

**CALENDAR ITEM
C62**

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10/16/15
W 40980
V. Perez

**CONSIDER AN APPLICATION FOR A
STATE GEOTHERMAL RESOURCES PROSPECTING
PERMIT ON STATE SCHOOL LANDS,
ASSESSOR'S PARCEL NUMBER 037-500-03,
LOCATED APPROXIMATELY 20 MILES
SOUTH OF OWENS LAKE AND NORTHWEST OF
THE COSCO GEOTHERMAL FIELD,
INYO COUNTY**

APPLICANT:

Deep Rose Development, LLC
Attn.: Mr. Chuck E. Harris
809 Broadway, Suite 3
Sonoma, CA 95476

AREA, TYPE LAND AND LOCATION:

Approximately 640 acres of State fee-owned State school lands comprising all of Section 16, Township 21 South, Range 38 East, Mount Diablo Base Meridian, Inyo County (see Exhibit A and Exhibit B, attached hereto), approximately 20 miles south of Owens Lake, near the Coso Geothermal Field.

BACKGROUND:

State Geothermal Prospecting Permit (Permit) No. PRC 8973.2 was first issued to Deep Rose, LLC, on May 1, 2006, granting an exclusive right for two years to prospect for geothermal resources in the permitted area. The Permit was subject to an extension of two additional years at the discretion of the California State Lands Commission (Commission). On March 25, 2008, the Commission approved the two-year extension, effective May 1, 2008, through March 30, 2010, pursuant to Paragraph 1 of the Permit No. PRC 8973.2.

After the expiration of Permit PRC 8973.2, Permit No. PRC 8949.2 was issued by the Commission to Deep Rose Development, LLC (Applicant), effective on September 1, 2011, granting two years for the Permittee to continue prospecting for geothermal resources. On June 21, 2013, the Commission approved a two-year extension of this Permit, effective from September 13, 2013, through August

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31, 2015. Permit No. PRC 8949.2 expired on August 31, 2015, exhausting its four-year term allowed under the Permit.

APPLICATION FOR NEW PERMIT:

On August 5, 2015, the Applicant submitted an application for a new Permit. The application was deemed complete on September 1, 2015. If granted the new Permit (see Exhibit C, attached hereto), the Applicant will continue their prospecting program and schedule (described below). The drill pad access road, which goes through land owned by the U.S. Department of the Interior, Bureau of Land Management (BLM), is presently 70 percent (70%) complete. The Applicant plans to complete the following tasks, and hopes to discover a commercially viable geothermal resource, within the period of the new Permit:

- complete the final 30 percent (30%) of the access road that will lead to the permitted land;
- complete mass grading of the drill pad;
- drill the first exploratory geothermal well; and
- complete the final grading and configuration at the offsite, private water well installation.

PROSPECTING PROGRAM AND SCHEDULE:

The proposed prospecting program consists of completing the construction of an access road that will lead to a drill pad, with drilling and testing of up to a total of four geothermal wells that have been approved by Inyo County. The Applicant believes geothermal resources may exist at depth, based on their knowledge of the subsurface geologic structure in the region in relation to the Coso geothermal field geology to the southeast.

Geothermal exploration often includes geophysical methods such as measuring gravity, and shallow subsurface resistivity and heat flow trends. Heat flow is measured by drilling relatively-shallow holes, typically 500 to 2,000 feet deep. Such information would be useful for selecting a site for a deeper geothermal well. The Applicant has already selected a site based on regional geologic information. Commission staff agrees with the Applicant that other exploration techniques would not yield useful information, and that a deep well is the best way to determine the presence and production potential of commercially valuable geothermal resources.

CALENDAR ITEM NO. **C62** (CONT'D)

REASON FOR ISSUANCE:

Throughout the terms of each of the two previous Permits issued, the Applicant has experienced setbacks and partnership difficulties in securing funding to complete their road construction project as well as the exploratory drilling. Despite these setbacks, they continue to look for funding sources to complete the road, drill the exploratory well, and construct the geothermal plant. It is also difficult for the geothermal industry to obtain competitive financing because the other two major alternative energy sources, solar and wind, receive larger Federal investment tax credits.

Despite the difficulties, the Applicant has made significant progress, as listed below:

- Demolition of the existing pond at the water well site (private lands) and site reconfiguration re-grading and excavation of the new capacity pond has been completed.
- Re-grading of the entrance to the Pumice Mine Road has been completed.
- Re-planting and continual watering of the relocated Joshua trees in compliance with the Biological Consultant's recommendations is ongoing.
- Maintenance of the Los Angeles Department of Water and Power (LADWP) line roadway has been completed.
- Maintenance of the Pumice Mine and Deep Rose Entry roads, due to wear and tear and storm drainage spot erosion, has been completed.

The Applicant has invested in excess of \$5,500,000 in this project and has paid to date \$39,680 in rent to the State. The Applicant's two current funding sources have acknowledged the importance and value of the progress to date. Recent State and federal support for the development of new geothermal energy have created a more fertile environment. With the current status, the Applicant is confident that they will be able to complete the project under the new Permit.

TERMS OF PROPOSED PROJECT:

The primary term of this geothermal prospecting Permit shall be two (2) years. The Commission, at its discretion, may extend the term for one additional period not to exceed two (2) years. In no event shall the term of this Permit exceed four (4) years.

