

Record of Decision for the Truckhaven Geothermal Leasing Area Imperial County, California

July 2008



El Centro Field Office



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BUREAU OF LAND MANAGEMENT

California Desert District Office
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553-9046
www.ca.blm.gov

Dear Friend of the California Desert:

Bureau of Land Management El Centro Field Office Manager Vicki Wood has signed the Record of Decision (ROD) approving the Truckhaven Geothermal Leasing Area in western Imperial County.

Copies of the ROD are being mailed to those who received a copy of the final environmental impact statement or submitted a letter protesting the plan. The ROD is now available online at <http://www.ca.blm.gov/elcentro>. Copies are available upon request at the El Centro Field Office, Bureau of Land Management, 1661 S. 4th Street, El Centro, CA 92243. Copies are available for public inspection at the following locations:

- Bureau of Land Management, California State Office, 2800 Cottage Way, Suite W-1834, Sacramento, CA 95825.
- Bureau of Land Management, El Centro Field Office, 1661 S. 4th Street, El Centro, CA 92243.
- Bureau of Land Management, California Desert District, 22835 Calle San Juan De Los Lagos, Moreno Valley, CA 92553

Within 30 days of this decision, an adversely affected party has the right of appeal to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at Title 43 Code of Federal Regulations, Part 4.400. Additional appeals information is outlined in the ROD under Appeals Procedures.

Additional information can be obtained from John Dalton, Truckhaven Geothermal Leasing Area EIS Project Manager, at (951) 697-5200, Bureau of Land Management, 22835 Calle San Juan de Los Lagos, Moreno Valley, CA 92553; john_dalton@ca.blm.gov.

Sincerely,

for Steven J. Borchard
District Manager
California Desert District

RECORD OF DECISION

Decision

After careful consideration of all perspectives and factors, balancing the need for renewable energy, the need to protect biological, cultural and visual values, and the need to maintain areas for recreational opportunities associated with the Ocotillo Wells State Vehicle Recreation Area, I have concluded that the interests of the public would be best served by selecting Alternative III. Therefore, it is my decision to lease all BLM-managed lands, totaling 14,731 acres, within the Truckhaven Geothermal Leasing Area.

The leasing of these lands for geothermal resources would be subject to standard lease stipulations (FEIS Appendix A), Best Management Practices (FEIS Section 2.1.5), and the requirement that the leases would be fully committed to a geothermal unit acceptable to BLM. In addition, in order to provide for orderly development of geothermal resources and reduce the impacts of geothermal development, reasonable effort should be made to include geothermal resources of the State that would be subject to drainage from unit operations, provided that State makes such lands available for the development of geothermal resources

SIGNATURE AND DATE



Vicki L. Wood
Field Manager, El Centro Field Office

7/2/08

Date

TABLE OF CONTENTS

1. INTRODUCTION 1
 1.1 What the EIS Provides 5
 1.2 What the EIS Does Not Provide 5
 1.3 Notice of Modifications5

2. ALTERNATIVES CONSIDERED 5
 2.1 Alternative 1. 5
 2.2 Alternative 2 6
 2.3 Alternative 3..... 6

**3. MANAGEMENT CONSIDERATIONS IN SELECTING
THE PROPOSED ACTION.....6**

4. APPROVED MITIGATION MEASURES7
 4.1 Mitigation Measures and Best Management Practices7
 4.2 Construction Design Measures10

5. MONITORING13

6. PUBLIC INVOLVEMENT13

7. AVAILABILITY OF THE EIS 15

8. APPEAL PROCEDURES15

9. IMPLEMENTATION DATE15

10. CONTACT PERSON15

Appendix

A. Appeal Procedures16
B. Form 3200-24: Offer to Lease and Lease for Geothermal Resources 18

Maps

Figure 1-1 Lands Proposed for Leasing3

ABBREVIATIONS AND ACRONYMS

BLM	Bureau of Land Management
BMPs	best management practices
CDCA	California Desert Conservation Area
CDFG	California Department of Fish and Game
CDPR	California Department of Parks and Recreation
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CSLC	California State Lands Commission
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
MOU	Memorandum of Understanding
MW	megawatt
NEPA	National Environmental Policy Act
OHV	off-highway vehicle
RFD	reasonably foreseeable development
U.S.C.	United States Code

1. INTRODUCTION

The Truckhaven Geothermal Leasing Area Final Environmental Impact Statement (FEIS) was prepared to analyze and disclose the potential environmental impacts on the natural and human environment that could result from the proposed leasing of Federal geothermal resources. The EIS considered approximately 14,731 acres of Bureau of Land Management (BLM)-managed public lands in the area known as the Truckhaven Geothermal Leasing Area, located in western Imperial County, California (Figure 1-1). The minerals, including the geothermal resources, are managed by the BLM El Centro Field Office.

The FEIS was released to the public on February 1, 2008, with the publication of the Notice of Availability in the Federal Register (FR Vol.73, No. 22, Pg 6200). This Record of Decision (ROD) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality regulations (40 Code of Federal Regulations (CFR) 1500-1508) implementing NEPA.

The decision before the BLM in this ROD is whether to approve, disapprove, or approve with modifications the Proposed Action as described in the FEIS; that is, to approve or reject non-competitive geothermal leases currently before the BLM; to approve or disapprove competitive leasing on other BLM-managed geothermal resources in the Truckhaven Geothermal Leasing Area; and whether any special conditions of approval should be attached to activities related to the Federal development permits.

The decision described in this ROD has considered the environmental, economic and social impacts of the proposed leasing of Federal geothermal resources found in the Truckhaven Geothermal leasing Area. It has also considered comments received from the public and other Federal, State, local and Tribal entities and BLM's multiple use and sustained yield mandate as found in the Federal Land Policy and Management Act (FLPMA).

