

Response to Comments

City of New Plymouth Wastewater Treatment Facility

NPDES Permit Number:

July 15, 2016

On October 1, 2014, the U.S. Environmental Protection Agency (EPA) issued a public notice for the proposed reissuance of the City of New Plymouth Wastewater Treatment Facility (Facility) draft National Pollutant Discharge Elimination System (NPDES) Permit No. ID0020389. The public comment period closed on October 31, 2014.

During the public comment period, the EPA received comments from the City of New Plymouth (City) and the Idaho Conservation League (ICL). This document presents the comments received and provides corresponding response to those comments.

In addition, in the final Clean Water Act (CWA) 401 certification, Idaho Department of Environmental Quality (IDEQ) included conditions related to surface water monitoring, specifically addressing accessibility issues. The certification conditions are addressed as part of the response to Comment 4 (Surface Water Monitoring.)

Comment 1. Submittal Date for QAP and O&M Plan (City)

The City requested that the submittal date for revisions of the Quality Assurance Plan (QAP) and Operation and Maintenance (O&M) Plan be extended from 90 days to 180 days from the effective date of the permit. Both of the documents will require updates based on the revised NPDES permit and the City's resources are limited.

Response. The EPA agrees. The Schedule of Submissions and Parts II.A Quality Assurance Plan and II.B Operation and Maintenance Plan of the permit have been revised to require that the plans be submitted 180 days from the effective date of the permit.

Comment 2. Composite Samples (City)

The City noted the mixture of 8-hour and 24-hour composite samples for various parameters. The City requested that all composite samples be either grab (as in the previous permit) or 8-hour composite (as defined in the draft permit). The City sees no appreciable benefit of composite sampling and noted limited City financial and labor resources to conduct the sampling. In addition, the City noted that the mixture of 8-hour and 24-hour composite sampling adds complexity to the sampling and recordkeeping program with no appreciable benefit.

Response. Generally for a facility with this design flow, 24-hour composite samples are appropriate. However, in this particular case the EPA acknowledges that 24-hour composite sampling will provide no appreciable benefit and that 8-hour composite sampling is sufficient. A 24-hour composite sample is beneficial when the effluent quality is expected to vary during the 24-hour period. Here, the lagoons have long retention times (i.e., greater than 24 hours), thus, the EPA does not expect the effluent to vary substantially over a 24-hour period. However, because the Facility discharges infrequently, it is important to take a representative sample when

the Facility does discharge and grab samples may not be appropriate. Therefore, the composite samples in the permit have been revised to all be 8-hour composite samples.

Comment 3. Temperature Monitoring (City)

The City requested confirmation that their understanding was correct that for the case when no effluent discharge occurs during a calendar year, the annual Excel or electronic ASCII text file would not be required since there would be no effluent water temperature to monitor and report. When no effluent discharge occurs during a calendar year, an annual file of air temperatures would not be required.

Response. That is correct. To clarify this, the EPA added a sentence to Paragraph I.B.4 stating: “If no discharge occurs during a calendar year, the Permittee is not required to submit a temperature file. The permittee must submit a statement to the EPA that no discharge occurred during the calendar year.”

Comment 4. Surface Water Monitoring (City and IDEQ)

City: The City requested that surface water monitoring of the unnamed ditch be removed from the permit. During the prior permit cycle, the City completed surface water monitoring of the Payette River as part of the NPDES permit requirements. The City sees no benefit to monitoring the ditch and notes that the monitoring would be a significant expense to the City. The ditch serves as an outlet for irrigation runoff, road runoff, and a drain for local high groundwater. Water in the ditch flows to a constructed wetlands, managed by the Idaho Department of Fish and Game (IDFG). The wetlands controls the quality of the water flowing to the Payette River, which the effluent is intended to protect. Surface water monitoring would be a significant expense to the City.

IDEQ (Final CWA 401 Certification Conditions). In the final CWA 401 certification, IDEQ noted that the permit requirement for surface water monitoring of the receiving water, the unnamed drainage ditch, is not dependent upon whether the City of New Plymouth has access in the ditch. IDEQ requested that the permit be modified to (a) to require New Plymouth to make a good faith effort to obtain access to gather surface water information (b) so that it is not a violation of the permit if, after the good faith effort, access is denied so that the information cannot be collected, and (c) so that the obligation to collect the surface water data information is contingent upon the ability to safely access the ditch.

