

**ENVIRONMENTAL ASSESSMENT
FOR AN EXEMPTION TO THE 10 CFR PARTS 30, 40, and 70
COMMENCEMENT OF CONSTRUCTION REQUIREMENTS**

**AREVA Enrichment Services
Eagle Rock Enrichment Facility
Bonneville County, Idaho**

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PREPARED BY:

**U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
DIVISION OF FUEL CYCLE SAFETY AND SAFEGUARDS**

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1.0 INTRODUCTION

By letter dated June 17, 2009, Byproduct, Source, and Special Nuclear Material License applicant AREVA Enrichment Services, LLC, (the Applicant) submitted a request to exempt certain activities described in the license application for the proposed Eagle Rock Enrichment Facility from the “commencement of construction” provisions of Title 10 of the Code of Federal Regulations (CFR) 30.4, 30.33, 40.4, 40.32(e), 70.4, and 70.23(a)(7). The U.S. Nuclear Regulatory Commission (NRC) staff is considering issuing an exemption to the Applicant from provisions in 10 CFR 30.4, 30.33, 40.4, 40.32(e), 70.4, and 70.23(a)(7). The exemption would authorize the Applicant to undertake certain site preparation activities at its proposed uranium enrichment facility in Bonneville County, Idaho. Granting this exemption is not a guarantee that the NRC has decided to issue a license to the Applicant. The Applicant would be undertaking these site preparation activities with the risk that its license application may later be denied. NRC has prepared an Environmental Assessment (EA) in support of this exemption in accordance with the requirements of 10 CFR 51.21 and 51.33. Based on this EA, the NRC has reached a Finding of No Significant Impact.

2.0 BACKGROUND

The commencement of construction provisions of 10 CFR 30.33, 40.32(e), and 70.23(a)(7) date back to 1972, when they were initially codified by the NRC as part of a comprehensive rulemaking pertaining to all facilities licensed under Parts 30, 40, 50 and 70. (37 FR 5745; March 21, 1972). The amendments made to Parts 30, 40, 50 and 70 were initiated to make the NRC’s regulations consistent with the National Environmental Policy Act (NEPA) (37 FR 5746).

These regulatory provisions remained unchanged until after the passage of the Uranium Mill Tailings Radiation Control Act of 1978, which authorized the NRC to regulate byproduct material produced by uranium milling. To ensure that the commencement of construction provisions remained uniform among all plants and facilities in which byproduct, source, and special nuclear material are used and possessed, the NRC in 1980 amended its regulations in 10 CFR Part 40. These revisions required that the NRC’s NEPA review be completed prior to authorizing any uranium milling activities (45 FR 65521; October 3, 1980). NRC also amended 10 CFR Parts 30 and 70 to conform to the amendment of Part 40. Sections 30.33, 40.32(e), and 70.23(a)(7) state that, with some limited exceptions, “commencement of construction” prior to license issuance is grounds for license denial, and further states in relevant part as follows:

The term “commencement of construction” means any clearing of land, excavation, or other substantial action that would adversely affect the environment of a site. The term does not mean site exploration, roads necessary for site exploration, borings to determine foundation conditions, or other preconstruction monitoring or testing to establish background information related to the suitability of the site or the protection of environmental values.

However, in 2007, the NRC completed a rulemaking amending the regulations applicable to limited work authorizations (LWAs) for nuclear power plants (LWA rulemaking), which included a consideration of issues pertaining to preconstruction and site preparation work performed by Part 50 (and Part 52) licensees and applicants (72 FR 57416; October 9, 2007 and 73 FR 22786; April 28, 2008). As part of that rulemaking, the NRC modified the scope of activities that are considered construction and for which a construction permit, combined license, or LWA is necessary. After noting that the Atomic Energy Act of 1954, as amended (AEA) does not require an applicant to obtain permission before undertaking site preparation activities that do not implicate radiological health and safety or common defense and security, the NRC developed a revised definition of construction that excluded certain preparatory activities.