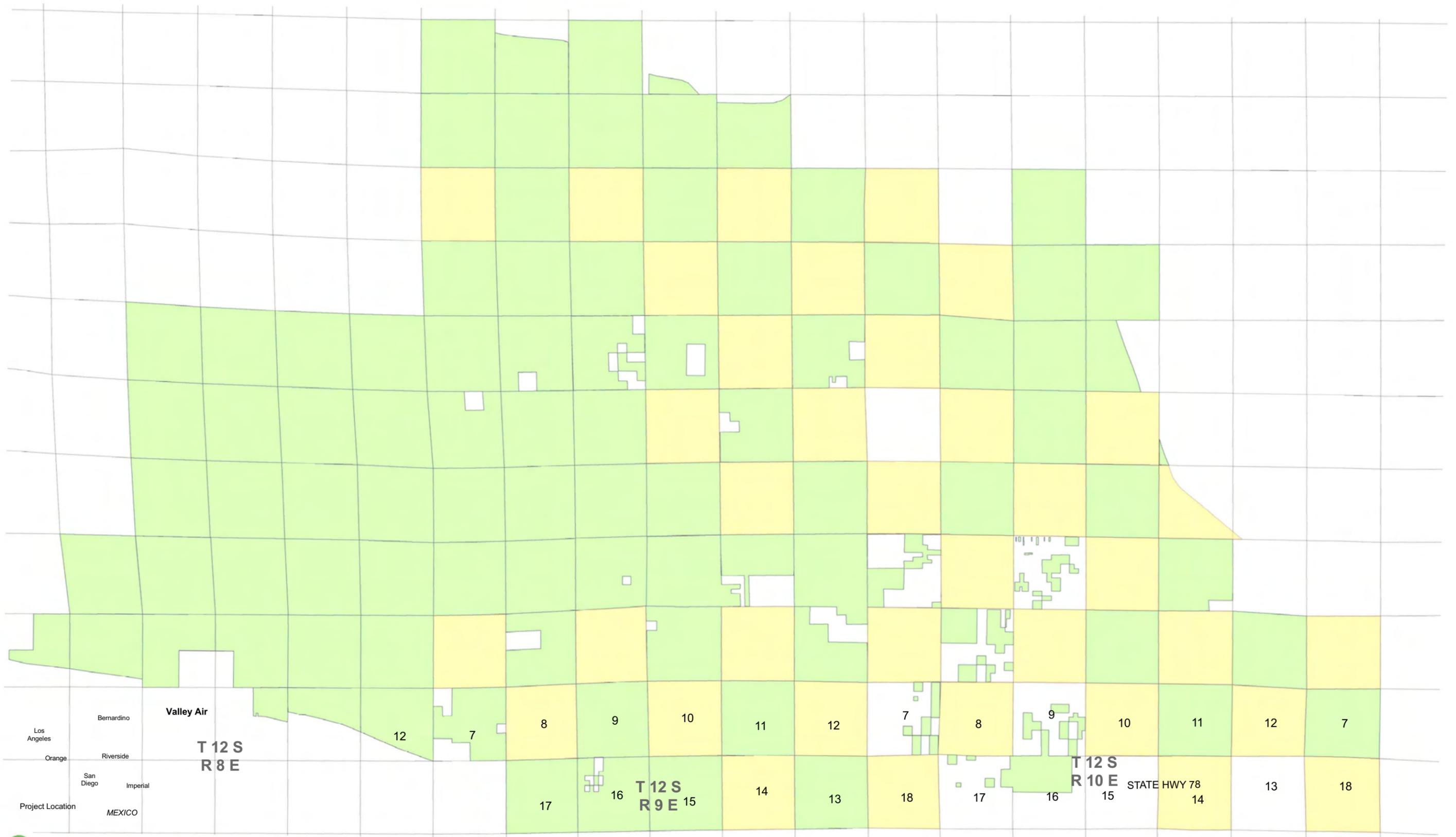


Figure 1-1
Lands Proposed for Leasing

1.1 What the EIS Provides

The EIS analyzed the impacts of leasing geothermal resources managed by the BLM in a 40,320 acre area west of the Salton Sea in Southern California. Given that the purpose of the EIS is to address leasing and not development, it analyzes impacts of leasing and not on specific impacts, which are more appropriately assessed prior to development. The EIS states:

The purpose of the proposed action is to:

- (1) Determine whether to approve leases for Federal geothermal resources on public lands with pending noncompetitive lease applications in the Truckhaven Geothermal Leasing Area; and
- (2) Determine whether to offer competitive leases for Federal geothermal resources on public lands in the Truckhaven Geothermal Leasing Area that do not have pending lease applications.

1.2 What the EIS Does Not Provide

The purpose of the EIS was to determine whether to approve leasing of Federal geothermal resources in the Truckhaven Geothermal Leasing Area. As noted above, the EIS did not address or analyze site-specific development or impacts. This approach is consistent with NEPA and BLM procedures because there are no site-specific plans of development before the BLM and to analyze such impacts at this point in time would be speculative. Instead, the EIS generally addressed impacts that may occur based upon the reasonably foreseeable development scenario contained within the EIS to allow BLM to make an informed decision on the proposal to lease.

1.3 Notice of Modifications

No comments have been received on the FEIS that modifies the proposed action.

