mg/L and an average weekly limit of 47 mg/L for BOD₅, and a monthly average effluent limit of 70 mg/L and an average weekly limit of 105 mg/L for TSS.

The City assumes that EPA has reviewed the past several years of effluent data and determined that the plant is capable of meeting the average monthly limit of 30 mg/L for BOD and TSS. The plant only discharges a few months each year during the winter and spring, therefore there is little data on which to base a conclusion as to the treatment efficiency of the plant. In March 2000 the effluent BOD₅ and TSS values were 33.6 mg/L and 40.4 mg/L, respectively. In March 2003 the effluent TSS value was 31 mg/L. The fact sheet for the previous permit states "The calculated 95th percentile...is as follows: TSS, mg/L, 88, 30 day average, 132, 7-day average."

The demographics of the City have not changed significantly since the last permit was issued, which would lead one to conclude that a 30 mg/L limit for BOD₅ and TSS will be problematic for the City.

The City requests that the permit be revised to include an average monthly effluent limit of 32 mg/L for BOD₅ and 70 mg/L.

Response 1

Wastewater treatment facilities that use lagoons as their primary treatment process do not automatically qualify for the Treatment Equivalent to Secondary effluent limits. To qualify for Treatment Equivalent to Secondary effluent limitations all of the following requirements must be met:

- The BOD₅ and TSS effluent concentrations consistently achievable through proper operation and maintenance of the treatment works exceed Secondary Treatment Effluent Limits.
- A trickling filter or waste stabilization pond is used as the principal treatment process.
- The treatment works provide significant biological treatment of municipal wastewater (i.e., a minimum of 65% reduction of BOD₅ is consistently attained).

Data that was used to develop the previous permit limits is over 15 years old and cannot be assumed to be representative of the effluent the City is currently discharging, as the city has upgraded its wastewater treatment facility since that time. Recent BOD₅ and TSS data reported by the City in their Discharge Monitoring Reports are as follows:

Date	Effluent BOD ₅ (mg/L)		Effluent TSS (mg/L)		BOD ₅ Removal (%)
	Average Weekly	Maximum Monthly	Average Weekly	Maximum Monthly	
3/31/97	5	5	21	21	92
4/30/97	5	5	5	5	83
2/29/00	33.3	33.3	29.6	29.6	80
2/28/03	6	6	8	8	82
3/31/03	3	3	5	5	87.5
5/31/03	5	5	26	26	100

These data indicate that the wastewater treatment plant can meet secondary treatment effluent limits. The City of Nezperce has not submitted any additional data that would indicate otherwise. Based on the facility information, the facility does not qualify for treatment equivalent to secondary limits. Therefore, the final permit retains the conditions that were included in the draft permit.

Finally, the requirement found in the Idaho Water Quality Standards at IDAPA 58.01.02.420 for lagoons (i.e., average monthly limit for TSS of 70 mg/L) has not been approved by EPA and therefore is not available to be used in an NPDES permit. The Idaho Department of Environmental Quality is currently in the process of developing TSS requirements for wastewater treatment facilities that use lagoons. Once these requirements are developed and EPA approves them, they will be available for use in NPDES permits.

Final Permit Revision: None

Comment 2

The increased effluent sampling frequency of once per week for BOD, TSS, total phosphorus, dissolved oxygen and ammonia is unnecessary and will provide little benefit for the cost of the testing. Please revise the sampling frequency to once per month for these parameters. As a comparison, the upstream sampling requirements in the draft permit are once per month. Additionally, other draft permits that are currently out for public comment, such as Juliaetta and Deary require once per month sampling.

Response 2

The Nezperce wastewater treatment plant only discharges a few weeks per year. In order to characterize the effluent, a weekly sampling frequency during discharge is required. It is inappropriate to compare the effluent monitoring frequencies for the Cities of Juliaetta and Deary to that of the City of Nezperce, because the Juliaetta and Deary facilities discharge year-round, as opposed to a few days per year.

Final Permit Revision: None

Comment 3

The sampling frequency for E. coli is five times per month which is a financial burden on the City. The City requests that E. coli monitoring be reduced to once per week which will provide 52 annual samples which is equivalent to 60 samples for statistical analyses of the effluent characteristics.

