



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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Brad Little, Governor
John Tippetts, Director

July 1, 2020

Misha Vakoc, Municipal Stormwater Permit Coordinator
Permitting, Drinking Water and Infrastructure Branch - Water Division
U.S. EPA Region 10
1200 6th Avenue, Suite 155
Mail Code WD-19-H16
Seattle, WA 98101-3188

Subject: FINAL §401 Water Quality Certification for the City of Coeur d'Alene Municipal Separate Storm Sewer System (MS4); NPDES Permit # IDS028215

Dear Ms. Vakoc:

On May 3, 2020, the Coeur d'Alene Regional Office of the Idaho Department of Environmental Quality (DEQ) received the proposed final draft of the above-referenced permit for the City of Coeur d'Alene Municipal Separate Storm Sewer System (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, 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 expressly, 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 direct any questions to Chantilly Higbee at 208.666.4605 or Chantilly.Higbee@deq.idaho.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dan McCracken", with a long horizontal flourish extending to the right.

Dan McCracken, Regional Administrator
Coeur d'Alene Regional Office



Idaho Department of Environmental Quality Final §401 Water Quality Certification

July 1, 2020

NPDES Permit Number(s): City of Coeur d'Alene Municipal Separate Sewer System (MS4); NPDES Permit # IDS028215

Receiving Water Body: Coeur d'Alene Lake, Spokane River, and Fernan 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 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 City of Coeur d'Alene MS4 discharges the following pollutants of concern: sediment, nutrients (nitrogen and phosphorus), heat, chlorides, metals, petroleum hydrocarbons, microbial pollution (*Escherichia coli*), 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 City of Coeur d'Alene MS4 discharges to the Spokane River, Fernan Creek, and Coeur d'Alene Lake within the Upper Spokane River and Coeur d'Alene Lake Subbasin assessment units (AU)s 17010305PN004_04 (Spokane River - Coeur d'Alene Lake to Post Falls Dam), 17010303PN032_03 (Fernan Creek - Fernan Lake to mouth), and 17010303PN001L_0L (Coeur d'Alene Lake). 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 Upper Spokane River AU is not fully supporting its cold water aquatic life use. Causes of impairment include lead, phosphorus, and zinc. The contact recreation use is fully supported. 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 (IDAPA 58.01.02.052.05.c) for the Spokane River.

The Coeur d'Alene Lake AU is not fully supporting its aquatic life use due to exceedances of cadmium, lead, and zinc; the contact recreation use is unassessed. However, *E.coli* data collected in 2008 and 2014 indicate that the recreation use is fully supported. Therefore, 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 beneficial use.

Fernan Creek is not supporting its aquatic life use due to temperature impairment. The contact recreation beneficial use in Fernan Creek is fully supported. Therefore, DEQ will provide Tier I protection for the aquatic life use and Tier II protection, in addition to Tier I, for the contact recreation use of Fernan Creek.

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 City of Coeur d'Alene MS4 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. The cold water aquatic life use in the Spokane River is not fully supported due to excess lead, zinc and phosphorus (2016 Integrated Report). Although a subbasin assessment and TMDL for lead and zinc has not yet been developed for the Spokane River, 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 necessary, a new TMDL will be developed. Prior to the development of TMDLs for 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). The permit requirement to execute a comprehensive stormwater management program that includes targeted pollution reduction activities and pollutant assessment and monitoring in each impaired AU by the City of Coeur d'Alene, is consistent with the developing TMDL.