2. ALTERNATIVES CONSIDERED

Three alternatives were considered in the EIS, which are described below:

2.1 Alternative 1

No Action Alternative (No Leasing/Environmentally Preferable Alternative)

BLM would not approve the existing noncompetitive lease applications or offer any other lands for leasing. Currently, the issuance of geothermal leases within the Truckhaven Geothermal Leasing Area is not approved by any land use plans or a Programmatic EIS.

2.2 Alternative 2

Address Only Pending Noncompetitive Lease Applications

BLM would offer the 11 sections of land with pending geothermal noncompetitive lease applications.

The geothermal leases would be subject to standard stipulations (Appendix A) and the requirement that the leases are fully committed to a geothermal unit acceptable to BLM prior to allowing any surface occupancy on the leases.

Additional mitigation measures would be developed as a part of future, site-specific analyses and permitting considerations covering subsequent proposed exploration, development, or utilization activities.

2.3 Alternative 3

Lease All BLM-managed Geothermal Resources in Truckhaven Geothermal Leasing Area (Preferred Alternative)

BLM would approve leases for sections with pending noncompetitive leasing applications and offer competitive leases for all other BLM managed lands at Truckhaven, totaling 14,731 acres. The geothermal leases would be subject to standard stipulations.

Additional mitigation measures would be developed as a part of future, site-specific analyses and permitting considerations covering subsequent proposed exploration, development, or utilization activities.

3. MANAGEMENT CONSIDERATIONS IN SELECTING THE PROPOSED ACTION

BLM is required to manage public lands for multiple-use in accordance with FLPMA. The diversity of stakeholder concerns surrounding this EIS resulted in support and opposition to components of the two action alternatives. In developing the Final EIS, BLM considered the impacts to recreation, aesthetics, threatened and endangered species, water quality, and cultural resources.

The reasonably foreseeable development scenario contained within the FEIS (Section 2.2) described the amount of land that would be affected by geothermal energy development using assumptions for infrastructure from other similar projects in the California Desert. Under these assumptions, approximately 502 acres would be initially disturbed by development. After construction, approximately 95 acres would be reclaimed leaving approximately 405 acres disturbed by the preparation of well pads, pipeline routes, access roads, and two power plant sites for the duration of the project. It is possible that the geothermal development within the Truckhaven Geothermal Leasing Area could last 30 years or more depending on the quality and extent of the geothermal resources.

As part of the collaborative effort with the California Department of Parks and Recreation, BLM will enter into a Memorandum of Understanding (MOU) with the Ocotillo Wells State Vehicle Recreation Area, to maintain open dialogue during implementation to minimize impacts to park values and ensure an appropriate level of inspection & enforcement and monitoring is conducted by the two agencies during all phases of operations.

This decision is consistent with the 1980 California Desert Conservation Area (CDCA) Plan, as amended, which designated the Truckhaven area “Multiple Use Class M”, which allows for “moderate” development. It is also consistent with the Western Colorado Route of Travel plan, which amended the CDCA plan in 2003 to designate and manage off-road trail use in the region.

The FEIS assessed (Sec. 4.1) the impacts to air quality and a consistency determination found that the proposed action will not adversely affect air quality in the subject air basin.

The decision will not affect designated wilderness areas or areas of critical environmental concern.

Lastly, I have determined that this decision will not cause undue or unnecessary impact to the public lands.

4. APPROVED MITIGATION MEASURES

Measures to avoid or minimize environmental impacts are included in the FEIS where practicable. The following list of mitigation measures (FEIS Chapter 2.1.5), will be used as appropriate in subsequent environmental documents developed as a result of development proposals.

4.1 Mitigation Measures and Best Management Practices

Geothermal resource leases are subject to the standard stipulations and lease terms. The current terms, which are subject to change, are found on Form 3200-24 (ROD Appendix A). The right to explore, develop, and utilize leased geothermal resources is inherent in the lease, subject to stipulations, legal requirements, and terms and conditions on permits. Specific conditions of approval and other mitigation measures would be required during subsequent authorizations. These include timing and location of activities during the development phases (see Section 2.2, Reasonably Foreseeable Development scenario). In addition, BLM and other governmental agencies may require specific permits.

To minimize adverse impacts to resources and uses in the proposed action area, the following Best Management Practices (BMP) and mitigation measures would be applied to future site-specific Plans of Operation, which are required for surface-disturbing activities. The BMPs provide guidance for lessees on how to meet Section 6 of the standard lease terms for this project area. Depending on site-specific conditions and

individual development plans, the following BMPs and mitigation measures may be required. Others could be identified during site-specific analyses.

General

These BMPs would help reduce or eliminate impacts to multiple elements of the human environment. Many BMPs would also minimize operator costs.

- Centralize production facilities;
- Bury distribution power lines in or adjacent to access roads;
- Use common utility or rights-of-way corridors, where practicable;
- Conduct interim reclamation of disturbed areas not needed for operation;
- Recontour all disturbed areas in final reclamation to original contours or to contours which blend with the surrounding topography;
- Revegetate reclaimed areas to restore the area to the original vegetative species composition (including annual plant seed bank, which includes several sensitive species); and/or
- Use or improve existing roads to minimize new construction.

Air Quality

- Fugitive dust emissions from roads would be mitigated by periodic watering.

Noise

- The power plants would be sited using terrain to further shield noise impacts to the greatest extent possible.
- Whenever reasonably possible, geothermal well drilling or major facility construction operations proposed within 1,000 feet of the OWSVRA boundary would be restricted to non-sleeping hours (7:00 am to 10:00 pm), or appropriate, reasonable methods would be employed to limit the hourly average noise levels at the OWSVRA to 60 dBA or below. If this is not reasonably possible, the geothermal lessee would provide at least a one-month notice to the OWSVRA manager of the date scheduled and location of the proposed operation so the California Department of Parks and Recreation can provide and post notice within the OWSVRA of the proposed activity. For unscheduled (emergency) operations, the geothermal lessee would immediately contact the OWSVRA manager so the California Department of Parks and Recreation can provide appropriate notice to the adjacent OWSVRA users.

