RESPONSE TO COMMENTS

City of Rigby
NPDES Permit ID0020010
October 12, 2016

On April 15, 2016, the U.S. Environmental Protection Agency (EPA) issued a public notice for the reissuance of the City of Rigby National Pollutant Discharge Elimination System (NPDES) Permit No. ID0020010. This Response to Comments document provides a summary of significant comments received and corresponding EPA responses.

Comments were received from the following:

Scott Humpherys, Plant Foreman, Wastewater Treatment Plant, City of Rigby (Foreman)

Justin Hays, Program Director, Idaho Conservation League (ICL)

The following changes to the Final Permit resulted from the comments received during the public review of the draft permit:

- The monitoring frequency for TSS and BOD_5 is reduced from twice per week to once per week.
- Condition I.B.2.b) referring to required observation of the receiving water in the vicinity of where the effluent enters the surface water was inadvertently included in the draft permit and is therefore removed.

1. **Comment (Foreman):** Table 1. Effluent Limitations and Monitoring Requirements: Rigby's draft permit includes requirements that BOD and TSS be sampled two times per week. The City's facility has had a good compliance record with only one violation from January 2010 through July 2015. The violation was one instance when BOD removal was 82 percent instead of the required 85 percent. The Eastern Idaho Regional Wastewater Authority's Oxbow WWTP (NPDES Permit #ID-0020133) is a similar size plant to Rigby's. The Oxbow plant has had violations for BOD, E. coli and TSS since the plant began operation in 2009. The Oxbow plant received a new NPDES permit June 1, 2014 with BOD and TSS sampling requirements of once per week. Considering the City of Rigby's good compliance record, we request once per week monitoring for BOD and TSS.

   Response: Monitoring frequency is determined on a case-by-case basis. Factors considered in establishing monitoring frequency include treatment methods and compliance history. *See* USEPA NPDES Permit Writers' Manual, EPA-833-K-10-001, September 2010, page 8-5. Based on the facility's good compliance history and the recent upgrade of the treatment plant, the EPA agrees to reduce the Final Permit's sampling frequency for BOD_5 and TSS to once per week.

   The *EPA Interim Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies* (Guidance) requires for reductions in monitoring a review of the compliance history.

   - A facility may not have had any Significant Noncompliance (SNC) violations for

the parameters for which monitoring/reporting reductions are being considered during the last two years and

- A facility may not have had any effluent violations of selected (critical) parameters during the last year. The "selected parameters" can be permit-specific and would be determined at the discretion of the permitting authority.

The permitting authority then calculates, for each parameter, the two-year (long term) average at the outfall. The average is compared with the permit limit, and the information in Table 1 of the Guidance to determine the potential monitoring frequency reduction. The table represents the probability of the occurrence of a violation of a monthly average permit limit. From the Guidance:

Table 1
Ratio of Long Term Effluent Average to Monthly Average Limit

Baseline	75-66%	65-50%
2/wk	2/wk	1/wk

TSS

For TSS the ratio of the long term effluent average to the monthly limit is:

Long term average: 8 mg/L

TSS monthly limit: 30 mg/L

Ratio = 8 mg/L/30 mg/L x 100 = 27%

As the Fact Sheet states:

"Only one violation was found. Monthly removal of BOD_5 was 82 percent during April 2010, compared to the minimum monthly limit of 85 percent. No violations were detected since then."

Rigby had no significant violations over the last two years and no violations over the last one year.

Based on the Guidance Rigby qualifies for the reduction in TSS monitoring from twice per week to once per week.

BOD_5

For BOD_5 the ratio of the long term effluent average to the monthly limit is:

Long term average over the last two years: 9 mg/L

BOD_5 monthly limit: 30 mg/L

Ratio = 9 mg/L/30 mg/L x 100 = 30%

Based on the Guidance Rigby qualifies for the reduction in BOD_5 monitoring from twice per week to once per week.

The final permit reduces the monitoring frequency for BOD_5 and TSS from twice per week to once per week.

2. **Comment (Foreman):** Paragraph 2. Narrative limitations for floating, suspended or submerged matter: It appears Paragraph 2.b is related to a different permit. Please delete or revise.

   Response: Condition I.B.2.b) refers to another permit and was inadvertently included in the draft permit. Its requirements are duplicative of that contained in Condition I.B.4.

   Condition I.B.2.b) is removed from the Final Permit.

3. **Comment (ICL):** The prior NPDES permit issued to the City of Rigby was for a facility with a design flow of 1.0 mgd. Sometime between the expiration (and extension) of this prior permit and now, the facility was significantly expanded. The facility processes were significantly altered and the design flow was increased to 2.59 mgd. In essence, this is an entirely new facility. As such this draft permit needs to be considered as a new permit for a new facility. This has implications with regard to determining the effect that this facility's discharge will have on the receiving water and the conclusions of an antideg review. As such the antideg review needs to be reconsidered.

