

February 18, 2025

U.S. Department of the Interior Bureau of Land Management Attention: HQ330 Geothermal Resource Exploration Categorical Exclusion 1849 C Street NW Washington, DC 20240

Submitted via BLM National NEPA Register

# Re: National Environmental Policy Act Implementing Procedures for the Bureau of Land Management (516 DM 11), 90 Fed. Reg. 5981 (Jan. 17, 2025)

Clean Air Task Force (CATF) is pleased to respond to the Bureau of Land Management's (BLM) proposal to establish categorical exclusions for certain geothermal resource exploration operations. CATF is a nonprofit organization dedicated to advancing the policy and technology changes necessary to achieve a zero-emissions high-energy planet at an affordable cost. With more than 25 years of internationally recognized expertise on environmental policy and law, and a commitment to exploring all potential solutions, CATF is a pragmatic, non-ideological advocacy group with the bold ideas needed to address climate change and air pollution. CATF has offices in Boston, Washington, D.C., and Brussels, with staff working remotely around the world.

CATF supports the establishment of additional categorical exclusions for geothermal activities that do not normally have significant environmental impacts. New geothermal facilities can provide clean baseload electricity and heat. While environmental review processes remain important for responsible development, geothermal resource exploration operations do not normally have significant environmental impacts and should, absent extraordinary circumstances, be categorically excluded from more intensive NEPA analysis requirements.

## I. Categorical Exclusions Are Generally Appropriate for Geothermal Exploration Activities

Categorical exclusions (CX) under the National Environmental Policy Act (NEPA) can reduce the environmental review burden for projects, or stages in project development and deployment, that do not have significant adverse effects. They can also provide an incentive for project proponents to design or site projects in ways that avoid adverse impacts in order to qualify for categorical exclusions.

The use of categorical exclusions must be consistent with NEPA's purposes and procedures. The purposes of NEPA are "to promote efforts which will prevent or eliminate damage to the environment and biosphere" and to integrate "environmental concerns ... into the very process of agency decision-making." Agencies may comply with NEPA by preparing an environmental impact statement (EIS), by preparing a less detailed environmental assessment (EA), or by

<sup>&</sup>lt;sup>1</sup> 42 U.S.C. § 4321.

<sup>&</sup>lt;sup>2</sup> Andrus v. Sierra Club, 442 U.S. 347, 350 (1979).

applying a categorical exclusion.<sup>3</sup> "[A] categorical exclusion is not an exemption from NEPA; rather, it is a form of NEPA compliance, albeit one that requires less than where an environmental impact statement or an environmental assessment is necessary." NEPA allows agencies to establish categorical exclusions for actions that normally do not significantly affect the quality of the human environment.<sup>5</sup> To ensure that categorical exclusions satisfy this standard, it is important that agencies use transparent processes and provide adequate support for the identified categories.

The proposed CX is well-supported. BLM evaluated 28 EAs for geothermal exploration, all of which resulted in findings of no significant impact. BLM consulted field office staff to understand the outcomes of each of the projects with an EA used to substantiate this CX and identified no unanticipated impacts occurring after project implementation for any of the projects. BLM also benchmarked the proposed CX against similar CXs from the United States Forest Service and the Department of the Navy, and reviewed seven projects approved under those CXs – projects which are "similar in character and function to the types of geothermal resource exploration projects the BLM anticipates could be authorized in reliance on the proposed GEO CX (if approved)." Finally, BLM included oil and gas EAs in its evaluation, properly taking into account the many similarities between oil and gas and geothermal development as well as the important differences. 8

#### II. BLM Should Clarify the Scope of Covered Resource Exploration Activities

Although we support the adoption of a geothermal exploration CX, the scope of covered exploration activities as proposed is overbroad. The proposed CX would apply to BLM approvals of Notices of Intent (NOIs) to conduct geothermal resource exploration operations, currently defined to include "any activity relating to the search for evidence of geothermal resources, where you are physically present on the land and your activities may cause damage to those lands." This definition is not restricted to the examples of exploration activities listed, nor to the specific methods analyzed in the substantiation report.

That is a problem for the implementation and legal durability of the CX. While the substantiation report thoroughly analyzes the environmental impacts of all commonly used geothermal exploration methods (temperature gradient wells, core drilling, geophysical operations, etc.), potential impacts from novel or experimental exploration methods yet to be developed remain necessarily unknown. BLM should ensure that the proposed CX treats such potential exploration methods appropriately to remain compliant with NEPA's requirement to prepare an EIS for all

<sup>&</sup>lt;sup>3</sup> See 42 U.S.C. § 4336.

<sup>&</sup>lt;sup>4</sup> Ctr. for Biological Diversity v. Salazar, 706 F.3d 1085, 1096 (9th Cir. 2013).

<sup>&</sup>lt;sup>5</sup> 42 U.S.C. §§ 4336(a)(2), 4336e(1). The Department of the Interior has promulgated regulations adopting categorical exclusions and establishing procedures for their application. *See* 43 C.F.R. §§ 46.205, 46.210, 46.215.