Topography, Geology, Geological Hazards

- A detailed geotechnical analysis would be performed prior to the construction of any structures so they could be sited to avoid any hazards from subsidence or

liquefaction (i.e., the changing of a saturated soil from a relatively stable solid state to a liquid during earthquakes or nearby blasting).

Fish and Wildlife

- Above ground pipelines would be insulated.
- All pipelines outside of a power plant site or other fenced areas would be elevated at least 12 inches (0.3 meters) above the ground surface to allow wildlife mobility and prevent interference with natural drainage.

Special Status Species

- Where feasible, vehicles would use existing roads. Before new drilling pads or other land disturbance is conducted, surveys of the affected areas would be conducted to identify any special status species populations to be avoided in the area.

Cultural Resources

- Before any specific permits are issued under leases, treatment of cultural resources would follow the procedures established by the Advisory Council on Historic Preservation for compliance with Section 106 of the National Historic Preservation Act.
- A pedestrian inventory would be undertaken of all portions that have not been previously surveyed or are identified by BLM as requiring inventory to identify properties that are eligible for the National Register of Historic Places.
- Those sites not already evaluated for National Register of Historic Places eligibility would be evaluated based on surface remains, subsurface testing, archival, and/or ethnographic sources. Subsurface testing would be kept to a minimum whenever possible if sufficient information is available to evaluate the site or if avoidance is an expected mitigation outcome.
- Recommendations regarding the eligibility of sites would be submitted to the BLM, and a treatment plan would be prepared to detail methods for avoidance of impacts or mitigation of effects. The BLM would make determinations of eligibility and effect and consult with the State Historic Preservation Office as necessary based on each proposed lease application and project plans.
- Avoidance of impacts through project design would be given priority over data recovery as the preferred mitigation measure. Avoidance measures include moving project elements away from site locations or to areas of previous impacts, restricting travel to existing roads, and maintaining barriers and signs in areas of cultural sensitivity. Any data recovery will be preceded by approval of a detailed research design, Native American consultation, and other requirements for BLM issuance of a permit under the Archaeological Resources Protection Act.

Visual Resources

- Power plants would be sited using terrain to obstruct visual impacts to the extent possible.
- All facilities, including geothermal production and injection pipelines, wellheads, powerplants, maintenance buildings, etc. would be painted a color that blends into the natural setting.

Human Health and Safety/Hazardous Materials

- Potential geothermal development would be constrained by the obstruction standards in Federal Aviation Administration regulations relating to objects affecting navigable airspace surrounding the Salton Sea Airport (per 14 CFR 77 Subpart C). These regulations allow for waivers issued by the Federal Aviation Administration. Other sections affected by the restrictions are on private or State lands.
- Mitigation measures for hazardous materials generated by geothermal exploration and development would be specified in authorized use permits and would require the responsible party to take corrective actions(s) as required to comply with Federal, State, and local regulations.

Recreation

- Facilities, including pipelines, power lines, and power production facilities, would be placed to avoid crossing or blocking existing off-highway vehicle routes, or be buried under routes if avoidance is not possible.

4.2 Construction Design Measures

Air Quality

- Hydrogen sulfide emissions would be abated, for example, through the injection of hydrogen peroxide and sodium hydroxide into the test line.

Soils

- Prior to geothermal exploration and development, a complete subsurface geotechnical investigation would be conducted to analyze the soil and geologic conditions. The investigation would evaluate and identify potential geologic hazards and would provide remedial grading recommendations, foundation and slab design criteria, and soil parameters for the design of geothermal power infrastructure. The following standard construction measures would be implemented as part of geothermal exploration and development:
 - Standard soil and geotechnical engineering investigations would be conducted to ensure foundation stability.

- Before on-site grading, an erosion control plan would be prepared by an erosion control specialist certified by the International Erosion Control Society to adequately control erosion during construction.
- Proposed fill slopes would be no steeper than 2:1 (horizontal to vertical). Proposed cut slopes would be determined by soil characteristics.
- Safe allowable slope heights would generally be limited by the shear strength characteristics of the particular soil or rock conditions present.
- Grading would be performed so all identified compressible materials would be removed and recompacted, and fill soils would be placed and compacted to at least 90 percent relative compaction.
- All graded pads would have drainage swales to direct stormwater runoff or irrigation runoff away from structures or the tops of slopes to control drainage facilities. No stormwater would be allowed to discharge over the top of cut or fill slopes.
- If perched groundwater were identified as a potential concern during the subsurface investigation, canyon sub-drains would be installed after alluvial removal and before the fill placement.

Water Resources

- Proposed geothermal exploration and development would comply with the Clean Water Act as implemented by the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, a general permit for construction activities, and the associated Order No. 92-08-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity. Projects of 1 acre or more are subject to this general construction permit process.
- Developers would be required to eliminate or reduce non-stormwater discharges to stormwater systems, develop a Stormwater Pollution Prevention Plan (SWPPP) prior to beginning construction, inspect all stormwater control structures, and implement other pollution prevention measures, such as applicable BMPs and conservation measures during construction.
 - The SWPPP would include the specific measures and techniques for implementation to protect the project sites and adjacent areas from erosion and deposition during site grading, construction, and post-construction stabilization of sediment on the site.
 - The contractor would provide a copy of the SWPPP for the various crews performing work on the construction site, and a copy would be kept on-site during the project to satisfy the requirements of the NPDES permit. A draft of this SWPPP would be forwarded to the BLM for review prior to its finalization.