Additionally, EPA allowed the City of Cottonwood to monitor once per week. At the least, the permit should provide a re-opener clause to address this issue if the Idaho Department of Environmental Quality revises its water quality standard for E. coli.

Response 3

The requirement to sample 5 times per month is a stipulation of the Idaho Water Quality Standards (IDAPA 58.01.02.251). The Water Quality Standards require that waters designated for primary contact recreation not contain E. coli bacteria in concentrations exceeding “a geometric mean of 126/100 ml based on a minimum of five samples taken every 3-5 days over a 30 day period.” The monitoring frequency of 5 samples per month was incorporated directly into the permit.

The permit contains a provision which states that the permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 122.62, 122.64, or 124.5. (See Part IV.A. of the permit). If the Idaho Department of Environmental Quality revises its water quality standard for E. coli, and EPA approves the water quality standard revision, then the permittee may submit a request for permit modification.

Final Permit Revision: None

Comment 4

The proposed permit contains a pH limit of 6.5-9.0 standard units. The pH of a lagoon system can vary naturally over a day when algae are present and values in excess of 9.0 are possible. The City requests an upper limit of 9.5 which is allowed by the Idaho State water quality standards.

Response 4

The upper limit of 9.0 is a technology based effluent limit for secondary treatment. The commenter has not provided any evidence that the facility cannot meet this limit. The pH effluent limits in the draft permit have been retained in the final permit.

Final Permit Revision: None

Comment 5

The draft permit allows a discharge from the facility only when there is a 10:1 dilution ratio between Long Hollow Creek and the effluent. The city is unable to monitor Long Hollow Creek because the USGS monitoring station has been removed. The city has written to EPA about this and requested that the permit be modified to include a zero discharge period between July 1 and October 1. Mr. Harold Geren of EPA agreed with the essence of the request but was too short-handed to modify the permit. Please remove the requirement for in-stream monitoring and instead insert a no discharge period of July 1 through October 1.

Response 5

In a letter dated April 11, 1991 the City of Nezperce submitted flow data from 1982 through 1984, and the City requested that the 10:1 dilution ratio be deleted from their permit and a “no discharge” requirement from July 1 through October 1 be inserted into the permit. Based on the data provided by the City, at that time, the Region believed the intent of the dilution requirement would be met if the facility did not discharge from July 1 through October 1.

The Region has since reviewed all of the data from Long Hollow Creek (i.e. from 1979 through 1986). These data show that there are only short periods of time from October through June when sufficient flow is in the creek to provide a 10:1 dilution ratio.

Because the City is unable to monitor the flow, at the permittee’s request the final permit is modified remove the 10:1 dilution requirement. However, in order to protect the beneficial uses of the receiving water, the water-quality based effluent limits for chlorine have been

modified to be based on the low flow of Long Hollow Creek during the period of effluent discharge (of October through June). The recorded low flows (1Q 10 and 7Q10) during this period are zero.

Final Permit Revision: The chlorine limits in Table 1 of the permit have been revised to be based on the low flows for Long Hollow Creek. The required dilution of 10:1 for discharge has been removed from the permit.

Comment 6

The City's budget has been established for fiscal year 2004 and expenses necessary for effluent dechlorination, sampling/testing equipment, new sampling requirements, development of an Operations and Maintenance Plan, and a Quality Assurance Plan have not been funded. The City does not have the in-house expertise to address these items and will need to procure engineering services. Therefore, the City requests that compliance period for sampling revisions, dechlorination, development of an Operations and Maintenance Plan, and a Quality Assurance Plan be extended to January 2005.

Response 6

To allow the City additional time to fund and develop the QAP, and Operation and Maintenance Plan the final permit has been revised to require these documents to be developed and implemented within 18 months of the effective date of the permit. Additionally, the final permit has been revised to include a one-year compliance schedule for the final chlorine limits. The compliance schedule should allow the facility adequate time to provide the necessary modifications to its treatment plant.

Final Permit Revision: Sections I.D. (Operation and Maintenance Plan) and I.E. (Quality Assurance Requirements) of the permit require that the documents be developed within 18 months of the effective date of the permit. Section 54I.B (Compliance Schedule for Total Residual Chlorine) has been added to the permit to allow the permittee one year to comply with the final chlorine limits.

