

**In the Matter of:  
NORTH UTAH COUNTY WATER  
CONSERVANCY DISTRICT  
Attn: Mr. John Jacobs  
75 North Center Street  
American Fork, Utah 84003**

**NOTICE OF VIOLATION  
AND COMPLIANCE ORDER  
DOCKET NO. I16-07**

**A. STATUTORY AUTHORITY**

This **NOTICE OF VIOLATION and COMPLIANCE ORDER (NOV/CO)** is issued by the **DIRECTOR OF THE UTAH DIVISION OF WATER QUALITY (DIRECTOR)** pursuant to the authority under the Utah Water Quality Act, as amended, Utah Code Ann. §§ 19-5-101 to 19-5-124 (the **ACT**), including Utah Code Ann. §§ 19-5-106(2)(d), 19-5-111 and 19-5-115. This **NOV/CO** is also issued in accordance with the Utah Administrative Procedures Act, Utah Code Ann. §§ 63G-4-101 through 63G-4-601.

**B. APPLICABLE STATUTORY AND REGULATORY PROVISIONS**

1. It is unlawful for any person to discharge a pollutant into waters of the state, unless the discharge is authorized by permit, Utah Code Ann. § 19-5-107(1)(a). Waters of the State means “all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state.”, Utah Code Ann. § 19-5-102(23)(a). See also Utah Admin. Code R 317-1-1.
2. It is unlawful for any person to make any discharge not authorized under an existing valid discharge permit, Utah Code Ann. § 19-5-107(1)(a).
3. It is unlawful “to cause pollution which constitutes a menace to public health and welfare, or is harmful to wildlife, fish or aquatic life, or impairs domestic, agricultural, industrial, recreational, or other beneficial uses of water”. It is also unlawful “to place or cause to be placed any wastes in a location where there is probable cause to believe it will cause pollution”, Utah Code Ann. § 19-5-107(1)(a).
4. *Utah Admin. Code R 317-2-7.1(numeric standard)* prohibits any person from discharging, or placing “...any wastes or other substances, in a manner that may interfere with water’s designated uses protected by assigned classes or to cause any of the applicable standards to be violated...”.
5. *Utah Admin. Code R 317-2-7.2, Narrative Standards* prohibits any person from discharging or placing any waste or other substance “.....in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or

result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures.”

6. *Utah Admin. Code R 317-15-1* requires that any federally permitted activity “...be conducted in a manner that will comply with applicable discharge and water quality requirements in order to maintain the chemical, physical, and biological integrity of waters of the United States within the State.”

### C. FINDINGS OF FACT

1. On information and belief, **NORTH UTAH COUNTY WATER CONSERVANCY DISTRICT** (hereinafter “**NUCWCD**”) is a water conservancy district organized under the laws of Utah and located in American Fork, Utah. On information and belief, **NUCWCD** owns and operates the Tibble Fork Dam, located below the confluence of Deer Creek and North Fork American Fork River in American Fork Canyon, Utah County, Utah.
2. The American Fork River and its tributaries are designated as 2B, 3A, 4 State Waterways in *R317-2-13.5(c), Classification of Waters of the State, Standards of Quality for Waters of the State*. In addition, the American Fork River and its tributaries are designated as a Category 1 Water for antidegradation purposes in *R317-2-12.1(a), Category 1 and Category 2 Waters, Standards of Quality for Waters of the State*.
3. As part of a required effort to seismically upgrade and increase storage capacity of the Tibble Fork Dam, **NUCWCD** and its contractors, Whitaker Construction Co., Inc., and RB&G Engineering, Incorporated, are rebuilding the Tibble Fork Dam. Part of this rebuilding effort requires the draining of Tibble Fork Reservoir, a 259 acre-foot reservoir created by the construction of Tibble Fork Dam in 1966.
4. The drainage basin of the North Fork of American Fork River contains several inactive and closed mines dating from the late 1800s and early 1900s. In preparation for the construction, in 2010 a contractor for the Natural Resources Conservation Service (NRCS) took samples of the sediment from the bottom of Tibble Fork Reservoir. Analysis of these samples confirmed the sediment was contaminated with arsenic and lead in excess of EPA’s Residential Regional Screening Levels. These findings were documented in Appendix D of the *Final Supplemental Watershed Plan No. 10 and Environmental Assessment for the Rehabilitation of Tibble Fork Dam*, prepared for the NRCS by McMillen, LLC, and dated January, 2015.
5. On or about June 13, 2016, construction on the dam rehabilitation project began. The projected completion date for the construction is December 15, 2016.