Recreation

- Any necessary temporary route closures for construction would be coordinated with BLM and Ocotillo Wells State Vehicular Recreation Area (OWSVRA) before beginning construction.
- Signs directing vehicles to alternative park access and parking would be posted in the event construction temporarily obstructs parking areas near trailheads.
- Signs and/or flagging that advise recreational users of construction activities would be posted in coordination with BLM and OWSVRA. Whenever active work is being performed, the area should be posted with “construction ahead” signs on any adjacent access roads or trails that might be affected.
- Construction-related traffic would be restricted to routes approved by the authorized agency(ies). Construction of new access roads or cross-country vehicle travel would not be permitted unless prior written approval is given by the authorized officer. Authorized roads used by the proposed action will be rehabilitated when construction activities are complete. The agency(ies) would work with the proponent to develop site-specific standards for route reconstruction.
- Whenever possible, construction activities would be avoided during high recreational use periods.

Transportation and Traffic

The following measures would be considered during implementation to minimize traffic safety issues. With the incorporation of these measures, no significant impacts to the local roadway systems would occur.

- The lessee would be required to file a traffic control plan indicating how and where construction traffic would be routed and traffic control measures would be emplaced to ensure accidents do not occur.
- Signs directing vehicles to alternative park access and parking would be posted in the event construction temporarily obstructs recreational parking areas near trailheads.
- Signs and/or flagging that advise recreational users of construction activities would be posted in coordination with BLM and/or OWSVRA. Whenever work is being performed, the area would be posted with “construction ahead” signs on any adjacent access roads or trails that might be affected.
- Construction-related traffic would be restricted to routes approved by the authorized agency(ies) (BLM, OWSVRA).
- Whenever possible, construction activities would be avoided during high recreational use periods.

5. MONITORING

As part of the MOU with State Parks, BLM will monitor construction and operations to ensure that impacts are within those disclosed in the FEIS and future site-specific environmental documents.

6. PUBLIC INVOLVEMENT

Scoping

During August 2005, BLM conducted a formal scoping process for the Truckhaven and Superstition Mountain areas regarding proposed geothermal leasing. BLM invited the participation of affected Federal, state, and local agencies; Indian tribes; and other interested persons to learn more about the proposals and to make comments.

(Subsequent to these meetings, BLM decided to move forward on an EIS for the Truckhaven area only. A separate EIS regarding the Superstition Mountain area is being developed by the Department of the Navy.) Based on comments during scoping, the BLM identified the environmental issues that were analyzed in the Draft and Final EISs. The scoping comments also assisted the BLM in determining the appropriate depth of analysis for each issue, and which issues were outside the scope of the proposed action.

Draft EIS

The BLM released the Draft EIS for public comment with the publication of a Notice of Availability in the Federal Register: February 16, 2007 (Vol. 72, No. 32: Pages 7672-7673). Three informational public meetings were held in Ocotillo Wells, Salton City and El Centro, CA during March 2007. Major points for the Draft EIS were presented at these meetings and questions regarding the planning process and Planning Area were answered by BLM representatives.

Public Comments on Draft EIS and BLM's Responses

A total of 600 comment letters were received by the BLM by the close of the public comment period. The following section describes the substantive issues most often raised in public comment letters and BLM's responses:

Estimates of Use at Ocotillo Wells State Vehicular Recreation Area

Many comments were received regarding the statement in the Draft EIS that OWSVRA received 1 million visitors annually. The Final EIS was revised to show that the Park had received 1.9 million visitors during the most recent year for which it had final data.

Amount of Land Affected by Geothermal Energy Development

The Draft EIS stated that the amount of land within the Truckhaven Geothermal Leasing Area is 40,320 acres. BLM received many comments suggesting that all 40,320 acres would be affected by the development. However, only 502 acres initially and 405 acres over the life of the project would actually be required for geothermal energy facilities.

Rights of BLM to Lease Mineral Estate Below Lands Managed by California State Parks under the Memorandum of Understanding

Several comments were received regarding BLM authority to lease the mineral estate below the lands that BLM has given State Parks to manage for recreation at OWSVRA. Under the MOU, BLM retained the explicit authority to lease the minerals.

Disruption of Existing Trail Use and Public Safety

Several members of the public commented about the loss of trails from geothermal development and its potential impacts to public safety. The EIS stated that temporary trail closures would likely be limited to the construction phase and any closures would be coordinated with the Park Superintendent at OWSVRA. Over the long term, the proposed action would likely not close designated trails.

Specificity of Impact Assessment

Some comments referred to the general nature of the impact assessment. The EIS provides a general analysis of impacts given that there are no specific development proposals. The EIS provides an estimate of the impacts, but until the lands can be leased and the technical aspects of development further refined, the EIS can only be a general analytical tool. This is consistent with BLM and CEQ guidance. At this point, BLM has 5 applications to lease geothermal resources at Truckhaven. BLM used this EIS to consider these applications and the possible leasing of other BLM administered minerals. No specific plans of development will be filed by developers until the land are leased. Therefore, it is not possible to precisely analyze impacts associated with development. When BLM does receive applications to develop the leases, it will conduct detailed, site-specific environmental analyses to assess the impacts of these specific plans.

Coordination with the State of California

Following closure of the public comment period, the BLM coordinated closely with the California Department of Parks and Recreation (CDPR) and California State Lands Commission (CSLC) to resolve agency issues as well as concerns raised by the public.

