

**PUBLIC SCOPING STATEMENT
REYNOLDS RANCH ISR
ENVIRONMENTAL ASSESSMENT**

**BUREAU OF LAND MANAGEMENT
CASPER FIELD OFFICE**

DESCRIPTION OF PROJECT

Cameco Resources Inc. (CAMECO) has filed a Plan of Operations (POO) to conduct operations for locatable minerals under the general mining laws with the Bureau of Land Management (BLM), Casper Field Office, for a uranium in situ recovery (ISR) operation on public, fee, and state lands within Converse County, Wyoming. The proposed project is located in multiple Sections within Townships 36 and 37 North, Ranges 73 and 74 West, 6th Principal Meridian in Wyoming. The proposed project is located along Ross Road approximately 30 miles northwest of Douglas, Wyoming.

The area for the project encompasses approximately 8700 acres, of which approximately 5360 acres are split estate with private surface and BLM minerals, 720 acres are BLM surface and minerals, 1980 acres are fee lands, and 640 acres are State owned lands. Those portions of the project occurring on private surface or state land are not subject to BLM authorization. The entire project would also be licensed by the Nuclear Regulatory Commission and permitted by the Wyoming Department of Environmental Quality.

CAMECO currently conducts commercial ISR uranium mining at the adjacent Smith Ranch/Highland mine operations area. CAMECO is proposing to expand its mining operations and to conduct ISR mining in the Reynolds Ranch area. This would enable CAMECO to continue to meet the current and future needs of its customers for U₃O₈, a product that will eventually become used in fuel for commercially operated nuclear power reactors.

As part of such operations in the Reynolds Ranch area, CAMECO would construct eight wellfields and a satellite ion-exchange facility for the recovery of uranium and for wellfield restoration following mining operations, and also a deep disposal well for the disposal of liquid wastes. When the project is fully operational, approximately five uranium recovery units would be in production at a time. Well field installation and testing for each unit would take up to a year and a half. Based on CAMECO's estimated schedule, uranium recovery in each unit would generally last approximately five years, followed by approximately four years of ground water restoration and a year and a half of decommissioning. CAMECO expects to conduct ISR operations in the Reynolds Ranch area over a 15-year period.

The ore deposits generally occur at depths of 450 feet to 1000 feet below the surface in long narrow trends varying from a few hundred to several thousand feet long and 20 to 300 feet wide. The depth depends on the local topography, the dip of the formation, and the stratigraphic horizon.

During in-situ leaching, an oxidant-charged solution, or lixiviant, is injected into the production zone aquifer through injection wells. CAMECO would use native ground water, carbon dioxide, and sodium carbonate/bicarbonate as the mining solution, with an oxygen or hydrogen peroxide oxidant. As it circulates through the production zone, the lixiviant oxidizes and dissolves the mineralized uranium, which is present in a reduced chemical state. The resulting uranium-rich solution is drawn to recovery wells where it is pumped to the surface, and then transferred to a satellite ion-exchange facility. At the satellite ion-exchange facility, the uranium is extracted from the solution by resin beads. The leaching solution is then recharged with the oxidant and

reinjecting to recover more uranium from the wellfield. During production, the uranium recovery solution continually moves through the aquifer from outlying injection wells to internal recovery wells. Monitor wells surround the wellfield pattern area, being located in the production zone aquifer as well as in the overlying and underlying aquifers. These monitor wells are screened in appropriate stratigraphic horizons to detect lixiviant in case it migrates out of the production zone.

Operation of the planned satellite ion-exchange facility for the Reynolds Ranch area would involve the transportation of uranium-charged resin beads from the satellite facility to the Smith Ranch central processing plant (CPP) using Ross Road, and the transportation of the stripped resin beads back to the satellite facility.

Following uranium recovery in each mining unit, CAMECO would restore ground-water conditions in the wellfield. Restoration would involve ground-water sweep, clean water injection, and geochemical stabilization of the aquifer with a reductant. The goal of ground water restoration is to return the aquifer to the baseline conditions that existed prior to the start of uranium recovery; or, if approved, to a secondary standard of pre-mining “class of use.”

At Reynolds Ranch, a total of approximately 325 acres would be disturbed with about 120 acres occurring on BLM surface. The satellite ion exchange processing facility and deep disposal well would be located on private land.

All BLM lands disturbed by the mining project would be returned to their pre-mining land use of livestock grazing and wildlife habitat.

