Description (4/26/2021)**:**

The New Mexico Oil Conservation Division, Engineering Bureau is reviewing the discharge permit renewal application below. Western Refining Southwest LLC: Underground Injection Control (UIC) Class I (Non-hazardous) Disposal Well (UICI-11) "Waste Disposal Well No. 2"-WDW-2 (API# 30-045-35747) is located at latitude N 36.69861º and longitude W -107.97035º. The discharge permit renewal application was received on 3/21. The total depth of the well is 7,500 ft. below ground level (bgl) and is "slotted" in the Entrada Sandstone Formation within the property boundary of the former Bloomfield Refinery (GW-1). The well replaced the previous Class I (Non-hazardous) disposal well (UICI-9), which was plugged and abandoned in September of 2015.

An assemblage of cemented casing strings to surface were set as follows: 1) 13-3/8-inch conductor casing was set to 300 ft. bgl; 2) 9-5/8-inch surface casing was set to 3,600 ft. bgl; and 3) 7-inch production casing was set to 7,500 ft. bgl. A 4-1/2-inch plastic lined injection string was set through the packer at 7,265 ft. bgl within the 7-inch casing slotted in the Entrada Formation from 7,315 - 7,483 ft. bgl.

The treated wastewater are rendered non-hazardous as it is primarily derived from boiler blow-down, reverse osmosis reject water, as it flows through the API Separator (solids, sludge, and floating scum are removed), the Benzene Strippers (volatile organics are removed), and the three lined aeration lagoons (active biological treatment) before reaching either the evaporation ponds or the Class 1 injection well. Typically, the water is routinely pumped directly from the Terminal aeration lagoons to the Class 1 injection well. Oilfield wastewater (~ 2,660 mg/L TDS) is injected at an average injection rate of 860 bbl./day (~ 25 gpm) below a permitted maximum surface injection pressure (MSIP) of 1,460 psig. Wastewater disposal is primarily achieved by evaporation ponds before any injection occurs. The Entrada Formation (injection zone) TDS concentration is about 48,900 ppm.