CALENDAR ITEM NO. **C62** (CONT'D)

PERMIT PROVISION:

1. Preferential right to a geothermal lease upon discovery of geothermal resources in commercial quantities. The permittee must inform the State, within 90 days of discovery, of its intent to exercise this right. Issuance of a geothermal lease is subject to approval by the Commission acting in its discretion under section 6371 of the Public Resources Code, and upon review of environmental documentation on the impacts of a proposed plan of development and production operations.
2. Annual rent, payable in advance of one dollar (\$1.00) per acre for the first year, five dollars (\$5.00) per acre for the second year, and twenty-five dollars (\$25.00) per acre for the third and fourth years, if extended.
3. Permittee must follow their prospecting program that consists of the drilling and testing of one or more geothermal wells during the term of the Permit. A total of four (4) geothermal wells have been approved by Inyo County.
4. The State has a performance bond, or other approved security, in the amount of \$50,000.
5. If a preferential geothermal Lease is issued, the lessee shall pay an annual rent of \$10 per acre, and royalties of 12.5 percent (12.5%) for geothermal resources and 5 percent (5%) for minerals and chemicals recovered from the resources that are subsequently sold to third parties. The value of the geothermal resources for royalty purposes shall be determined from either a sales contract or a percentage of the value of electrical power generated from the resource, both of which are subject to prior approval by the Commission. The value of the minerals or chemicals produced shall be determined from the first sales in marketable form.

STATUTORY AND OTHER REFERENCES:

- A. Public Resources Code: Division 6, Parts 1 and 2; and Division 13.
- B. California Code of Regulations: Title 2, Division 3; and Title 14.

OTHER PERTINENT INFORMATION:

1. The Applicant has a Conditional Use Permit from the Inyo County Planning Department granting permission to drill up to four (4) geothermal exploration wells.

CALENDAR ITEM NO. **C62** (CONT'D)

2. The Applicant has a Right-of-Way over adjacent U.S. Bureau of Land Management lands to construct an access road to the State parcel.
3. The Applicant has obtained a permit to conduct geothermal operations from the California Division of Oil, Gas, and Geothermal Resources (CDOGGR).
4. A Mitigated Negative Declaration (MND), State Clearinghouse No. 2005121125, was prepared by CDOGGR and adopted on March 28, 2006, for this project. The Commission staff has reviewed such document and Mitigation Monitoring Program pursuant to the provisions of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21081.6) and adopted by the lead agency.
5. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but such activity will not affect those significant lands. Based upon the staff's consultation with the persons nominating such lands, and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

EXHIBITS:

- A. Land Description
- B. Site Map
- C. Prospecting Permit

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

1. Find that a MND, State Clearinghouse No. 2005121125, and a Mitigation Monitoring Program were prepared by DOGGR and adopted on March 28, 2006, for this project and that the Commission has reviewed and considered the information contained therein.
2. Re-adopt the June 21, 2013, Mitigation Monitoring Program, as contained on file in the Sacramento Office of the State Lands Commission as Exhibit B to Calendar Item 82, June 21, 2013.

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SIGNIFICANT LANDS INVENTORY FINDING:

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

AUTHORIZATION:

1. Authorize the issuance of Geothermal Prospecting Permit to Deep Rose Development, LLC for prospecting of geothermal resources on State school lands, Section 16, Township 21 South, Range 38 East, MDBM, in Inyo County.
2. Authorize the Executive Officer, or her designee, to execute any documents necessary to implement the Commission's action.

EXHIBIT A

W 40980

LAND DESCRIPTION

That certain parcel of State School Land in Inyo County, State of California, more particularly described as follows:

All of Section 16, Township 21 South, Range 38 East, Mount Diablo Meridian, as shown on the Official U.S. Government Township Plat approved October 15, 1881.

