



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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Brad Little, Governor
John H. Tippetts, Director

July 3, 2019

Susan Poulsom
U.S. EPA Region 10
Water Division, NPDES Permitting Section
NPDES Permits Unit (OWW-191)
1200 Sixth Avenue, Suite 155
Seattle, Washington 98101-3140

Subject: Final 401 Water Quality Certification for the North Idaho Highway Districts Municipal Separate Storm Sewer Systems (MS4); NPDES Permit# IDS028207

Dear Ms. Poulsom:

The Coeur d'Alene Regional Office of the Department of Environmental Quality (DEQ) has reviewed the above-referenced proposed final permit for the North Idaho Highway Districts MS4. 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 Thomas Herron at (208) 666-4631 or via email at thomas.herron@deq.idaho.gov to discuss any questions or concerns regarding the content of this certification.

Sincerely,

A handwritten signature in blue ink, appearing to read "Daniel Redline".

Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

c: Misha Vakoc, EPA Region 10
Thomas Herron, DEQ Coeur d'Alene



Idaho Department of Environmental Quality Final §401 Water Quality Certification

July 3, 2019

NPDES Permit Number(s): Lakes Highway District, Post Falls Highway District, East Side Highway District (North Idaho Highway Districts) Municipal Separate Storm Sewer Systems; NPDES Permit # IDS028207

Receiving Water Body: Hayden Lake, Spokane River, Coeur d'Alene Lake, Fernan Lake

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 our review of the above-referenced permit and associated fact sheet, DEQ certifies that if the permittees comply 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 North Idaho Highway Districts discharge the following pollutants of concern: sediment, nutrients (nitrogen and phosphorus), chlorides, metals, petroleum hydrocarbons, microbial pollution, and organic chemicals (pesticides and industrial chemicals). Terms and conditions of the permit and this certification require permittees to reduce pollutant loading to the maximum extent practicable.

Receiving Water Body Level of Protection

The North Idaho Highway Districts discharges to Hayden Lake, Coeur d'Alene Lake, Fernan Lake and the Spokane River within the Coeur d'Alene and Upper Spokane Subbasin assessment units (AU) 17010303PN001L_0L (Coeur d'Alene Lake); 17010303PN033_03 (Fernan Lake); 17010305PN005L_0L (Hayden Lake); 17010305PN004_04 (Spokane River – Coeur d'Alene Lake to Post Falls Dam); and 17010305PN003_04 (Spokane River – Post Falls Dam to Idaho/Washington border). These AUs have the following designated beneficial uses: cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply. 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 2016 Integrated Report, the Hayden Lake, Coeur d'Alene Lake and Spokane River AUs are not fully supporting their aquatic life use. Causes of impairment include phosphorus (Hayden Lake); cadmium, lead, and zinc (Coeur d'Alene Lake); and lead, zinc, and phosphorus (Spokane River).

The contact recreation beneficial use for the Spokane River is assessed and fully supported. The recreation use for Hayden and Coeur d'Alene Lakes is unassessed; however, *E. coli* data indicate that recreation is fully supported based on monitoring in 2008 and 2014. As such, DEQ will provide Tier I protection (IDAPA 58.01.02.051.01) for the aquatic life use and Tier II protection (IDAPA 58.01.02.051.02) in addition to Tier I for the contact recreation use for the Spokane River, Hayden Lake, and Coeur d'Alene Lake (IDAPA 58.01.02.052.05.c). Fernan Lake's recreational use is impaired due to excess phosphorus and its aquatic life use is fully supported. DEQ will provide Tier I protection for the recreation use and Tier I and Tier II for the aquatic life 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 municipal separate storm sewer system (MS4) discharge must reduce the discharge of pollutants to the maximum extent practicable (MEP). The terms and conditions contained in the North Idaho Highway Districts permit and this certification will reasonably assure that permittees reduce pollutants to the MEP.

