

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION COMMISSION

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**APPLICATION OF LIGHTNING DOCK  
GEOTHERMAL HI-01, LLC FOR APPROVAL  
TO INJECT INTO A GEOTHERMAL AQUIFER  
THROUGH THREE PROPOSED GEOTHERMAL  
INJECTION WELLS AT THE SITE OF THE  
PROPOSED LIGHTNING DOCK GEOTHERMAL  
POWER PROJECT, HIDALGO COUNTY, NEW  
MEXICO**

**CASE NO. 15357**

**APPLICATION OF LIGHTNING DOCK  
GEOTHERMAL HI-01, LLC TO PLACE WELL  
NO. 63A-7 ON INJECTION-GEOTHERMAL  
RESOURCES AREA, HIDALGO COUNTY, NEW  
MEXICO**

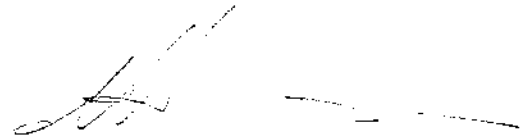
**CASE NO. 15365**

**AMENDED PROPOSED ORDER**

Comes now, Michelle Henrie of Michelle Henrie, LLC and proposes the attached Order, as amended, for consideration by the Oil Conservation Commission on behalf of Lightning Dock Geothermal HI-01, LLC ("Lightning Dock"). Lightning Dock filed a proposed Order on August 31, 2015. The amendments proposed herein (a) correct immaterial typos, (b) add Finding No. 12, (c) add Paragraph 2 of the Order (page 5), and (d) add Exhibits 1-8.

Respectfully Submitted,

MICHELLE HENRIE, LLC



Michelle Henrie  
P.O. Box 7035  
Albuquerque, NM 87194  
Attorney for Lightning Dock Geothermal HI-01, LLC

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION COMMISSION**

**APPLICATION OF LIGHTNING DOCK  
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**APPLICATION OF LIGHTNING DOCK  
GEOTHERMAL HI-01, LLC TO PLACE WELL  
NO. 63A-7 ON INJECTION-GEOTHERMAL  
RESOURCES AREA, HIDALGO COUNTY, NEW  
MEXICO**

**CASE NO. 15365**

**Order No. R-14021-\_\_\_\_**

**ORDER OF THE COMMISSION**

These cases came on to the Oil Conservation Commission's docket under circumstances stated below, and the Commission, having considered its regulations and the matter of record,

**FINDS THAT:**

1. Lightning Dock Geothermal HI-01, LLC ("Lightning Dock") submitted to the Oil Conservation Division ("Division") four G-112 applications to drill injection wells. The first two applications, for wells for 15-8 and 76-7, were filed on June 1, 2015. The third application, for well 13-7, was filed on June 15, 2015. The fourth application, for well 63A-7, was filed on July 1, 2015.
2. AmeriCulture, Inc. ("AmeriCulture") objected to all four G-112 applications. It objected to the applications for wells 15-8, 76-7 and 13-7, on June 20, 2015. It objected to the application for well 63A-7, on July 15, 2015.

3. The geothermal regulation governing injection well applications are 19.14.93.8(C)

NMAC. These regulations state as follows:

If no objection is received within 20 days from the date of receipt of the application, and the Division director is satisfied that all of the above requirements have been complied with, that the proposal is in the interest of conservation and will prevent waste and protect correlative rights, and that the well is cased, cemented, and equipped in such a manner that there will be no danger to any natural resource, including geothermal resources, useable underground water supplies, and surface resources, form G-112 will be approved. In the event the form is not approved because of objection from an affected geothermal lease owner or for other reason, the application will be set for public hearing, if the applicant so requests.

The geothermal regulations do not require a hearing if an objection is received. In contrast, the oil and gas regulations do require a hearing if an objection is received. See 19.15.26.8(D)

NMAC. Since it was originally promulgated in 1982, the applicable oil and gas regulation has consistently stated that “If a written objection to an application for administrative approval of an injection well is filed ... the Division shall set the application for hearing.” When the geothermal regulations were written a year later in 1983, the mandatory hearing provision was omitted.

4. Lightning Dock’s four G-112 applications to drill injection wells are governed by the geothermal regulations, not the oil and gas regulations. Thus, an objection to the G-112 applications does not require the Commission or the Division to set a hearing. To the contrary, they have discretion whether to set a hearing.

5. The reason AmeriCulture stated to support its objection is: “Owing partially to the potential for endangerment of the regional geothermal resource, underground water supplies, and businesses that rely upon the regional geothermal resource, we believe that [the] applications should be denied.”

