



## **DEPARTMENT OF THE INTERIOR**

### **Office of the Secretary**

**[A2407-014-004-065516; #O2412-014-004-047181.1; LLHQ330000]**

### **National Environmental Policy Act Implementing Procedures for the Bureau of Land Management**

**AGENCY:** Office of the Secretary, Interior.

**ACTION:** Notice.

**SUMMARY:** This notice announces a revision to the National Environmental Policy Act (NEPA) implementing procedures for the Bureau of Land Management (BLM) at DOI Handbook of NEPA Implementing Procedures (DOI NEPA Handbook) that supplements Chapter 1 of Part 516 of the Department of the Interior's (Department or DOI) Departmental Manual (516 DM 1). The revision adds a new categorical exclusion (CE) for geothermal resource exploration operations to the *DOI Handbook of NEPA Implementing Procedures, Appendix 2: Bureau Categorical Exclusions*.

**DATES:** The CE is effective **[INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

**ADDRESSES:** The new CE will be found at the web address for the DOI NEPA Handbook: <http://www.doi.gov/elips/>. The "Substantiation of Proposed National Environmental Policy Act Categorical Exclusion for Geothermal Resource Exploration Operations" (Substantiation Report) for the CE is available at the BLM's ePlanning site: <http://eplanning.blm.gov/eplanning-ui/project/2034945/510>.

**FOR FURTHER INFORMATION CONTACT:** Amelia Savage, Senior Planning and Environmental Specialist Decision Support, Planning, and NEPA, at (303) 239-3635, or

alsavage@blm.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

## **SUPPLEMENTARY INFORMATION:**

### **I. Background**

The Department published the proposed CE and Substantiation Report for geothermal resource exploration operations on January 17, 2025, for a 30-day public comment period. Refer to the *Federal Register* notice (90 FR 5981) proposing the CE for more information regarding the background and rationale for establishment of the CE. This notice notifies the public of the Department's establishment of the Geothermal Exploration Operations (GEO) CE and includes the BLM's responses to comments from the public on the proposed CE. The BLM has made editorial edits to the CE text as explained in this notice. These edits do not change the scope of the CE as proposed.

Geothermal energy offers baseload energy as geothermal power plants use heat energy found in rock formations containing hot water or steam below the Earth's surface to turn a turbine and generate electrical power. Additionally, geothermal energy is a steady source of electricity, generating energy 24 hours a day, regardless of changing weather patterns, as opposed to intermittent sources of power. Geothermal power plants also have one of the smallest amounts of surface disturbance relative to electricity produced, with a generation-weighted average of 0.34 acre/Gigawatt hour (GWh). Currently, approximately seventy (~70) percent (%) of geothermal installed capacity in the United States includes federal resources. For these reasons, the BLM's Geothermal Energy Program is a critical component to the efforts of the administration and various western states to advance the nation's energy portfolio.

Further, this CE advances President Trump’s Executive Order 14154, *Unleashing American Energy*, and Executive Order 14156, *Declaring a National Energy Emergency*, and Secretary Burgum’s ensuing Secretary’s Order 3417, *Addressing the National Energy Emergency*, and Secretary’s Order 3418, *Unleashing American Energy*

The Department proposed the CE for use by the BLM to support approval of a notice of intent to conduct geothermal resource exploration operations (NOI) to streamline project authorization at the exploration operations phase (see definition at 43 CFR 3200.1) to simplify and focus the NEPA process. This increased efficiency will serve to expedite authorization of geothermal exploration activities that could be vital to the expansion of geothermal development on BLM managed lands.

NEPA, 42 U.S.C. 4321 et seq., requires Federal agencies to consider the environmental effects of their proposed actions in their decision-making processes and inform and engage the public in that process. To comply with NEPA, agencies determine the appropriate level of review of any major Federal action—an environmental impact statement (EIS), environmental assessment (EA), or a categorical exclusion (CE). See generally, 42 U.S.C. 4336 (b); 43 CFR Part 46; DOI NEPA Handbook section 1.2 (2025). Where it is reasonably foreseeable that significant environmental effects are likely, the agency must prepare an EIS and document its decision. See generally, 42 U.S.C. 4336 (b)(1); DOI NEPA Handbook section 1.2(a)(5)(ii). Where appropriate, an agency may prepare an environmental assessment, and if it reaches a finding of no significant impact (FONSI), it need not prepare an EIS. See generally, 42 U.S.C. 4336(b)(2); DOI NEPA Handbook section 1.6; section 1.2(a)(4).

