



State of Utah

GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

Department of  
Environmental Quality

Alan Matheson  
Executive Director

DIVISION OF WATER QUALITY  
Walter L. Baker, P.E.  
Director

for 401 Wq Cert billing Tracy Behling  
Ferron Canyon & Irrigation Company  
P.O. Box 256  
Ferron, UT 84523

**Subject: Approval 401 Water Quality Certification with Conditions.**  
401 Water Quality Certification No.: SPK 2013-00240, Amended.  
USACE 404 Permit No.: SPK 2013-00240.

Applicant: Ferron Canal and Reservoir Company.

Project: Millsite Reservoir Sluicing Project.

Date of Amended Request: February 8, 2016.

Amended Requests: 1) dredge to the spillway at the average daily sediment concentration of inflow to inception of spill for that current year; 2) revise the Dissolved Oxygen requirement; 3) eliminate the pre-existing condition, #3, to align the outgoing and incoming Ferron Creek monitoring sites to an average daily NTU level within 15 NTUs. Purpose: According to the applicant the purpose of the project is twofold: (1) to maintain the present storage capacity of Millsite Reservoir, which loses approximately 74 acre-ft/yr of water storage each year to sediment deposits, and (2) to replenish Ferron Creek with turbid water that more closely mimics the natural state of Ferron Creek than the present clear-water discharge regime. The turbid water will be beneficial to native Utah fish that use turbid water as part of their habitat. A hydraulic dredge will move water through a pipeline in the reservoir to the uncontrolled spillway where effluent will be released when the spillway is discharging.

Location: The project site is located on Millsite Reservoir, approximately 3 miles west of the town of Ferron, in Section 11, Township 20 South, Range 6 East, Salt Lake Meridian, Latitude 39.0994°, Longitude -111.1976°, Emery County, Utah, and can be seen on the UT-FERRON USGS Topographic Quadrangle.

Watercourse: Ferron Creek, Colorado River Watershed Management Unit, Utah.

Public Comment Period: Original comment period 06/17/2014 – 07/16/2014; Amended comment 03/11/2016 – 04/11/2016.

Dear Mr. Behling:

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 Ferron Creek Irrigation Company has provided reasonable assurances that any discharge associated with the Millsite Reservoir Sluicing 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 U.S. Army Corps of Engineers (USACE) 404 standard individual permit SPK 2013-00240. The affected portions of Ferron Creek have the following beneficial uses Utah Administrative Code (UAC R317-2-6):

Class 2B – Protected for infrequent primary contact recreation;

Class 3C – Protected for nongame fish and other aquatic life, including the necessary aquatic organisms in their food chain;

Class 4 – Protected Agricultural uses.

As documented in Utah's 2014 *Integrated Report*, Ferron Creek was assessed as Category 3 meaning no assessment has been conducted and more data is required. Ferron Creek continues to be protected by Utah's Narrative Standards (UAC R317-2-7.2) and antidegradation policy (UAC R317-2-3).

The USACE is requested to include all of the amended conditions of this 401 Water Quality Certification (Certification) in the USACE 404 Individual Permit SPK 2013-00240 and any related off-site storage Nationwide Permit.

Approval is hereby given to conduct sediment maintenance in Millsite Reservoir under the following conditions.

1. Daily dredging material discharge from the Millsite Reservoir, Emery County, Utah (Millsite Reservoir) to the uncontrolled secondary spillway (spillway) will be based on the calculated average daily suspended-sediment concentration (ADSC) from the upstream USGS monitoring station 0932650 (upstream station) for the current calendar year from the time the Millsite Reservoir begins to fill to the time the spillover begins. The USGS downstream monitoring station 09327000 (downstream station) will be monitored daily to verify the dredging discharge's ADSC is being met. Every effort will be made by the operation not to exceed the ADSC. Any ADSC exceedances greater than 25% will be reported to DWQ Certification contact within 48 hours from the day of each exceedance.
2. The maximum volume of sediment load to be passed downstream will be limited to the load volume received to Millsite Reservoir calculated from the upstream station for that current year. Any load averages calculated from the downstream station maybe deducted from the following year's operation.
3. Adding dredging material to the spillway will only occur during times when the flow  $r$  is greater than 50 cubic feet per second (cfs) from the spillway at the Millsite Reservoir.
4. Notify DWQ Certification contact 48 hours prior to commencement of the dredge and spill operation, and within 48 hours after the operation ceases for each year of operation. This condition, #4, maybe waived at the Director's discretion.
5. Each dredging event to the spillway will utilize the latest regression equations relating sediment load from the two USGS gauges, based on sediment concentration and turbidity data collected from previous spillover events.
6. If communication fails between one or both of the USGS gauges, every effort will be made to replace the unit(s) the following day. The Project can continue dredging only through the next day at the last known ADSC constant rate. Any procedure for continuance after this 24 hour timeframe will be subject to DWQ approval.