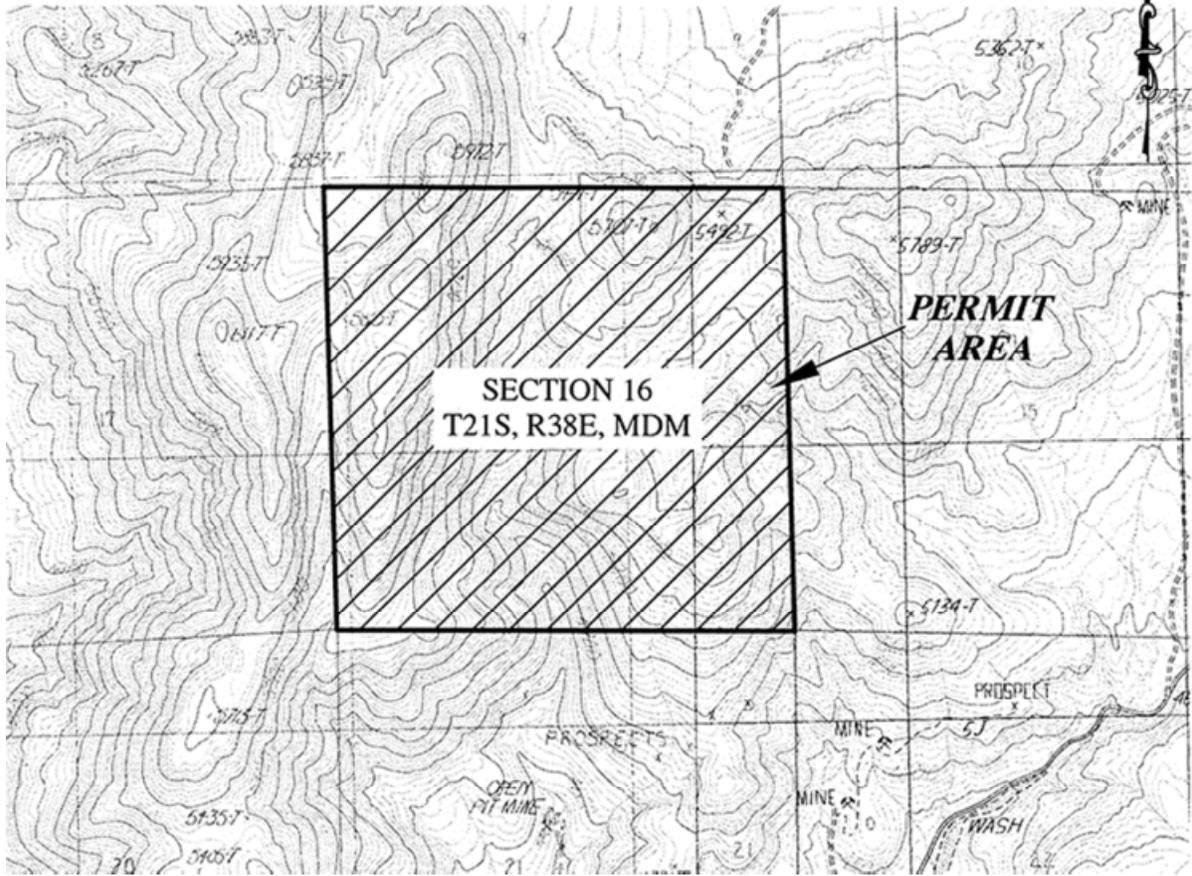
END OF DESCRIPTION

Prepared 08/11/2015 by the California State Lands Commission Boundary Unit.



NO SCALE

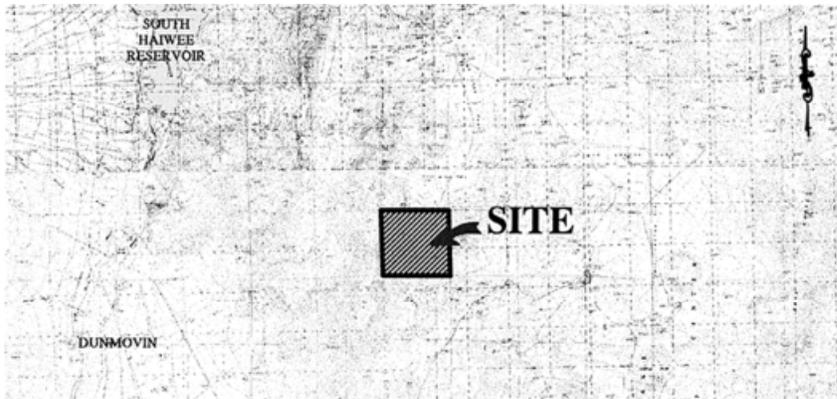
SITE



SECTION 16, T21S, R38E, MDM

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

Exhibit B

W 40980
DEEP ROSE
DEVELOPMENT, LLC
GEOTHERMAL
PROSPECTING PERMIT
INYO COUNTY



STATE LANDS COMMISSION

State of California

GEOHERMAL RESOURCES PROSPECTING PERMIT

Pursuant to Division 6 of the California Public Resources Code ("PRC"), this geothermal resources prospecting permit is made and entered into between the California State Lands Commission (hereinafter referred to as the "State"), and Deep Rose Development, LLC ("Permittee"), effective the 1st day of November, 2015. Permittee accepts this prospecting permit, giving Permittee the exclusive right to prospect for geothermal resources upon the permitted land, pursuant the following terms and conditions.

1. TERM

This permit shall be for a term of two (2) years. The State may, in its discretion, extend the term for up to two (2) additional years.

2. PREFERENTIAL RIGHT TO LEASE

Upon discovery of geothermal resources in commercial quantities, Permittee shall have a preferential right to a lease. Permittee must inform the State, in writing, of its intention to exercise its preferential right within ninety (90) days of the discovery. Failure to so inform the State will result in an abandonment of the preferential right. No lease will be issued to Permittee until its issuance is approved by the State, acting in its discretion under section 6371 of the PRC and upon review of environmental documentation concerning production operations on the permitted land.

3. PERMITTED LAND

The land covered by this permit is situated in the County of Inyo and consists of Section 16, Township 21 South, Range 38 East, Mount Diablo Meridian, totaling 640 acres, more or less, of State fee-owned school lands.

4. GEOHERMAL RESOURCES

The term "geothermal resources" as used in this permit shall have the meaning given to it by section 6903 of the PRC.

5. QUALIFICATION OF PERMITTEE

Permittee shall possess at all times during the term of this permit qualifications for holding a permit or lease as provided in sections 6801, 6905 and 6922 of the PRC.