Under NEPA, the Department recently revised its 43 CFR Part 46 regulations and its procedural and interpretive guidance (see 90 FR 29498, July 3, 2025) (explaining the Department’s decision to move most of its NEPA procedures to the DOI NEPA Handbook). Before publishing these procedures, the Department and the BLM consulted with CEQ to

ensure the procedures conform to NEPA and applicable regulations. Consistent with those revisions, the Department may establish CEs—categories of actions that the agency has determined normally do not have a significant effect on the human environment—in its NEPA procedures. See 42 U.S.C. 4336(a)(2); 43 CFR 46.205. If the BLM determines that a CE covers a proposed action, it then evaluates the proposed action for extraordinary circumstances, which are factors or circumstances that indicate a normally categorically excluded action may have a significant effect. 43 CFR 46.205, 46.215. If the BLM cannot categorically exclude the proposed action following review for extraordinary circumstances, it will prepare an EA or EIS, as appropriate, before issuing any decision to authorize the action. 43 CFR 46.205(c); 42 U.S.C. 4336(b). For establishing a CE, the BLM developed a written record containing information sufficient to substantiate its determination that the category of actions does not have a significant effect on the human environment. This substantiation and the establishment of the CE is made publicly available by publishing this notice in the *Federal Register*. See 43 CFR 46.205(h).

In developing the GEO CE, the Department and BLM consulted with the Council on Environmental Quality (CEQ) in accordance with 42 U.S.C. 4332(2)(B) and its past guidance to agencies. The BLM also provided an opportunity for public review of the proposed CE and the Substantiation Report (See 90 FR 5981, January 17, 2025).

## **II. Categorical Exclusion as Proposed**

The text of the proposed CE, as provided in the January 17, 2025, *Federal Register* notice, was as follows:

Approval of a notice of intent to conduct geothermal resource exploration operations that:

- Does not include the direct testing of geothermal resources or resource utilization;

- Does not exceed 10 acres of total (contiguous or noncontiguous) surface disturbance;
- Requires reclamation of surface disturbances when their intended purpose has been fulfilled;
- Requires reclamation of temporary routes when their intended purpose(s) has been fulfilled, unless through a separate review and decision-making process the BLM incorporates and appropriately designates the route as part of its transportation system.
- Does not make a temporary route available for public use unless the temporary route is specifically intended to accommodate public use;
- Requires temporary routes to be constructed or used so as to allow for the reclamation, by artificial or natural means, of vegetative cover on the temporary route and areas where the vegetative cover was disturbed by the construction or use of the route, and requires such treatment to be designed to reestablish vegetative cover as soon as possible, but at most within 10 years after approved reclamation commences; and,
- Includes design elements to protect resources and resource uses consistent with the applicable resource management plan, laws, regulations, and any lease terms (as applicable).

### **III. Comments on the Proposed CE**

The BLM received 10 comment letters during the 30-day public comment period on the proposed CE. Comments were submitted by State agencies, interest groups, non-profit organizations, and private citizens. The BLM received comments both in support of and in opposition to the proposed CE. Some comments were beyond the scope of the proposed CE, such as a recommendation for the BLM to update the 2008 “Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States.”

The BLM considered all comments to date and responds in this notice to all four substantive issues raised in the public comments. The BLM appreciates the interest and participation of all respondents. The BLM, where appropriate, grouped together similar or related comments, and responds to the comments as follows:

*Comment 1—Support for the GEO CE:* At least nine commenters expressed support for establishing the CE, stating that it would substantially reduce permitting timelines for geothermal energy authorizations and advance the responsible development of clean and reliable energy on public lands while keeping in place strong commitments to environmental stewardship. In addition, commenters noted that the availability of the CE for the BLM's use could help the BLM to expedite approval of new geothermal projects and promote the realization of their associated economic benefits while allowing the BLM's staff to focus on other proposals that may have a significant environmental effect.

*Response 1:* The BLM will continue to conduct the appropriate level of NEPA review for proposed Federal actions, including, where appropriate, reliance on available CEs, and public engagement, as necessary, and consider potential adverse effects of proposed activities through the NEPA process.

*Comment 2—Suggested revisions to the scope of covered activities:* At least one commenter expressed concern that the scope of covered exploration activities under the proposed CE is too broad and suggested that the BLM restrict use of the proposed CE to existing types of geothermal resource exploration activities and not allow reliance on the CE for novel or experimental geothermal resource exploration methods yet to be developed.

