

**Bureau of Land Management  
Winnemucca District Office**

**Field Office(s):**  HRFO  BRFO

**Categorical Exclusion  
Team Review**

|   |
|---|
| <b>Applicant: US GEOTHERMAL NEVADA (USGN)</b>   |
| <b>Proposal: SAN EMIDIO SEISMIC SURVEY 2011</b> |
| <b>CX#: DOI-BLM-NV-W030 -2011-0007 -CX</b>      |

**Prepared By:** Raquel Minky

**Date:** March 23, 2011

| <b>Name /Title</b>   | <b>Resource/Agency Represented</b>    | <b>Signature/Date</b>            | <b>Comments<br/>(Attach if more room is needed)</b> |
|----------------------|---------------------------------------|----------------------------------|---|
| Kathy Ataman         | Cultural Resources                    | <i>Kathy Ataman</i>              | none  |
| <i>Joanne Louden</i> | T&E (plants and animals)              | <i>[Signature]</i>               | 03/23/11  |
| Mark E Hall          | Native American Reli                  | <i>Mark E Hall</i><br>3/23/2011  | NONE  |
| Kristine Struck      | Lands with Wilderness Characteristics | <i>[Signature]</i><br>3/23/11    |   |
| Raquel Minky         | Project Lead/Mineral Resources        | <i>Raquel Minky</i><br>3/24/2011 | NONE  |

Continue the list of specialties as necessary .....

**43 CFR 46.215**  
**Categorical Exclusions: Extraordinary Circumstances**

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- | <u>Yes</u> | <u>No</u> |  |
|------------|-----------|--|
| [ ]        | [x]       | (a) Have significant impacts on public health or safety  |
| [ ]        | [x]       | (b) Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas. |
| [ ]        | [x]       | (c) Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)].   |
| [ ]        | [x]       | (d) Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.  |
| [ ]        | [x]       | (e) Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.  |
| [ ]        | [x]       | (f) Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.  |
| [ ]        | [x]       | (g) Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau.   |
| [ ]        | [x]       | (h) Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.   |
| [ ]        | [x]       | (i) Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.  |
| [ ]        | [x]       | (j) Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).   |
| [ ]        | [x]       | (k) Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).  |
| [ ]        | [x]       | (l) Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).  |

*All of the above questions must be answered negatively before the Categorical Exclusion may be approved. This checklist is taken from 43 CFR 46.215*

Prepared By:           Raquel Minky           Date           March 24, 2011

**Bureau of Land Management  
Winnemucca District Office  
Categorical Exclusion/Cultural Resources Inventory Needs Assessment Form**

|                                      |   |   |
|--------------------------------------|---|---|
| <input type="checkbox"/> HRFO (1000) | <input checked="" type="checkbox"/> BRFO (3000) | <input type="checkbox"/> District (     ) |
|--------------------------------------|---|---|

|   |                                       |
|---|---------------------------------------|
| <b>CX#: DOI-BLM-NV-W030-20110007-CX</b> | <b>Date: March 7, 2011</b>            |
| File Code : 43 CFR 3250                 | Lease / Case File / Serial #: N-89494 |

1. BLM District Office: Winnemucca District Office
2. Name of Project Lead: Raquel Minky
3. Project Title: San Emidio Seismic Survey 2011
4. Applicant: US Geothermal Nevada (USGN)
5. Project Description: USGN has submitted a NOI for geothermal exploration to conduct a surface seismic survey in the San Emidio Desert on both Public and private lands intended to supplement the geological profile of the San Emidio resource area. Exploration activities would be performed between approval of the NOI and July 30, 2011. This proposal is part of a DOE Recovery Act Grant DE-FOA 0000109. The survey would include 4 additional, 1 mile seismic transects. Forty seismic acceleration points would be evaluated for each traverse. Data collection would include cross-country travel by a tri-axial vibroseis machine mounted on a 64,000 pound low impact field vehicle. Seismic jugs would be moved and set by hand crews. Staff would use 1 ATV for set up and removal of seismic acceleration points. Flagging and staking of each route would be completed before work to ensure archaeological sites are avoided. The survey would require 2 ATV passes to set out and pick up receivers. Each seismic route and associated seismic evaluation point would be loaded into the truck mounted GPS unit. A staging area for equipment would be located on private land.

There would be no roads or excavation required and the truck would make one pass along each route. Existing access routes will be utilized where possible. One or two staff members would be on site during the testing and data collection. It is anticipated that it would take 15 minutes to complete each test and move to the next site. Each seismic alignment would be tested in approximately 7 hours and the complete operation would be completed in approximately 3 days. Upon completion of the seismic study, any disturbed soils would be stabilized. Water runoff and erosion would be evaluated on an ongoing basis. Noxious weeds would be controlled and weed spraying would be evaluated annually.

Any archaeological sites would be avoided. In the event that the BLM Authorized Officer determines that an additional cultural evaluation is required for testing, USG would direct a qualified archaeologist to evaluate the test sites and ensure that each selected test location would not be located on an archaeological occurrence.

