

Conditions of Approval with respect to Placing a Well on Injection within a Geothermal Resources Area (Preliminary Form G-112)

Lightning Dock Geothermal HI-01, LLC (Permit GTHT-1)
Federal Lease NM-34970 in the Lightning Dock Known Geothermal Resource Area

Class V Injection Well LDG 13-7

To be located 1537 feet from the North line and 504 feet from the West line (Unit E) of Section 7 in Township 25 South, Range 19 West NMPM, Hidalgo County, New Mexico

1. Before injection, the operator (Lightning Dock Geothermal HI-01, LLC) must be in compliance with all conditions associated with the drilling and completion of the well.
2. The operator must submit to the Oil Conservation Division (OCD) a final G-112 form along with required G-105, G-106, and G-107 forms, all containing complete information, within 60 days of well completion. Commercial injection into the well is not allowed until OCD has approved all such forms.
3. A successful mechanical integrity test (MIT) of the well is required before injection can occur. Specifics of this testing are contained in the Conditions of Approval associated with drilling of the well.
4. The operator shall install a groundwater monitoring well to be associated with this injection well. The monitoring well must be located within 100 feet of the injection well in the nominal downgradient direction hydrologically. The monitoring well must be constructed of at least 2" diameter threaded PVC well materials, incorporate a screened interval approximately 10 feet above and 20 feet below the initial static water table, and otherwise conform with applicable requirements of the Office of the State Engineer.
5. The top of pipe elevation of the groundwater monitoring well must be determined to an accuracy of at least 0.01 feet. The depth to groundwater within the monitoring well must be gauged to an equivalent accuracy on a weekly basis beginning at least one week before injection begins and continuing for two months thereafter. Depth to water determinations must be made at least once a month throughout the injection well's useful life. All acquired data must be retained by the operator and reported to the OCD on a regular basis.
6. Appropriate sampling and analysis of groundwater from the monitoring well must be undertaken in accordance with the OCD-approved water quality monitoring plan for this geothermal project. All acquired water quality data must be retained by the operator and reported to the OCD on a regular basis. The OCD retains the right to modify the monitoring plan based upon available information.

This approval does not relieve the operator from responsibility should its operations pose a threat to public health or the environment, nor does it relieve the operator of compliance with any other federal, state, or local requirements.