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 *Sub-Basin Assessment and Total Maximum Daily Loads of Lakes and Streams Located on or Draining to the Rathdrum Prairie (17010305)* (DEQ 2000) and *Coeur d'Alene Lake and River Subbasin Assessment and Total Maximum Daily Loads, 2013 Fernan Lake Addendum (HUC 17010303)* (DEQ 2013) establishes wasteload allocations for phosphorus in Hayden Lake and Fernan Lake. The wasteload allocations are designed to ensure that Hayden Lake and Fernan Lake will achieve the water quality necessary to support existing and designated aquatic life beneficial uses when the TMDL is fully implemented. The terms and conditions contained in the North Idaho Highway Districts permit reasonably assure consistency with these wasteload allocations. In addition, the permit requirement to execute a comprehensive stormwater management program that includes targeted pollution reduction activities and pollutant assessment and monitoring in impaired AUs by the North Idaho Highway Districts is consistent with the TMDLs.

A TMDL has not yet been developed for Coeur d'Alene Lake; however, a lake management plan has been developed and is being implemented to limit basin-wide nutrient inputs that impair lake water quality conditions which, in turn, influence the solubility of mining-related metals contamination contained in lake sediments. The lake management plan was developed in lieu of a CERCLA cleanup plan (remedial action) associated with the Bunker Hill Superfund site.

A subbasin assessment and TMDL for cadmium, lead, and zinc has not yet been developed for the Spokane River; however this effort is currently underway. A TMDL for phosphorus has not yet been developed but recent new lower phosphorus effluent limits for municipal dischargers are being implemented. Support status will be re-evaluated in the future and if found necessary, a new TMDL will be developed. Prior to the development of TMDLs for Coeur d'Alene Lake and the Spokane River, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04).

In general, the permit contains clear, specific and measurable provisions for the continued implementation of specific controls, management practices, control techniques, and system design and engineering methods to achieve the requirements of the permit. The provisions in this MS4 permit are at least as stringent as those established in the previous individual MS4 permits for the Lakes and Post Falls Highway Districts (note that this is the first MS4 permit for East Side Highway District) thus addressing anti-backsliding.

The following list contains specific terms and conditions of the permit (Part 2-5) aimed at providing a Tier I level of protection and compliance with the Hayden Lake and Fernan Lake TMDLs, as well as protection for Coeur d'Alene Lake and the Spokane River:

- a prohibition on snow disposal directly into surface waters;
- specific prohibitions for non-stormwater discharges;
- a requirement to develop/revise a stormwater management plan that includes five control measures:
 - a) public education and outreach,
 - b) illicit discharge detection and elimination,
 - c) construction site stormwater runoff control,
 - d) post-construction stormwater management for new development and redevelopment,
 - e) pollution prevention/good housekeeping for MS4 operations;
- quantitative monitoring/assessment of pollutants removed by BMPs in conjunction with their required maintenance in all impaired AUs;
- requirements for East Side and Post Falls Highway Districts to implement pollutant reduction activities; and
- the stipulation that if either EPA or DEQ determine that an MS4 causes or contributes to an excursion above the water quality standards, the permittee must take a series of actions to remedy the situation.

In summary, the terms and conditions contained in the North Idaho Highway Districts permit provide reasonable assurance that the permittees will reduce discharge of pollutants to the maximum extent practicable, and are consistent with the wasteload allocations established in the *Sub-Basin Assessment and Total Maximum Daily Loads of Lakes and Streams Located on or Draining to the Rathdrum Prairie and Coeur d'Alene Lake and River Subbasin Assessment and Total Maximum Daily Loads, 2013 Fernan Lake Addendum (HUC 17010303)*. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in Hayden Lake, Coeur d'Alene Lake, Fernan Lake and the Spokane 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 Spokane River, Coeur d'Alene Lake, and Hayden Lake are considered high quality for recreational uses and Fernan Lake is considered high quality for cold water aquatic life uses. As

such, the water quality relevant to these uses 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 recreational uses of the Spokane River, Coeur d'Alene Lake and Hayden Lake and for each pollutant that is relevant to aquatic life uses of Fernan Lake (IDAPA 58.01.02.052.05). Pollutants relevant to recreational uses include the following: microbial pollution, nutrients, metals, petroleum hydrocarbons, and organic chemicals (pesticides and industrial chemicals). Pollutants relevant to aquatic life uses include the following: sediment, heat, nutrients, metals, chlorides, petroleum hydrocarbons, and organic chemicals.