One of the most contentious issues from the EIS process dealt with the impact to recreation at the Ocotillo Wells State Vehicular Recreation Area. The EIS described the potential short term impact to some existing trails, mostly likely during construction. Mitigation and best management practices would minimize impacts by encouraging developers to avoid building roads, pipelines and other facilities on or near existing trails.

The FEIS was also slightly modified in order for it to serve the dual purpose of complying with the NEPA and also to serve as the basis for preparing an Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA) for the potential issuance of State leases for geothermal resources on areas where the CSLC has jurisdiction over mineral interests within the Truckhaven Geothermal Leasing Area.

The FEIS included the revised map and language requested by the State along with other clarifications requested by State agency reviewers of the Draft EIS.

7. AVAILABILITY OF THE EIS

Copies of this ROD and the FEIS are available for download at the “Planning” page of the BLM national website (<http://www.blm.gov>). A paper copy may be requested by contacting the Bureau of Land Management, California Desert District, 22835 Calle San Juan De Los Lagos, Moreno Valley, CA 92553, attention: John Dalton.

8. APPEAL PROCEDURES

Within 30 days after the date of publication in the Federal Register of this decision, an adversely affected party has the right of appeal to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at Title 43 Code of Federal Regulations, Part 4.411. Follow the procedures as outlined in the attached Form 1842-1, Information on Taking Appeals to the Board of Land Appeals. Within 30 days after filing an appeal, a Statement of Reasons must be provided to the Board of Land Appeals, list in Item 3 on the form. In addition, please provide the El Centro Field Office with a copy of the Statement of Reasons. The appellant has the burden of showing that the appealed decision is in error.

9. IMPLEMENTATION DATE

As provided under 43 CFR 3200.5(b), this decision is immediately in full force and effect upon approval by the Authorized BLM officer. The authorized BLM officer for this action is the BLM El Centro Field Manager.

10. CONTACT PERSON

For additional information concerning this decision, please contact:

John Dalton, Project Manager
BLM-California Desert District
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553
Telephone: (951) 697-5311

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Appendix A

Appeal Procedures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS

DO NOT APPEAL UNLESS

1. This decision is adverse to you,
AND
2. You believe it is incorrect

IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

1. NOTICE OF APPEAL.....	A person who wishes to appeal to the Interior Board of Land Appeals must file in the office of the officer who made the decision (not the Interior Board of Land Appeals) a notice that he wishes to appeal. A person served with the decision being appealed must transmit the <i>Notice of Appeal</i> in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the FEDERAL REGISTER, a person not served with the decision must transmit a <i>Notice of Appeal</i> in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).	
2. WHERE TO FILE	U.S. Dept. of the Interior Bureau of Land Management El Centro Field Office 1661 South 4th Street El Centro, CA 92243	U.S. Dept. of the Interior Office of Hearings & Appeals Interior Board of Land Appeals 801 North Quincy St., MS 300-QC Arlington, VA 22203
NOTICE OF APPEAL.....	And	
WITH COPY TO SOLICITOR...	U.S. Dept. of the Interior Office of the Solicitor-Pacific Southwest Region 2800 Cottage Way, Room E-2753 Sacramento, CA 95825-1890	
3. STATEMENT OF REASONS	Within 30 days after filing the <i>Notice of Appeal</i> , file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. If you fully stated your reasons for appealing when filing the <i>Notice of Appeal</i> , no additional statement is necessary (43 CFR 4.412 and 4.413).	
WITH COPY TO SOLICITOR.....	U.S. Dept. of the Interior Office of the Solicitor-Pacific Southwest Region 2800 Cottage Way, Room E-2753 Sacramento, CA 95825-1890	U.S. Dept. of the Interior Bureau of Land Management El Centro Field Office 1661 South 4th Street El Centro, CA 93342
	And	
4. ADVERSE PARTIES.....	Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the <i>Notice of Appeal</i> , (b) the Statement of Reasons, and (c) any other documents filed (43 CFR 4.413).	
5. PROOF OF SERVICE.....	Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (43 CFR 4.401(c)).	
6. REQUEST FOR STAY.....	Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with a <i>Notice of Appeal</i> (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your <i>Notice of Appeal</i> (43 CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the <i>Notice of Appeal</i> and Petition for a Stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted. Standards for Obtaining a Stay. Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.	

Unless these procedures are followed, your appeal will be subject to dismissal (43 CFR 4.402). Be certain that **all** communications are identified by serial number of the case being appealed.

NOTE: A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, Subpart B for general rules relating to procedures and practice involving appeals.

43 CFR SUBPART 1821--GENERAL INFORMATION

Sec. 1821.10 Where are BLM offices located? (a) In addition to the Headquarters Office in Washington, D.C. and seven national level support and service centers, BLM operates 12 State Offices each having several subsidiary offices called Field Offices. The addresses of the State Offices can be found in the most recent edition of 43 CFR 1821.10. The State Office geographical areas of jurisdiction are as follows:

STATE OFFICES AND AREAS OF JURISDICTION:

Alaska State Office ----- Alaska
Arizona State Office ----- Arizona
California State Office ----- California
Colorado State Office ----- Colorado
Eastern States Office ----- Arkansas, Iowa, Louisiana, Minnesota, Missouri
and, all States east of the Mississippi River
Idaho State Office ----- Idaho
Montana State Office ----- Montana, North Dakota and South Dakota
Nevada State Office ----- Nevada
New Mexico State Office ---- New Mexico, Kansas, Oklahoma and Texas
Oregon State Office ----- Oregon and Washington
Utah State Office ----- Utah
Wyoming State Office ----- Wyoming and Nebraska

(b) A list of the names, addresses, and geographical areas of jurisdiction of all Field Offices of the Bureau of Land Management can be obtained at the above addresses or any office of the Bureau of Land Management, including the Washington Office, Bureau of Land Management, 1849 C Street, NW, Washington, DC 20240.