6. RENT, ROYALTY AND OTHER MONETARY CONSIDERATIONS

(a) Permittee shall pay to the State an annual rent, payable in advance, of one dollar (\$1.00) per acre or fraction thereof during the first year; five dollars (\$5.00) per acre or fraction thereof during the second year; and, should the term of this permit be extended by the State, twenty-five dollars (\$25.00) per acre or fraction thereof during each of the third and fourth years.

(b) Permittee shall pay to the State rent, royalties, and other monetary considerations for geothermal resources produced, saved and sold from the permitted land, under any subsequent preferential lease, in sums and according to the terms set forth in Exhibit "A".

7. INTEREST AND PENALTY

(a) Rent and other monetary considerations which are not paid when due shall bear interest from their due date until they are paid at the rate of one and one-half percent (1-1/2%) per month of the unpaid balance.

(b) Rent and other monetary considerations which are not paid when due shall be subject to a penalty of five percent (5%) of the past due amount.

(c) Past due rent and other monetary considerations include, but are not limited to, amounts which were not paid because of Permittee's unreasonable use of inaccurate information in computing the rent and other monetary considerations and Permittee's unreasonable errors in the computations themselves. The determination of what errors of Permittee are unreasonable rests with the State.

8. PROSPECTING PROGRAM

(a) Permittee shall abide by the prospecting program and time schedule set forth in Exhibit "B". If Permittee does not complete the prospecting program in accordance with the time schedule, this permit may be terminated by the State.

(b) Permittee shall drill at least one (1) geothermal well during the term of this permit. The term of this permit shall not be extended by the State unless Permittee has commenced the drilling or has applied for the necessary permits to drill a well and is exercising diligence and good faith to complete the acquisition of such permits.

9. OPERATIONS

(a) Operations under this permit shall be conducted in a safe and workerlike manner in accordance with generally accepted good engineering practices and with due regard for the protection of life and property, preservation of the environment and conservation of natural resources.

(b) Permittee shall not drill a geothermal well on or into the permitted land without prior approval of the State. All drilling shall be performed subject to the terms of the PRC, this permit, and the regulations of the State.

(c) Before commencing the drilling of a well, Permittee shall notify the State of its intention

to drill. The notice shall contain the location and elevation above sea level of the derrick, proposed depth, bottom hole location, casing program, proposed completion program, and proposed testing program.

(d) Before commencing drilling operations, Permittee shall submit a contingency plan for the protection of personnel and equipment while drilling in rock strata known or suspected to contain hydrogen sulfide (H₂S). Permittee shall establish a training program to promote efficient safety procedures in an H₂S contaminated environment. An H₂S indicator and alarm shall be installed in areas suspected or known by the State to contain H₂S gas which may reach levels considered to be dangerous to the health and safety of personnel. The contingency plan, training program and detection system must be approved by the State.

(e) Geothermal resources shall not be sold, utilized or otherwise disposed of without the prior approval of the State. This permit does not grant Permittee the right to produce, commercially exploit, or otherwise utilize any discovered geothermal resources; nor does it authorize Permittee to construct generating plants, building, pipelines or other facilities for the production and utilization of geothermal resources.

(f) No well shall be perforated, redrilled, plugged back or altered without the prior approval of the State.

(g) Before work is commenced to plug and abandon any well, notice shall be given to the State showing the condition of the well and the proposed method of abandonment. No well may be abandoned unless prior approval of the method of abandonment has been obtained from the State.

10. ENVIRONMENTAL IMPACT

(a) Permittee shall and hereby agrees to abide by the regulations, conditions and mitigation, and all other measures designed to restrict, limit, modify, or minimize the environmental impact of Permittee's operations under this permit as set forth in the Mitigated Negative Declaration, State Clearinghouse No. 2005121125, prepared by the California Division of Oil, Gas, and Geothermal Resources and certified by the State Oil and Gas Supervisor on March 28, 2006, on file in the office of the State, and by reference made a part hereof and hereafter sometimes referred to as the "environmental document". Further, Permittee shall comply with all modifications of equipment and plans deemed necessary by the State to achieve the objectives set forth in the environmental document.

(b) If Permittee fails to comply with the conditions, restrictions and mitigation measures imposed under the environmental document, the State shall notify Permittee or its designated representative by telephone and written communication of the noncompliance, direct Permittee to cease all operations that are not in compliance with the environmental document, except emergency mitigative or corrective measures, and order Permittee to develop a remedial plan for the noncompliance which shall be implemented as soon as reasonably possible.

(c) Upon receipt of a notice of noncompliance, Permittee shall immediately cease all activities, except emergency mitigative or corrective measures. Permittee shall not resume its activities until the State has issued a written notice that the noncompliance has been corrected.

(d) Permittee's failure to comply with the applicable environmental document or remedial plan shall be considered a breach of the permit and subject to Paragraphs 29 and 30 of this permit. Additionally, provided Permittee has been notified of and failed to cure any such breach in accordance with Paragraph 29 of this permit, the State shall have the discretion to levy against the bond or other financial security agreement required by Paragraph 28 of this permit. In such event, the State may undertake measures to remedy the matter(s) of concern specified in the notice of noncompliance.