In doing so, the NRC determined that its NEPA obligations and responsibilities arise only when the NRC undertakes a “Federal” action, and that NEPA, a purely procedural statute, does not expand the NRC’s jurisdiction beyond the scope of the AEA (72 FR 57416 ;October 9, 2007). Regarding the site-preparation activities excluded from the LWA definition of construction, the NRC noted that such activities do not have a reasonable nexus to radiological health and safety or the common defense and security, and as such, were “non-Federal actions.” Accordingly, these site preparation activities are not subject to the requirements of NEPA because they are not within the scope of the NRC’s AEA authority. The NRC, therefore, amended its 10 CFR Part 51 NEPA regulations to include a definition of construction there that was consistent with the definition added to 10 CFR 50.10. Site preparation activities that were deemed not to have a direct nexus to radiological health and safety were listed in 10 CFR 51.4 as activities not included within the “construction” definition. In this regard, 10 CFR 51.4 states, in relevant part, that “construction” does not include:

- Site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction or operation, or the protection of environmental values;
- Preparation of a site for construction of a facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;
- Erection of fences and other access control measures;
- Excavation;
- Erection of support buildings (such as, construction equipment storage sheds, warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and office buildings) for use in connection with the construction of the facility;
- Building of service facilities, such as paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities, transmission lines;

The NRC’s determination that certain site preparation activities did not constitute “construction” impacted the scope of the agency’s NEPA review of such activities. The NRC clarified that because these site preparation activities lacked a reasonable radiological nexus to radiological

health and safety and/or common defense and security -- and thus did not require NRC approval or oversight -- these activities were not Federal actions within the context of NEPA. Consequently, these activities would only be considered in the agency's environmental review to that extent necessary to establish an environmental baseline against which the incremental effect of the NRC's subsequent major Federal action (i.e., issuance of a license) would be measured (see 72 FR 57416; Oct. 9, 2007).

While the NRC had previously recognized the need for uniformity in carefully approving conforming amendments when it modified the "commencement of construction" provisions in 1980, no conforming amendments were made in Parts 30, 40 and 70 when the LWA rulemaking was finalized in 2007. Ever since, as is evident from the regulatory text quoted above, the NRC's "commencement of construction" provisions in Parts 30, 40 and 70 have been inconsistent with the Part 51 "construction" definition. Activities that do not constitute construction under 10 CFR Parts 50, 51, and 52, are viewed as construction under 10 CFR Parts 30, 40 and 70. Site preparation actions that a materials license applicant or licensee cannot engage in -- absent an exemption -- are the same actions that the NRC determined in the LWA rulemaking were not within the scope of the agency's licensing review under the AEA. In short, while 10 CFR 30.33, 40.32(e), and 70.23(a)(7) specifically cite the need to perform a Part 51 environmental analysis, the terms of 10 CFR 30.4, 30.33, 40.4, 40.32(e), 70.4, and 70.23(a)(7) are now inconsistent with 10 CFR Part 51 as modified by the LWA rulemaking.

Unless and until this inconsistency in the regulations is corrected, the NRC staff will review exemption requests to consider whether site preparation activities will be permitted before a special nuclear material license is issued.

3.0 PROPOSED ACTION

NRC proposes to grant an exemption that will allow the Applicant to conduct certain site preparation activities that are currently allowed under 10 CFR § 51.4, and notwithstanding the 10 CFR 30.33(a)(5), 40.32(e) and 70.23(a)(7) provisions discussed above. The scope of the Applicant's June 17, 2009, exemption request includes the nine items listed below. NRC staff, as part of its safety review of the request, is considering approving each item on the list as an exempted activity.

- Clearing the site
- Site grading and erosion control
- Excavating the site including rock blasting and removal
- Installing parking areas
- Constructing the storm water detention pond
- Constructing highway access roadways and site roads
- Installing utilities (e.g., temporary and permanent power) and storage tanks

- Installing fences for investment protection (not used to implement the Physical Security Plan)
- Installing construction buildings, offices (including construction trailers), warehouses and guardhouses.

In response to a request for additional information dated September 14, 2009, the Applicant clarified that the storage tanks would be used strictly for construction purposes; the guardhouses are not part of the physical security plan; and the construction buildings, offices, and warehouses are not part of the Standard Practice Procedures Plan for the Protection of Classified Information.

4.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

As indicated by the above list, the Applicant seeks permission from NRC to engage in certain site preparation work before it is authorized to conduct uranium enrichment operations. This action is needed to allow the Applicant to complete certain on-site activities in parallel with the licensing and hearing processes, so that it can begin construction promptly upon issuance of the license. The NRC staff would need to grant the exemption request to allow the Applicant to begin these site preparation activities.