   Response: The treatment plant is an existing source with an increased design capacity; it is not a new discharger. *See* 40 CFR 122.2. The treatment plant was upgraded from a lagoon system to a mechanical plant with parallel oxidation ditches and a new design flow of 2.59 mgd. 40 CFR 122.29(b)(3) states, "Construction on a site at which an existing source is located results in a modification subject to 40 CFR 122.62 rather than a new source (or a new discharger) if the construction does not create a new building, structure, facility, or installation . . . but otherwise alters, replaces, or adds to existing process or production equipment." Thus, because the upgrades altered, replaced, or added to the existing plant, the facility is not a new discharger. The effect the facility's discharges have on receiving water was determined by analyzing the discharges and establishing effluent limitations necessary to meet water quality standards (Section 301(b)(1)(C) of the Clean Water Act) and to require conditions to ensure compliance with the water quality standards (40 CFR 122.4(d)). The antidegradation analysis that was conducted by the Idaho Department of Environmental Quality (IDEQ) was reviewed by the EPA and is consistent with the State's 401 certification requirements and the State's antidegradation implementation procedures.

   This comment did not result in a change to the Final Permit.

4. **Comment (ICL):** The EPA fact sheet provides information regarding the low flow conditions in the receiving water. The 7Q10 in the summer is 746 cfs and for the winter, it is 0.67 cfs.

   DEQ appears to have utilized the summer 7Q10 of 745 cfs while undertaking the required antideg review for this permit. It is not clear to us why DEQ is utilizing the summer 7Q10 instead of the winter 7Q10. We think that we understand that this facility discharges year round – if this is the case then it is inappropriate to utilize the relatively high volume summer low flow condition when calculating the degradation impacts of this discharge.

The agencies need to redo the antideg review for this facility and utilize the winter 7Q10 of 0.67 cfs. Doing so will likely reveal that the increased discharges authorized by this permit will have a 'significant' impact on water quality in the receiving water. This finding should trigger the need for a comprehensive antideg review, per Idaho's antideg rules.

Response: IDEQ is responsible for providing responses to comments on their 401 certification. *See* IDEQ's Response to Comments document.

The permit is not changed.

5. **Comment (ICL):** DEQ has authorized a mixing zone for ammonia. This mixing zone may utilize 25% of the critical flow volumes of the receiving water.

   However, neither the 401 nor the NPDES (or NPDES factsheet) provide a clear indication of what low flow condition the agencies are utilizing to calculate this mixing zone. Given that the winter flows are so low (less than 1 cfs) it is imperative that any mixing zone that is authorized must utilize the winter low flow criteria. Please clarify this in the response to comments.

   Response: The flows used to develop mixing zones include minimal winter flows, as shown on page 28 of the fact sheet in Table C-1 Critical Flows and provided below:

Table C-1: Critical Flows		
Flows	**cfs**	
	Summer	**Winter**
1Q10	209	0.5
7Q10	746	0.67
30B3	1700	33.1
Harmonic Mean	1880	47.1

   The Final Permit is not changed.

6. **Comment (ICL):** In its antideg review, the DEQ reports that a lack of water quality data makes it "impossible to complete" an analysis of the utilization of the receiving water's assimilative capacity and, thus, undertaking the required significance determination. DEQ reports that monitoring required in this proposed permit will provide the data necessary to undertake this analysis and that the analyses will be conducted in next permit cycle. This is not appropriate. This permit authorizes a vast increase in discharge volume and mass loading of pollutants. This increase in discharge will degrade existing water quality. Utilizing data gathered post increase and post degradation will not protect against the degradation. The agencies must not authorize a permit that allows degradation without undertaking the appropriate review and mitigation measures (such as the implementation of necessary non-point controls in the watershed).

   Further, DEQ inappropriately attempts to justify this lack of review by stating that although the WWTP design flow had been increased from 0.53 mgd to 2.59 mgd, "there have been no new connections to the City of Rigby WWTP which may have increased levels of these pollutants." Issuing a permit which authorized a vast increase in pollutant loading but then saying that it will not cause degradation because the agency does not

think that anybody will utilize this new capacity, and that they anticipate that discharge volume/loading will stay the same is inappropriate. This permit needs to be crafted in such a manner that water quality will be protected under a scenario of full capacity utilization.

Response: IDEQ is responsible for providing responses to comments on the 401 certification. *See* IDEQ's Response to Comments document.

The permit is not changed.

7. **Comment (ICL):** Flow Tiered Effluent Limits? Given the extreme differences in the receiving water's low flow conditions observed in the summer vs the winter, we wonder if the agencies should not consider developing two distinct seasons and accompanying seasonal discharge limits. The draft permit's proposed limits will cause unacceptable degradation – and likely WQS violation – during the winter months.

   Response: The EPA developed and IDEQ certified seasonal ammonia limits for winter and summer. See Pages 11, 28, 29 and 40 of the Fact Sheet. The two other pollutants that would cause violations of the water quality standards are pH and *E. coli*. For these pollutants the EPA insured compliance with water quality standards and thus preventing degradation during both the summer and winter seasons by establishing limits requiring compliance with the water quality standards at the end of pipe that apply throughout the year.

   This comment did not result in a change to the Final Permit.

8. **Comment (ICL):** Phosphorus Limits Needed. This facility discharges into the receiving waters that then flow downstream into waters that are out of compliance for nutrient water quality standards. As such, the discharges from this facility are contributing to violations of water quality standards downstream. This situation mandates that this facility be issued effluent limits for phosphorus that are consistent with those required of downstream dischargers.

   Response: The EPA disagrees that the permit must include effluent limits for phosphorus. The nearest listed water body for phosphorus is the American Falls Reservoir, more than 60 miles downstream. There are numerous tributaries to the Snake River and potential phosphorus sources over this long distance of the river. Also, the American Falls TMDL does not require a phosphorus limit for Rigby.

   This comment did not result in a change to the Final Permit.