(e) The State shall make inspections as necessary during the term of the permit to verify compliance with the environmental document. All reasonable and necessary costs for the administration and implementation of such inspections shall be paid by the Permittee through a Standard Reimbursement Agreement or other suitable instrument. All costs shall be calculated under provisions of the State Administrative Manual and shall not exceed the State's actual costs.

11. LIABILITY AND INDEMNIFICATION FOR WASTE, DAMAGE AND LOSS

Permittee shall use all reasonable precautions to prevent waste of, damage to, or loss of natural resources and reservoir energy and shall be liable to the State for any such waste, damage or loss to the extent that it is caused by the negligence of, the breach of any provision of this permit by, or the noncompliance with any applicable statutes or regulations of the State by Permittee, or its employees, agents or contractors. Nothing in this permit shall diminish any other rights or remedies which the State may have in connection with any such negligence, breach or non-compliance. With respect to any other damage or loss, Permittee shall indemnify the State, its officers, agents and employees against all claims, demands, causes of action, or liability of any kind which may be asserted against or imposed upon the State, its officers, agents, or employees, by any third person or entity arising out of or connected with the issuance of this permit, operation thereunder, or the use by Permittee, its agents, employees or contractors of the permitted lands.

12. SUSPENSION OF OPERATIONS

In the event of any disaster or of pollution resulting from operations under this permit, Permittee shall immediately suspend all drilling operations, except those which are corrective and mitigative, and promptly notify the State. Drilling operations shall not be resumed until adequate corrective measures have been taken and authorization for resumption of operations has been given by the State. Permittee shall immediately suspend any drilling operations, except those which are corrective or mitigative, if the State determines that there is a substantial likelihood that continued operations could endanger public health or safety or cause serious damage to property or to the environment. Drilling operations shall not be resumed until the State has given its approval after determining that adequate corrective measures are feasible and have been taken to eliminate the likelihood of danger and damage.

13. SUBSIDENCE

Upon receipt of any evidence of subsidence or landslide of the surface of either the permitted or adjacent land, the State may determine that some or all further operations under this permit would or might aggravate or cause subsidence or landslides that could impair or interfere with the use of the permitted land or the areas adjacent to the permitted land or could cause

damage to other properties. The State shall notify Permittee of its determination and may require Permittee to suspend all or part of its operations under this permit. Any suspension of operations shall take effect not later than thirty (30) days from the date of the State's notice. Exercise of the right to require a total or partial suspension of operations is subject to the following restrictions:

(a) The determination may be made by the State at any time during the term of this permit but only at a meeting of the State Lands Commission following at least thirty (30) days written notice to Permittee that the State has received evidence of subsidence or landslides and proposes to determine whether some or all further operations under this permit would or might aggravate or cause subsidence or landslides that could impair or interfere with the use of the permitted land or the areas adjacent to the permitted land or could cause damage to other properties. At the Commission meeting Permittee may present facts and arguments relevant to the determination regarding subsidence or landslides. The notice and hearing requirements of this paragraph are not prerequisites to the suspension of operations that may be required by the State under Paragraph 12 of this permit.

(b) At least thirty (30) days prior to the Commission meeting, the State shall make available to Permittee for study all written and graphic information and opinions that are matters of public record that have been prepared by or for the State concerning subsidence and landslides of the permitted and adjacent land.

(c) Operations under this permit which have been suspended pursuant to this paragraph may be resumed by Permittee only in the manner and to the extent provided in a program approved by the State.

(d) Notwithstanding its approval of a program for total or partial resumption of operations, the State may require Permittee again to suspend operations in accordance with the provisions of this paragraph if the State receives evidence of further subsidence or landslides of the permitted or adjacent land.

During any period of total or partial suspension of operations pursuant to this paragraph, the rent, drilling and offset obligations of Permittee shall likewise be suspended to the extent that such rent, drilling and offset obligations are rendered impracticable or unreasonable as a result of the State's notice to suspend operations.

14. ENTRY BY STATE

The State, or persons authorized by the State, shall have the right to go upon the permitted land at all reasonable times for purposes including, but not limited to, inspecting, maintaining, repairing and protecting the property and all equipment on it, placing signs upon the property, responding to a fire, taking police action and inspecting all operations of Permittee. No entry by the State, or by persons authorized by the State, shall give Permittee any right to charge for nor subject the State to liability for any loss of occupation or quiet enjoyment of the premises.

15. RECORDS AND REPORTS

Permittee shall keep accurate records of its operations and shall file with the State the following information in the time and manner specified:

Permittee shall supply to the State all physical and factual exploration results, logs, surveys and any other data in any form resulting from operations under this permit or from any surveys, tests, or experiments conducted on the permitted land by Permittee or by any person or entity acting with the consent of Permittee or with information or data provided by Permittee. Permittee shall also supply to the State the results of all geological, geophysical or chemical tests, experiments, reports and studies, interpretive or factual, including but not limited to reservoir studies and tests, experiments, reports or studies relating to reinjection or reservoir depletion, irrespective of whether the results of such tests, experiments, reports or studies contain sensitive, proprietary or confidential information or trade secrets. All of the aforementioned data and results shall be supplied to the State within thirty (30) days of completion of any recorded portion of the operation, test, experiments, report or study from which the data or results are obtained. Permittee waives any statutory or other rights or objections it might have to prevent disclosure of any tests, experiments, reports or studies. All data and documents supplied by Permittee pursuant to this paragraph shall be deemed to have been "obtained in confidence" for purpose of Government Code section 6254(e) and may be disclosed to other persons only with the written consent of Permittee or upon a determination by the State that their disclosure is in the public interest.

