



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor
John H. Tippetts, Director

May 18, 2018

Michael J. Lidgard, Manager
NPDES Permits Unit
U.S. Environmental Protection Agency – Region 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

Re: FINAL 401 Water Quality Certification for the City of Carey Wastewater Treatment Facility,
NPDES Permit No. ID0025747

Dear Mr. Lidgard:

Enclosed is the Final 401 Water Quality Certification for the above referenced facility. The public comment period was issued on April 11, 2018 and expired on May 11, 2018. No changes were made to the permit as a result of public comments.

Please be aware that the Final Section 401 Water Quality Certification may be appealed via 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.

Thank you for your assistance in this process.

Sincerely,

A handwritten signature in blue ink that reads "David Anderson".

David Anderson
Regional Administrator

DA:BBB:sg

Enclosure (1)

CC: Lisa Kusnierz, EPA-Region 10
Sarah Hansen, DEQ-IPDES
Balthasar Buhidar, DEQ-TFRO
Kiley Mulholland, DEQ-TFRO



Idaho Department of Environmental Quality Final §401 Water Quality Certification

May 18, 2018

NPDES Permit Number(s): ID0025747 City of Carey WWTF

Receiving Water Body: Little Wood 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 I 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 I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II 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 III 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 I protection for that use, unless specific circumstances warranting Tier II 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 City of Carey WWTF discharges the following pollutants of concern: five-day biochemical oxygen demand (BOD₅), total suspended solids (TSS), *E. coli* bacteria, total residual chlorine (TRC), pH, and ammonia. Effluent limits have been developed for BOD₅, TSS, *E. coli* bacteria, TRC, and pH. No effluent limits are proposed for ammonia.

Receiving Water Body Level of Protection

The City of Carey WWTF discharges to the Little Wood River within the Little Wood Subbasin assessment unit (AU) ID17040221SK003_05 (West Canal (north) to West Canal (south)). This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, and primary contact recreation. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

According to DEQ's 2014 Integrated Report, this AU is not supporting one or more of its assessed uses. The aquatic life and salmonid spawning uses are not supporting due to low flow alteration. The contact recreation beneficial use is fully supporting. As such, DEQ will provide Tier I protection (IDAPA 58.01.02.051.01) for the aquatic life and salmonid spawning uses, and Tier II protection (IDAPA 58.01.02.051.02) in addition to Tier I for the contact recreation use.

Protection and Maintenance of Existing Uses (Tier I Protection)

A Tier I 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 and designated uses and the level of water quality necessary to protect existing and designated uses shall be maintained and protected. In order to protect and maintain existing and designated 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 existing and designated beneficial uses. The effluent limitations and associated requirements contained in the City of Carey WWTF permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS.

In sum, the effluent limitations and associated requirements contained in the City of Carey WWTF permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS and technology based effluent limits. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Little Wood River in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

High-Quality Waters (Tier II Protection)

The Little Wood River is considered high quality for primary contact recreation. As such, the water quality relevant to primary contact recreation use of the Little Wood 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 primary contact recreation uses of the Little Wood River (IDAPA 58.01.02.052.05). These include the following: *E. coli*. Effluent limits are set in the proposed and current permit for all this pollutant.

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). For a new permit or license, the effect on water quality is determined by reviewing the difference between the existing receiving water quality and the water quality that would result from the activity or discharge as proposed in the new 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). 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 relevant to uses receiving Tier II protection.

Pollutant	Units	Current Permit			Proposed Permit			Change ^a
		Average Monthly Limit	Average Weekly Limit	Max Daily Limit	Average Monthly Limit	Average Weekly Limit	Max Daily Limit	
Pollutants with limits in both the current and proposed permit								
Five-Day BOD	mg/L	30	45	---	30	45	---	NC
	lb/day	25	38	---	25	38	---	
	% removal	85 Avg Mon minimum ^b			85 Avg Mon minimum ^b			
TSS	mg/L	30	45	---	30	45	---	NC
	lb/day	25	38	---	25	38	---	
	% removal	85 Avg Mon minimum ^b			85 Avg Mon minimum ^b			
pH	standard units	6.5–9.0 all times			6.5–9.0 all times			NC
<i>E. coli</i>	no./100 mL	126 ^c	---	406 ^c	126 ^c	---	406 ^c	NC
Total Residual Chlorine ^d	mg/L	0.01	--	0.02	0.01	---	0.02	NC

^a NC = No Change, I = Increase, D = Decrease.

^b Percent Removal. The monthly average percent removal must be calculated from the arithmetic mean of the influent values and the arithmetic mean of the effluent values for that month using the following equation:

$(\text{average monthly influent concentration} - \text{average monthly effluent concentration}) \div \text{average monthly influent concentration} \times 100$. Influent and effluent samples must be taken over approximately the same time period.

^c The average monthly *E. coli* bacteria counts must not exceed a geometric mean of 126/100 ml based on a minimum of five samples taken every 3 - 7 days within a calendar month. The 406 cfu/100 mL is an instantaneous maximum. Reporting is required within 24 hours of a maximum daily limit or instantaneous maximum limit violation.

^d The limits for chlorine are not quantifiable using EPA-approved analytical methods. The minimum level (ML) for

chlorine is 50 µg/L. The EPA will use 50 µg/L as the compliance evaluation level for this parameter. The permittee will be compliance with the total residual chlorine limitations if the average monthly and maximum daily concentrations are less than 50 µg/L and the average monthly and maximum daily mass loadings are less than 0.125 lb/day.

In the current permit, monitoring for total phosphorus shall be conducted once per month starting in 2005 and lasting until a minimum of 10 samples have been collected during the permit cycle. For the proposed permit, total phosphorus was removed from the effluent monitoring because the receiving water is not impaired for that pollutant based on the 2014 Integrated Report. In the current permit, flow was measured 5 times per week. In the proposed permit, flow monitoring should be continuously monitored when discharge occurs.

For the proposed permit, because the receiving water is typically dry and the facility does not regularly discharge to the river, there is insufficient data to conduct a reasonable potential analysis for ammonia. The facility monitoring requirements are being retained in the proposed permit to gather more data.

Pollutants with No Limits

There is one pollutant of concern, ammonia, relevant to Tier II 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 ammonia, 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 Little Wood River.

In sum, DEQ concludes that this discharge permit complies with the Tier II provisions of Idaho's WQS (IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06).

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

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 Balthasar B. Buhidar, Twin Falls Regional Office, (208) 736-2190), or at Balthasar.buhidar@deq.idaho.gov.



David Anderson

Regional Administrator

Twin Falls Regional Office