Project dimensions (length, width, height, depth): 4 miles Acreage: 5

Will the project result in new surface disturbance? Yes  No

Has the project area been previously disturbed? Yes. Less than 20% of the project area has been previously disturbed.

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Applicant: US Geothermal Nevada

Project Title: San Emidio Seismic Survey 2011

6. Legal Description: T. 29 N., R. 23 E., Sections 15, 17, & 21, MDB&M

USGS 24k Quad name: San Emidio Desert North

100k map name: Kumiva

Land Status: BLM  Private

7. Create PDFs of 1:24000 Project Location Map and 1:100,000 general vicinity map. (See template and instructions in S:\NEPA\_2010\NEPA Templates 2010\Proposed Action\_Needs Assessment)

**8. To be completed by Cultural Resource Specialist (CR):**

Area of Potential Effect:

APE Acreage: 5 acres

Records Check:

Records Examined: Winnemucca cultural resource files

Results: Area was previously surveyed. There are no sites along the proposed seismic line routes. The area has low site densities.

Inventory Type Needed:

None

Categorical Exemption (Number \_\_\_\_\_)

Reconnaissance \_\_\_\_\_

Class I \_\_\_\_\_

Class II \_\_\_\_\_

Class III \_\_\_\_\_

Architectural \_\_\_\_\_

Rationale for Inventory Type determination: Area was previously surveyed and no sites were located along the seismic routes.

Tribal Notification/Consultation Needs: N/A

Rationale:

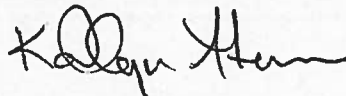
Tribe(s) to be contacted:

Public Notification Needs: N/A

Rationale:

Person(s), group(s) to be contacted:

CRS Approval:



Date: 3/14/11

Field or other appropriate Manager Concurrence:



Date: 3/15/11

**Part I: Plan Conformance Review**

The proposed Action is subject to the:

- Paradise-Denio Management Framework Plan
  - Sonoma-Gerlach Management Framework Plan
  - Black Rock Desert-High Rock Canyon Emigrant Trails NCA and Associated Wilderness and Other Contiguous Lands in Nevada RMP
- (The Proposed Action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM Manual 1617.3).*

**Part II: NEPA Review**

Categorical Exclusion Review: This Proposed Action qualifies as a categorical exclusion under:

- 43 CFR 46.210 DOI Implementation of NEPA of 1969, Listing of Departmental Categorical Exclusions (*formerly 516 DM2 Appendix 1*)
- 516 DM11.9, (BLM) B(6) Approval of Notices of Intent to conduct geophysical exploration of oil, gas, or geothermal, pursuant to 43 CFR 3150 or 3250, when no temporary or new road construction is proposed.

**ESA and BLM Sensitive Status Species**

| Evaluation Criteria  | Yes                      | No                       |
|--|--------------------------|--------------------------|
| 1. Are species listed under the Endangered Species Act likely to occur in the project area? If yes, list the species in Table 1 below. Verify with USFWS or use approved list. | <input type="checkbox"/> | x                        |
| 2. Are BLM NV Sensitive Species, based upon the current IM, likely to occur in the project area? If yes, list the species in the Table 1 below.                                | x                        |                          |
| 3. Could the proposed action result in "take" under the Migratory Bird Treaty Act? If yes, attach appropriate mitigation measures.   | x                        | <input type="checkbox"/> |

**Table 1. Special Status Species that may occur in the project area:**

| ESA                      | BLM                        | Common ( <i>Scientific</i> ) Name                   | May Be Affected?   | Mitigation for BLM Sensitive Species ( <i>Attach ESA Section 7 Compliance to Form</i> )  |
|--------------------------|----------------------------|---|--|--|
| <input type="checkbox"/> | X <input type="checkbox"/> | Loggerhead Shrike<br>( <i>Lanius ludovicianus</i> ) | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | The Migratory Bird Treaty Act prohibits the destruction of nests (nests with eggs or young) of migratory birds. Most of the "songbirds" that occur in this area are migratory birds and are protected by this provision. For any activities conducted during the nesting season (April 15 – July 15), a careful examination of each area to be disturbed (including cross-country travel routes) should be done to assure no nests with eggs or young are present. If such nests are found, they should be avoided by an appropriate distance to prevent destruction of the nest and disturbance of the nesting birds. |



