



Idaho Department of Environmental Quality Draft §401 Water Quality Certification

October 22, 2018

NPDES Permit Number(s): NPDES Permit # ID-0028533, Garden Creek Farms

Receiving Water Body: Warm Springs Canal and Warm Springs Creek

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, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

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).

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- 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, 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 Garden Creek Farms discharges the following pollutants of concern: five-day biochemical oxygen demand (BOD₅), biological wastes, floating and submerged matter, total suspended solids (TSS), nutrients (phosphorus and nitrogen), ammonia, and therapeutic drugs and chemicals. Effluent limits have been developed for TSS and total phosphorus. No effluent limits are proposed for BOD₅, biological wastes, floating and submerged matter, nitrogen, ammonia and therapeutic drugs/chemicals.

Receiving Water Body Level of Protection

Garden Creek Farms discharges to the Warm Springs Canal (Outfall 001) and Warm Springs Creek (Outfall 002) within the Upper Salmon Subbasin assessment unit (AU) ID17060201SL132_02 and ID17060201SL132_04 (Warm Spring Creek – source to Hole-in-Rock Creek). Warm Springs Canal (Outfall 001) and Warm Springs Creek (Outfall 002) are undesignated in Idaho's WQS (IDAPA 58.01.02.130.03). For undesignated waters, DEQ generally presumes cold water aquatic life and primary and secondary contact recreation beneficial uses (IDAPA 58.01.02.101.01.a). 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, the Warm Springs Canal and Warm Springs Creek AUs are not fully supporting their aquatic life use. Causes of impairment include low flow alterations and sedimentation. The contact recreation beneficial use is not assessed. As such, DEQ will provide Tier I protection (IDAPA 58.01.02.051.01) for aquatic life use and Tier II for 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 Garden Creek Farms permit are set at levels that reasonably assure 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, which are set at levels designed to help restore the water body to a condition that supports existing and designated 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 the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04).

The EPA-approved *Upper Salmon Subbasin Assessment and TMDL: 2016 Addendum and Five-Year Review* (September 2016) establishes wasteload allocations for sediment; however, sediment is not a pollutant of concern for this facility. These wasteload allocations are designed to ensure the Warm Springs Canal (Outfall 001) and Warm Springs Creek (Outfall 002) will achieve the water quality necessary to support its existing and designated aquatic life beneficial uses and comply with the applicable numeric and narrative criteria. The effluent limitations and associated requirements contained in the Garden Creek Farms permit are set at levels that comply with these wasteload allocations.

In sum, the effluent limitations and associated requirements contained in the Garden Creek Farms permit are set at levels that reasonably assure compliance with the narrative and numeric criteria in the WQS and the wasteload allocations established in the *Upper Salmon Subbasin Assessment and TMDL: 2016 Addendum and Five-Year Review*. Therefore, DEQ has determined the permit will protect and maintain beneficial uses in the Warm Springs Canal (Outfall 001) and Warm Springs Creek (Outfall 002) in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

New Permit Limits for Pollutants Currently Discharged

This permit is considered a new permit for new discharges at Garden Creek farms and when new limits are proposed in a permit for pollutants in the 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 Garden Creek Farms includes new limits for total phosphorus (TP) and TSS (Permit Table 1). The TSS and TP limits in the proposed permit are reasonably likely to result in 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 these pollutants.

High-Quality Waters (Tier II Protection)

The Warm Springs Canal (Outfall 001) and Warm Springs Creek (Outfall 002) are considered high quality for contact recreation. As such, the water quality relevant to contact recreation uses of Warm Springs Canal and Warm Springs 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 each pollutant that is relevant to contact recreation uses of Warm Springs Creek and Warm Springs Canal (IDAPA 58.01.02.052.05). These include the following: *E.coli* bacteria, nutrients, ammonia, biological wastes, and floating and submerged matter. 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 No Limits

There are several pollutants of concern relevant to Tier II protection of recreation that currently are not limited and for which the proposed permit also contains no limits (Permit Table 1). Bacteria, as monitored by *E. coli*, is a pollutant of concern for contact recreation uses; however, because fish are not warm-blooded animals they will not be a source of fecal coliform bacteria. In order to reduce the discharge of pollutants and protect water quality sufficient to satisfy appropriate water quality requirements for Idaho WQS, Garden Creek farms implements on-site BMPs including the use of quiescent zones in raceways to settle solids, which are pumped from the facility to a settling basin. BMPs that focus on solids control effectively remove pollutants like nutrients, ammonia, wastes and suspended matter that are either bound or are incorporated into solid waste.

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

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

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. Garden Creek Farms cannot immediately achieve compliance with the TSS effluent limit; therefore, DEQ authorizes a compliance schedule and interim limit. This compliance schedule provides the permittee a reasonable amount of time to achieve the final effluent limits as specified in the permit. At the same time, the schedule ensures that compliance with the final effluent limit is accomplished as soon as possible. DEQ authorizes a 36-month compliance schedule as outlined in the permit (Table 2).

Parameter	Units	Average Monthly
Net TSS (interim)	lbs/day	823
Net TSS (final)	lbs/day	471

Demonstration of the following milestones should be delivered to DEQ to provide reasonable assurance that the compliance schedule will be met.

Due Date (End of Year)	Activity
1	Feasibility Study
2	Design and construction of measures to reduce TSS.
3	Construction complete. Operation should demonstrate effluent limits are achieved.

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 Troy Saffle, Idaho Falls Regional Office, 208.528.2650 or troy.saffle@deq.idaho.gov.

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Regional Administrator

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