

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

**Response to Comments
City of Bonners Ferry Water Treatment Plant
Permit No. ID-0020451**

Background

On June 22, 2006, EPA proposed to reissue/issue the National Pollutant Discharge Elimination System (NPDES) Permits for nine water treatment plants in Idaho:

City of Bonners Ferry Water Treatment Plant	ID-0020451
City of Sandpoint Sand Creek Water Treatment Plant	ID-0024350
Laclede Water District Water Treatment Plant	ID-0027944
City of Lewiston Water Treatment Plant	ID-0026531
City of Pierce Water Treatment Plant	ID-0020893
City of Orofino Water Treatment Plant	ID-0001058
Riverside Independent Water District Water Treatment Plant	ID-0021237
City of Weiser Water Treatment Plant	ID-0001155
Wilderness Ranch Water Treatment Plant	ID-0028312

The Public Notice of the draft individual permits initiated a public comment period which was initially scheduled to expire on July 21, 2006. The public comment documents included one fact sheet which provided the basis for the conditions in the draft individual permits. Based on interest and concerns with the permits, the public comment permit was extended to August 5, 2006.

This document summarizes significant comments received on the Bonners Ferry Water Treatment Plant Permit. 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.

Comments specific to the Bonners Ferry Water Treatment Plant permit were received from Mike Klaus and Stephen Boorman of the City of Bonners Ferry.

Comment

The City requested that Total Suspended Solids (TSS) limit be revised to 300 mg/L (average monthly) and 400 mg/L (maximum daily). Further, the City believed the permit limits should be based on a water quality-based evaluation. If the City cannot meet the limits developed from the analysis, the City requested a compliance schedule in order to meet the limits.

Response

The EPA disagrees. The permit contains technology-based effluent limits for TSS. In general, the Clean Water Act requires effluent limits that are the more stringent of either technology-based or water quality-based limitations. Technology-based effluent limits are based on a minimum level of treatment for point sources provided by currently available treatment technologies. Water quality-based effluent limits are developed to ensure that applicable water quality standards for receiving waters are met.

EPA established the technology-based TSS effluent limits of 30 mg/L (average monthly limit) and 45 mg/L (maximum daily limit) utilizing Best Professional Judgment (BPJ) to meet the requirements of BCT/BAT. (see Part IV.C of the Fact Sheet). Discussion on the development of the technology-based effluent limits is provided in Appendix A, Part D of the Fact Sheet. In developing the limits, EPA relied on existing data for TSS and the research performed for the EPA in 1987 (SAIC, Model Permit Package for the Water Supply Industry, EPA Contract No. 68-01-7043).

Further, the City of Bonners Ferry existing permit (issued in 1976) for the water treatment plant has TSS limits of 30 mg/ and 45 mg/L (monthly average and daily maximum) for TSS. The permit provided a schedule for the City to come into compliance with these limits. The regulations at 122.47 prevent EPA from giving a compliance schedule in the permit for an existing effluent limit. In addition, the regulations at 122.44(l) require that the effluent limits in reissued permits be as stringent as those in the existing permit.

Comment

The City requested that total residual chlorine limit be 0.8 mg/L (average monthly) and 1.0 mg/L (maximum daily). The City believed the permit limits should be based on a water quality-based evaluation. If the City cannot meet the limits developed from the analysis, the City requested a compliance schedule in order to meet the limits.

Response

The EPA disagrees that the chlorine effluent limits should be increased but agrees that a compliance schedule is warranted. In fact, additional information obtained on the water treatment plant outfall from IDEQ, indicates that the current outfall arrangement does not provide the adequate mixing that was assumed in the draft permit limits. EPA and IDEQ find that no dilution is available from the river for chlorine. As a result, Table 1 of the permit has been modified to require that the water quality-based effluent limits for chlorine be met at the end of the pipe.

The EPA agrees that a compliance schedule is warranted for the water quality-based effluent limits for chlorine. The permit requires that the permittee meet the final chlorine effluent limits by November 1, 2009. (Refer to Section I.C and Table 1, footnote 4 of the final permit.) This will allow the permittee sufficient time to modify their operations to meet the limits. The permit establishes interim limits of 0.5 mg/l (maximum daily) and 0.3 mg/L (average monthly) and requires submittal of an annual Report of Progress on meeting the final chlorine effluent limits.

