



State of Utah

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DIVISION OF WATER QUALITY
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Director

BUILD

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APR 06 2017

H. Craig Petersen, Mayor
Logan City's Mayor Office
290 North 100 West
Logan, UT 84321

Subject: **Approval 401 Water Quality Certification with Conditions.**
401 Water Quality Certification No.: FERC-P-4258.
FERC Amended License No.: P-4258-046
USACE 404 NWP Permit No.: SPK 2015-00690-UO.

Applicant: Logan City.
Project: Logan Third Dam Rehabilitation – Logan No. 2 Project.
Date of Application: October 25, 2016.
Requests: (1) Replace the spillway crest gates with Obermeyer weirs; (2) replace spillway abutment walls; (3) armor the abutments of the dam, which may consist of a combination of riprap and/or roller compacted concrete; (4) replace the penstock isolation gate (radial gate) with an Obermeyer weir gate; (5) replace the trash rack at the intake structure; (6) replace the low level sluice gatehouse; (7) rehabilitate the upstream face of dam; (8) dredge about 100,000 cubic yards of sediment from the reservoir; (9) refurbish the electrical generating equipment, which includes replacing the existing runners, wicket gates, and associated parts that are damaged; (10) recoat the interior and exterior of the steel portion of the penstock to reduce corrosion potential; and (11) replace the roof and repair the walls of the existing surge tank.

Purpose: Based on the available information, the overall project purpose is to repair, rehabilitate and upgrade the Third Dam Facility in order to provide for safe and efficient operation.

Location: Approximately 6.5 miles east on Hwy 89 from Main Street in Logan, Utah . Project is located within Section 28, Township 12 North, Range 2 East, Salt Lake Meridian, Latitude 41.72°, Longitude -111.71°, Logan City, Cache County, Utah.

Watercourse: Logan River, Bear River Watershed Management Unit, Cache County, Utah.

Public Comment Period: 02/21/2017 – 03/22/2017.
Comments and Inquiries Received: None.



DWQ-2017-002929 *AM*

Dear Mayor Peterson:

Pursuant to Section 401 of the Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA), the Utah Department of Environmental Quality, Division of Water Quality (DWQ) certifies

that the Logan City Corporation has provided reasonable assurances that any discharge associated with the Logan Third Dam Rehabilitation – Logan No. 2 Project (Project) will not violate surface water quality standards, or cause additional degradation in surface waters not presently meeting water quality standards. In accordance with Section 401(a)(1) of the CWA [33 U.S.C. Sec. 1341(a)(1)], DWQ hereby issues this amended 401 Water Quality Certification provided the conditions outlined below are met and included in the FERC License Amendment Order for Project P-4285 and the U.S. Army Corps of Engineers (USACE) 404 Nationwide Permit SPK 2015-00690. The affected portions of the Bear River have the following beneficial uses as stated in Utah Administrative Code (UAC R317-2-6):

Class 2B – Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water;

Class 3A - Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.

Class 3D – Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.

Class 4 - Protected for agricultural uses including irrigation of crops and stock watering.

As documented in Utah's 2016 *Integrated Report*, the Logan River was assessed as being impaired for total phosphorous. The Cutler Reservoir TMDL addressed this impairment and was approved by U.S. EPA in 2010 (see link <https://deq.utah.gov/ProgramsServices/programs/water/watersheds/docs/2010/03Mar/BearRiverCutlerReservoirTMDLsFinalReportFeb2010.pdf>). The TMDL recommended a load reduction of total phosphorous to be obtained through a combination of animal waste management BMPs and pasture and rangeland improvements.

The FERC and USACE are requested to include all of the amended conditions of this 401 Water Quality Certification (Certification) in the FERC License Amendment Order for Project P-4258-046 and the USACE 404 Nationwide Permit SPK 2015-00690-UO.

Approval is hereby given to conduct the outlined Project requests as described in the 401 Water Certification Application dated Oct. 25, 2016, FERC-P-4258, under the following conditions.

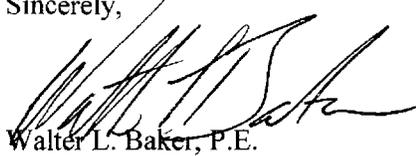
1. Applicant should ensure that all workers involved are continuously aware of the water quality protection measures before the start and during the dredging and construction period.
2. Water quality standards in the Logan River and its tributaries could be violated unless appropriate Best Management Practices (BMPs) are incorporated to minimize the erosion-sediment and nutrient load to any adjacent waters during Project construction activities. Utah Administrative Code R317-2 requires that the Project and subcontractors cannot increase water turbidity by 10 NTUs in Logan River or tributaries and if violated shall immediately notify the DWQ. A fact sheet describing the Utah Department of Environmental Quality's (DEQ) recommended environmental BMPs for construction sites are located on our web site at: <http://www.deq.utah.gov/Permits/water/updes/docs/utrc00000.pdf>
3. Applicant should ensure that real-time turbidity monitoring (RTTM) is continuously available during Project sediment dredging and construction and have a third party notification process. The third party will be responsible to notify the on-site construction manager of any impairment readings for dissolved oxygen and turbidity to meet Class 3A Water Quality Standards along with specific conductance, temperature, flow and pH. All work will cease and desist until water

