



State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF WATER QUALITY
John K. Mackey, P.E.
Director

April 6, 2023

DIVISION OF WATER QUALITY
UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
PUBLIC NOTICE TO REISSUE A UPDES PERMIT

PURPOSE OF PUBLIC NOTICE

The purpose of this public notice is to declare the State of Utah's intention to renew a Utah Pollution Discharge Elimination System (UPDES) Permit under authority of the Utah Water Pollution Control Act, Section 19-5-104(9) and 107(2), Utah Code Annotated 1953, as amended. Said "permit" refers to the UPDES Permit and the Fact Sheet Statement of Basis (including Total Maximum Daily Loads (TMDL's)) if applicable, as per Section 303(d) of the Federal Clean Water Act (CWA)].

PERMIT INFORMATION

PERMITTEE NAME: Jordanelle Special Service District Keetley Water Treatment Plant
FACILITY LOCATION: 10500 North 1420 West, Heber City, Utah
MAILING ADDRESS: PO Box 519, Heber City, Utah 84032
TELEPHONE NUMBER: 435-333-0475
UPDES PERMIT NUMBER: UT0022403
PERMITTED OUTFALL: 001
RECEIVING WATERS: Jordanelle Reservoir

BACKGROUND

Jordanelle Special Service District (JSSD) maintains a non-operational silver, lead and zinc mine near Park City, Utah, which has been inactive since 1982. The Standard Industrial Classification (SIC) code established for this inactive mine is 1031 and the North American Industry Classification System (NAICS) code is 21223, for lead and zinc ores, while the SIC code is 1044 and the NAICS code is 21222 for silver ores. JSSD manages the water flowing out of the mine and directly into the onsite Keetley Water Treatment Plant (KWTP) to provide drinking water to the local community. This water treatment process has a SIC code 4941 and NAICS code 22131 for Water Supply. The primary mine water treatment at the KWTP consists of two *Ondeo-Degremont Densedeg* high-rate solids contact clarifiers for the removal of metals present in the mine water. Raw mine water flows from the Ontario Drain Tunnel flows into a splitter box, which then flows into one of two rapid mixers where lime addition occurs to raise the pH. The water is then drawn into the solid contact reactors through an axial flow turbine.

Polymer is injected into the water on the downstream side of the axial flow turbine. Flocculent particles are sheared as they are drawn through the turbine. As the particles reach a specific density, they are drawn through an up-flow chamber and then cascade into the thickener. It is in the thickener that settling occurs. Sludge is drawn from the thickener and recycled into the solids contact reactor to facilitate coagulation. Water is then discharged from the thickener into troughs where it flows to a conditioning chamber. If needed the pH is adjusted downward using carbon dioxide prior to being discharged from the facility to the onsite fish pond and then to the Jordanelle Reservoir via Outfall 001, which is located at latitude 40°38'03" North and longitude 111°26'13" West. The effluent is discharged from the southeast corner of the settling pond above the high-water mark of the Jordanelle Reservoir.

Over the past several years, KWTP had an average discharge flow of 5-7 million gallons per day (MGD) from Outfall 001. The KWTP has a maximum design flow of 12-16 MGD. JSSD is also currently considering the addition of a new similar water source of up to 1.0 MGD from the nearby former Mayflower Mine to be included in the KWTP process at some point in the near future. This new water source would not change the overall design flow and treatment system of the KWTP, as no increase in the design flow or concentration/loading of pollutants is being requested by JSSD over those authorized in the existing permit. This renewal permit will once again authorize discharges from the JSSD KWTP over the next 5 years as required. For additional information, please refer to the draft permit and fact sheet documents.

PUBLIC COMMENTS

During the public comment period provided under Utah Administrative Code (UAC) R317-8-6.5, any interested person may submit written comments on the draft permit and may request a public hearing if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments will be considered in making the final decision and shall be answered as provided in UAC R317-8-6.12. Public comments are invited any time prior to the deadline of the close of business on **May 5, 2023**. Written public comments can be submitted to: Jeff Studenka, UPDES Individual Permits Section, Utah Division of Water Quality, PO Box 144870, Salt Lake City, Utah 84114-4870 or by email at: wqcomments@utah.gov. After considering public comment the Utah Division of Water Quality may execute the permit issuance, revise it, or abandon it. The permit is available for public review under "Public Notices" at <https://deq.utah.gov/division-water-quality>. If internet access is not available, a copy may be obtained by calling Jeff Studenka at 385-602-7303.