<sup>&</sup>lt;sup>6</sup> Bureau of Land Management,

Substantiation of Proposed National Environmental Policy Act Categorical Exclusion for Geothermal Resource Exploration Operations 10-11 (Jan. 17, 2025),

 $<sup>\</sup>frac{\text{https://eplanning.blm.gov/public\_projects/2034945/200630587/20126698/251026678/Geothermal\%20Exploration\%}{20\text{Resource}\%20\text{Operation}\%20\text{CX}\%20\text{Substantiation}\%20\text{Report-}\%20\text{Proposed.pdf.}}$ 

<sup>7</sup> Id. at 12.

<sup>&</sup>lt;sup>8</sup> See id. Appendix B, at 106.

<sup>&</sup>lt;sup>9</sup> 43 C.F.R. § 3200.1 (see definition of "exploration operations").

"major Federal actions significantly affecting the quality of the human environment," <sup>10</sup> and with Interior's implementing regulations. <sup>11</sup>

We suggest that BLM clarify that the proposed CX applies to currently used exploration activities (geophysical operations, drilling temperature gradient wells, drilling holes used for explosive charges for seismic exploration, core drilling, related construction of roads and trails, and cross-country transit by vehicles over public land) and to other exploration activities that are substantially similar to those listed activities.

Alternatively, BLM could maintain a broad presumptive CX for all exploration activities as currently defined, but clarify, through additional guidance, how existing departmental extraordinary circumstances regulations<sup>12</sup> would apply to novel exploration methods and/or unusual environmental circumstances specifically relevant for geothermal exploration activities.

#### III. BLM Should Base This CX on Interior's Regulations, Not CEQ's

NEPA's statutory text and Interior's implementing regulations at Title 43 C.F.R. Part 46 provide ample authority for the adoption of this CX. Because the proposal relies on these authorities, the regulatory basis for this action is legally sufficient, notwithstanding recent developments regarding regulations promulgated by the Council on Environmental Quality.<sup>13</sup> Due to such developments, however, we encourage BLM to clearly state that NEPA and Interior's NEPA regulations form a sufficient basis for the action and to update the list of authorities accordingly.

### IV. BLM Should Continue Streamlining Geothermal Development

As with the CX recently promulgated for geothermal resource confirmation activities, <sup>14</sup> we commend BLM's continued efforts to streamline geothermal resource exploration approvals through the proposed CX. We encourage the agency to continue its work ensuring safe and efficient approvals of these projects, including through additional categorical exclusions and through programmatic NEPA review. In particular, we continue to encourage BLM to update the 2008 Geothermal Programmatic Environmental Impact Statement (PEIS) to keep pace with technological advances in geothermal development. Enhanced geothermal systems, closed-loop systems, and superhot rock development present new opportunities and challenges that the existing PEIS covers only briefly. <sup>15</sup>

The current regulatory framework may also benefit from updates to incorporate next-generation

<sup>&</sup>lt;sup>10</sup> 42 U.S.C. § 4332 (C).

<sup>&</sup>lt;sup>11</sup> 43 C.F.R. § 46.205 (categorical exclusions apply only to categories of actions that have "no significant individual or cumulative effect on the quality of the human environment").

<sup>&</sup>lt;sup>12</sup> 43 C.F.R. § 46.215.

<sup>&</sup>lt;sup>13</sup> See Marin Audubon Soc'y v. FAA, 121 F.4th 902, 914 (D.C. Cir. 2024); Exec. Order No. 14154, 90 Fed. Reg. 8,353 (Jan. 29, 2025) (rescinding Exec. Order No. 11,991, 42 Fed. Reg. 26,967 (May 24, 1977)).

<sup>&</sup>lt;sup>14</sup> 90 Fed. Reg. 4,768 (Jan. 16, 2025); Clean Air Task Force Comment Letter on Categorical Exclusions for Certain Geothermal Resource Confirmation Activities (Nov. 21, 2024), *available at* <a href="https://www.catf.us/resource/clean-airtask-force-comments-categorical-exclusions-certain-geothermal-resource-confirmation-activities/">https://www.catf.us/resource/clean-airtask-force-comments-categorical-exclusions-certain-geothermal-resource-confirmation-activities/</a>.

<sup>&</sup>lt;sup>15</sup> See U.S. Bureau of Land Mgmt. & U.S. Forest Serv., Final Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States, at 1-10 (Oct. 2008), <a href="https://www.blm.gov/sites/blm.gov/files/Geothermal">https://www.blm.gov/sites/blm.gov/files/Geothermal</a> PEIS final.pdf.

geothermal technologies. Current BLM geothermal regulations are written with conventional geothermal in mind. For example, reservoir stimulation activities for enhanced geothermal system development are not specifically mentioned in the regulatory subparts for drilling or utilization operations. <sup>16</sup> We encourage BLM to consider updates to these regulations to facilitate responsible development of next-generation geothermal resources.

#### V. Conclusion

Thank you for considering these comments. BLM's role in facilitating geothermal development on public lands is critical to meeting our nation's goals of energy independence through domestic, clean energy production while ensuring environmental stewardship. We look forward to continued engagement with BLM on policies that promote responsible geothermal development.

Respectfully submitted,

Terra Rogers,
Director, Superhot Rock Program,
Clean Air Task Force,
114 State Street 6th Floor,
Boston, MA 02109,
trogers@catf.us

<sup>&</sup>lt;sup>16</sup> See 43 C.F.R. Subparts 3260–67, 3270–79.