RELATIONSHIP TO EXISTING PLANS AND DOCUMENTS

Casper Resource Management Plan (CRMP) - The CRMP (December 7, 2007) directs the management of BLM-administered lands within the analysis area. The objective for management of locatable minerals, as stated in the CRMP is “BLM-administered mineral estate, except for areas identified for the protection of specific resource values or uses, is open for prospecting and development for locatable minerals.”

Environmental Assessment for the Addition of the Reynolds Ranch Mining Area to Power Resources, Inc's Smith Ranch Highlands Uranium Project (NRC EA) - The NRC EA (November 2006) was prepared by the U.S. Nuclear Regulatory Commission (NRC) with a Decision Record and Finding of No Significant Impact issued on January 7, 2007. On Jan. 31, 2007, NRC issued a license amendment for the Smith Ranch-Highland Uranium Project to include the Reynolds Ranch ISL site as a satellite facility.

Use Authorizations - An approved Plan of Operations is subject to mitigation and monitoring measures to prevent unnecessary or undue degradation of public lands. Other conditions of approval to protect important resources may be added to the authorization if analysis proves such measures would further reduce environmental impact.

NATIONAL ENVIRONMENTAL POLICY ACT

On reviewing the proposal, the BLM has determined that an Environmental Assessment (EA) will be prepared.

The NRC EA will be incorporated by reference in the BLM EA and the BLM EA will be tiered to the NRC EA. Incorporation by reference and tiering provide opportunities to reduce paperwork and redundant analysis in the NEPA process. Incorporation by reference allows BLM to briefly summarize the relevant portions of the NRC EA rather than repeat them. Tiering is a form of incorporation by reference that refers to the previous NRC EA. The tiered BLM EA document will focus on those issues and mitigation measures not analyzed in sufficient detail in the NRC EA.

Scoping Statement – Reynolds Ranch ISR Environmental Assessment

The impact analysis presented in the EA will result in one of three outcomes, as determined by the BLM, either: 1) the proposed project would not result in significant impacts and a Decision Record with a Finding of No Significant Impact (DR/FONSI) could be signed (which would allow the project to be implemented), or 2) the project, as proposed, would result in significant impacts and would require the preparation of an Environmental Impact Statement (EIS), or 3) no action would be approved under this proposal.

For this project, the BLM has determined that scoping activities will be conducted prior to the preparation of an EA:

- to determine reasonable development alternatives to be considered in the document
- to identify issues of concern related to the proposed project
- to determine the depth and range of analyses for issues addressed in the document

This scoping statement has been prepared to enable government agencies, the general public, and other interested parties to participate in, and contribute to the analysis process. Public input is important in establishing the scope of analysis for any NEPA document, and the BLM encourages public participation.

IDENTIFIED RESOURCE MANAGEMENT ISSUES AND CONCERNS

The following issues and concerns have been identified to-date. This list is not meant to be all-inclusive, but rather to serve as a starting point for public input. Once all issues and concerns have been gathered through scoping and BLM consideration of the project, corresponding resource disciplines will be identified to conduct analysis for individual issues and concerns.

- potential effects upon wildlife within the analysis area
- potential impacts to cultural and historical resources within the analysis area including the Bozeman Trail
- potential impacts to water resources
- restoration of disturbed areas and control of nonnative plants
- potential impacts to hunting areas and other recreation

TIMING NEEDS AND REQUIREMENTS

Government agencies, the public, and other interested parties are encouraged to participate throughout the environmental analysis process to help in identifying the level of analysis needed, alternatives to be considered, issues or concerns that should be assessed, mitigation opportunities, and any other comments or ideas to help ensure that the analysis process is comprehensive.

The scoping period for this project ends on July 31, 2008. Please submit your comments to:

Tom Foertsch, Geologist
Bureau of Land Management
Casper Field Office
2987 Prospector Drive
Casper, Wyoming 82604

E-mail: casper_wymail@blm.gov

Please refer to the Reynolds Ranch ISR Project in your response.

REFERENCES CITED

BLM. 2007. Record of Decision, Casper Resource Management Plan, Bureau of Land Management, Casper Field Office, Wyoming.

http://www.blm.gov/rmp/casper/cfo_rod_arnp.htm

NRC. 2007. Environmental Assessment for the Addition of the Reynolds Ranch Mining Area to Power Resources, Inc's Smith Ranch Highlands Uranium Project, U.S. Nuclear Regulatory Commission.

<http://adamswebsearch.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML062690386>