6. In 2013, the Commission heard these objections by AmeriCulture in Case No. 14948. The Commission was not convinced. Order No. R-136775-B concluded that Lightning Dock's (f/k/a Los Lobos') proposed injection wells complied with 19.14.93.8 NMAC, were in the interest of conservation, will prevent waste, will protect correlative rights, and will be cased, cemented and equipped in such a manner that there will be no danger to any natural resource including geothermal resources, useable underground water supplies, or surface resources. AmeriCulture's 2015 objection fails to state any new reason, any new evidence, or any new consideration for the Commission.

7. On August 12, 2015, AmeriCulture, through its attorney, filed an application for a hearing of these cases. The application cites that it is submitted in accordance with 19.14.112.8(A) NMAC. This regulation allows an applicant to file an application for a hearing. The regulation does not require the Commission or the Division to grant the application. To the contrary, they have discretion whether to set a hearing.

8. AmeriCulture's application for a hearing nowhere states any reason why the Commission should grant the application and hold a hearing.

9. It would be prejudicial to Lightning Dock to hold a hearing when no reason has been given for doing so. It would be further prejudicial to Lightning Dock to force it into a hearing process in which Lightning Dock does not even know what it has to defend against because AmeriCulture has refused to articulate the reasons it applied for a hearing.

10. It is not an efficient use of agency resources to hold hearings without good cause.

11. The geothermal regulations do not require the Commission or the Division to hold a hearing just because an application for a hearing has been filed.

12. On September 1, 2015, the Division filed draft proposed Conditions of Approval with the Commission.

The Commission concludes that:

13. 19.14.93.8 NMAC does not require the Commission or the Division to hold a hearing when an objection to an injection well is received.

14. 19.14.112.8 NMAC does not require the Commission or the Division to hold a hearing when an application for a hearing is received.

15. No reason supports the Commission proceeding to hear Case No. 15357 and Case No. 15365.

16. It would be prejudicial to Lightning Dock for the Commission to hear Case No. 15357 and Case No. 15365.

**IT IS THEREFORE ORDERED THAT:**

1. Case No. 15357 and Case No. 15365 be and hereby are dismissed.

2. The applications of Lightning Dock to drill wells 15-8, 76-7 and 13-7, and 63A-7 and to place those wells on injection is hereby granted subject to the Conditions of Approval filed by the Division on September 1, 2015, which are attached hereto as Exhibits 1-8.

3. Hereafter, the Division Director shall exercise discretion about whether good cause exists to hear an objection to an injection well.

4. Hereafter, the Division Director shall exercise discretion about whether good cause exists to grant an application for a hearing.

DONE at Santa Fe New Mexico on the \_\_\_\_ day of \_\_\_\_\_, 2015.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

\_\_\_\_\_  
PATRICK PADILLA, Member

\_\_\_\_\_  
ROBERT BALCH, Member

\_\_\_\_\_  
DAVID CATANACH, Chair

S E A L

Conditions of Approval with respect to Drilling a Geothermal Resources Well (Form G-101)

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 76-7**

To be located 1896 feet from the South line and 1128 feet from the East line (Unit I) of Section 7 in Township 25 South, Range 19 West NMPM, Hidalgo County, New Mexico

1. The operator (Lightning Dock Geothermal HI-01, LLC) must obtain a well bond approved by the Oil Conservation Division (OCD) prior to any drilling activity.
2. This injection well shall be drilled and completed as described in the operator's application (Forms G-101, G-102, G-104, G-112, and associated attachments) dated June 9, 2015.
3. Drilling pits must be constructed with liners capable of withstanding elevated temperatures associated with geothermal activity and otherwise meet all pertinent requirements of 19.15.17 NMAC. All wastes must be properly handled, managed, and disposed.
4. This well shall not be intentionally deviated except toward the vertical without prior approval from the OCD using a G-103 sundry notice with copies of that notice simultaneously provided to geothermal operators on offsetting tracts, if any. Deviations may result in the need for downhole directional surveying.
5. A successful mechanical integrity test (MIT) along with a cement bond log of the well is required before injection can occur. The MIT shall consist of a 30-minute pressure test at 600 psig on the 7" diameter surface casing. The pass/fail criteria for this test is no more than a 10% loss in pressure using a recorded calibrated no more than 90 days prior to the MIT. A G-103 sundry notice must be provided to and approved by the OCD in advance of the MIT and the OCD must be given sufficient notice such that the test can be observed.

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.