16. EXAMINATION OF BOOKS

Permittee waives all rights it may have to prevent the State's examination at reasonable times of the books and records of any individual, association or corporation which has transported for, or received from, Permittee any geothermal resources produced from the permitted land. Permittee waives all rights it may have to prevent the State's examination at reasonable times of the books and records of any such individual, association or corporation with respect to such individual's, association's or corporation's operations, wells, improvements, machinery and fixtures used on or in connection with the permitted land.

17. WAIVER OF USE OF DATA

Permittee waives any statutory or other right to prevent disclosure to the State, or a duly authorized employee or representative of the State, of any information, reports, data or studies of any kind filed by Permittee with any federal, state or local agency relating to the permitted land, the geothermal resources thereunder or any operations performed under this permit, irrespective of whether such information, reports, data or studies contain sensitive, proprietary or confidential information or trade secrets. All information, reports, data or studies of any kind filed by Permittee with any federal, state or local agency, including all information filed with the State as required by this permit, shall be available at all times for any use of the State or its duly authorized representatives. Any information, reports, data or studies obtained by the State from any public agency and which are not public records shall be deemed to have been "obtained in confidence" for purposes of Government Code section 6254(e) and may be disclosed to other persons only with the written consent of Permittee or upon a determination by the State that their disclosure is in the public interest.

18. NOTICES

All notices to be given under this permit shall be deemed to have been fully given when made in writing and deposited in the U.S. Mail with postage prepaid, and addressed as follows:

To the State: California State Lands Commission
Mineral Resources Management Division
200 Oceangate, 12th Floor
Long Beach, CA 90802

To Permittee: Deep Rose Development, LLC
Attention: Mr. Charles E. Harris
809 Broadway, Suite 3
Sonoma, CA 95476

The addresses to which the notices shall be mailed may be changed by written notice given by one party to the other as provided above. Nothing contained in this paragraph shall preclude the giving of any notice by personal service to Permittee or its officers or agents. All payments specified in this permit shall be made to the State at the address provided for notices to the State.

19. PRESERVATION OF PROPERTY, WASTE DISCHARGE

Permittee shall perform all work with due regard for the preservation of the permitted land and with due regard to the environmental impact of its operations in accordance with the following terms and conditions:

(a) Permittee shall remove the derrick and other equipment and facilities within sixty (60) days after Permittee has stopped using them in its operations.

(b) All permanent operating sites shall be landscaped or fenced so as to screen them from public view to the maximum extent possible. The landscaping or fencing shall be approved in advance by the State and shall be kept in good condition.

(c) All drilling operations shall be conducted in a manner that will eliminate, as far as practical, dust, noise, vibration and noxious odors. Operating sites shall be kept neat, clean and safe. Drilling dust shall be controlled to prevent its widespread deposition. Dangerous material deposited on trees and vegetation shall be removed. The determination as to what material is dangerous rests with the State.

(d) Permittee shall file with the Regional Water Quality Control Board a report on any proposed waste discharge in accordance with section 13260 of the Water Code. Water shall be discharged in accordance with requirements prescribed by the Regional Water Quality Control Board. The State Lands Commission and any other State agency having jurisdiction over the affected lands shall also approve in advance the place and manner of such waste discharge.

(e) Permittee shall notify the California Department of Fish and Wildlife before beginning any operations which may adversely affect fish and wildlife resources. Permittee shall conduct its

operations in a manner which will not interfere with the right of the public to fish upon and from the public lands of the State and which will not preclude the right of the public to reasonable use of public lands and waters.

(f) Any operations disturbing the surface of the soil, including road building, construction and movement of heavy equipment, shall be conducted in a manner that will not result in unreasonable damage to trees and plant cover, in soil erosion or in degradation of the waters of the State, including fish and aquatic life habitat.

(g) Pollution of the ocean and tidelands, rivers, lakes or other bodies of water, and any impairment of or interference with bathing, fishing, or navigation in any such body of water are prohibited. No brine, minerals or refuse of any kind from any well or works shall be permitted to be deposited on or pass into the ocean, rivers, lakes or other bodies of water without specific written authorization from the State.

(h) No permanent filled lands, piers, platforms or other fixed structures shall be constructed, used, maintained or operated on any tide and submerged lands covered by this permit without obtaining all permits required by and complying with all applicable provisions of federal, state and local law, and without securing the written authorization of the State.

(i) Permittee shall maintain existing roads and bridges on or serving the permitted land in a condition at least equal to that before Permittee's use. New roads and bridges shall be located, constructed and maintained in accordance with applicable state and local specifications.

(j) Permittee shall compensate the surface owner at market value for all timber cut from the permitted land or otherwise damaged or destroyed. Permittee shall not obtain borrow pit material from the permitted land without permission from and payment of its market value to the State.

(k) Permittee shall protect from damage and repair or replace, when damaged by Permittee, all improvements, structures, telephone lines, trails, ditches, pipelines, water developments, fences, crops and other property of other persons, including the State, which are on or near the permitted land.

(l) Permittee shall control access to drilling sites by the public to prevent accidents or injury to persons or property.