*Response 2:* Within the Substantiation Report, the BLM reviewed different types of exploration project requirements, including well pads, well diameter, and access road requirements for geothermal resource exploration projects. For example, as described within the Substantiation Report, the 10 acres of disturbance provides flexibility to address the various types of exploration project requirements considered within the 28 projects analyzed

in the EAs reviewed, such as, construction of temporary roads for site access, construction of well pads, and drilling of temperature gradient wells or core holes. The commenter did not identify any specific kind of “novel or experimental” geothermal resource exploration activity that the BLM did not adequately consider in developing this CE.

Moreover, before relying on the CE to approve any proposed action, the BLM must consider extraordinary circumstances (43 CFR 46.215) including whether a project would have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks. This review would be documented and included in the information posted on the BLM’s NEPA register. If the responsible official cannot rely on the CE because of extraordinary circumstances, the responsible official will prepare an EA or EIS, consistent with 43 CFR 46.205(c).

*Comment 3— Potential effects to wildlife resources:* At least one commenter expressed concern that geothermal resource exploration can affect wildlife and recommended that the BLM incorporate protections for species into the CE text.

*Response 3:* The BLM’s NOI review process includes several layers of protection, which ensure that exploration projects will not significantly impact wildlife, regardless of the level of NEPA review. Actions that are proposed to take place on BLM-managed lands must be reviewed for conformance with the applicable BLM resource management plan (RMP) as part of the BLM’s compliance with the Federal Land Policy and Management Act, as amended, 43 U.S.C. 1701 et seq., and its implementing regulations (43 CFR 1610.5–3). The BLM ensures that design elements are included in NOI approvals for conformance with the applicable RMP, lease terms (as applicable), and other relevant requirements. BLM professionals review each proposed action for potential resource conflicts and incorporate appropriate design elements into any approval.

BLM’s Substantiation Report and project EA summaries illustrate these considerations. Geothermal resource exploration projects may impact wildlife resources

(e.g., migratory birds, bald and golden eagles, raptors, wild horses and burros, mule deer, small mammals and reptiles). Due to the non-contiguous nature of disturbed acreage, one common environmental impact consideration is the potential for species displacement due to habitat fragmentation, including edge effects associated with dispersed surface disturbance. Other common effects are loss of habitat from vegetation removal, and mortality of small, less mobile mammals and reptiles due to increased vehicle traffic (Levine et al. 2018; Substantiation Report, appendix A). However, in the 28 EAs/FONSI's analyzed, BLM made findings that population-level effects to species were not expected to occur; effects of habitat fragmentation due to removal of vegetation and construction of drill sites and new roads in areas used by wildlife were short-term and negligible because the project size was small in comparison to the amount of surrounding lands with suitable habitat. Moreover, common design elements ensured restoration of disturbed habitat.

The BLM reviewed published reports from the National Renewable Energy Laboratory and other reliable sources analyzing potential environmental effects and associated project design elements implemented for protection of wildlife and resources in geothermal resource exploration projects as a comparison to the effects analyzed within the EAs selected for analysis.

Further, before relying on the CE to approve any proposed action, the BLM must consider extraordinary circumstances (43 CFR 46.215), which include consideration of effects on, among others: natural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; wetlands; floodplains; national monuments; migratory birds; other ecologically significant or critical areas; listed or proposed species or critical habitat; and contribution to the introduction, continued existence, or spread of invasive plants or non-native invasive species. This review would be documented and included in the information posted on the BLM's NEPA register.

BLM contacted the field offices and relevant staff that had prepared each of the 48 EAs and requested information as to 1) whether the projects had been completed or at least substantially implemented, 2) whether project activities had resulted in any unanticipated effects (e.g., effects not contemplated, discussed), and 3) if unanticipated effects had occurred, what they were. For each of the 48 EAs included for analysis, BLM staff positively confirmed that no unanticipated effects occurred for any of the studied projects.

If the responsible official cannot rely on the CE to support a decision on a particular proposed action due to extraordinary circumstances, the responsible official will prepare an EA or EIS, consistent with 43 CFR 46.205(c) and 42 U.S.C. 4336(b). Finally, reliance on a CE constitutes compliance only with NEPA; the BLM must separately comply with requirements under any other applicable law, such as the Endangered Species Act.

*Comment 4—Suggested revisions to allowable disturbed acreage:* At least one commenter suggested that the BLM expand the acreage amount of allowable surface disturbance.

*Response 4:* To support the development of the CE, in its Substantiation Report, the BLM examined the range of surface disturbance types and extent in 28 geothermal projects analyzed in EAs that all supported FONSI, and that were completed between 2003 and 2019, to identify potential effects resulting from the kinds of activities normally included in NOIs, as outlined in the Department's regulations at 43 CFR Part 3200, subpart 3250. As discussed in the Substantiation Report, the BLM reviewed these EAs and associated FONSI to determine the scope of environmental effects anticipated to result from the exploration operations and compared the various disturbed acreage statistics. The size and scale of geothermal resource exploration projects evaluated in those documents were the basis of the surface disturbance limitations chosen for the CE. This analysis together with BLM's consultations with CEQ and the Department's Office of Environmental

Policy and Compliance support the 10-acre surface disturbance limitation. Therefore, the BLM declines to modify the allowable disturbed acreage.

