



Idaho Department of Environmental Quality Draft §401 Water Quality Certification

October 4, 2012

404 Permit Application Number: NWW-2012-512-B03

Applicant/Authorized Agent: City of Meridian

Project Location: T4N, R1W, Section 34, ¼SW, ¼NW in Ada County

Receiving Water Body: Fivemile Creek, Rutledge Lateral

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 activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon its review of the joint application for permit, publicly noticed on September 16, 2012, 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 activity 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.

This Certification shall remain in effect until December 31, 2013 at which time construction must be completed.

Project Description

This project is to install a flush line for the city of Meridian's potable water distribution system. The project includes installing a steel casing and new PVC water main under a piped portion of the Rutledge Lateral. The project will install a new 12" RCP gravity flush line to Fivemile Creek. Riprap will be placed to prevent erosion of the channel from flushing activities. In addition, portion of the Rutledge drain pipe may need to be removed and replaced to allow for the installation of the steel casing and water main.

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 primary pollutant of concern for this project is sediment. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various conditions to protect water quality and to meet Idaho WQS, including the water quality criteria applicable to sediment.

Receiving Water Body Level of Protection

The gravity flush line is located on Fivemile Creek in the lower Boise River Subbasin, within the assessment unit (AU) 17050114SW010_03 (Fivemile Creek - source to Milner Canal). This AU is designated for cold water aquatic and secondary contact recreation.

The secondary contact recreation beneficial use is not assessed. The only pollutant of concern for this project is sediment. Sediment is not relevant to recreational uses; therefore project will not result in a lowering of water quality with respect to recreational uses. Thus, this review will focus on the aquatic life use only. The cold water aquatic life use in this Fivemile Creek AU is not fully supported due to excess sediment siltation (2010 Integrated Report).

The other receiving water body in the project area is Rutledge Lateral. Rutledge Lateral is a man-made waterway, built to convey water for agricultural purposes. In accordance with IDAPA 58.01.02.101.02 man-made waterways are to be protected for the use for which they were

developed. Because the Rutledge Lateral is not protected for recreational or aquatic life uses, DEQ will provide Tier 1 protections only to both Fivemile Creek and Rutledge Lateral.

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. The numeric and narrative criteria in the WQS are set at levels that ensure protection of designated beneficial uses.

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. The *Lower Boise River SBA and TMDL* (DEQ, 1999) includes a total suspended sediments target load for the main stem Boise River, and its tributaries, of 50 mg/l for no more than 60 days, and 80 mg/l for no more than 14 days. In the *Lower Boise River 5-Year SBA and TMDL Review* (DEQ, 2009), it is noted that the Fivemile Creek sediment loads exceed the TMDL targets for sediment. Therefore, this project must ensure that discharges do not cause an increase in sediment loading to Fivemile Creek or cause or contribute to an excursion above any applicable water quality standard.

During the construction phase, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. To be consistent with the *Lower Boise SBA and TMDL*, as long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, and conditions of this certification, then there is reasonable assurance the project will comply with the state's numeric and narrative criteria. These criteria are set at levels that protect and maintain designated and existing beneficial uses. It is noted that in-water work activities for this project will occur during the low flow, non-irrigation season (October 15 through March 15), to minimize sediment transport. A coffer dam will be used to bypass any flow in Fivemile Creek and sediment control mats will be placed downstream of the coffer dam to minimize turbidity. Riprap will be placed flush to the existing surface of Fivemile Creek to protect bed and bank from erosion during flush line discharge. It is also noted that if flows are encountered within Rutledge Lateral they will be bypassed using mechanical pumps. Straw Wattles and underwater sediment control mats will be installed to minimize siltation.

The permit requirements, coupled with the conditions set forth in this certification, ensure that the level of water quality necessary to protect both designated and existing uses is maintained and protected in compliance with 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

General Conditions

1. This certification is conditioned upon the requirement that any modification (e.g., change in BMPs, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401. Such modifications may not be implemented until DEQ has determined whether additional certification is necessary.
2. DEQ reserves the right to modify, amend, or revoke this certification if DEQ determines that, due to changes in relevant circumstances—including without limitation, changes in project activities, the characteristics of the receiving water bodies, or state WQS—there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.
3. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.
4. A copy of this certification must be kept on the job site and readily available for review by any contractor working on the project and any federal, state, or local government personnel.
5. Project areas shall be clearly identified in the field prior to initiating land-disturbing activities to ensure avoidance of impacts to waters of the US beyond project footprints.
6. The applicant shall provide access to the project site and all mitigation sites upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.
7. The applicant is responsible for all work done by contractors and must ensure the contractors are informed of and follow all the conditions described in this certification and the Section 404 permit.