(m) Permittee shall pond drilling mud in a safe manner and place and, where required by the State, post the site with danger signs and fence it in order to protect persons, domestic animals and wildlife. Upon completion of drilling, Permittee shall dispose of the mud or allow it to dry in place and cover it with a protective layer of soil. Any drilling muds that are determined to be hazardous by any federal, state, or local agency, shall be disposed in the manner required by the applicable statute or regulation.

(n) Permittee shall keep to a reasonable number and size any areas to be cleared and graded for drilling sites. Any clearing and grading shall be subject to State approval.

(o) Permittee shall continuously monitor effluent gases at the wellhead in order to

determine the emissions of hydrogen sulfide and other toxic materials. Permittee shall submit to the State Air Resources Board and to any Air Pollution Control District having jurisdiction, as required, the results of complete gas analyses, including toxic materials that would exist in vapor form at the wellhead temperature.

(p) Permittee shall keep noise levels for drilling or any other phase of operations to a minimum and at no time shall allow the noise level to exceed sixty-five (65) decibels at a distance of one-half (1/2) mile from the drill site. Permittee shall equip all internal combustion engines with mufflers and shall use mufflers or silencers during well testing and cleaning. Permittee shall make all noise level measurements in conformance with American Standards Institute Code section 1.13-1971 (Measurement of Sound Pressure Levels).

(q) The above requirements are in addition to, and shall not be construed as limitations upon, all other regulations, restrictions and measures provided in this permit which are designed to restrict, modify or minimize the environmental impact of operations under this permit.

20. EXISTING RIGHTS

This permit is issued subject to all existing rights at the effective date of this permit, and such rights shall not be affected by the issuance of this permit. If the permitted land has been sold by the State of California subject to a mineral reservation, Permittee shall comply with the conditions and limitations prescribed by the law including, but not limited to, those contained in section 6401 of the PRC.

21. RESERVATION OF RIGHTS

The State reserves whatever rights it may have to lease, sell or otherwise dispose of any part of the surface or subsurface of the permitted land which is not required by Permittee in its operations under this permit. This reservation includes the right of the State at any time during the term of this permit, or any extension thereof, to grant to persons whatever easements or rights-of-way in the permitted land the State determines to be necessary or appropriate, provided that easements which unreasonably interfere with Permittee's operations shall not be granted.

22. MULTIPLE USE

This permit and operations under it shall be consistent with the principle of multiple use of public lands and resources as provided in section 6902 of the PRC.

23. COORDINATION OF ACTIVITIES

Permittee shall coordinate activities with other State permittees or lessees for the development of geothermal resources on lands nearby or adjacent to the permitted land. Such coordination includes, but is not limited to, giving State permittees or lessees the right to use Permittee's access roads.

24. SURVEYS BY STATE

The State shall have the right to go upon the permitted land for the purpose of conducting surveys, tests or experiments using any geological, geochemical, geophysical or other method,

including core drilling, for determining the presence on or in the permitted land of any mineral resource, including, but not limited to, oil, hydrocarbon gas, other hydrocarbons, and geothermal resources, provided that such surveys, tests, or experiments do not unreasonably interfere with or endanger Permittee's operations.

25. COMPLIANCE WITH LAWS

Permittee shall comply with all valid federal, state and local laws applicable to Permittee's operations, including, but not limited to, the applicable provisions of Division 3 and 6 of the PRC and the applicable regulations adopted under the authority of these statutory provisions.

26. EMPLOYMENT PRACTICES

Permittee shall not discriminate against any person in its employment practices because of race, color, ancestry, national origin, religion, sex, age, marital status or physical disability, AIDS, AIDS-related condition, or sexual orientation. Permittee shall carry at all times full Worker's Compensation Insurance covering all employees engaged in operations under this permit.

27. TAXES

Permittee shall pay, when due, all taxes and assessments lawfully assessed and levied under the laws of the United States, the State of California or any of the State's political subdivisions against Permittee's interest in the permitted land, against improvements, property or assets of Permittee situated upon the permitted land, against the geothermal resources and other products produced from the permitted land and against all other rights of Permittee arising out of this permit.

28. BOND AND INSURANCE

(a) Within thirty (30) days of the effective date of this permit, Permittee shall furnish, and maintain until released by the State, a bond, or other security device approved by the State, in the sum of fifty thousand dollars (\$50,000.00) and in favor of the State for its exclusive use and benefit, guaranteeing the faithful performance by Permittee of the terms and conditions of this permit. This requirement shall be separate from any other bonding provisions of the PRC and the regulations of the State.

(b) At the option of the State and within thirty (30) days after written notice, Permittee shall procure and maintain public liability, property damage or other insurance for the benefit of the State in an amount satisfactory to the State.

29. CANCELLATION

At any time before the discovery of commercially valuable deposits of geothermal resources on the permitted land, the State may cancel this permit upon the failure of Permittee, after thirty (30) days written notice and demand for performance, to exercise due diligence and care in the prosecution of the prospecting or development work in accordance with the terms and conditions of this permit. After the discovery of commercially valuable deposits of geothermal resources on the permitted land, the State may cancel this permit upon failure of Permittee, after ninety (90) days written notice and demand for compliance, to cure any breach or default under the terms and conditions of the permit. If the permit is cancelled, Permittee shall comply with the restoration and

removal requirements of this permit, and shall have a reasonable time within which to remove any property owned or used by the Permittee in connection with its operations under the permit.