Comment

The City requested 12 months, instead of 6 months, to complete the Quality Assurance Plan.

Response

The EPA agrees. Sections II.A of the permit is revised to require completion of the document within one year of the effective date of the permit.

Comment

The City requested that metals monitoring be eliminated on the basis that the finished water is already tested for metals on a regular basis. Comments regarding the metals monitoring were also received from the City of Sandpoint and the City of Weiser, on their individual water treatment plant permits. EPA has determined that these comments apply to the permit for the Bonners Ferry facility as well, because of the similarity of the water treatment plant operations which resulted in similar draft permit conditions and limitations. Concern with the metals monitoring was that the monitoring requirement was onerous and the analysis was costly. Analysis was unnecessary if the particular metal was not added during the treatment process.

Response

EPA disagrees that the metals monitoring requirement is onerous. The permit requires a total of three samples: one sample per year for three years. Three samples is the minimum that EPA believes is necessary to characterize the effluent.

The EPA disagrees that the information is unnecessary. The purpose of this sampling is to characterize the metal concentrations in the wastestream from the water treatment plant. This information will be used to determine whether the discharge has the reasonable potential to cause or contribute to an excursion of water quality criteria for metals in the receiving water. EPA must assure that the discharge of the wastestream from the water treatment process does not exceed water quality criteria in the receiving water. The coagulation filtration process removes any trace metals that may be in the source water. As a result, the wastewater may contain elevated concentrations of metals. Studies have shown increased metals concentrations in spent filter backwash when compared to raw water samples (Filter Backwash Recycling Rule Technical Guidance Manual (EPA 816-R-02-014, December 2002)). EPA does not have existing data on the levels of metals in the wastestream. Concentrations vary from plant to plant. EPA will review the monitoring data during development of the next permit and determine if limits and/or monitoring for additional parameters are necessary.

To reduce the cost of the analysis, the permit is revised to remove analysis for mercury and to substitute total chromium for chromium III and VI. Analytical costs can vary, but an assessment indicates the analytical cost for the total remaining twelve metals to be about \$120 to \$180.

Comment

Comments were received from the City of Orofino, the Riverside Independent Water District, and the City of Sandpoint, on their individual water treatment plant permits, regarding flow

monitoring. EPA has determined that these comments apply to the permit for the City of Bonners Ferry facility as well, because of the similarity of the water treatment plant operations which resulted in similar draft permit conditions and limitations. The permittees commented that flow monitoring should be calculated based on plant operations instead of continuous monitoring.

Response

The EPA agrees. Flow monitoring in Table 1 of the permit is revised to be estimated based on plant operation, instead of continuous monitoring. Water treatment plant operators track water balance through the treatment plant as part of treated water production. Basing the flow on these values is sufficient for the NPDES permit, and does not warrant a metering device on the effluent discharge.

Comment

Comments were received from the City of Lewiston, the City of Pierce, the City of Orofino, the Riverside Independent Water District, and the City of Sandpoint, on their individual water treatment plant permits, regarding the 24-hour composite sampling. EPA has determined that these comments apply to the permit for the City of Bonners Ferry facility as well, because of the similarity of the water treatment plant operations which resulted in similar draft permit conditions and limitations. The permittees requested grab samples for TSS and metals instead of composite samples.

Response

The EPA agrees. The sample type for these parameters was revised to be “grab” instead of “composite.” The EPA believes that the grab sample will be representative of the discharge.

Comment

Comments were received from the City of Pierce and the Riverside Independent Water District, on their individual water treatment plant permits, and from Jerry Shaffer of Idaho Department of Environmental Quality (IDEQ) regarding ambient monitoring for turbidity. EPA has determined that these comments apply to the permit for the Bonners Ferry facility as well, because of the similarity of the water treatment plant operations which resulted in similar draft permit conditions and limitations. The comments stated that ambient sampling for turbidity is unnecessary. The drinking water treatment plants that use surface water, monitor for upstream turbidity on a daily basis and report these values to IDEQ in a monthly report. It would be redundant and provide no additional information to require the systems to monitor upstream turbidities as part of the permit.

Response

The EPA agrees. Ambient sampling (Section I.C of the draft permit) for turbidity is removed.