6. On or about August 19, 2016, NUCWCD began to release water from Tibble Fork Reservoir as part of a planned reduction in the water level to allow construction on the lower portions of the dam and water outlet. As the water level in the reservoir dropped, the North Fork of American Fork River began to erode through a large bar of sediment which had accumulated on the bottom of the reservoir, releasing an estimated 8,700 cubic yards of sediment into the river.
7. On or about August 21, 2016, a witness observed a large amount of sediment in the waters of the North Fork of American Fork River, which flowed into American Fork River and contaminated the water. The witness stated the river appeared to be full of mud and he observed numerous dead fish. According to Mike Slater, of the Utah Division of Wildlife Resources (DWR), there were no live fish found in a two-mile stretch of the North Fork of the American Fork River between the Tibble Fork Dam and the confluence with the South Fork of the American Fork River during a survey conducted by the DWR on August 23, 2016. Mr. Slater estimated the total number of rainbow and brown trout killed in the affected areas of the river to be approximately 5,250 fish.
8. On August 21, 2016, employees of the National Park Service at Timpanogos Cave National Monument observed a “substantial sediment discharge” in American Fork River near the monument headquarters. On August 22, 2016, Park Service employees took water samples from the river near Cave Camp Springs in the Monument. Subsequent analysis of these samples revealed the water contained 7,680 milligram per liter (mg/L) of suspended solids, and 0.276 mg/L arsenic, 5.61 mg/L lead, 0.00427 mg/L mercury, and 8.05 mg/L zinc. By contrast, a water sample taken by Park Service employees at the same location on August 8, 2016, contained only 3.60 mg/L of suspended solids, and no detectable concentrations of arsenic, lead, mercury or zinc.
9. On the morning of August 23, 2016, the United States Forest Service notified the Division of Water Quality (**DIVISION**) of the release via phone message. Kevin Okleberry, Scott Daly, and Toby Hooker, Division employees, traveled to the location of the release. They noted that the American Fork River and the North Fork of American Fork River had a deep brown color and gave off a faint odor of rotting organic materials. They took water and sediment samples at several locations along the River. Subsequent analysis of these samples showed the sediment contained concentrations of arsenic, cadmium, lead, and zinc in excess of the EPA Region 3 Freshwater Sediment Screening Values for Aquatic Life. The sediment sample taken from the mouth of the canyon also exceeded a human health-based Comparison Value for lead. Analysis of the water samples also revealed the turbidity of the water exceeded the standards outlined in *R317-2-14.1, Numeric Criteria, Standards of Quality for Waters of the State*, which prohibit an increase in turbidity of 10 Nephelometric Turbidity Units (NTU) above background levels.
10. On August 24, 25, 26, 27, 28, 30, and September 1, 2016, Division employees returned to the same sampling locations and collected additional water and sediment

samples. The turbidity values for all water samples taken downstream from Tibble Fork Reservoir on those dates exceeded the *R317-2-14.1* standard of 10 NTU above background, and based on readings of water quality sondes installed in the river above and below Tibble Fork Reservoir the turbidity of the water did not consistently return to levels below the standard until September 2, 2016, a total of 13 days of violations. All sediment samples taken during that time frame contained arsenic, cadmium, lead, and zinc concentrations in excess of EPA Freshwater Sediment Screening Values for Aquatic Life.

11. Based on inspections and surveys of the river, along with the preceding sampling data and visual observations provided by the public and employees of other agencies, conditions relative to sediment deposition currently exist in the river which continue to violate the Narrative Standards outlined in *R317-2-7.2, Narrative Standards, Standards of Quality for Waters of the State*.

#### **D. VIOLATIONS**

Based on the foregoing Findings of Fact, **NUCWCD** has violated the following:

1. Utah Code Ann. § 19-5-107(1)(a) for a discharge not authorized under an existing valid discharge permit as listed and described in the Findings of Fact paragraphs C.5 through C.9.
2. Utah Code Ann. § 19-5-107(1)(a) for releasing "...a pollutant into waters of the state or to cause pollution which constitutes a menace to public health and welfare, or is harmful to wildlife, fish or aquatic life, or impairs domestic, agricultural, industrial, recreational, or other beneficial uses of water, or placing or causing to be placed any wastes in a location where there is probable cause to believe that it will cause pollution.", as listed and described in the Findings of Fact paragraph C.5 through C.9.
3. *Utah Admin. Code R317-2-3.1* for violating the antidegradation policy for Category 1 Waters, which stipulates that "No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses."
4. *Utah Admin. Code R317-2-7.1* for discharging or placing "...wastes or other substances, in a manner that may interfere with a water's designated uses, or to cause any of the applicable standards to be violated." as described in Findings of Fact paragraph C.5 through C.9.
5. *Utah Admin. Code R317-2-7.2* for discharging or placing a waste that is "...offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health

effects, as determined by bioassay or other tests performed in accordance with standard procedures.” as described in Findings of Fact paragraphs C.3 and C.4.

