



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1445 North Orchard • Boise, Idaho 83706 • (208) 373-0550  
www.deq.idaho.gov

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

September 8, 2017

Karen Burgess  
Acting Manager, NPDES Permits Unit  
EPA Region 10  
1200 Sixth Avenue, Suite 900  
Seattle, Washington 98101-3140

Subject: Final 401 Water Quality Certification for Sorrento Lactalis, ID-0020837

Dear Ms. Burgess:

The Boise Regional Office of the Department of Environmental Quality (DEQ) has reviewed the above-referenced proposed final permit for Sorrento Lactalis. 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, 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 expressly, or by taking no action.

This letter is to inform you that DEQ is issuing the attached final 401 certification subject to the terms and conditions contained therein.

Please contact me directly at (208) 373-0420 or via email at [aaron.scheff@deq.idaho.gov](mailto:aaron.scheff@deq.idaho.gov) to discuss any questions or concerns regarding the content of this draft certification.

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron Scheff".

Aaron Scheff  
Regional Administrator  
Boise Regional Office

c: Susan Poulsom, EPA Region 10

ec: Nicole Deinarowicz, DEQ State Office



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

September 8, 2017

**NPDES Permit Number(s):** ID0028037; Sorrento Lactalis Wastewater Treatment Facility

**Receiving Water Body:** Purdam Drain

---

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).

- 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 Sorrento Lactalis Wastewater Treatment Facility (WWTF) discharges the following pollutants of concern: five day biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS), pH; *E. coli* bacteria, ammonia, total phosphorus (TP), floating/suspended or submerged matter, oil and grease, and temperature. Effluent limits have been developed for BOD<sub>5</sub>, TSS, *E. coli* bacteria, pH, TP, floating/suspended or submerged matter, and oil and grease. Although no effluent limits are proposed for ammonia, nitrate-nitrite, temperature; monitoring requirements are included in the permit to determine WQS compliance and future permit limits for these pollutants.

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

The Sorrento Lactalis discharges to the Purdam Drain within the Lower Boise Subbasin. Purdam Drain is a man-made waterway, not designated in sections 110-160 of the WQS which collects shallow groundwater and agricultural return water from agricultural land to the southeast. Purdam Drain enters Mason Creek, assessment unit (AU) 17050114SW006\_02 (Mason Creek - entire watershed), approximately 4.5 miles downstream from the Sorrento Lactalis WWTF discharge. Mason Creek then flows into the Boise River.

In Idaho, Man-made waterways, for which uses are not designated in IDAPA 58.01.02, sections 110-160, are to be protected for the uses for which they were developed; in this case, agricultural water supply (IDAPA 58.01.02.101.02). In addition, existing uses must be maintained and protected (IDAPA 58.01.02.050.02.b; IDAPA 58.01.02.051.01).

On October 8, 2015 EPA conducted an existing use screen for both aquatic life and recreational uses. The survey provided inconclusive results regarding any existing uses in Purdam Drain.

As the Purdam Drain is protected only for agricultural water supply, and there is no evidence to date regarding other existing uses, DEQ will provide Tier I protection to the Purdam Drain.

While the Purdam Drain is the receiving water for the Sorrento Lactalis WWTF discharge, DEQ has also examined whether the discharge is consistent with achieving compliance with WQS in Mason Creek and the Boise River through compliance with the sediment and bacteria load allocations (LAs) applicable to Sorrento Lactalis in the Lower Boise River TMDL, and the TP LA for the Boise River in the Lower Boise River TP TMDL Addendum and Snake River Hells Canyon (SRHC) TMDL.

### ***Protection and Maintenance of Existing Uses (Tier I Protection)***

A Tier I review is performed for all new or reissued permits, 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 Sorrento Lactalis permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS that are applicable to Purdam Drain, Mason Creek, and the Boise River.

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 (WLAs) for point source discharges and LAs for nonpoint sources, 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 WLAs in the approved TMDL.

The Sorrento Lactalis WWTF discharges to the Purdam Drain which then flows for five miles before entering Mason Creek. As noted above, Purdam Drain is protected for agricultural water supply, which is generally satisfied by water quality that meets the narrative criteria set forth in Section 200 of the WQS (IDAPA 58.01.02.252.02). Part I.B of the permit establishes numeric effluent limitations protective of more sensitive uses in downstream waterbodies and specifically limit the discharge of hazardous materials; toxic substances; deleterious materials; excess nutrients; floating, suspended, or submerged matter; and oil and grease. Therefore, the permit will protect and maintain the agricultural water supply use of Purdam Drain.

