

**Division of Water Quality
Utah Department of Environmental Quality
Public Notice of Renewal of Ground Water Discharge Permit
Permit No. UGW570002**

Purpose of Public Notice

The Utah Department of Environmental Quality (DEQ) is soliciting comments on the request to renew a ground water discharge permit as described below. The ground water discharge permit is issued by the Director of the Division of Water Quality under authority of the Utah Water Quality Act, Section 19-5-106(g) Utah Code Ann. 1953, as amended and Utah Administrative Code R317-6. Under Section 19-1-301.5, effective May 8, 2012, a person who wishes to challenge a Permit Order may only raise an issue or argument during an adjudicatory proceeding that was raised during the public comment period and was supported with sufficient information or documentation to enable the Director to fully consider the substance and significance of the issue. Utah Code Ann. 19-1-301.5 can be viewed at the following internet URL: <http://le.utah.gov/xcode/Title19/Chapter1/19-1-301.5.html>.

Permit Information

Permitte: Western Zirconium

Mailing Address: 10000 W 900 S
Ogden, UT 84404-9760

Facility Location: 12 Miles west of Ogden, Utah

Western Zirconium is an operating unit of Westinghouse Electric Company, located approximately 12 miles west of Ogden, Utah, that extracts zirconium and hafnium metals from raw materials and fabricates these metals into products used primarily by the nuclear fuels industry. Wastewater from these processes is discharged into evaporation lagoons located adjacent to the plant site, in a salt flats area near the Great Salt Lake.

Since 1992, monitoring wells located adjacent to the lagoons have exhibited elevated concentrations of ammonia, radium and other constituents of the pond wastewater in the shallow ground water at the site. This contaminated ground water has also discharged to surface water in the salt flats area surrounding the lagoons and migrated away from the site.

In response to detection of wastewater parameters in monitor wells and surface water surrounding the lagoons, and a Notice of Violation and Order issued by the Division of Water Quality (DWQ) in 1999, Western Zirconium constructed a subsurface barrier wall around the lagoons, keyed into a layer of low-permeability sediments underlying the site, to minimize discharge of lagoon water to the subsurface. In combination with the upward hydraulic gradient of the site's ground water, this barrier wall should minimize subsurface flow of wastewater from the ponds, and also the flow of contaminants to surface water.

Due to the extensive upgrade of wastewater containment, Western Zirconium was required under UAC R317-6-6.1 to apply for a ground water discharge permit to operate the facility. This permit was first issued in August, 2013. The permit is founded under the concept that the subsurface barrier wall effectively isolates the evaporation ponds from the surrounding ground and surface water. Compliance with permit conditions will be evaluated by performance monitoring of the subsurface barrier wall, and also by monitored natural attenuation of the existing ground and surface water contamination. To demonstrate that the barrier wall is functioning as designed, it is necessary to review different types of monitoring data from many different points, and assess site-wide conditions. Because of this, permit compliance will not be tied to numeric levels of contaminant concentrations at monitor points, but rather on a review of all relevant data needed to demonstrate barrier wall effectiveness. However, any expansion of the area underlain by contaminated ground water will be evaluated by detection of wastewater contaminants in monitor wells just outside the current boundary of the plume of contaminated ground water. For this version of the permit, new monitoring parameters have been added that better reflect wastewater

constituents. Other parameters of environmental concern will continue to be monitored for informational purposes, but will not be used to evaluate plume expansion.

Public Comments

Public comments are invited any time prior to **Monday, October 15, 2018**. Written comments may be directed to the Division of Water Quality (DWQ), P.O. Box 144870, Salt Lake City, UT 84114-4870. All comments received prior to close of business to **Monday, October 15, 2018**, will be considered in the formulation of final conditions to be imposed on the permit.

Additional Information

Additional information may be obtained upon request by contacting Mark Novak at (801) 536-4358 or mnovak@utah.gov or by writing to the aforementioned address. Related documents are available for review during normal business hours at DWQ, 195 North 1950 West in Salt Lake City or on the DWQ web page at <https://deq.utah.gov/division-water-quality>

In compliance with the Americans with Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Larene Wyss, Office of Human Resources at (801) 536-4284, TDD (801) 536-4284.