Conditions of Approval with respect to Drilling a Geothermal Resources Well (Form G-101)

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. The operator (Lightning Dock Geothermal HI-01, LLC) must obtain a well bond approved by the Oil Conservation Division (OCD) prior to any drilling activity.
2. This injection well shall be drilled and completed as described in the operator's application (Forms G-101, G-102, G-104, G-112, and associated attachments) dated June 16, 2015.
3. Drilling pits must be constructed with liners capable of withstanding elevated temperatures associated with geothermal activity and otherwise meet all pertinent requirements of 19.15.17 NMAC. All wastes must be properly handled, managed, and disposed.
4. This well shall not be intentionally deviated except toward the vertical without prior approval from the OCD using a G-103 sundry notice with copies of that notice simultaneously provided to geothermal operators on offsetting tracts, if any. Deviations may result in the need for downhole directional surveying.
5. A successful mechanical integrity test (MIT) along with a cement bond log of the well is required before injection can occur. The MIT shall consist of a 30-minute pressure test at 600 psig on the 7" diameter surface casing. The pass/fail criteria for this test is no more than a 10% loss in pressure using a recorded calibrated no more than 90 days prior to the MIT. A G-103 sundry notice must be provided to and approved by the OCD in advance of the MIT and the OCD must be given sufficient notice such that the test can be observed.

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.





Conditions of Approval with respect to Drilling a Geothermal Resources Well (Form G-101)

Lightning Dock Geothermal HI-01, LLC (Permit GTHT-1)

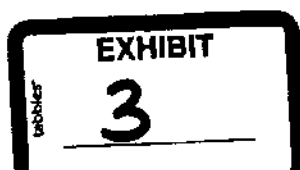
Federal Lease NM-34970 in the Lightning Dock Known Geothermal Resource Area

Class V Injection Well LDG 15-8

To be located 2141 feet from the South line and 345 feet from the West line (Unit E) of Section 8 in Township 25 South, Range 19 West NMPM, Hidalgo County, New Mexico

1. The operator (Lightning Dock Geothermal HI-01, LLC) must obtain a well bond approved by the Oil Conservation Division (OCD) prior to any drilling activity.
2. This injection well shall be drilled and completed as described in the operator's application (Forms G-101, G-102, G-104, G-112, and associated attachments) dated June 9, 2015.
3. Drilling pits must be constructed with liners capable of withstanding elevated temperatures associated with geothermal activity and otherwise meet all pertinent requirements of 19.15.17 NMAC. All wastes must be properly handled, managed, and disposed.
4. This well shall not be intentionally deviated except toward the vertical without prior approval from the OCD using a G-103 sundry notice with copies of that notice simultaneously provided to geothermal operators on offsetting tracts, if any. Deviations may result in the need for downhole directional surveying.
5. A successful mechanical integrity test (MIT) along with a cement bond log of the well is required before injection can occur. The MIT shall consist of a 30-minute pressure test at 600 psig on the 7" diameter surface casing. The pass/fail criteria for this test is no more than a 10% loss in pressure using a recorded calibrated no more than 90 days prior to the MIT. A G-103 sundry notice must be provided to and approved by the OCD in advance of the MIT and the OCD must be given sufficient notice such that the test can be observed.

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.



Conditions of Approval with respect to Drilling a Geothermal Resources Well (Form G-101)

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 63A-7**

To be located 1934 feet from the North line and 1403 feet from the East line (Unit G) of Section 7 in Township 25 South, Range 19 West NMPM, Hidalgo County, New Mexico

1. The operator (Lightning Dock Geothermal HI-01, LLC) must obtain a well bond approved by the Oil Conservation Division (OCD) prior to any drilling activity.
2. This injection well shall be drilled and completed as described in the operator's application (Forms G-101, G-102, G-104, G-112, and associated attachments) dated June 29, 2015.
3. Drilling pits must be constructed with liners capable of withstanding elevated temperatures associated with geothermal activity and otherwise meet all pertinent requirements of 19.15.17 NMAC. All wastes must be properly handled, managed, and disposed.
4. This well shall not be intentionally deviated except toward the vertical without prior approval from the OCD using a G-103 sundry notice with copies of that notice simultaneously provided to geothermal operators on offsetting tracts, if any. Deviations may result in the need for downhole directional surveying.
5. A successful mechanical integrity test (MIT) along with a cement bond log of the well is required before injection can occur. The MIT shall consist of a 30-minute pressure test at 600 psig on the 7" diameter surface casing. The pass/fail criteria for this test is no more than a 10% loss in pressure using a recorded calibrated no more than 90 days prior to the MIT. A G-103 sundry notice must be provided to and approved by the OCD in advance of the MIT and the OCD must be given sufficient notice such that the test can be observed.

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.



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 76-7**

To be located 1896 feet from the South line and 1128 feet from the East line (Unit I) 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.



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.



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 15-8**

To be located 2141 feet from the South line and 345 feet from the West line (Unit E) of Section 8 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.



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 63A-7**

To be located 1934 feet from the North line and 1403 feet from the East line (Unit G) 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.



**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing pleading was e-mailed to the following counsel and also faxed to Mr. Lakins on September 2, 2015:

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Michelle Henrie