October 26, 2015

NPDES Permit Number(s): ID-0000388 / Independent Meat

Receiving Water Body: Rock 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.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier 1 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 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).

- Tier 2 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 3 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 1 protection for that use, unless specific circumstances warranting Tier 2 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 Independent Meat Company discharges the following pollutants of concern: water temperature from non-contact cooling water. Effluent limits have been developed for temperature (to commence on January 01, 2017). No effluent limits are proposed for other parameters as temperature is the only parameter of concern.

**Receiving Water Body Level of Protection**

The Independent Meat Company discharges to the Rock Creek waterbody within the Upper Snake Rock Subbasin assessment units (AUs) ID17040212SK013_04 and ID17040212SK013_05 (Rock Creek – River Mile 25 [Township 11 South, Range 18 East, Section 36] to mouth). These AUs have the following similar designated beneficial uses: cold water aquatic life, salmonid spawning, and primary & 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).

The AU is listed in Category 4 of the 2012 Integrated Report. The aquatic life use is impaired. So also is the primary contact recreation. Causes of impairment for both AUs include fecal coliform, total phosphorus, sedimentation/siltation, total suspended solids, and other flow regime alterations. As such, DEQ will provide Tier 1 protection (IDAPA 58.01.02.051.01) for the aquatic life use and for the contact recreation use as an appropriate level of protection use using information available at this time (IDAPA 58.01.02.052.05.c).

**Protection and Maintenance of Existing Uses (Tier 1 Protection)**

As noted above, a Tier 1 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 uses and the level of water quality necessary to protect 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 beneficial uses. The effluent limitations and associated requirements contained in the Independent Meat Company 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, 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 Snake Rock TMDL and Upper Snake Rock TMDL Modification* (2000 and 2005, respectively) establish wasteload allocations for bacteria, total suspended solids, sedimentation/siltation and total phosphorus. These wasteload allocations are designed to ensure the Rock Creek waterbody 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. However, a temperature TMDL was not developed because water temperature was not listed as a pollutant-of-concern. So EPA established end-of-pipe limitations based on the numeric WQS for temperature. Consequently, the effluent limitations and associated requirements contained in the Independent Meat Company NPDES permit are set at levels that comply with the numeric WQS for the aquatic life beneficial use of Rock Creek.

In sum, the effluent limitations and associated requirements contained in the Independent Meat Company NPDES permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS for temperature; and the wasteload allocations established in the *Upper Snake Rock TMDL and Upper Snake Rock TMDL Modification* (2000 and 2005, respectively) for the other pollutants (bacteria, TSS and TP). Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Rock Creek waterbody in compliance with the Tier 1 provisions of Idaho’s WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07). As such, DEQ will provide Tier 1 protection (IDAPA 58.01.02.051.01) for contact recreation use and provide and a Tier 1 protection for aquatic life use. Tier 2 protection does not apply because contact recreation is not supporting and this requires only Tier 1 protection.

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

Temperature limitations for the facility are based on the discharge of the facility into Rock Creek. At the point of discharge, Rock Creek is protected for the following designated uses: cold water aquatic life, salmonid spawning, primary contact recreation and secondary contact recreation (IDAPA 58.01.02.150.14). In addition, the Idaho WQS state that all waters of the State of Idaho are protected for industrial and agricultural water supply (Section 100.03.b and c), wildlife (Section 100.04) and aesthetics (Section 100.05). Additional numeric criteria necessary for the protection of aquatic life can be found at IDAPA 58.01.02.250 (Surface Water Quality Criteria for Aquatic Life use Designations). Numeric criteria necessary for the protection of recreation uses can be found at IDAPA 58.01.02.251 (Surface Water Quality Criteria for Recreation Use Designations).

**Compliance Schedule.** The EPA has determined that Independent Meat Company cannot immediately comply with the end-of-pipe water quality-based effluent limitations for water
temperature. Therefore, a compliance schedule is needful for temperature. EPA has established a one-year compliance schedule to end on January 1, 2017. DEQ visited with the facility and determined that it is in the process of contracting with an engineer to determine what upgrades to the existing cooling water system will be required to retrofit it to meet the temperature limits. DEQ confirmed that it cannot meet the temperature limits immediately. So a one-year compliance schedule seems appropriate. Therefore, an interim effluent limitation of 27°C (80°F) consistent with the existing permit has been established to ensure no increases in temperature discharges during the term of the compliance schedule. The interim effluent limitation is the same temperature limit that has been in place since 1978.

DEQ certifies a compliance schedule of one year, as described in the NPDES permit, to end on January 1, 2017, thus allowing the numeric temperature standards to become the permit limits for the facility. The water quality standard for temperature applicable to Rock Creek at the point of discharge is 22°C instantaneous or less with a maximum daily average of no greater than 19°C. While the schedule of compliance is in effect, the Permittee must comply with the interim limit and monitoring requirements as specified in the NPDES permit. Permit limits after the compliance schedule end are:

April 1–April 30: 9°C - Maximum Daily (Report Average Monthly)
May 1–August 31: 19°C - Maximum Daily (Report Average Monthly)
September 1–October 31: 9°C - Maximum Daily (Report Average Monthly)
November 1–March 31: 19°C - Maximum Daily (Report Average Monthly)

**Mixing Zone.** According to EPA’s Reasonable Potential Analysis (Fact Sheet, Appendix D) the discharge of non-contact cooling water into Rock Creek has reasonable potential to cause or contribute to an exceedance of water quality criteria if the maximum projected temperature at the edge of the mixing zone exceeds the most stringent criterion for temperature. Therefore, no mixing zone can be granted; and the reasonable potential is determined at the end-of-pipe.

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

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