The cold water aquatic life use in Coeur d'Alene Lake is not fully supported due to excess lead, zinc, and cadmium (2016 Integrated Report). 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 cold water aquatic life use in Fernan Creek is not fully supported due to excess heat according to the 2016 Integrated Report. The *Coeur d'Alene Tributaries Temperature Total Maximum Daily Loads: Addendum to the Coeur d'Alene Lake Subbasin Assessment and TMDLs* (DEQ 2012) identified that the cause of impairment is excess temperature loading, due to a lack of shade. The TMDL sets target loads for shade cover with the goal of returning the watershed to natural background vegetation conditions. The TMDL indicates that unique hydrologic conditions exist at the lower portion of Fernan Creek relevant to this MS4, which make it unlikely that the MS4 has any meaningful heat contribution to Fernan Creek during the months when temperatures are most likely to exceed Idaho's WQS. For example, a backwater condition exists at the confluence of Lake Coeur d'Alene and Fernan Creek below the outfall, which influences temperature independent of upstream shade and solar loading. This reach is also directly below the Fernan Lake outlet, making temperature heavily influenced by the upstream lake. In addition, a dam, which controls the elevation of Fernan Lake, exists directly above the reach. Consequently, this reach is significantly dewatered during the late summer months, which makes meeting shade targets on this reach of Fernan Creek unrealistic. These flow alteration and backwater conditions preclude the ability to fully mitigate temperature impairment caused by this condition. Additionally, surface water and stormwater discharge data collected by DEQ and the

City of Coeur d'Alene, respectively, indicate that stormwater discharges from the MS4 contribute temperatures that are on average, consistently cooler than the ambient temperature of Fernan Creek between the months of April through August, which are the months of concern for temperature exceedances of Idaho WQS.

Prior to the development of TMDLs for the Spokane River and Coeur d'Alene Lake, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04). Although the antidegradation policy and implementation provisions do not require consistency with the Coeur d'Alene Lake Management Plan, DEQ notes that the comprehensive stormwater management, monitoring, and pollution reduction activities required by the permit are consistent with the recommended actions in the Plan.

The permit contains clear, specific and measureable 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 prior individual MS4 permit for the City of Coeur d'Alene.

Specific terms and conditions of the permit that ensure the Spokane River, Fernan Creek, and Coeur d'Alene Lake receive a Tier I level of protection include:

- 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 the City of Coeur d'Alene 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 City of Coeur d'Alene MS4 permit provide reasonable assurance that the permittee will reduce discharge of pollutants to the maximum extent practicable. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Spokane River, Coeur d'Alene Lake, and

Fernan Creek 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, Fernan Creek, and Coeur d'Alene Lake are considered high quality for recreational 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 the primary contact recreation use of the Spokane River, Fernan Creek, and Coeur d'Alene Lake (IDAPA 58.01.02.052.05). Pollutants relevant to recreational uses include the following: microbial pollution, 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 for review (Permit Part 6.4.2), and is subject to on-site inspections (Permit Part 8.7). EPA also determined that additional pollutant reduction activities were required for the City of Coeur d'Alene.

This permit reissues the City of Coeur d'Alene's MS4 permit. 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. The permit contains monitoring and assessment expectations for the City of Coeur d'Alene MS4 (Permit Part 4.2). 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 City of Coeur d'Alene is required to conduct at least two pollutant reduction activities (Permit Part 4.3) targeting pollutants causing impairments in the Spokane River and Coeur d'Alene Lake. Therefore, DEQ has reasonable assurance that insignificant or no degradation will result from the discharge of pollutants from the City of Coeur d'Alene MS4 permit. EPA oversight through review of annual reports and periodic inspections should ensure

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

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 thus no degradation is expected with respect to these pollutants.

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 Spokane River and Coeur d'Alene Lake

In carrying out the requirements of Part 4.3 of the permit, the City of Coeur d'Alene must define and implement at least one pollutant reduction activity designed to reduce lead, zinc, and total phosphorus loadings from the MS4 into the Spokane River, and at least one pollutant reduction activity designed to reduce lead, zinc, cadmium, and total phosphorus loadings from the MS4 into Coeur d'Alene Lake.

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 Chantilly Higbee, Coeur d’Alene Regional Office at 208-769-1422 or via email at Chantilly.Higbee@deq.idaho.gov.



Dan McCracken

Regional Administrator

Coeur d’Alene Regional Office