Fill Material

1. Fill material shall be free of organic and easily suspendable fine material. The fill material to be placed shall include clean earth fill, sand, and stone only.
2. All temporary fills shall be removed in their entirety on or before construction completion.
3. Excavated or staged fill material must be placed so it is isolated from the water edge or wetlands and not placed where it could re-enter waters of the state uncontrolled.

Erosion and Sediment Control

1. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standard as stipulated under the Idaho WQS (IDAPA 58.01.02.250.02.e). Any violation of this standard must be reported to the DEQ regional office immediately.
2. BMPs for sediment and erosion control suitable to prevent exceedances of state WQS shall be selected and installed before starting construction at the site. One resource that may be used in evaluating appropriate BMPs is DEQ's *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties*, available online at <http://www.deq.idaho.gov/media/494058-entire.pdf>. Other resources may also be used for selecting appropriate BMPs.
3. One of the first construction activities shall be placing permanent and/or temporary erosion and sediment control measures around the perimeter of the project or initial work areas to protect the project water resources.
4. Permanent erosion and sediment control measures shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state. They shall be installed at the earliest practicable time consistent with good construction practices and shall be maintained as necessary throughout project operation.
5. Top elevations of bank stabilization shall be such that adequate freeboard is provided to protect from erosion at 100-year design flood elevation.
6. Structural fill or bank protection shall consist of materials that are placed and maintained to withstand predictable high flows in the waters of the state.
7. At a minimum, BMPs must be inspected and maintained daily during project implementation. BMPs shall be replaced or augmented if they are not effective.
8. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
9. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
10. Maximum fill slopes shall be such that material is structurally stable once placed and does not slough into the stream channel during construction, during periods prior to revegetation, or after vegetation is established.
11. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.
12. Sediment from disturbed areas or able to be tracked by vehicles onto pavement must not be allowed to leave the site in amounts that would reasonably be expected to enter waters of the state. Placement of clean aggregate at all construction entrances or exits and other BMPs such as truck or wheel washes, if needed, must be used when earth-moving equipment will be leaving the site and traveling on paved surfaces.

Turbidity

1. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standard as stipulated under the Idaho WQS (IDAPA 58.01.02). Any violation of this standard must be reported to the DEQ regional office immediately.

2. All practical BMPs on disturbed banks and within the waters of the state must be implemented to minimize turbidity during in-water work.
3. If a visible plume is observed, then the project may be causing an exceedance of the WQS. If an exceedance occurs, the applicant must inspect the condition of the projects BMPs. If the BMPs appear to be functioning to their fullest capability, then the applicant must modify the activity (this may include modifying existing BMPs).

In-water Work

1. Work in open water is to be kept at a minimum and only when necessary. Equipment shall work from an upland site to minimize disturbance of waters of the US.
2. Construction affecting the bed or banks shall take place only during periods of low flow.
3. Fording of the channel is not permitted.
4. Work in waters of the state shall be restricted to areas specified in the application.
5. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

Vegetation Protection and Restoration

1. Disturbance of existing native vegetation shall be kept to a minimum.
2. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
3. Fencing and other barriers should be used to mark the construction areas.
4. If authorized work results in unavoidable vegetative disturbance, riparian vegetation shall be successfully reestablished to function for water quality benefit at pre-project levels or improved at the completion of authorized work.

Dredge Material Management

1. Upland disposal of dredged material must be done in a manner that prevents the material from re-entering waters of the state.

Management of Hazardous or Deleterious Materials

1. Petroleum products and hazardous, toxic, and/or deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the state. Adequate measures and controls must be in place to ensure that those materials will not enter waters of the state as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third-party activities.
2. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
3. Daily inspections of all fluid systems on equipment to be used in or near waters of the state shall be done to ensure no leaks or potential leaks exist prior to equipment use. A log book of these inspections shall be kept on site and provided to DEQ upon request.

4. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
5. Equipment and machinery shall be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment prior to entering a water of the state. Any wastewater or wash water must not be allowed to enter a water of the state.
6. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
7. Spills of petroleum products must be cleaned up immediately in accordance with the WQS, IDAPA 58.01.02.851.04.

Culverts

1. The culvert shall not constrict the stream channel and shall not be angled such that the outflow is directed toward the stream bank. The culvert's flow line shall match the existing stream invert at its entrance and exit. Adequate grade control shall be installed to prevent channel down cutting or excessive deposition from occurring.
2. The culvert outflow shall be armored with riprap to provide erosion control. This riprap will be clean, angular, dense rock that is free of fines and resistant to aquatic decomposition.
3. Culverts shall be sized appropriately to maintain the natural drainage patterns.

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 Julia Achabal, DEQ Boise Regional Office, 208.373.0321, julia.achabal@deq.idaho.gov.

DRAFT

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