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**Applicant: US Geothermal Nevada**  
**Project Title: San Emidio Seismic Survey 2011**

|                          |                                     |  |  |  |
|--------------------------|-------------------------------------|--|--|--|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Vesper sparrow<br>( <i>Pooecetes gramineus</i> ) | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | See stipulation for Loggerhead shrike  |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Burrowing owl<br>( <i>Athene cunicularia</i> )   | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | Burrowing owls may be present in the project area. For any activities conducted during the nesting season (Mar 1 – Aug 31), a careful examination of each area to be disturbed (including cross-country travel routes) should be done to assure no occupied burrows are present. If occupied burrows are found, they should be avoided by an appropriate distance to prevent destruction of the burrow and disturbance of the nesting birds. |
| <input type="checkbox"/> | <input type="checkbox"/>            |  | <input type="checkbox"/> Yes<br><input type="checkbox"/> No            |  |
| <input type="checkbox"/> | <input type="checkbox"/>            |  | <input type="checkbox"/> Yes<br><input type="checkbox"/> No            |  |
| <input type="checkbox"/> | <input type="checkbox"/>            |  | <input type="checkbox"/> Yes<br><input type="checkbox"/> No            |  |

**Table 2 Migratory Bird Treaty Act Consideration**

| Potential MBTA Species w/in the Project Area Common ( <i>Scientific</i> ) Name | May Be Affected?   | Proposed Mitigation                   |
|--|--|---------------------------------------|
| Sage thrasher<br>( <i>Oreoscoptes montanus</i> )                               | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | See stipulation for Loggerhead shrike |
| Common poorwill<br>( <i>Phalaenoptilus nuttallii</i> )                         | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | See stipulation for Loggerhead shrike |
| Horned lark<br>( <i>Eremophila alpestris</i> )                                 | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | See stipulation for Loggerhead shrike |
| Sage sparrow<br>( <i>Amphispiza belli</i> )                                    | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | See stipulation for Loggerhead shrike |
| Brewer's sparrow<br>( <i>Spizella breweri</i> )                                | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | See stipulation for Loggerhead shrike |

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|   |  |                                       |
|---|--|---------------------------------------|
| Black-throated sparrow<br>( <i>Amphispiza bilineata</i> ) | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | See stipulation for Loggerhead shrike |
|---|--|---------------------------------------|

The Proposed Action has been reviewed to determine if any exceptions described in 43 CFR 46.215  
Categorical Exclusions: Extraordinary Circumstances (See attached page)

*Mitigation Measures/Remarks: Subject to lease stipulations. (See Attached)*

**Part III: DECISION:** I have reviewed this plan conformance and NEPA compliance record and have determined that the proposed project is in conformance with the approved land use plan and that no other environmental analysis is required. It is my decision to implement the project, as described, with the mitigation measures identified above.

Remarks reserved for authorized officer:

Authorized Official *Rafael Mendez* Date: 3/28/11  
(Signature)

Administrative Review or Appeal Opportunities  
See 43 CFR 4.401(a) Part 4 for general rules relating to procedures and practice involving appeals.

## Additional Mitigations

### Wildlife

- The Migratory Bird Treaty Act prohibits the destruction of nests (nests with eggs or young) of migratory birds. Most of the “**songbirds**” that occur in this area are migratory birds and are protected by this provision. The following is a table of potential Migratory Bird Treaty Act species within the Project Area that may be affected by the proposed project. Species listed in this document are representative, but not exclusive of migratory birds typically associated with the habitats:

| <u>Common Name</u>     | <u>Scientific Name</u>          |
|------------------------|---------------------------------|
| Horned Lark            | <i>Eremphila Alpestris</i>      |
| Common Poorwill        | <i>Phalaenoptilus Nuttallii</i> |
| Sage Thrasher          | <i>Oreoscoptes Montanus</i>     |
| Brewer's Sparrow       | <i>Spizella Breweri</i>         |
| Sage Sparrow           | <i>Amphispiza Belli</i>         |
| Black-throated Sparrow | <i>Amphispiza Bilineata</i>     |
| Loggerhead Shrike      | <i>Lanius Ludovicianus</i>      |
| Vesper Sparrow         | <i>Pooecetes Gramineus</i>      |

For any activities conducted during the nesting season (April 15 – July 15), a careful examination of each area to be disturbed (including cross-country travel routes) should be done to assure no nests with eggs or young are present. If such nests are found, they should be avoided by an appropriate distance to prevent destruction of the nest and disturbance of the nesting birds.

- **Burrowing owls** may be present in the project area. For any activities conducted during the nesting season (Mar 1 – Aug 31), a careful examination of each area to be disturbed (including cross-country travel routes) should be done to assure no occupied burrows are present. If occupied burrows are found, they should be avoided by an appropriate distance to prevent destruction of the burrow and disturbance of the nesting birds.

### Reclamation

- All disturbance will be reclaimed according to BLM performance standards and requirements. Reclamation will be completed at the earliest feasible time, and the operator shall reclaim the area disturbed by taking reasonable measures to prevent or control on-site and off-site damage of the Federal Lands.
- Reclamation shall include, but shall not be limited to:



- Saving of topsoil for final application after reshaping of disturbed areas have been completed;
- Measures to control erosion, landslides, and water runoff;
- Measures to isolate, remove, or control toxic materials;
- Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, including scarifying and reseeding overland travel disturbance;
- When reclamation of the disturbed area has been completed the authorized officer shall be notified so that an inspection of the area can be made.