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). NPDES permits for regulated small MS4s must include terms and conditions to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements under the Clean Water Act. "Maximum extent practicable" is the statutory standard that describes the level of pollutant reduction that MS4 operators must achieve. To achieve these goals, the current and proposed MS4 permits implement minimum control measures and rely on iterative practices to identify and reduce discharge of pollutants. Permittees' implementation of these practices must be documented in annual reports to EPA and DEQ review and is subject to on-site inspections (Fact Sheet Section 1.4). EPA also determined that additional pollutant reduction activities were required for Post Falls Highway District and East Side Highway District.

Reissued Permit- Post Falls Highway District, Lakes Highway District

Due to the nature of MS4 permits, implementing their requirements results in a continual discovery of pollutant sources, use and refinement of BMPs, feedback from BMP implementation and maintenance, additional knowledge through training opportunities, and investigating and resolving complaints. This level of scrutiny and effort combined with requirements to address pollution sources typically leads to improved water quality the longer the permit is in effect. It also generally results in minimal to no adverse change in water quality significant to recreational and aquatic life uses. Although there is no water quality monitoring requirement in the past permits, the current permit contains monitoring and assessment expectations for these MS4s (Permit Section 4.3.1). A multitude of case studies illustrate that the use of best management practices (which include stormwater management program elements, permit prohibitions, and other permit conditions) have a measurable positive effect on water quality or a biological metric.¹ In addition, the Post Falls Highway District MS4 is required to conduct two pollutant reduction activities (final Permit Section 4.3.2) targeting pollutants causing impairments in the Spokane River. Therefore, DEQ has reasonable assurance that insignificant or no degradation will result from the discharge of pollutants from the Post Falls and Lakes Highway Districts MS4s.

¹ Urban Stormwater Management in the United States, National Research Council, 2008.

New Permit – East Side Highway District

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).

In addition to the above requirements for reissued permittees, East Side Highway District must map their MS4 and all associated outfalls, submit a monitoring/assessment plan, and conduct two pollutant reduction activities (final Permit Part 4.2 and 6.2) that target pollutants causing impairments in Coeur d'Alene Lake. Pollutant reductions should be realized as each element of the stormwater management plan is developed and implemented during the permit cycle. Again, as studies have demonstrated the implementation of BMPs reduce pollutants if they are correctly designed, constructed, and maintained. EPA oversight through review of annual reports and periodic inspections should ensure such correct BMP design, construction, and maintenance. At a minimum, water quality conditions should be maintained from current conditions. Therefore, no adverse change in water quality and no degradation is expected with respect to these pollutants.

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 IDAPA 58.01.02.052.06).

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

Best Management Practices

Best management practices (BMPs) must be designed, implemented, and maintained by the permittee to fully protect and maintain the beneficial uses of waters of the United States and to improve water quality at least to the maximum extent practicable.

When selecting BMPs, the permittee must consider and, if practicable, utilize practices identified in the Idaho Department of Environmental Quality *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties* (<http://www.deq.idaho.gov/water-quality/wastewater/stormwater/>).

Pollutant Reduction Activities in Coeur d'Alene Lake and the Spokane River

In carrying out the requirements of Part 4.2.2 of the permit, the East Side Highway District must define and implement at least two (2) pollutant reduction activities designed to reduce cadmium, lead, zinc and phosphorus from the MS4 into Coeur d'Alene Lake.

In carrying out the requirements of Part 4.3.2 of the permit, the Post Falls Highway District must define and implement at least two (2) pollutant reduction activities designed to reduce lead, zinc, phosphorus, and polychlorinated biphenyl loading from the MS4 into the Spokane River.

Reporting of Discharges Containing Hazardous Materials or Deleterious Material

All spills of hazardous material, deleterious material or petroleum products which may impact waters (ground and surface) of the state shall be immediately reported. Call 911 if immediate assistance is required to control, contain or clean up the spill. If no assistance is needed in cleaning up the spill, contact the Coeur d'Alene Regional Office at 208-769-1422 during normal working hours or Idaho State Communications Center after normal working hours. If the spilled volume is above federal reportable quantities, contact the National Response Center.

For immediate assistance: Call 911

National Response Center: (800) 424-8802

Idaho State Communications Center: (800) 632-8000

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 Thomas Herron, Coeur d'Alene Regional Office at 208-769-1422 or via email at Thomas.Herron@deq.idaho.gov.



Daniel Redline

Regional Administrator

Coeur d'Alene Regional Office

