

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

**Response to Comments  
Riverside Independent Water District Water Treatment Plant  
Permit No. ID-0021237**

**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 Riverside Independent Water District 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 Riverside Independent Water District permit were received from Nancy Jennings of the Riverside Independent Water District and Jerry Shaffer of Idaho Department of Environmental Quality (IDEQ).

**Comment**

The District requested that the permit be revised based on the maximum volume of flow discharged from the facility. The maximum flow can be 150,000 gpd. The draft permit was based on a flow of 68,000 gpd.

**Response**

The EPA agrees. The mass-based limits in the permit were revised based on the updated effluent flow data.

**Comment**

The permit requires monitoring for aluminum. The treatment process does not use alum or any other additives that contain aluminum. The District requested that aluminum monitoring be removed.

**Response**

The EPA agrees; monitoring for aluminum is removed from the permit.

**Comment**

The District 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**

The District 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**

The District requested one year, instead of 6 months, to complete the Quality Assurance Plan and the Best Management Plan. The District is in the midst of a time consuming water improvement project.

**Response**

The EPA agrees. Sections II.A and II.B of the permit are revised to require completion of the documents within one year of the effective date of the permit.

**Comment**

The District requested that the lower effluent pH value be lowered based on available dilution. The City of Orofino provided weekly alkalinity, pH, and temperature data for the Clearwater River. The District provided alkalinity data for the discharge.

**Response**

The EPA agrees. The minimum pH effluent limit was lowered from 6.5 to 6.0. The permit also requires monthly monitoring for alkalinity.

EPA calculated the mixed pH for the discharge outside of the mixing zone based on reasonable critical conditions using the following data:

Receiving Water:

Flow 7Q10	771 cfs
Receiving Water Available for Mixing	25%
Highest Temperature	23 deg. Celsius
Lowest pH	6.6
Lowest Alkalinity	9 mg/L as CaCO <sub>3</sub> /L

Effluent:

Maximum Flow	0.15 mgd
Highest Temperature (assumed to be the same as the source water)	23 deg. Celsius
Lowest discharge pH	6.0
Alkalinity	21 mg/L as CaCO <sub>3</sub> /L

The resulting pH outside of the mixing zone was 6.6, which meets the downstream water quality standard for Idaho of 6.5.

**Comment**

Both the District and IDEQ commented 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 for turbidity is removed (Section I. C of the draft permit).

**Comment**

IDEQ requested that the permit be modified to require that a copy of the DMR be sent to IDEQ. IDEQ acts as a partner with the drinking water systems and provides technical assistance to the systems. Seeing a system's monthly DMR helps IDEQ identify any problems with the system.

**Response**

The EPA agrees. Section III.B *Reporting of Monitoring Results* is modified to require that a copy of the DMR be sent to the IDEQ Lewiston regional office.

### **Comment**

Comments were received from the City of Sandpoint, the City of Weiser, and the City of Bonners Ferry, on their individual water treatment plant permits, regarding metals monitoring. EPA has determined that these comments apply to the permit for the Riverside Independent Water District 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. In addition, the finished water is already tested for metals.

### **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.