6. *Utah Admin. Code R317-15* for discharging a waste that degraded water quality in American Fork River beyond the state water quality standards set forth in the terms and conditions of the April 16, 2012, Utah 401 Water Quality Certification (Cert) issued to the United States Army Corps of Engineers (USACE) 404 permit SPK-2014-00541. Specifically the failure to conduct activities in the water of the state that must: 1) minimize turbidity increases to less than the 10 NTUs numeric criteria for the assigned beneficial use class 2B and 3A in the American Fork River; and 2) immediately modify the implemented BMPs to ensure compliance with water quality standards. Additionally, for the non-compliance with Cert condition #6, which requires “all practical Best Management Practices (BMPs) on disturbed banks and within waters of the state shall be implemented to minimize turbidity during in-water work”; Cert condition #7, which requires that “that any spill, discharge of oil or other substance which may cause pollution to the waters of the state must be immediately reported to DWQ at (801) 536-4100 or after hours to (801) 536-4123”; Cert condition #11, which requires that “discharge must meet a Total Suspended Solids (TSS) of total daily maximum of 70 mg/L”; and Cert condition #12, which requires that “permittee shall protect any potentially affected fish spawning areas” as described in Findings of Fact paragraph C.5 through C.9

## **E. ORDER**

Based on the foregoing **FINDINGS OF FACT** and **VIOLATIONS** and pursuant to Utah Code Ann. § 19-5-107 and § 19-5-111, **NUCWCD** is hereby **ORDERED** to:

1. Immediately initiate all action required to come into compliance with all applicable provisions of the Utah Water Quality Act and the Water Quality rules in the Utah Administrative Code, R317.
2. Immediately cease and desist all un-permitted releases of sediment at the site which violate Utah Water Quality standards.
3. Submit a report containing the information below. The report must be submitted to the **DIRECTOR** within thirty (30) days of receipt of this **NOV/CO** and must provide the information listed below:
  - A. An evaluation of what caused the cited violations. This information should include the following:
    - Dates of the initial sediment release from the reservoir.
    - How long sediment was released from the reservoir during each occurrence.
    - An estimation of the volume and quality of sediment released from the reservoir during each occurrence.
    - Any other information regarding the releases that occurred that may be important in resolving the violations listed in Section D of this **NOV/CO**.
  - B. Describe, in detail, the actions taken and/or planned to be implemented (including dates), to attain and continue to be in full compliance with this **NOV/CO**.
  - C. Describe, in detail, any environmental mitigation plans for the construction that were in place prior to the initial release on August 19, 2016 and any deviations from that plan.
  - D. Provide a written explanation as to why no federal, state, or local agencies were notified of the sediment release until August 21, 2016, two days after it had commenced.
  - E. Describe how the polluted excess sediment will be removed from the affected portions of the American Fork River drainage, and what steps will be taken to rehabilitate wildlife habitat in the creek and protect public

health from any contaminated canals, including timeframes.

F. Prepare a comprehensive monitoring plan for **DIRECTOR** approval for the sediment and water in the affected portions of the American Fork River drainage, including the frequency, duration, and specific analyses that will be conducted. The monitoring plan must be sufficient to demonstrate full extent of impacts to the aquatic life, agricultural, and recreational beneficial uses described in R317-2-13.5(c) and to demonstrate effectiveness of restoration efforts for these uses, and should include the following:

- An evaluation of the impacts to aquatic organisms; for example, changes to fish and macroinvertebrate population and composition as a result of the release, and long-term evaluation of fish tissue metal accumulation.
- Monitoring of cleanup status to include a demonstration that substrate and aquatic populations have returned to pre-release condition through the impacted segments of the river.
- Demonstration that sediment conditions are not harmful to the public health.
- Monitoring to demonstrate irrigation and secondary water use is not negatively impacted.

#### F. NOTICE

This **NOV/CO** is effective immediately. **NUCWCD** may contest this **NOV/CO** by submitting a Request for Agency Action (RFAA) in writing as provided for in Utah Code Ann. § 19-1-301, and as specified in Utah Admin. Code R305-7-303. Any such request must be received by the **DIRECTOR** within 30 days of the **NOV/CO**'s issuance or the **NOV/CO** shall become final. Failure to file an RFAA within 30 days waives any right to contest this **NOV/CO**.

Compliance with the provisions of this **ORDER** is mandatory. Failure to respond may subject **NUCWCD** to further civil penalties or criminal fines under Utah Code Ann. § 19-5-115.

Any compliance schedules submitted by the violator as required by this **NOV/CO** must be submitted by the deadlines established in the Order and approved by the **DIRECTOR**. Once compliance schedules are approved by the **DIRECTOR**, the compliance schedule must be implemented according the deadlines and requirements established in the compliance schedule(s) and/or this **NOV/CO**. Once approved, timeframes and requirements of any compliance schedules become binding on the violator.

All reports required under the **NOV/CO** must be accompanied by the following certification, which is to be signed in accordance with Utah Admin. Code R 317-8-3.4(4):

*“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.”*

Utah Code Ann. § 19-5-115 provides that violation of the **ACT** or a related order may be subject to a civil penalty of up to \$10,000 per day of violation. Under certain circumstances of willfulness or gross negligence, violators may be fined up to \$25,000 per day of violation.

This **NOV/CO** does not relieve **NUCWCD** from complying with all other local, State, and Federal laws and requirements, nor does it preclude the Utah Department of Environmental Quality or the **DIRECTOR** from taking any and all other actions allowed by law.

Signed this 28 day of September 2016.

  
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Walter L. Baker, P.E.  
Director