State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

Tony Delfin Deputy Cabinet Secretary

David R. Catanach, Division Director Oil Conservation Division



Response Required - Deadline Enclosed

Underground Injection Control Program

July 28, 2016

Mr. Nevin Bannister Chief Operating Officer OWL SWD Operating, LLC 8214 Westchester Drive, Suite 850 Dallas, TX 75225

RE: <u>NOTICE TO OPERATOR:</u> REQUIREMENT TO CONDUCT INJECTION SURVEY

Maralo Sholes B Well No. 2 (API 30-025-09806) 660' FSL, 660' FEL; Unit P, Sec 25, T25S, R36E, NMPM, Lea County, New Mexico

Injection Authority: Administrative Order SWD-1127

Order Date: June 1, 2008

Permitted Interval: Yates and Seven Rivers formations; 2938 feet to 3055 feet

Mr. Bannister:

The Division is in receipt of a formal correspondence by the City of Jal regarding the potential impacts of the operation of the injection well referenced above (the "subject well"). This correspondence presents concerns for the protection of underground source of drinking water in the vicinity of the subject well. In response to this correspondence, the Engineering Bureau is conducting a technical review of the well file and operation with respect to the conditions contained in the administrative order.

OWL SWD Operating, LLC (the "operator" or "OWL") has responded to recent requests for inspection and upgrade of the wellhead in order to monitor an intermediate casing string that is only sealed in place with drilling mud and not cement. This situation is being assessed for potential vertical migration of fluids behind casing and may require additional testing based on the results of the Bradenhead monitoring.

During the review of the well file, the Division found that the reported volumes of injection fluids increased significantly during the calendar year 2015 (see attachment). The average daily injection rate for 2015 was approximately 19,500 barrels of water per day (BWPD) while the highest singlementh rate happened in August with approximately 30,790 BWPD. All of the reported volumes were

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injected with a surface pressure of zero (0) pounds per square inch (PSI). Conversely, the injection volumes for the period from 2009 to 2014 showed an average of 3300 BWPD with all volumes injected with a surface pressure of 0 PSI.

The Division is required "to ensure that the injected water enters only the proposed injection interval" as a condition of the administrative order. Based on the recent injection information and lack of any quantitative testing, the Division cannot confidently determine that the injection fluids are staying within the permitted interval. Therefore, the Division is stipulating that the operator conduct an injection survey for the subject well with the results to be submitted within the next twenty-one (21) days of this correspondence date.

The type of injection survey may be either a temperature survey or a radioactive tracer survey. At a minimum, the injection survey will be conducted to established industry protocols with results that provide a clear interpretation. A description of activities to conduct the proposed injection survey must be submitted in a Notice of Intent Sundry for approval by the Hobbs District Supervisor. Scheduling of the injection survey must provide the opportunity for Division personnel to be present to witness the activities. All test results, logs and reports prepared as a result of the injection survey are to be submitted to the attention of the Division Director in Santa Fe.

In the event that a satisfactory response is not received to this letter of direction within the prescribed period, enforcement will occur. Such enforcement may include immediate shut-in and an application for appearance by OWL before a Division Examiner to terminate the injection authority granted in the administrative order.

Please contact Mr. Daniel Sanchez, Fields Operations Manager (505.476.3493), with any questions regarding this correspondence.

Sincerely.

DAVID R. CATANACH

Director

DRC/prg

Attachment: GRAPH 1: INJECTION RATE VS. TIME: Maralo Sholes B No. 2 (30-025-09806; SWD-1127)

cc: Oil Conservation Division – Hobbs District Office

Well File API 30-025-09806 Administrative Order SWD-1127

Bureau of Land Management - Carlsbad Field Office

Mr. Bob Gallagher, City Manager, City of Jal

GRAPH 1: INJECTION RATE VS. TIME: Maralo Sholes B No. 2 (30-025-09806; SWD-1127) 33,000 32,000 Operator: OWL SWD Operating LLC 31,000 30,000 29,000 28,000 27,000 26,000 25,000 24,000 23,000 22,000 21,000 20,000 ₹ 19,000 18,000 ਬੁੱ 17,000 16,000 15,000 14,000 E 13,000 12,000 11,000 Operator: Fulfer Oil and Cattle (until 11-2014) 10,000 9,000 8,000 7,000 6,000 5,000 4,000 3,000 2,000 1,000 Monthly Report (Form C-115)