Mason Creek is impaired for elevated temperature, cause unknown (nutrients suspected), sediment, and *E. coli*. A temperature TMDL has not yet been completed for this water body. At this time, there is not sufficient data to determine whether or not the discharge of heat from the WWTF to the Purdam Drain has the reasonable potential to cause or contribute to excursions above the water quality standards for temperature in Mason Creek. Continuous monitoring of the effluent and receiving water temperature is a permit requirement. This data will determine whether the discharge to Purdam Drain adversely impacts the temperature of Mason Creek and whether temperature related effluent limits will be required in the future.

Mason Creek is listed for cause unknown (nutrients suspected). The Boise River (AU 17050114SW005\_06b), downstream from Mason Creek, is also impaired for nutrients (TP). A nutrient TMDL has not yet been developed for Mason Creek. The *Lower Boise River TMDL 2015 Total Phosphorus Addendum (TMDL)* was developed to address the TP impairment in the Lower Boise River. Water quality monitoring and modeling completed since 2012 have determined the extent of impairment in the Boise River as well as WLAs expected to restore beneficial uses in the Boise River. The final permit includes mass-based effluent limits for TP; and is consistent with the TMDL WLA for the Boise River.

The Hells Canyon segment of the Snake River is also impaired because of excess nutrients. The *SRHC TMDL* (DEQ 2003) established a LA for the Boise River based upon a TP concentration of 0.07 mg/L at the mouth of the Boise River. The WLAs in the *Lower Boise River TMDL 2015 Total Phosphorus Addendum (TMDL)* were developed to also meet the Boise River's LA in the *SRHC TMDL* (DEQ 2003). The limits for TP in the permit were developed to ensure that the WLA in the Lower Boise River TMDL and the LA in the *SRHC TMDL* will be met; therefore, DEQ believes the permit will ensure compliance with the TMDLs and applicable narrative criteria.

Mason Creek is also listed for sedimentation/siltation and *E. coli*. The *Lower Boise River TMDL 2015 Tributary Sediment and Bacteria Addendum (TMDL)* was developed to address the sediment and bacteria impairment in Mason Creek. The final permit includes concentration and mass-based effluent limits for TSS and a concentration limit for *E. coli* that are consistent with the TMDL WLA.

The Boise River (AU 17050114SW005\_06b) is also impaired for sediment and bacteria at the confluence of Mason Creek. The EPA-approved *Lower Boise River TMDL* (DEQ 1999) and TMDL Addendum (2008) establishes LAs for sediment and bacteria at the mouth of Mason Creek. These sediment and bacteria allocations are designed to ensure the Boise River 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 Sorrento Lactalis permit are set at levels that comply with these LAs.

In sum, the effluent limitations and associated requirements contained in the Sorrento Lactalis permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS and the WLAs and LAs established in the *SRHC TMDL (2003)*, *Lower Boise River Tributary TMDL Addendum (2015)*, and *Lower Boise River TMDL (1999)*, and *Lower Boise River TMDL Addendum (2015)*. Therefore, DEQ has determined the permit will protect and maintain known beneficial uses of the Purdam Drain in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

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

### ***Surface Water Monitoring Requirements***

The permit requires surface water monitoring of the receiving water, Purdam Drain. In addition, the permit requires the permittee to collect additional information to determine the appropriate existing uses for the Purdam Drain. Any information regarding existing aquatic life uses that is required to be collected in the permit for purposes of determining the application of and compliance with WQS such as physical and biological data should be consistent with DEQ's Beneficial Use Reconnaissance Project (BURP) protocol. The protocol can be found at <http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/burp/>.

## 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, WLAs, 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 Kati Carberry, DEQ Boise Regional Office, at (208) 373.0434 or via email at [Kati.Carberry@deq.idaho.gov](mailto:Kati.Carberry@deq.idaho.gov).