#### **IV. Additional Clarifying Changes**

While considering the comments and recommendations the BLM received during the public comment period on the proposed CE revisions, the BLM incorporated three changes to the CE text proposed in January 2025. These changes include updating the format from a bulletized list to an alphabetized list; to add “or resource production” to better track the definition of geothermal exploration operations (43 CFR 3200.1); and to add “, pursuant to 43 CFR part 3200 subpart 3250,” before “that” in the main CE text to qualify the regulations and define the scope of activities to which the CE pertains.

#### **Categorical Exclusion Justification**

The BLM finds that the category of actions described in the CE (below) does not normally have a significant effect on the human environment. This finding is based on the analysis of the proposal to establish the CE in the BLM’s Substantiation Report and supporting record documents. The Substantiation Report explains that the restrictions on the proposed CE limit surface disturbance and access road construction and the required design elements incorporated into the NOI approvals and enforced by conditions of approval, as needed, are effective to address environmental effects. Consequently, the BLM concludes that the category of actions included in this CE does not normally result in significant environmental effects.

The Substantiation Report summarizes the review of 28 geothermal EAs that supported FONSI, 20 similar oil and gas drilling project EAs that also supported FONSI, as well as benchmarking similar CEs supporting geophysical investigations that are in use by other agencies by analyzing 6 U.S. Forest Service and 1 Department of the Navy project to demonstrate the finding that actions under the revised CE would not normally result in significant effects to the human environment. The Substantiation Report includes evaluation

of the BLM NEPA analyses and available scientific research on the effects of actions similar to those included in the new CE over time and over different geographic areas and following consideration of comments from the public.

The Department and the BLM consulted with CEQ on the proposed and final CE. CEQ found the CE to comply with NEPA and agreed that the CE is appropriate to establish. Therefore, the Department adds this CE to the DOI NEPA Handbook, Appendix 2.

When applying this CE, responsible officials within the BLM will evaluate proposed actions covered by the CE to determine whether any extraordinary circumstances are present in accordance with the requirements in the Department's NEPA implementing procedures at 43 CFR 46.205 and 46.215. This review would be documented and included in the information posted on the BLM's NEPA register. If the responsible official cannot rely on this CE to support a decision to authorize geothermal resource exploration operation activities due to extraordinary circumstances, the responsible official will prepare an EA or EIS before doing so, consistent with 43 CFR 46.205(c) and 42 U.S.C. 4336(b). When applying this CE, the BLM will document its reliance on the CE and publish the documentation on the BLM NEPA website.

**V. Text added to the U.S. Department of the Interior Handbook of NEPA  
Implementing Procedures, Appendix 2: Bureau Categorical Exclusions.**

The *DOI Handbook of NEPA Implementing Procedures, Appendix 2: Bureau Categorical Exclusions* includes the following language:

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Bureau of Land Management

**11.9 Actions Eligible for a Categorical Exclusion (CE)**

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B. Oil, Gas, and Geothermal Energy

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(8) Approval of a notice of intent to conduct geothermal resource exploration operations, pursuant to 43 CFR part 3200 subpart 3250, that:

(a) Does not include the direct testing of geothermal resources or resource production or utilization;

(b) Does not exceed 10 acres of total (contiguous or noncontiguous) surface disturbance;

(c) Requires reclamation of surface disturbances when their intended purpose has been fulfilled;

(d) Requires reclamation of temporary routes when their intended purpose(s) has been fulfilled, unless through a separate review and decision-making process the BLM incorporates and appropriately designates the route as part of its transportation system.

(e) Does not make a temporary route available for public use unless the temporary route is specifically intended to accommodate public use;

(f) Requires temporary routes to be constructed or used so as to allow for the reclamation, by artificial or natural means, of vegetative cover on the temporary route and areas where the vegetative cover was disturbed by the construction or use of the route, and requires such treatment to be designed to reestablish vegetative cover as soon as possible, but at most within 10 years after approved reclamation commences; and,

(g) Includes design elements to protect resources and resource uses consistent with the applicable resource management plan, laws, regulations, and any lease terms (as applicable).

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(Authority: NEPA, as amended (42 U.S.C. 4321 et seq.))

**Stephen G. Tryon,**

*Director,*

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