(Form 1842-1, September 2006)

Appendix B

**Form 3200-24: Offer to Lease and
Lease for Geothermal Resources**

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OFFER TO LEASE AND LEASE FOR GEOTHERMAL RESOURCES

Serial No. _____

The undersigned (see page 2) offers to lease all or any of the lands in item 2 that are available for lease pursuant to the Geothermal Steam Act of 1970 (30 U.S.C. 1001-1025).

Read Instructions Before Completing

1. Name

Street _____

City, State, Zip Code _____

2. Surface managing agency if other than BLM: _____ Unit/Project _____

Legal description of land requested (segregate by public domain and acquired lands):

T. _____ R. _____ Meridian _____ State _____ County _____

Amount remitted: Filing fee \$ _____

Rental fee \$ _____

Total acres applied for _____

Percent U.S. interest _____

Total \$ _____

DO NOT WRITE BELOW THIS LINE

3. Land included in lease:

T. _____ R. _____ Meridian _____ State _____ County _____

Total acres in lease _____

Rental retained \$ _____

In accordance with the above offer, or the previously submitted competitive bid, this lease is issued granting the exclusive right to drill for, extract, produce, remove, utilize, sell, and dispose of all the geothermal resources in the lands described in item 3 together with the right to build and maintain necessary improvements thereupon, for a primary term of 10 years. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance and, when not inconsistent with lease rights granted or specific provisions of this lease, regulations and formal orders hereafter promulgated.

THE UNITED STATES OF AMERICA

Type of lease:

Noncompetitive

Competitive

Other _____

by _____ (Signing Officer)

(Title) _____ (Date)

EFFECTIVE DATE OF LEASE _____

4. (a) Undersigned certifies that:

(1) Offeror is a citizen of the United States; an association of such citizens: a municipality; or a corporation organized under the laws of the United States, any State or the District of Columbia; (2) All parties holding an interest in the offer are in compliance with 43 CFR 3200 and the authorizing Act; (3) Offeror's chargeable interests, direct and indirect, do not exceed that allowed under the Act; and (4) Offeror is not considered a minor under the laws of the State in which the lands covered by this offer are located.

(b) Undersigned agrees that signature to this offer constitutes acceptance of this lease, including all terms, conditions and stipulations of which offeror has been given notice, and any amendment or separate lease that may cover any land described in this offer open to lease application at the time this offer was filed but omitted for any reason from this lease. The offeror further agrees that this offer cannot be withdrawn, either in whole or part, unless the withdrawal is received by the BLM State Office before this lease, an amendment to this lease, or a separate lease, whichever covers the land described in the withdrawal, has been signed on behalf of the United States.

This offer will be rejected and will afford the offeror no priority if it is not properly completed and executed in accordance with the regulations, or if it is not accompanied by the required payments. Title 18 U.S.C. Sec. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Duly executed this _____ day of _____, 20_____.

(Signature of Lessee or Attorney-in-fact)

LEASE TERMS

Sec. 1. Rentals—Rentals shall be paid to proper office of lessor in advance of each lease year until there is production in commercial quantities from the leased lands. Annual rental rates per acre or fraction thereof are: \$1 for noncompetitive leases and \$2 for competitive leases.

If this lease or a portion thereof is committed to an approved cooperative or unit plan which includes a well capable of producing leased resources, and the plan contains a provision for allocation of production, royalties shall be paid on the production allocated to this lease. However, annual rentals shall continue to be due for those lands not within a participating area.

Failure to pay annual rental, if due, on or before the anniversary date of this lease (or next official working day if office is closed) shall automatically terminate this lease by operation of law. Rentals may be suspended by the Secretary upon a sufficient showing by lessee.

Sec. 2. Royalties—Royalties shall be paid to proper office of lessor. Royalties shall be computed in accordance with regulations and orders. Royalty rates on production are: 10 percent for steam, heat, or energy; 5 percent for byproducts; and 5 percent for demineralized water.

Lessor reserves the right to establish reasonable minimum values on production after giving lessee notice and an opportunity to be heard. Royalties shall be due and payable on the last day of the month following the month in which production occurred.

A minimum royalty shall be due for any lease year beginning on or after the commencement of production in commercial quantities in which royalty payments aggregate less than \$2 per acre. Lessee shall pay such difference at the end of lease year. This minimum royalty may be waived, suspended, or reduced, and the above royalty rates may be reduced for all or portions of this lease if the Secretary determines that such action is necessary to encourage the greatest ultimate recovery of the leased resources, or is otherwise justified.

Sec. 3. Bonds—Lessee shall file and maintain any bond required under regulations.

Sec. 4. Diligence, rate of development, unitization, and drainage—Lessee shall perform diligent explorations as required by regulations and shall prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves right to specify rates of development and production in the public interest and to require lessee to subscribe to a cooperative or unit plan, within 30 days of notice, if deemed necessary for proper development and operation of the area, field, or pool embracing these leased lands. Lessee shall drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in amount determined by lessor.

Sec. 5. Documents, evidence, and inspection—Lessee shall file with proper office of lessor, not later than (30) days, after effective date thereof, any contract or evidence of other arrangement for the sale or disposal of production. At such times and in such form as lessor may prescribe, lessee shall furnish detailed statements showing amounts and quality of all products removed and sold, proceeds therefrom, and amount used for production purposes or unavoidably lost. Lessee may be required to provide plats and schematic diagrams showing development work and improvements, and reports with respect to parties in interest, expenditures, and depreciation costs.