Aaron Scheff

Regional Administrator  
Boise Regional Office



September 7, 2017

Kati Carberry  
Idaho Department of Environmental Quality  
1445 North Orchard  
Boise, ID 83706

**Re: Request for TSS Reserve for Growth for Lactalis' Proposed New NPDES Permit ID-0020837**

Ms. Carberry:

The Sorrento Lactalis Wastewater Treatment Facility is currently in the process of requesting and obtaining a new NPDES permit for discharge into the Purdam Drain, a tributary of the Lower Boise River. Its current permit was written in 2005 and has been administratively extended since that time. They are now in the process of developing a new draft permit with the U.S. Environmental Protection Agency.

Due to the numerous changes that have occurred related to the Lower Boise River since Lactalis' last permit was drafted I am writing to formally request a documented allocation of reserve for growth for Total Suspended Solids (TSS) based Lactalis' new draft permit and the facility's growth.

Lactalis' current permit has a TSS limit of 30 mg/l with a design flow of 0.5 million gallons per day (mgd). Its proposed draft permit has tiered permit limits, with a maximum daily TSS limit of 25 mg/l and 221 pounds per day with a proposed maximum daily flow of 1.52 mgd. Therefore, Lactalis requests that a waste load allocation of at least 221 pounds per day of TSS be reflected in the TMDL for the Lower Boise River.

The 2015 addenda to the TMDL for the Lower Boise River Subbasin included an allocation of 222 pounds per day TSS for Lactalis' facility. It is not clear why this allocation was not included in the 2008 (or subsequent) addenda to the Lower Boise River TMDL. This appears to have been an oversight. In any case, because Lactalis' 222 pounds-per-day allocation is already accounted for in the subbasin TMDL, the 221 pound-per-day allocation for the Lower Boise River will have no practical effect and can be taken from the TMDL's Reaming Reserve for Growth of 1.23 tons per day TSS.

Please feel free to contact me at [pwickman@forsgren.com](mailto:pwickman@forsgren.com), if you have any question or if I need to provide any additional information.

It is my understanding that the draft permit is on track to be issued in the coming weeks. In light of the timing, a response at your earliest convenience would be much appreciated.

Sincerely,

A handwritten signature in blue ink that reads "Patrick A. Wickman".

Patrick A. Wickman  
Environmental Scientist



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1445 North Orchard • Boise, Idaho 83706 • (208) 373-0550  
www.deq.idaho.gov

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

September 8, 2017

Patrick Wickman  
Forsgren Associates Inc.  
415 South 4<sup>th</sup> Street  
Boise, ID 83702

Subject: Sorrento Lactalis -TSS Reserve for Growth Load Allocation for the Lower Boise River TMDL

Dear Mr. Wickman:

The Boise Regional Office of the Department of Environmental Quality (DEQ) received a request from Sorrento Lactalis to be granted a portion of the total suspended solids (TSS) reserve for growth allocation. This reserve for growth was set aside in the *Sediment and Bacteria Allocations Addendum to the Lower Boise River TMDL (2008)*.

On July 25, 2017, EPA requested 401 certification of a Proposed Final NPDES permit for Sorrento Lactalis Permit No. ID0020837. The proposed final permit includes a technology-based monthly average effluent limit of 25 mg/L TSS with a mass-based limit of 221 lbs/day with a proposed maximum daily flow of 1.52 mgd. DEQ understands that a wasteload allocation of 221 lbs/day is needed from the *Lower Boise River TMDL (1999)* in order for Sorrento to meet their TSS mass-based limit in the proposed final permit.

This letter is to inform you that DEQ is revising Table 15 of the *Sediment and Bacteria Allocations Addendum to the Lower Boise River TMDL (2008)* to allow Sorrento Lactalis a 221 lbs/day maximum daily and 116 lbs/day for the monthly average limits. The resulting total remaining reserve for growth in the sediment TMDL will be 1.12 tons/day.

An additional requirement of the TSS wasteload allocation is that all or a portion of this allocation be returned to the reserve for growth when the facility's treatment technology is able to reduce its TSS discharge. Determination of the portion of the reserve for growth allocation to be returned will be dependent upon the facility design flow and performance capabilities.

Please contact Kati Carberry at the DEQ Boise Regional Office at (208) 373-0434 to discuss any questions or concerns regarding the wasteload allocation.

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron Scheff".

Aaron Scheff  
Regional Administrator  
Boise Regional Office