



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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

March 7, 2017

Mr. Michael J. Lidgard  
NPDES Permits Unit Manager  
EPA Region 10  
1200 Sixth Avenue, Suite 900  
Seattle, Washington 98101-3140

Subject: FINAL §401 Water Quality Certification for the City of Genesee Wastewater Treatment Plant,  
#ID0020125

Dear Mr. Lidgard:

The Lewiston Regional Office of the Department of Environmental Quality (DEQ) has reviewed the above-referenced permit for the City of Genesee Wastewater Treatment Plant. Section 401 of the Clean Water Act requires that states issue certifications for activities which are authorized by a federal permit and which may result in the discharge to surface waters. In Idaho, the DEQ is responsible for reviewing these activities and evaluating whether the activity will comply with Idaho's Water Quality Standards, including any applicable water quality management plans (e.g., total maximum daily loads). A federal discharge permit cannot be issued until DEQ has provided certification or waived certification either expressively, or by taking no action.

This letter is to inform you that DEQ is issuing the attached §401 Water Quality Certification subject to the terms and conditions contained therein.

Please contact me directly at (208) 799-4370 to discuss any questions or concerns regarding the content of this certification.

Sincerely,

A handwritten signature in black ink that reads "John Cardwell".

John Cardwell  
Regional Administrator  
Lewiston Regional Office

c: Ashley Grompe, EPA Region 10  
Nicole Deinarowicz, DEQ State Office



## Idaho Department of Environmental Quality Final §401 Water Quality Certification

March 7, 2017

**NPDES Permit Number(s):** City of Genesee Wastewater Treatment Plant  
Permit #ID0020125

**Receiving Water Body:** Cow Creek

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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.

Following 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, 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). 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 applies a water body by water body approach to implement Idaho's antidegradation policy. 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 Genesee Wastewater Treatment Plant discharges the following pollutants of concern: biochemical oxygen demand (BOD<sub>5</sub>), TSS, pH, *E. coli* bacteria, total residual chlorine (TRC), ammonia, temperature, and phosphorus. Effluent limits have been developed for biochemical oxygen demand (BOD<sub>5</sub>), TSS, pH, *E. coli* bacteria, total residual chlorine (TRC), ammonia, temperature, and phosphorus.

### ***Receiving Water Body Level of Protection***

The City of Genesee Wastewater Treatment Plant discharges to Cow Creek within the Palouse Subbasin assessment unit (AU) ID17060108CL001\_03 (Cow Creek – source to Idaho/Washington border). This AU has the following designated beneficial uses: cold water aquatic life and secondary 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).

DEQ's 2012 Integrated Report lists the cold water aquatic life use in the receiving water body AU as not fully supported due to temperature and nutrient impairment. The secondary contact recreation use is fully supported. Therefore, DEQ will provide Tier I protection only for the aquatic life use and Tier II protection, in addition to Tier I, for the recreational beneficial use (IDAPA 58.01.02.051.02; 58.01.02.051.01).

### ***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 designated and existing uses and the level of water quality necessary to protect designated and 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 and existing beneficial uses. The effluent limitations and associated requirements contained in the City of Genesee Wastewater Treatment Plant permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. A central purpose of TMDLs is to establish wasteload allocations for point source discharges that are set at levels designed to help restore the water body to a condition that

supports designated and existing beneficial uses. Discharge permits must contain limitations that are consistent with wasteload allocations in the approved TMDL.

Prior to the development of the TMDL, the WQS require the application of Idaho's antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04). The EPA-approved *Cow Creek Subbasin Assessment and Nutrient Total Maximum Daily Load* (2005) and *Cow Creek Temperature Total Maximum Daily Loads* (2013) establish wasteload allocations for temperature and phosphorous. These wasteload allocations are designed to ensure Cow Creek will achieve water quality to support its designated and existing aquatic life beneficial uses and comply with numeric and narrative criteria. The effluent limitations and associated requirements contained in the City of Genesee Wastewater Treatment Plant permit are set at levels that comply with these wasteload allocations. Table 1 provides a summary of the current permit limits and the proposed or reissued permit limits, with the exception of *E. coli* which is captured in Table 2.

