U.S. Environmental Protection Agency Region 10

Response to Comments City of Kendrick Permit No. ID-002455-4

Background

On June 24, 2004, EPA proposed to reissue the National Pollutant Discharge Elimination System (NPDES) Permit for the City of Kendrick wastewater treatment facility. The Public Notice of the draft permit initiated a public comment period which expired on July 23, 2004. The EPA received comments on the draft permit from the City of Kendrick.

This document summarizes significant 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

Requiring 5 samples per month for E. coli will impose a significant financial burden on the City and creates logistical complications. The City requests that the permit be revised to require a weekly sampling frequency.

Response 1

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.

Comment 2

The 5-day biochemical oxygen demand (BOD₅) discharge limits of 30/45 mg/L and 85% removal criteria are too restrictive for Kendrick's waste stabilization treatment pond. A review of data from January 2001 to date, indicates that the City would have violated the proposed "daily" effluent limit of 30 mg/L and the 85% percent removal requirement one-third of the time. The City requests that the permit be revised to include Treatment Equivalent to Secondary limits for BOD₅ of 45/65 mg/L and 65% removal.

Response 2

The EPA disagrees. The performance of the wastewater treatment plant has greatly improved during the last few years. A review of Discharge Monitoring Report data submitted to EPA since October 2001 (summarized below), indicates that since October 2001, the treatment plant would have met the BOD_5 effluent concentration 100% of the time. Further, the comment erroneously states that the BOD_5 effluent concentration limit of 30 mg/L is a "daily" effluent limit. This is incorrect; the 30 mg/L limit is an average monthly effluent limit, there are no maximum daily limits in the permit for BOD_5 .

Reported Effluent BOD ₅		
Report Date	Monthly Effluent (mg/L)	Monthly Percent Removal
Oct-01	25	91
Nov-01	7	95
Dec-01	16	0
Jan-02	2	94
Feb-02	9	97
Mar-02	8	97
April-02	2	98
May-02	25	90
June-02	14	93
Aug-02	14	86
Sept-02	20	93
Oct-02	11	97.3
Dec-02	0	100
Jan-03	2	98
Feb-03	2	99.5
Mar-03	4	97.3
April-03	2	98.6
May-03	2	99
June-03	25	97.7
Nov-03	2	99
Dec-03	5	97
Jan-04	8	89
Feb-04	6	87
Mar-04	23	60
April-04	11	69

An average monthly limit up to 45 mg/L for BOD₅ is possible for facilities that qualify for Treatment Equivalent to Secondary limitations. To qualify for Treatment Equivalent to Secondary limitations, the following requirements must be met:

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

As the effluent data show, the City of Kendrick treatment facility does not meet the first requirement, since effluent concentration limits do no exceed secondary treatment effluent limits.

A review of the percent removal data indicates that the facility achieved greater than 85% removal, during all but three months. Of the remaining three months, during two of the months, the facility provided less than 65% removal.

Permit Modification: None

Comment 3

The City requested an extension until fall 2008 to comply with the water quality-based effluent limits for chlorine due to funding problems. The City also requested an interim limit of 2.0 mg/L.

Response 3

The EPA agrees that a compliance schedule to meet the chlorine limits is warranted. In their 401 Certification, Idaho Department of Environmental Quality has provided a compliance schedule for the final chlorine limitations to allow additional time for any necessary treatment plant modifications to meet the limits. The final limits must be met by September 1, 2008. In the interim, a technology-based average monthly chlorine limit of 0.5 mg/L is established in the permit. The derivation of this technology-based limit was provided in the Fact Sheet.

Permit Modification: Section I.B *Chlorine Schedule of Compliance* and Note 3 of Table 1 *Effluent Limitations and Monitoring Requirements* are modified to require chlorine compliance by September 2008.

Comment 4

The City requested that the schedule for completion of the Operation and Maintenance Plan and Quality Assurance Plan be extended to January 2006. In addition the City requested that all sampling revisions be delayed until January 1, 2006.

Response 4

To allow the City additional time to develop the Operation and Maintenance (O&M) Plan and Quality Assurance Plan (QAP), the final permit has been revised to require the documents to be developed and implemented by January 1, 2006.

The initiation of surface water sampling has been delayed for one year. This will allow the permittee additional time to prepare for monitoring.

There are no revisions to the sampling requirements for effluent BOD₅, TSS, flow and E. coli bacteria. Note that the draft (and final) permits require that sampling and analysis for effluent temperature, phosphorus, ammonia, and oxygen begin in January 2006.

Final Permit Revision: Section I.D. of the permit (Quality Assurance Requirements) is modified to require that the QAP be developed by January 1, 2006. Section 1.E (Operation and Maintenance Plan) is modified to require that the O&M Plan be developed by January 1, 2006. Section I.C.4 of the final permit has been revised to delay surface water monitoring to begin one year from the effective date of the permit.