UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

September 13, 2010

7/21/2010
75FR42466

Cindy Bladey
Chief, Rules Announcements and Directives Branch
Office of Administrative Services
Office of Administration, TWB-05-B01M
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

6

RECEIVED
2010 SEP 15 AM 9: 59
RULES AND DIRECTIVES
BRANCH
USNRC

Re: Eagle Rock Enrichment Facility Project (NUREG-1945),
EPA Project Number: 09-022-NRC

Dear Ms. Bladley:

The US Environmental Protection Agency (EPA) has reviewed the U.S. Nuclear Regulatory Commission (NRC) Draft Environmental Impact Statement (DEIS) for the proposed Eagle Rock Enrichment Facility (ERF) Project CEQ # 20100268, in Idaho Falls, Bonneville County, ID, in accordance with our authorities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

AREVA Enrichment Services LLC (AES), a private developer, proposes to construct, operate, maintain and decommission a gas centrifuge uranium enrichment facility near Idaho Falls in Bonneville County, Idaho for a period of 30 years. Because the proposed facility would be sited on a 460-acre area within a 4,200-acre parcel that would be purchased from a private landowner, the NRC will have to decide whether the facility's construction, operations and decommissioning should be authorized or not. For this decision to be made and the public to understand its implications, the NRC developed and analyzed two alternative actions, the proposed project and a no action. Based on the DEIS analysis results, the NRC recommends that, unless safety issues mandates otherwise, the facility license be issued.

We note with appreciation that the DEIS addresses many of the issues we raised during the project scoping period in June 2009, including analysis of cumulative impacts and climate change effects. Also, we commend NRC staff for working with a variety of stakeholders and considering public comments in the NEPA analysis for the project. The DEIS document includes a good description of resources within the project area, analysis of anticipated environmental impacts from the project, mitigation measures to offset the impacts, and monitoring programs for potential radiological and non-radiological releases from the facility to the environment and measures to be taken to prevent such releases and ensure protection of environmental resources and human health in case an accidental release occurred.

Overall, most impacts by the proposed project would be due to construction activities, which would generate moderate to large impacts to various resources including air and biological

SUNSI Review Complete
Template = ADM-013

E-RIDS = ADM-03
Add =
S. Lemont (SXL8)

Printed on Recycled Paper

resources, with some impacts being permanent due primarily to the facility footprint. In particular, we are concerned about potential exceedances of air quality standards and impacts to water quality and vegetation and habitat as discussed below.

Air quality impacts

For better protection of public health from air pollution exposure, EPA has set National Ambient Air Quality Standards (NAAQS) for six principal pollutants or criteria pollutants (see http://www.epa.gov/air/criteria.html) that should be used to determine if emissions from a project would exceed daily and annual standards. Any projects that would generate emissions exceeding the standards would have to include measures to demonstrate that, if implemented, the project would comply with both state and federal air quality regulations.

Even though background concentrations of criteria pollutants within the project area and environs are currently below the standards, it is likely that emissions within the project area could exceed the standards because of the proposed project. As the DEIS noted, particulate matter (PM) concentrations during construction activities would be moderate to large (p. 4-11) due to fugitive dust releases to the air during ground disturbing activities even after application of mitigation measures, although they would be temporary and brief in duration. The DEIS indicates that air emissions associated with the ERF preconstruction and construction activities alone would be 271.5% and 105% higher than NAAQS for 24-hour PM_{10} and $PM_{2.5}$ concentrations, respectively (p. 4-20). Because of these anticipated exceedances of ambient air quality standards, we recommend that NRC maximize implementation of the mitigation measures described in the DEIS and coordinate with the Idaho Department of Environmental Quality (IDEQ) throughout the project lifespan to assure that federal and state air quality standards will be met by the project.

Air quality may also be impacted due to cumulative impacts from surrounding activities such as agriculture and fire, herbicides to treat invasive plant species, and continued management of radioactive materials at nearby Idaho National Laboratory. The EIS should consider all sources of emissions and determine the contribution of each source to air quality - negative or positive. Because the DEIS does not include refined analysis of emissions from sources that are utilizing appropriate control technologies and more detailed construction activities and schedules (p. 4-12), we recommend that the final EIS include that information so accurate air quality impacts and mitigation measures and their effectiveness can be determined.

Since the project area and surrounding areas may include sensitive populations such as the elderly and children, it will also be important to monitor emissions (radiological and ambient air) and take corrective action if air quality standards are not met. Proposed monitoring strategies should be tailored to local conditions because localized air quality impacts can be substantial, even though area-wide and/or long term monitoring may show compliance with air quality standards. The draft EIS indicates that monitoring data from a distant monitoring station in Pocatello, for example, may not represent accurate air emission at the project site. Further, there is no monitoring station close to the proposed facility site (p. 4-16).

