STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor
Curt Fransen, Director

September 12, 2014

Matt Hightree
City of Boise
150 N Capital Blvd, City Hall #2
Boise, ID 83702

Re: Reference No. NWW-2014-00270
City of Boise Phosphorus Removal Facility – Dixie Drain

Dear Mr. Hightree:

The Department of Environmental Quality (DEQ) has considered water quality certification for construction related to the referenced project. DEQ is issuing the attached 401 Water Quality Certification subject to the terms and conditions contained therein.

This certification shall remain in effect until December 31, 2016, at which time construction must be completed.

If you have any questions or further information to present please contact Julia Achabal, at 373-0321, or via email at Julia.Achabal@deq.idaho.gov.

Sincerely,

Pete Wagner
Regional Administrator
Boise Regional Office

JRA: dr

c: Greg Martinez, COE, Boise
Miranda Adams, DEQ State Office
TRIM 2014AKF70

Idaho Department of Environmental Quality

Final §401 Water Quality Certification

September 12, 2014

404 Permit Application Number: NWW-2014-00270

Applicant/Authorized Agent: City of Boise

Project Location: T5N, R5W, Section 36, W½; 43.728963, -116.885837

Receiving Water Body: Dixie Slough and Eureka Canal

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, received on July 30, 2014, 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, 2016.

Project Description

The City of Boise will construct a water diversion structure and outfall in the Dixie Slough that will feed a non-point source water treatment facility. This project will also replace the existing intake structure for the Eureka Canal with a new gated structure.

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

This project is located on Dixie Slough within the Lower Boise Subbasin assessment unit (AU) ID17050114SW001_02 (Remnant channels and oxbows of the Boise River). This AU has the following designated beneficial uses: cold water aquatic life and primary contact recreation. The cold water aquatic life beneficial use in this assessment unit is not fully supported due to temperature. The primary contact recreation beneficial use has not been assessed (2012 Integrated Report). *E. coli* data collected in 2011, used to calculate a geometric mean, indicate that recreational uses are also not fully supported, but the only pollutant of concern associated with this project is sediment and sediment is not relevant to recreational uses.

Eureka Canal is also in the project area, but is a man-made water and is not included in any assessment unit. DEQ protects man-made waters for the use in which they are developed (IDAPA 58.01.02.101.02); in this case, agricultural 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).

As such, DEQ will provide Tier 1 protection for the primary contact recreation and cold water aquatic life uses in this AU (IDAPA 58.01.02.051.01).

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.

Construction of the inlet, outlet and gravity irrigation takeout structure will impact the Dixie Slough channel. Construction of the treatment facility will take place in the winter months, during the period of low flow. Coffer dams will be used to divert flow from the construction footprint and reduce sediment resulting from construction activities. Any temporary disturbance to wetlands areas will be re-graded to original contours and seeded with a native wetland seed mix.

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. 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.

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above; therefore, the permit ensures that the level of water quality necessary to protect both designated and existing uses is maintained and protected in compliance with the Tier 1 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

Required Notification

The permittee must notify the DEQ Boise Regional Office, Julia Achabal, 208-373-0321 or Julia.Achabal@deq.idaho.gov when authorized work begins.

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 state 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.
8. If this project disturbs more than 1 acre and there is potential for discharge of stormwater to waters of the state, coverage under the EPA Stormwater Construction General Permit *must* be obtained. More information can be found at http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/Region+10+CGP+resources.

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. Fill material shall not be placed in a location or in a manner that impairs surface or subsurface water flow into or out of any wetland area.
3. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.
4. All temporary fills shall be removed in their entirety on or before construction completion.
5. 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. 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.

2. 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.
3. 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.
4. Permanent erosion and sediment control measures 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. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
8. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
9. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
10. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
11. 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.
12. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.
13. 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. Visual observation is acceptable to determine whether BMPs are functioning properly. If a plume is observed, the project may be causing an exceedance of WQS and the permittee must inspect the condition of the projects BMPs. If the BMPs appear to be functioning to their fullest capability, then the

permittee must modify the activity or implement additional BMPs (this may also include modifying existing BMPs).

3. Containment measures such as silt curtains, geotextile fabrics, and silt fences must be implemented and properly maintained to minimize instream sediment suspension and resulting turbidity.
4. Turbidity monitoring must be conducted, recorded. Monitoring must occur each day during project implementation when project activities may result in turbidity increases above background levels. *A properly and regularly calibrated turbidimeter is recommended.*

   Turbidity shall not exceed background turbidity by more than fifty (50) nephelometric turbidity units (NTU) or more than twenty-five (25) NTU for more than ten (10) consecutive days.

   If an exceedance occurs, the permittee 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).

   Copies of daily logs for turbidity monitoring must be available to DEQ upon request

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 state. If this is not practicable, appropriate measures must be taken to ensure disturbance to the waters of the state is minimized.
2. Construction affecting the bed or banks shall take place only during periods of low flow.
3. Fording of the channel is not permitted. Temporary bridges or other structures shall be built if crossings are necessary.
   a. Temporary crossings must be perpendicular to channels and located in areas with the least impact. The temporary crossings must be supplemented with clean gravel or treated with other mitigation methods at least as effective in reducing impacts. Temporary crossings must be removed as soon as possible after the project is completed or the crossing is no longer needed.
4. Heavy equipment working in wetlands shall be placed on mats or suitably designed pads to prevent damage to the wetlands.
5. Work in waters of the state shall be restricted to areas specified in the application.
6. Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.
7. 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 wetlands and 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 and wetland vegetation shall be successfully reestablished to function for water quality benefit at pre-project levels or improved at the completion of authorized work.

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. In accordance with IDAPA 58.01.02.850, in the event of an unauthorized release of hazardous material to state waters or to land such that there is a likelihood that it will enter state waters, the responsible persons in charge must
   b. Make every reasonable effort to abate and stop a continuing spill.
   c. Make every reasonable effort to contain spilled material in such a manner that it will not reach surface or ground waters of the state.
   d. Immediately notify DEQ of the spill by calling the Idaho State Communications Center at 1-800-632-8000.
   e. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.
8. Any release that causes a sheen (of any size) in waters of the state must be reported *immediately* to the National Response Center at 1-800-424-8802 and DEQ by calling the Idaho State Communications Center at 1-800-632-8000.

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 DEQ Boise Regional Office, Julia Achabal, 208-373-0321 or Julia.Achabal@deq.idaho.gov.

Pete Wagner
Regional Administrator
Boise Regional Office