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

Pollutant	Units	Current Permit			Proposed Permit			Change <sup>a</sup>
		Average Monthly Limit	Average Weekly Limit	Single Sample Limit	Average Monthly Limit	Average Weekly Limit	Single Sample Limit	
<b>Pollutants with limits in both the current and proposed permit</b>								
Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	30	45	—	30	45	—	D
	lb/day	38	56	—	8	11	—	
	% removal	—	—	—	85%	—	—	
Total Suspended Solids (TSS)	mg/L	45	65	—	30	45	—	D
	lb/day	56	81	—	8	11	—	
	% removal	—	—	—	65%	—	—	
Total Residual Chlorine	mg/L	0.007	—	0.018	0.007	—	0.018	NC
	lb/day	0.01	—	0.02	0.01	—	0.02	
<b>Pollutants with new limits in the proposed permit</b>								
pH	standard units	—			6.5–9.0 all times			New
Total Phosphorus	lb/day (June–Sept)	—	—	—	2.0	4.1	—	New, TMDL
Temperature	°C	—	—	—	—	—	22°C instantaneous maximum and 19°C maximum daily average	New, TMDL
Total Ammonia (as N)	mg/L	—	—	—	0.6	—	1.7	New
	lb/day	—	—	—	0.8	—	2.1	
Total Ammonia (as N) Interim Limit	mg/L	—	—	—	15	—	26	New
	lb/day	—	—	—	19	—	33	

<sup>a</sup> NC = no change; D = decrease

The effluent limitations and associated requirements contained in the City of Genesee Wastewater Treatment Plant permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS and the wasteload allocations established in the *Cow Creek Subbasin Assessment and Nutrient Total Maximum Daily Load* (2005) and *Cow Creek Temperature Total Maximum Daily Loads* (2013). Therefore, DEQ has determined the permit will protect and maintain designated and existing beneficial uses 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)

Cow Creek is considered high quality for recreation beneficial use. Water quality relevant to the recreation beneficial use of Cow Creek 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 the pollutants that are relevant to the recreation beneficial use of Cow Creek (IDAPA 58.01.02.052.05). These include *E. coli* and TP. Effluent limits are set in the proposed and existing permit for *E. coli* bacteria and TP.

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 water quality 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 water quality 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 – *E. coli*

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 City of Genesee Wastewater Treatment Plant permit, this means determining the permit's effect on water quality based upon the limits for *E. coli* in the current and proposed permits. Table 2 provides a summary of the current permit limits and the proposed or reissued permit limits that pertain only to Tier II protection (secondary contact recreation).

**Table 2. 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 <sup>a</sup>
		Average Monthly Limit	Average Weekly Limit	Single Sample Limit	Average Monthly Limit	Average Weekly Limit	Single Sample Limit	
<b>Pollutants with limits in both the current and proposed permit</b>								
<i>E. coli</i> bacteria	#/100 mL	126	—	576	126	—	576	NC

<sup>a</sup> NC = no change

The proposed permit limits for *E. coli* in Table 2 are the same as those in the current permit (“NC” in change column). Therefore, no adverse change in water quality and no degradation will result from the discharge of these pollutants.

### New Permit Limits for Pollutants Currently Discharged-TP

When new limits are proposed in a reissued permit for pollutants in the existing discharge, the effect on water quality is based upon the current discharge quality and the proposed discharge quality resulting from the new limits. Current discharge quality for pollutants that are not currently limited is based upon available discharge quality data (IDAPA 58.01.02.052.06.a.i). Future discharge quality is based upon proposed permit limits (IDAPA 58.01.02.052.06.a.ii).

The proposed permit for City of Genesee Wastewater Treatment Plant includes new limits for total phosphorus (Table 1). These limits were included in the permit to be consistent with the wasteload allocations in the approved *Cow Creek Subbasin Assessment and Nutrient Total Maximum Daily Load* (2005) and Idaho Water Quality Standards (WQS) (IDAPA 58.01.02). The total phosphorus limits in the proposed permit reflect a maintenance or improvement in water quality from current conditions. Therefore, no adverse change in water quality and no degradation will occur with respect to this pollutant.

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**

### **Compliance Schedule**

Pursuant to IDAPA 58.01.02.400.03, DEQ may authorize compliance schedules for water quality-based effluent limits issued in a permit for the first time. The City of Genesee Wastewater Treatment Plant cannot immediately achieve compliance with the effluent limits for ammonia; therefore, DEQ authorizes a compliance schedule. This compliance schedule provides the permittee an interim ammonia limit and a reasonable amount of time to achieve the final effluent limits as specified in the permit, while still ensuring compliance as soon as possible. The permittee must achieve compliance with the ammonia limitations of Part I.B, Table 1 in the permit, *Effluent Limitations and Monitoring Requirements*, within eight years from the effective date of the permit.

### **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 Sujata Connell, Lewiston Regional Office at 208-799-4370 or [Sujata.Connell@deq.idaho.gov](mailto:Sujata.Connell@deq.idaho.gov).

A handwritten signature in black ink, appearing to read "John Cardwell", is written over a horizontal line.

John Cardwell  
Regional Administrator  
Lewiston Regional Office