5.0 SCOPE OF REVIEW

This EA is being prepared pursuant to 10 CFR 51.21, which states, “[a]ll licensing and regulatory actions subject to this subpart require an environmental assessment....” The only two exceptions to this rule are those actions requiring environmental impact statements (EISs) pursuant to 10 CFR 51.20, and those that are categorically excluded or identified as otherwise not requiring environmental review pursuant to 10 CFR 51.22. An EA is required here because this action is not identified as an action requiring an EIS, and exemptions are not currently covered by any categorical exclusion.

6.0 ALTERNATIVES

The no action alternative is to not grant the exemption and not allow the Applicant to engage in any site preparation activities before an operating license is issued. If the NRC does not grant the exemption, the Applicant would need to wait until a decision is made on its license application request to engage in the preconstruction activities.

7.0 IMPACTS OF THE NO-ACTION ALTERNATIVE

There are no environmental impacts of not granting the exemption.

8.0 IMPACTS OF THE PROPOSED ACTION

The NRC staff reviewed the Applicant’s exemption request in the context of whether or not the requested activities fall within one of the categories of site preparation activities considered not construction under 10 CFR 51.4. As stated above in the description of the proposed action, the staff intends to only exempt those activities that fall within this definition. As discussed in Section 2 of this EA, the site preparation activities will be considered in the NRC’s environmental review of the subsequent major Federal action (i.e., issuance of a license) only to the extent necessary to establish an environmental baseline. Thus, these activities will be

considered in the environmental impact statement (EIS) the NRC staff is preparing to support a licensing decision on the proposed Eagle Rock Enrichment Facility.

9.0 OTHER FEDERAL AND STATE AGENCIES

Several regulatory agencies will be directly involved with the review and approval of site preparation activities at the proposed Eagle Rock Enrichment Facility project, as well as later construction activities. Included among these agencies are the Idaho State Historical Society, State Historic Preservation Office (SHPO), Idaho Department of Environmental Quality (IDEQ), and U.S. Fish and Wildlife Service (FWS) Pacific Region Office.

10.0 AGENCIES CONSULTED

The NRC staff has consulted with the SHPO, FWS, and IDEQ regarding the site preparation activities addressed in this EA.

11.0 CONCLUSIONS

NRC staff prepared this EA as required by 10 CFR 51.21. The purpose of this EA was to describe the proposed action and alternatives to the proposed action. The staff has determined that the proposed site preparation activities fall within one of the categories of activities not included in the definition of "construction" in 10 CFR 51.4. The NRC staff concludes that there will be no significant environmental impacts caused by the action considered in this EA, because none of the activities approved by the action are considered "construction" for the purposes of Part 51 environmental analyses. As discussed in Section 2 of this EA, the site preparation activities will be considered in the EIS the NRC staff is preparing to support the licensing decision on the Applicant's proposed Eagle Rock Enrichment Facility. As discussed in Section 9 of this EA, other Federal and state agencies exercise authority over the exempted activities, presented herein. Furthermore, the staff, as set out in Section 12.0, recognizes the commitments made by the Applicant.

12.0 PROPOSED COMMITMENTS

In addition to regulatory oversight by other agencies, the NRC recognizes certain mitigation measures proposed by the Applicant in its July 7, 2009, letter, "Response to Information Needs Identified by the U.S. NRC for the AES EREF- Environmental Report," RAI Response 7.4. These proposed commitments include the following:

1. Mitigation associated with cultural resource Site MW004 will be completed prior to initiation of preconstruction and/or construction activities associated with the EREF project that impact Site MW004, or Site MW004 will be marked along with a suitable buffer zone by AES's archaeologist so that pre-construction/construction activities do not impact this site.
2. AES will develop a Memorandum of Agreement (MOA) with the Idaho SHPO. The MOA will detail activities required as mitigation of adverse effects to Site MW004 and the means of protecting and safeguarding its cultural resources in the future.
3. In addition, AES will develop, in consultation with the Idaho SHPO, a Preservation Plan to manage the cultural resources for Site MW004. The Preservation Plan will outline

responsibilities for management of onsite cultural resources, and site processes and procedures for the preservation and treatment of these cultural resources.

4. AES will also develop an Unanticipated Discoveries Plan to define the actions to take in the event that unanticipated potential cultural resources are discovered during pre-construction or construction activities.