- quality readings meet Water Quality Standards. Project work in the Logan River will not be conducted if RTTM is not working properly at the start of each working day and work will not continue past four hours continuous of downtime of the RTTM equipment.
4. Adhere to the minimum flow requirements outlined on page 29 Table 2 entitled “*Seasonal minimum flow requirements as specified in license Article 105 and Forest Service 4C Condition No. 26*” found in the FERC Environmental Assessment dated Sept 2, 2016 (FERC EA).
 5. Before construction or ground-disturbing activities begin, the Project must receive DWQ Approval for the following plans:
 - a) Reservoir Sediment Maintenance (dredging, disposal, re-suspension, dewatering and fish rescue);
 - b) Instream Flow and Turbidity Measurement, Monitoring and Notification;
 - c) Spoils Management and Hazardous Materials (spoils contamination and accidental spills);
 - d) Method for passage of river flow cofferdams in consultation with US Forest Service;
 - e) Wetland Mitigation and Monitoring Plan in consultation with USACE.
 6. Project construction should not preclude the addition of a fish ladder at some future date.
 7. Refueling equipment and storage of lubricants and fuels will occur at designated staging areas and in state approved containers. The storage and refueling areas will be at least 500 feet from the edge of the nearest water body (including wetlands), at least 200 feet from the nearest private water supply well, and at least 100 feet from the nearest municipal water supply well.
 8. Utah Code Annotated 19-5-114 requires that any spill or discharge of oil or other substances which may cause pollution to the waters of the State, including wetlands, must be immediately reported to the Utah DEQ Spill Hotline at (801) 536-4123, a 24-hour phone number. Logan City agrees to fully remediate any spill or discharge in accordance with all applicable regulations.
 9. Logan City must acquire all necessary easements, access authorizations and permits to ensure they are able to implement the Project, including the Utah Department of Transportation.
 10. The legislatively-mandated fee for 2017 is \$90.00/hour, for review and issuance of the §401 Water Quality Certification
<http://www.deq.utah.gov/FeesGrants/fees/docs/2016/DEQFEEDOC17.pdf>, per: (see page 174). An invoice will be sent to you once all plans have been approved. Your payment is due within 30 days.
 11. Logan City shall not use any fill material which may leach organic chemicals (e.g., discarded asphalt) or nutrients (e.g., phosphate rock) into waters of Utah.
 - a. Construction activities that disturb one acre or more, or are part of a common plan of development, are required to obtain coverage under the Utah Pollutant Discharge Elimination System (UPDES) Storm Water General Permit for Construction Activities, Permit No. UTRC00000. The permit requires the development of a storm water pollution prevention plan (SWPPP) to be implemented and updated from the commencement of any soil disturbing activities at the site until final stabilization of the project. A fact sheet describing the permit application procedures are located on our web site at: www.deq.utah.gov/Permits/water/updes/updes_f.htm
 - b. Dewatering activities, if necessary during the construction, may require coverage under the UPDES General Permit for Construction Dewatering, Permit No. UTG070000. The permit requires water quality monitoring every two weeks to ensure that the pumped water is meeting permit effluent limitations, unless the water is managed on the construction site. For more dewatering information refer to DEQ’s website at: <http://www.deq.utah.gov/Permits/water/updes/docs/utrc00000.pdf>
 12. §401 Certification Modification: Without limiting DWQ’s discretion to take other actions in accordance with UAC R317-15, and, as applicable, 33 USC 1341, DWQ may modify the Certification to add, delete, or modify the conditions in this Certification as necessary and feasible to address:

- a) Adverse or potentially adverse Project effects on water quality or designated beneficial uses that did not exist or were not reasonably apparent when this Certification was issued;
- b) TMDLs;
- c) Changes in water quality standards;
- d) Any failure of Certification conditions to protect water quality or designated beneficial uses when the Certification was issued; or
- e) Any change in the Project or its operations that will not adversely affect water quality or designated beneficial uses when this Certification was issued.

Please contact Mr. Bill Damery at (801) 536-4354, wdamery@utah.gov with any questions you may have concerning this 401 Water Quality Certification with Conditions.

Sincerely,



Walter L. Baker, P.E.
Director

WLB/WD/blj

cc: Hollis Jencks, USACE, via mail
Peter Yarrington, FERC, via email
Stan Postma, via email

DWQ-2017-000866