Printed on Recycled Paper

Water quality

The DEIS indicates that water quality may be adversely affected if the project construction activities (blasting, surface grading, excavation, and surface pavement, building roofs) alter the hydrology of springs and surface runoff such that erosion carries sediment and pollutants to local drainages (p. 4-32), accelerating infiltration and migrating through soils to the underlying aquifer. Also, groundwater extraction, land disturbance, material storage, waste disposal, inadvertent chemical or hazardous liquid spills, and compaction produced by vehicular traffic can all affect recharge to the local aquifer and groundwater quality. Because of such potential impacts to water quality, we recommend that this aspect of the project be monitored to assure that water quality is protected. The NRC should continue to coordinate with IDEQ and Tribes that may be affected by the project to assure that the state and tribal water resources (quantity and quality) are protected and used judiciously.

Since the project anticipates obtaining a National Pollutant Discharge Elimination System (NPDES) permit for planned preconstruction and construction activities likely to disturb up to nearly 600 acres, the final EIS should include updated information on the permit application process and measures to protect water quality. In keeping with the use of sustainable practices, we encourage NRC to consider use of Low Impact Development (LID) techniques during the proposed project activities because some of them have the potential to reduce stormwater volumes and thus mimic natural conditions as closely as possible. The techniques also lessen the impacts of stormwater runoff from impervious surfaces such as paved parking lots, roads and roofs, and can provide energy other utility savings. More information about LID practices can be found online at: http://www.lowimpactdevelopment.org/ and http://www.epa.gov/smartgrowth/stormwater.htm.

Impacts to vegetation and wildlife

Sections 4.2.7 discuss the project's impacts to ecological resources, including vegetation and wildlife species. The DEIS indicates that vegetation removal, habitat fragmentation, and ground disturbance would result in moderate impacts on plant communities and wildlife species (p. 4-44). Most impacts to these resources would occur primarily on almost 592-acre area of the ERF footprint. About 185 acres of sagebrush steppe, 136 acres of non-irrigated pastures, and 268 acres of irrigated cropland habitats would be lost. Such habitat loss and alterations would impact a number of species including sage grouse, which is a candidate species for listing under the Endangered Species Act, pygmy rabbits, and nesting migratory birds and other species of concern (p. 4-46). Noting that some of the impacts would be indirect, others would be direct, cumulative and unavoidable.

We appreciate measures to limit the project footprint impacts, including replanting almost 133 acres of that footprint with native species after construction activities and eliminating grazing within the entire project area (4200 acres). Because of an arid environment at the project site, however, planted vegetation would take years to establish or restoration could fail, thus exacerbating loss of cover and habitat for the species. Given the usage of the project area by sage-grouse and other sensitive wildlife species, and limited survey data for the species, it is important that the NRC continue to work with the US Fish and Wildlife Service and the Idaho

Printed on Recycled Paper

Department of Fish and Game (IDFG) as the project is implemented to monitor risks to individual species and identify effective measures to reduce risks and protect the species and their habitat, particularly loss, degradation, and fragmentation of the sagebrush steppe habitat due to construction activities, wildfire, and agriculture. Also, we believe that it would be useful for the project to coordinate with the Idaho National Laboratory and Bureau of Land Management due to their long term experiences monitoring impacts to the species and associated habitats in and around the proposed project area.

Consultation with Tribal Governments

The draft EIS indicates that there have been contacts with Tribes that may be affected by the proposed project. This is especially important because the DEIS states that the project would result in up to large impacts to resources important to tribes (p. 4-4), including historical and cultural, visual, and ecological resources. Construction activities, for example, would destroy historic and cultural resources at MW004 site, while increased traffic and construction activities and the presence of an industrial complex would significantly alter the visual landscape. Because of these and other impacts that may be discovered during the project operations, we recommend that the final EIS include a discussion of how issues raised by Tribes would be addressed by the project and outcomes of the ongoing work with the Idaho State Historic Preservation Office and affected Tribes on potential effects requiring Section 106 review of the National Historic Preservation Act. Since the project would result in economically beneficial impacts to the region, EPA would be interested in any information on how Tribes' economic conditions would be enhanced because of the project.

Based on issues and concerns discussed above, we are assigning a rating of EC-2 (Environmental Concerns – Insufficient information) to this DEIS. A copy of the rating system used in conducting our review is enclosed for your reference.

We appreciate the opportunity to provide comments on the DEIS. If you have questions about our comments, please contact me at (206) 553-1601 or Theo Mbabaliye of my staff at (206) 553-6322 or by email at mbabaliye.theogene@epa.gov .

Sincerely,

Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

Enclosure:
EPA Rating System for DEISs

cc: EPA Idaho Operations Office
Idaho Department of Environmental Quality
Shoshone-Bannock Tribes

Printed on Recycled Paper

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

Printed on Recycled Paper