In the form prescribed by lessor, lessee shall keep a daily drilling record, a log, and complete information on well surveys and tests and keep a record of subsurface investigations and furnish copies to lessor when required. Lessee shall keep open at all reasonable times for inspection by any authorized officer of lessor, the leased premises and all wells, improvements, machinery, and fixtures thereon, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or in the leased lands. Lessee shall maintain copies of all contracts, sales agreements, accounting records, and documentation such as billings, invoices, or similar documentation that support costs claimed as manufacturing, preparation, and/or transportation costs. All such records shall be maintained in lessee's accounting offices for future audit by lessor. Lessee shall maintain required records for 6 years after they are generated or, if an audit or investigation is underway, until released of the obligation to maintain such records by lessor.

During existence of this lease, information obtained under this section shall be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552).

Sec. 6. Conduct of operations—Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee shall take reasonable measures deemed necessary by

lessor to accomplish the intent of this section. To the extent consistent with leased rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-ways. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessees.

Prior to disturbing the surface of the leased lands, lessee shall contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short term special studies under guidelines provided by lessor. If in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects.

Sec. 7. Production of byproducts—If the production, use, or conversion of geothermal resources from these leased lands is susceptible of producing a valuable byproduct or byproducts, including commercially demineralized water for beneficial uses in accordance with applicable State water laws, lessor may require substantial beneficial production or use thereof by lessee.

Sec. 8. Damages to property—Lessee shall pay lessor for damage to lessor's improvements, and shall save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

Sec. 9. Protection of diverse interests and equal opportunity—Lessee shall maintain a safe working environment in accordance with standard industry practices and take measures necessary to protect the health and safety of the public. Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly.

Lessee shall comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessee nor lessee's subcontractor shall maintain segregated facilities.

Sec. 10. Transfer of lease interests and relinquishment of lease—As required by regulations, lessee shall file with lessor, any assignment or other transfer of an interest in this lease. Lessee may relinquish this lease or any legal subdivision by filing in the proper office a written relinquishment, which shall be effective as of the date of filing, subject to the continued obligation of the lessee and surety to pay all accrued rentals and royalties.

Sec. 11. Delivery of premises—At such time as all or portions of this lease are returned to lessor, lessee shall place all wells in condition for suspension or abandonment, reclaim the land as specified by lessor, and within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of producible wells or continued protection of the environment.

Sec. 12. Proceedings in case of default—If lessee fails to comply with any provisions of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation in accordance with the Act. However, if this lease includes land known to contain a well capable of production in commercial quantities, it may be cancelled only by judicial proceedings. This provision shall not be construed to prevent the exercise by lessor or any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver shall not prevent later cancellation for the same default occurring at any other time.

Whenever the lessee fails to comply in a timely manner with any of the provisions of the Act, this lease, the regulations, or formal orders, and immediate action is required, the Lessor may enter on the leased lands and take measures deemed necessary to correct the failure at the expense of the Lessee.

Sec. 13. Heirs and successors-in-interest—Each obligation of this lease shall extend to and be binding upon, and every benefit hereof shall inure to, the heirs, executors, administrators, successors, or assigns of the respective parties hereto.

Instructions

A. General

1. Items 1 and 2 need to be completed only by parties filing for a noncompetitive lease. The BLM will complete front of form for all other types of leases.
2. Entries must be typed or printed plainly in ink. Offeror must sign form (item 4) in ink.
3. An original and two copies of this offer must be prepared and filed in the proper BLM State office. See regulations at 43 CFR 1821.2-1 for office locations.
4. If more space is needed, additional sheets must be attached to each copy of the form submitted.

B. Special:

Item 1—Enter offeror name and billing address.

Item 2—Indicate the agency controlling the surface use of the land and the name of the unit

or project of which the land is a part. Offeror may also provide other information that will assist in establishing title for minerals. The description of land must conform to 43 CFR 3203.4. Total acres applied for must not exceed that allowed by regulations.

Payments: The amount remitted must include the filing fee and the first year's rental at the rate of \$1 per acre or fraction thereof. The full rental based on the total acreage applied for must accompany an offer even if the mineral interest of the United States is less than 100 percent. The filing fee will be retained as a service charge even if the offer is completely rejected or withdrawn. To protect priority, it is important that the rental submitted be sufficient to cover all the land requested. If the land requested includes lots or irregular quarter-quarter sections, the exact area of which is not known to the offeror, rental should be submitted on the basis of each such lot or quarter-quarter section containing 40 acres. If the offer is withdrawn or rejected in whole or in part before a lease issues, the rental remitted for the parts withdrawn or rejected will be returned.

Item 3—This space will be completed by the United States.

PAPERWORK REDUCTION ACT STATEMENT

1. This information is being collected pursuant to the law (43 CFR 3200).
2. This information will be used to create and maintain a record of geothermal lease activity.
3. Response to this request is required to obtain a benefit.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this geothermal lease application.

AUTHORITY: 30 U.S.C. et. seq.

PRINCIPAL PURPOSE—The information is to be used to process geothermal lease applications.

ROUTINE USES:

- (1) The adjudication of the lessee's rights to the land or resources.
- (2) Documentation for public information in support of notations made on land status records for the management, disposal, and use of public lands and resources.
- (3) Transfer to appropriate Federal agencies when concurrence is required prior to granting a right in public lands or resources.
- (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION — If all the information is not provided, the offer may be rejected. See regulations at 43 CFR 3200.

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
El Centro Field Office
1661 S. 4th Street
El Centro CA 92243**

**OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE**