STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1118 F Street • Lewiston, Idaho 83501 • (208) 799-4370

C.L. "Butch" Otter, Governor
Curt Fransen, Director

September 10, 2012

Mr. Michael J. Lidgard, Manager
NPDES Permit Unit
US EPA, Region 10
1200 Sixth Avenue
Seattle, Washington 98101

Subject: Final 401 Certification of the Fenn Ranger Station WWTP, NPDES Permit No. ID-002071-1

Dear Mr. Lidgard:

The Idaho Department of Environmental Quality (DEQ) has reviewed the final draft NPDES permit for the Fenn Ranger Station Waste Water Treatment Plant. Enclosed with this letter are the State of Idaho's final water quality certification and antidegradation review.

If you have any questions or need further information please contact John Cardwell or me at (208) 799-4370.

Sincerely,

Clayton Steele
Regional Administrator
DEQ Lewiston Regional Office

ec: Barry Burnell, DEQ Water Quality Division Administrator
Doug Conde, Deputy Attorney General
Miranda Adams, DEQ State Office

Printed on Recycled Paper

Idaho Department of Environmental Quality

Final §401 Water Quality Certification

September 10, 2012

NPDES Permit Number(s): Fenn Ranger Station Waste Water Treatment Plant; ID-002071-1

Receiving Water Body: Selway River

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review National Pollutant Discharge Elimination System (NPDES) permits and issue water quality certification decisions.

Based upon its review of the above-referenced permit and associated fact sheet, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the discharge will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier 1 Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier 2 Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier 3 Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier 1 protection for that use, unless specific circumstances warranting Tier 2 protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The Fenn Ranger Station Waste Water Treatment Plant discharges the following pollutants of concern: Biochemical Oxygen Demand, Total Suspended Solids, *E.*coli bacteria, pH, Total Residual Chlorine, and Total Ammonia as N.. Effluent limits have been developed for Biochemical Oxygen Demand, Total Suspended Solids, *E.*coli bacteria, pH, and Total Residual Chlorine. No effluent limits are proposed for Total Ammonia as N.

Receiving Water Body Level of Protection

The Fenn Ranger Station Waste Water Treatment Plant discharges to the Selway River assessment unit (AU) 17060302CL001_06 (O'Hara Creek to mouth). This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply. There is no available information indicating the presence of any existing beneficial aside from those that are already designated.

The beneficial uses of this Selway River AU 17060302CL001_06 have not been assessed; therefore DEQ must determine the appropriate level of antidegradation protection on a case by case basis. Currently there is no data available regarding the support status of the cold water aquatic life, salmonid spawning, contact recreation, and water supply uses in this AU and the collection of necessary data to determine the support status of these uses would take considerable time. As such, the applicant has agreed to consider the Selway River high quality water for the beneficial uses listed above (per.comm.). For the purposes of this antidegradation review, and to prevent further delays in the issuance of this certification, DEQ will provide a Tier 2 protection, in addition to Tier 1, for the aquatic life, salmonid spawning, contact recreation, and water supply uses (IDAPA 58.01.02.051.02; 58.01.02.051.01).

DEQ will reevaluate the level of antidegradation protection afforded to this AU based on available information when preparing future 401 certifications for this facility (IDAPA 58.01.02.052.05.b).

Protection and Maintenance of Existing Uses (Tier 1 Protection)

As noted above, a Tier 1 review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The numeric and narrative criteria in the WQS are set at levels that ensure protection of

designated beneficial uses. The effluent limitations and associated requirements contained in the Fenn Ranger Station Waste Water Treatment Plant permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS. Therefore, DEQ has determined the permit will protect and maintain existing and designated uses.

High-Quality Waters (Tier 2 Protection)

The Selway River is considered high quality for cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply. As such, the water quality relevant to the beneficial uses of the Selway River must be maintained and protected, unless a lowering of water quality is deemed necessary to accommodate important social or economic development.

To determine whether degradation will occur, DEQ must evaluate how the permit issuance will affect water quality for each pollutant that is relevant to cold water aquatic life, salmonid spawning, contact recreation, and water supply uses of the Selway River (IDAPA 58.01.02.052.05). The Biochemical Oxygen Demand, Total Suspended Solids, *E.*coli bacteria, pH, Total Residual Chlorine, and Total Ammonia as N are pollutants relevant to the cold water aquatic life and salmonid spawning beneficial uses. The *E.*coli bacteria is the only pollutant relevant to the contact recreation beneficial use.

Effluent limits are set in the proposed and existing permit for Biochemical Oxygen Demand, Total Suspended Solids, *E.*coli bacteria, pH, and Total Residual Chlorine. There is no effluent limit proposed for Total Ammonia Nitrogen. The fact sheet accompanying the proposed permit includes a reasonable potential to exceed analysis for the facility's discharge of Total Ammonia the shows the facility's discharge does not have the potential to cause or contribute to an exceedance of the acute or chronic criteria, and therefore, no effluent limits for ammonia are required.

For a reissued permit or license, the effect on water quality is determined by looking at the difference in water quality that would result from the activity or discharge as authorized in the current permit and the water quality that would result from the activity or discharge as proposed in the reissued permit or license (IDAPA 58.01.02.052.06.a).

Pollutants with Limits in the Current and Proposed Permit

For pollutants that are currently limited and will have limits under the reissued permit, the current discharge quality is based on the limits in the current permit or license (IDAPA 58.01.02.052.06.a.i), and the future discharge quality is based on the proposed permit limits (IDAPA 58.01.02.052.06.a.ii). For the Fenn Ranger Station Waste Water Treatment Plant permit, this means determining the permit's effect on water quality based upon the limits for Biochemical Oxygen Demand, Total Suspended Solids, *E.*coli bacteria, pH, and Total Residual Chlorine in the current and proposed permits. Table 1 provides a summary of the current permit limits and the proposed or reissued permit limits.

Table 1. Comparison of current and proposed permit limits for pollutants of concern.

Pollutant	Units	Current Permit			Proposed Permit			Change[a]
		Average Monthly Limit	Average Weekly Limit	Single Sample Limit	Average Monthly Limit	Average Weekly Limit	Single Sample Limit	
Pollutants with limits in both the current and proposed permit								
BOD	mg/L	30	45	—	30	45	—	NC
	lb/day	5	8	—	5	8	—	
	% removal	---	—	—	85%	—	—	
TSS	mg/L	30	45	—	30	45	—	NC
	lb/day	5	8	—	5	8	—	
	% removal	---	—	—	85%	—	—	
pH	standard units	6.5–9.0 all times			6.5–9.0 all times			NC
E. coli	no./100 mL	126		406	126		406	NC
Total Residual Chlorine (final)	mg/L	0.5	0.75	—	0.5	0.75	—	NC
	lb/day	0.05	0.08	—	0.08	0.13	—	I
Pollutants with no limits in both the current and proposed permit								
Total Ammonia	mg/L	—	—	Report	—	—	Report	NC

[a] NC = no change, I = increase, D = decrease.

The proposed permit limits in Table 1 for Biochemical Oxygen Demand, Total Suspended Solids, *E.*coli bacteria, and pH, are the same as those in the current permit. Therefore, no adverse change in water quality and no degradation will result from the discharge of these pollutants.

The proposed permit limits in Table 1 for Total Residual Chlorine shows that although the concentration based limits are the same as those in the current permit, the proposed mass based limits are less stringent than in the current permit. As stated in the proposed permit fact sheet, "EPA has determined that the mass based limits in the existing permit were incorrectly calculated." EPA acknowledges the mass based limits for the existing permit should have been calculated as shown for the proposed permit in Table 1. Because there have been no changes in the design flow, influent quality, or treatment processes that would likely result in an increased mass based discharge of this pollutant from this facility and there is no reason to believe the proposed permit limits will result in a lowering of water quality, the proposed permit should maintain the existing high water quality in Selway River.

Pollutants with No Limits

There is one pollutant of concern Total Ammonia Nitrogen relevant to Tier 2 protection of recreation that currently is not limited and for which the proposed permit also contains no limit (Table 1). For such pollutants, a change in water quality is determined by reviewing whether changes in production, treatment, or operation that will increase the discharge of these pollutants are likely (IDAPA 58.01.02.052.06.a.ii). With respect to Total Ammonia Nitrogen, there is no reason to believe this pollutant will be discharged in quantities greater than those discharged under the current permit. This conclusion is based upon the fact that there have been no changes in the design flow, influent quality, or treatment processes that would likely result in an increased discharge of this pollutant. Because the proposed permit does not allow for any increased water quality impact from this pollutant, DEQ has concluded that the proposed permit should not cause a lowering of water quality for the pollutant with no limit. As such, the proposed permit should maintain the existing high water quality in Selway River.

Mixing Zones

Pursuant to IDAPA 58.01.02.060, DEQ authorizes a mixing zone that utilizes 25% of the critical flow volumes of Selway River for Total Residual Chlorine and Total Ammonia Nitrogen.

Other Conditions

This certification is conditioned upon the requirement that any material modification of the permit or the permitted activities—including without limitation, any modifications of the permit to reflect new or modified TMDLs, wasteload allocations, site-specific criteria, variances, or other new information—shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401.

Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the "Rules of Administrative Procedure before the Board of Environmental Quality" (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to John Cardwell, Idaho Department of Environmental Quality, Lewiston Regional Office, (208) 799-4370, John.Cardwell@deq.idaho.gov.

Clayton Steele
Regional Administrator
Lewiston Regional Office