Response. In response to the City’s comment, the EPA disagrees that surface water monitoring in the unnamed ditch should be removed. However, in consideration of the City’s comment, EPA has revised the requirements in the final permit as outlined below.

The effluent from the Facility is discharged from Outfall 001 to the unnamed drainage ditch. Immediately to the north of the lagoons, the ditch enters the Payette River Wildlife Management Area (WMA) which is owned and operated by IDFG. The WMA is a wetlands area with several ponds. The ditch meanders through the WMA and flows to a pond in the WMA. Water from the WMA discharges to the Lower Payette River approximately 1.2 miles downstream from Outfall

001. The WMA has waterfowl producing ponds and supports active fishing.¹ In developing the permit conditions, EPA considered protection of the downstream Payette River, as well as the WMA ponds and water flowing to the WMA.

Surface water monitoring is only required during weeks in which the Facility discharges to the ditch. The Facility has not discharged in over five years; the last discharge was in March, 2010. If this frequency continues, the Facility may not discharge during this permit cycle, therefore no surface monitoring would be required. If the Facility continues to function as a storage/evaporation facility only, the expense of monitoring will not be triggered. In the event that the Facility begins to discharge more frequently, EPA has added a clause to the final permit to limit the required number of surface water samples to 12 samples during each calendar year. Specifically, the added note to Table 2 (Surface Water Monitoring Requirements) states that “Each calendar year, surface water monitoring must continue until a minimum of 12 samples are collected.”

The reporting requirement for the surface water monitoring is revised to be an annual report (to be submitted with the December DMR) instead of a monthly submittal as part of the DMR.

EPA also revised the surface water monitoring condition to address the accessibility of the unnamed drainage ditch. The permittee must attempt to access the unnamed drainage ditch upstream of the wastewater outfall to collect surface water samples. If the permittee is unable to access the unnamed drainage ditch, the permit requires that the City instead conduct the surface water monitoring downstream of the Facility immediately within the boundary of the Payette River Wildlife Management Area.

Comment 5. Phosphorus Limits (ICL)

ICL is concerned that the draft permit does not require limits on total phosphorus. Limitations on phosphorus are required to help the Payette River ultimately comply with the Snake River-Hells Canyon TMDL phosphorus target.

Response. It is not necessary to include phosphorus limits in this permit. There are no facility data to suggest that limits are necessary. Further, as the result of the City’s upgrades to the collection system, the Facility does not appear to be a current source of phosphorus to the Payette River.

According to IDEQ’s most recent EPA-approved integrated report, the Payette River is not impaired for phosphorus. However, the Payette River is a tributary to the Snake River which is impaired for nutrients, with phosphorus as the limiting nutrient. The IDEQ’s *Snake River Hells Canyon TMDL* (July, 2003) assigned a load allocation of 0.07 mg/L total phosphorus to the mouth of the Payette River.

The majority of the phosphorus loadings to the Payette River are from non-point sources. The IDEQ’s *Lower Payette River TMDL Five-Year Review (HUC 170150122)* (February, 2010)

¹ From Idaho Wildlife Management Areas, Payette River WMA, <https://fishandgame.idaho.gov/public/wildlife/wma/>

identified that the major contributions of total phosphorus to the lower Payette River to be the irrigation drains. Significant progress has been made in reducing the phosphorus loads in the Payette River through nonpoint source efforts. Continued reduction of phosphorus loading is expected to occur from the nonpoint sources.²

Under the previous permit, the City was required to collect quarterly samples for phosphorus testing beginning in 2002 until a total of 12 samples were tested. The previously collected data are not representative of the current discharge. This is because samples were collected prior to the collection system upgrades. Through work on their collection system, the City of New Plymouth, has significantly reduced phosphorus loads to the Payette River from the Facility. The City upgraded its collection system in 2009 to reduce inflow/infiltration (I/I) caused by several irrigation canals and ditches within the City. The project resulted in decreases in influent flows. Because of the reduced influent flows, the Facility has not discharged, with the exception of one time in March 2010. The effluent quality is different for a lagoon that discharges continuously (as did in the past) and a lagoon that discharges infrequently.