7. Where the design channel water surface is below natural ground, a one (1) foot freeboard shall be maintained from the top of terrace. If the water surface exceeds this freeboard, operations will cease immediately until a safe freeboard can be maintained. Each cross section will be visually checked daily during the dredge and spill operation to determine if water levels are approaching terrace levels.
8. When the spill and dredging operation ceases, the channel will be inspected and any cross section (transects) reach with more than 1.5 ft. average deposition will be excavated to the offsite storage area or landfill.
9. The Applicant will have the USGS create and update a Turbidity-Suspended Sediment (Load) model for every year this Project is in operation.
10. Dissolved oxygen in the water of the affected reach of Ferron Creek will be monitored daily whenever sediment is being added to Ferron Creek to verify that sediment oxygen demand does not result in dissolved oxygen (DO) concentrations of less than 3.0 mg/L and additionally the DO is not allowed to drop below 5 mg/L for more than three consecutive days. (RDCC Jan. 27, 2016 DWR e-mail to W. Baker DWQ-2016-006956) If monitoring limitations prevent reliable daily DO monitoring, then a functional minimum of 5 mg/L DO will be maintained. Daily monitoring will be conducted for the entire period dredging material is being added to the spillway. Dredging rates will be decreased if DO concentrations are 3.0 mg/L or less or cease if a 3.0 mg/L or above DO level cannot be maintained. An annual report will be submitted to the Division Director by November 1 of each year the project is active. This report will include at minimum a detailed explanation on how each Certification condition was met during the past year's operation including: the current USGS Load Modeling results, a comparison of the incoming and outgoing volume of sediment loads to Millsite Reservoir with the sediment loads restored to Ferron Creek (via the secondary spillway), all turbidity and temperature data, discharge rates, number of days that sediment restoration activities occurred (indicate which dredging days were to the off-site storage area), and all DO monitoring results. Describe any measurable impacts to the seven established baseline cross sections (transects at Mill Road, 800 W, 400 W, Highway 10, Conover, Molen and Diversion) before, during, and after each spillway discharge event noted in Table 1 entitled "Ferron Creek monitoring locations and measured parameters" found in the 2015 *Mitigation and Monitoring Plan to Support Application SPK 2013-00240-UO*, Hotchkiss, not dated. Measurable impacts should include a detailed description of any excessive deposition from streambed elevation resurveys, damaging deposition of fines in streambed from point bar resampling, and changes in invertebrate and fish population at the sampled transects. Based on the findings, a clear water flush maybe required.
11. If monitoring indicates that deposition of only silts and fine sands are causing an adverse effect to the stream environment, the following season the dredging shall occur further upstream of the dam (further west) to include removal of coarser materials such as small to medium sized gravels.
12. Parameters described in Table 1 found in the 2015 *Mitigation and Monitoring Plan to Support Application SPK 2013-00240-UO*, Hotchkiss' will be measured twice each year for the first four occurrences of spillway discharge: once before spillway discharge and once after. After four spillover occurrences starting in 2016, the '2015 *Mitigation and Monitoring Plan to Support Application SPK 2013-00240-UO*, Hotchkiss' can be revisited.
13. Each year of operation will utilize the previous years' updated regression equation for each established USGS gauge monitoring site.
14. Update the 2015 *Mitigation and Monitoring Plan to Support Application SPK 2013-00240-UO*, Hotchkiss per DWQ comments as agreed in the letter dated May 13, 2015 from R. Hotchkiss to T. Hooker and the May 12, 2015 Hotchkiss addendum.

15. 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. Ferron Canyon & Irrigation Company agrees to fully remediate any spill or discharge in accordance with all applicable regulations.
16. Ferron Canal and Reservoir Company 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.
  - o Construction activities that disturb one acre or more are required to obtain coverage under the Utah Pollutant Discharge Elimination System (UPDES) Storm Water General Permit for Construction Activities, Permit No. UTR300000. 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:  
<http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm>
17. Ferron Canal and Reservoir Company must acquire all necessary easements, access authorizations and permits to ensure they are able to implement the Millsite Reservoir Sluicing Project.
18. The off-site disposal area shall be constructed per final engineer stamped drawings submitted by Jones & DeMille Engineering to DWQ on May 20, 2015 or any subsequent DWQ approved plans.
19. To further protect aquatic life upon the renewal of this Certification the applicant will review options with DWQ in returning a minimal flow amount immediately downstream to Ferron Creek from the Millsite Reservoir as a result of the reservoir storage capacity increase from the entire dredging operations.
20. The legislatively-mandated fee for 2016 is \$90.00/hour, for review and issuance of the §401 Water Quality Certification, per:  
<http://www.deq.utah.gov/FeesGrants/fees/docs/2015/05May/DEQFEEDOC16.pdf>, (see page 10). An invoice will be sent to you by August 1, 2016. Your payment is due within 30 days.
21. §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 Millsite Reservoir Sluicing 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](mailto: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:ag

cc: Michael Pectol, USACE.  
Rollin Hotchkiss, BYU

DWQ-2013-00240.  
File: SPK 2013-00240.

DRAFT