30. WAIVER OF BREACH

(a) The waiver by the State of any breach or default shall not constitute a waiver of any other breach or default of the same or any other provision of this permit, regardless of the State's knowledge of the other breaches or defaults. The State's acceptance of monies from Permittee shall not constitute a waiver of any preceding breach or default, other than failure of Permittee to pay the particular monies accepted, regardless of the State's knowledge of the preceding breach or default at the time of its acceptance of the monies. Acceptance of monies by the State after termination of the permit shall not constitute a reinstatement, extension, or renewal of the permit or revocation of any notice or other act by the State.

31. SOLVENCY

If at any time during the term of this permit, Permittee makes a voluntary assignment of its assets for the benefit of its creditors, or an attachment is levied and permitted to remain for any unreasonable length of time upon the interest, rights or privileges of Permittee in this permit or in any geothermal resources produced from the wells drilled by Permittee upon the permitted land, the State may terminate the permit by giving written notice to Permittee of its election to do so.

32. ASSIGNMENT AND SUBLETTING

(a) Permittee may assign or transfer this permit or any interest it may have in this permit and may sublet all or part of the permitted land as provided in sections 6804 and 6925 of the PRC. The State's written consent to an assignment, transfer or sublease may be conditioned upon, among other things, the State's participation in any consideration received by Permittee or its successors in interest for the assignment, transfer or sublease if this participation is deemed by the State Lands Commission to be in the best interests of the State. The consent to any assignment, transfer or sublease shall not be deemed a consent to any subsequent assignment, transfer or sublease. Any assignment, transfer or sublease made without the State's consent, whether voluntary or by operation of law, shall be of no effect and shall be a breach that gives to the State the right to cancel this permit. Permittee may subcontract, without State approval, parts of the work to be performed under this permit so long as Permittee remains responsible to the State for the work that is subcontracted. Upon approval by the State of any assignment, transfer or sublease, the assignee, transferee or sublease shall be bound by the terms of this permit to the same extent as if such assignee, transferee or sublessee were the original Permittee, any conditions in the assignment, transfer or sublease to the contrary notwithstanding. Permittee shall submit to the State documentation of any acquisition, merger, name change, corporate reorganization, or any other organizational restructuring that affects the entity which holds this permit.

(b) For purposes of this paragraph, any transaction or conveyance, or series of transactions or conveyances occurring within a period of six consecutive months, regardless of form or structure, that results in the transfer of either a controlling interest in Permittee or a fifty percent (50%) or greater ownership interest in any business entity owning a controlling interest in Permittee, shall be deemed an assignment or transfer of the permit for which State approval is

required. A “controlling interest” in Permittee is thirty-five percent (35%) or more of: (i) the voting stock of the Permittee if it is a corporation; (ii) the general partnership interest if the Permittee is a general or limited partnership; or (iii) the membership interest if the Permittee is a limited liability company.

33. QUITCLAIM

Permittee may file with the State at any time a written quitclaim of all its rights under this permit or of any portion of the permitted land as provided in sections 6804.1 and 6914 of the PRC.

34. SURRENDER OF PREMISES

If Permittee is not the surface owner, Permittee shall surrender possession of the permitted land at the expiration of this permit or its sooner termination with all improvements, structures and fixtures in good condition, with the exception of derricks which shall be removed completely, or the State may require Permittee to remove, within ninety (90) days, designated improvements, structures and fixtures which were put upon the permitted land by Permittee and to restore and replant the permitted land to the extent and in the manner specified by the State. All removal and restoration costs shall be paid by Permittee. At the option of the State, Permittee shall plug and abandon all wells in a manner approved in writing by the State Lands Commission and by the Division of Oil, Gas and Geothermal Resources. The wells shall be abandoned within the time specified by the State and at the expense of Permittee.

35. FORCE MAJEURE

Except for rent and/or royalties, the obligations imposed upon Permittee by this permit may be suspended during the time Permittee is prevented from complying with them by wars, strikes, riots, acute and unusual labor or material shortages, acts of God, laws, rules and regulations of any federal, state, county or municipal agency or such other unusual conditions which are beyond the control of Permittee. In order for any obligation imposed upon Permittee to be suspended, Permittee must inform the State in writing as soon as possible that a condition warranting suspension has arisen and obtain the State's concurrence that a force majeure exists. Permittee shall inform the State in writing as soon as possible when such condition ceases to exist.

36. SEVERABILITY

If any provision of this permit is judicially determined to be invalid, it shall be considered deleted from this permit and shall not invalidate the remaining provisions.

CALIFORNIA STATE LANDS COMMISSION

Date

By: _____
Marina Voskanian, P.E.,
Division Chief
Mineral Resources Management Division

PERMITTEE *
Deep Rose Development, LLC

Date

By: _____

Approved as to form:

By: _____
Jennifer Lucchesi, Chief Counsel
California State Lands Commission

* In executing this document, the following are required:

Corporations:

1. Affix Corporate Seal.
2. Attach certified copy of the resolution or other document authorizing its execution on behalf of the corporation.

Individuals:

1. Attach acknowledgment of Signature.