No phosphorus samples have been collected since the City completed upgrades to the collection system in 2009. In fact, since the upgrades have been completed, the City has only discharged from the Facility on one occasion. The permittee was not required to test for phosphorus during that discharge because the permittee had already completed the required 12 samples under the permit. The large facultative lagoons provide sufficient surface area and storage for evaporation of influent flow. The EPA does not believe the Facility is currently a phosphorus source to the Payette River.

The final permit requires the City to sample for phosphorus once per week when the Facility is discharging to collect necessary data to assess the impact of phosphorus loads from the Facility. If this Facility begins to discharge, the data will be available to assess the impact of phosphorus from the Facility.

Comment 6. Antidegradation review (ICL)

ICL stated that the EPA cannot rely on IDEQ's antidegradation review and thus must conduct its own antidegradation review of this discharge. The IDEQ appears to have conducted an antideg review for the lower section of the Payette River and not an antidegradation review of the actual receiving water. The IDEQ determined that the lower Payette River should receive Tier I protection. However, IDEQ lacks the necessary water quality data to determine if the actual receiving water is a Tier I or a Tier II water. As such, IDEQ needs to assume that the actual receiving water is a Tier II water and needs to conduct Tier II review.

The IDEQ inappropriately concluded that because the discharger has been previously permitted at the current design flow that there is no need to conduct a thorough antideg review. This logic is flawed though because the draft permit proposes to increase the effluent limit for BOD₅. Increasing this limit authorizes an increase in the amount of BOD₅ discharge to the receiving

² Lower Payette River TMDL Five-Year Review (HUC 170150122) (February, 2010) pages 14, 118, and 64

water. This will result in increasing the level of degradation over that which currently occurs and will be relevant when a Tier II review is conducted.

Response. After consideration of the antidegradation issues raised in the comment, EPA is revising the final permit to have the same limits for BOD₅ as in the previous permit. This revision is consistent with IDEQ's antidegradation policy and meets the performance-based requirements under the CWA for municipal wastewater treatment plants.

The CWA requires Publicly Owned Treatment Works (POTWs) to meet performance-based requirements based on available wastewater treatment technology. Section 301 of the CWA establishes a required performance level, referred to as "secondary treatment." The EPA has developed and promulgated "secondary treatment" effluent limitations, which are found in 40 CFR 133.102. These technology-based effluent limits apply to certain municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by application of secondary treatment in terms of BOD₅, TSS, and pH. EPA has additionally established effluent limitations (40 CFR 133.105) that are considered "Treatment Equivalent to Secondary" (TES) treatment standards which apply to facilities meeting certain conditions established under 40 CFR 133.101(g).

The BOD₅ concentration limits in the previous permit were based on "Secondary Treatment" standards because effluent monitoring data for the Facility showed that the Facility could meet those concentrations. The BOD₅ limits in the draft permit were less stringent than the limits in the previous permit. The limits in the draft permit were technology-based limits based on meeting "Treatment Equivalent to Secondary" (TES) treatment standards. In developing the limits for the draft permit, EPA concluded that the Facility met the necessary criteria set forth in 40 CFR § 133.105 to qualify for the application of the less stringent TES standards for both BOD₅ and TSS. (See Appendix C, Technology Based Limits in the Fact Sheet.)

However, in developing the limits in the draft permit, neither EPA nor IDEQ conducted an antidegradation analysis in accordance with IDEQ's antidegradation policy. The Facility discharges to an unnamed drainage ditch which immediately discharges to the Payette WMA. The Payette WMA includes wetlands and ponds. From the Payette WMA, the water flows to the Payette River. The Payette WMA wetlands and ponds supports aquatic life and contact recreation. The Payette wetlands and ponds on the Payette WMA have not been assessed in the IDEQ integrated report. In the absence of information, the EPA is assuming Tier 2 protection for the Payette WMA. To ensure that there is no degradation of a Tier 2 waterbody, EPA has changed the final BOD₅ limits back to the limits that were set forth in the previous permit (i.e., the Secondary Treatment limits).

Given the upgrades to the collection system, the Facility should be able to meet the previous (more stringent) permit limits. The Facility has not discharged in over five years. As noted in the Fact Sheet, the Facility is currently underloaded in terms of its design conditions. The most recent discharges (March 2010) were well below the BOD₅ concentration based limits.

There were no changes to the percent removal limits requirements for BOD₅. They are the same in the draft permit, previous permit and final permit.