



August 9, 2012

David Brooks
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: LOS LOBOS RENEWABLE POWER, L.L.C. - LIGHTNING DOCK GEOTHERMAL NO. 1 (HI-01) DISCHARGE PERMIT (GTHT-001) NE/4 SW/4 OF SECTION 7, TOWNSHIP 25 SOUTH, RANGE 19 WEST, NMPM, HIDALGO COUNTY, NEW MEXICO CLASS V INJECTION WELLS AND GEOTHERMAL PRODUCTION OR DEVELOPMENT WELLS, TOWNSHIP 25 SOUTH, RANGES 19 AND 20 WEST, NMPM, HIDALGO COUNTY, NEW MEXICO

Dear David:

On behalf of AmeriCulture, I hereby provide the following comments pertaining to the G-112 application by Los Lobos Renewable Power, LLC (hereinafter LLRP) to use well LDG-45-7 as an injection well.

LLRP was issued a discharge permit for three Class V geothermal injection wells in July, 2009, pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 through 20.6.2.3114 NMAC (Permitting and Ground Water Standards) and 20.6.2.5000 through 20.6.2.5299 (Underground Injection Control).

Under the Conditions of Approval for said permit, "pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, the owner/operator must ensure that all discharges shall be consistent with the terms and conditions of the permit."

The permit states in paragraph 21.F that, "The production/injection method that the owner/operator shall follow is as follows: High temperature (>250°F) geothermal water shall be brought to surface from the Horquilla Formation or geothermal reservoir at approximately 3,400 feet below ground level by five (5) production or development wells at approximately 3,000 gpm per well. Hot water shall be routed in parallel and in series through approximately 50 binary cycle (self-contained heat exchanger, evaporator and condenser) power generation units. Condensed produced or effluent water (approximately 225°F) shall be routed directly to three (3) Class V geothermal wells and into the same depth within the Horquilla Formation or geothermal reservoir."

The permit language clearly states that the produced geothermal fluid will be returned via injection into the same geothermal aquifer. In his May 29, 2009 Order of the Division (the Order), then Division Director Mark Fesmire states in paragraph 23 that, "From a reading of the entirety of Paragraph 21.F, it is plain that it authorizes injection into the reservoir from which the geothermal was produced, be it the Horquilla or some

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other formation.” In paragraph 28 of the Order, the Director reaffirms the prohibition against the operation of the Class V injection if, “...the injection process causes excursion of the injected fluids, or migration of other waters, into another aquifer (distinct from the source formation) so as to cause an exceedance of standards or background in that aquifer.

Although the application is silent on the source of fluids proposed to be injected, we have been told that LLRP has expressed intent to inject geothermal fluids from well T-55-7 into LDG-45-7. Following is a summary of certain water quality parameters present in the waters of both wells, according to analytical results provided to the OCD by LLRP.

	45-7	T-55
Fluoride	4.3	12.5
Chloride	44	92
Sulfate	220	537
TDS	580	1115

Provided that the above water chemistry remains approximately the same under production conditions, the aquifer associated with well 45-7 and the aquifer associated with well 55-7 are different aquifers and therefore production from one well and injection to another, irrespective of which well is produced and which well is injected into, would be strictly prohibited according to the permit language. Furthermore, injection of water from well 55-7 into well 45-7 would almost certainly result in an exceedance of background for fluoride, a contaminant specified in 20.6.2.3103 NMAC, for well 45-7. According to LLRP’s analytical results, the fluoride concentration in well 55-7 is 12.5 mg/l and the fluoride concentration in well 45-7 is 4.3 mg/l.

Based on the forgoing, AmeriCulture requests that the prohibition against (a) injection into an aquifer other than the producing aquifer, and (b) the injection of produced water having higher than background contaminant concentration, be included in any conditions of approval corresponding to the use of well 45-7 as an injection well. We also request to be copied on any and all documentation and correspondence in the possession of the OCD pertaining to said application.

Furthermore, AmeriCulture requests to be notified of any and all proposed modifications to, or deviations from, permit conditions for any and all injection or production wells of LLRP.

Sincerely Yours,



Damon E. Seawright
President