



January 14, 2005

**Smith Ranch - Highland
Uranium Project**
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ATTN: Document Control Desk

Gary S. Janosko, Chief
Fuel Cycle Facilities Branch,
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
11545 Rockville Pike, Two White Flint North
Rockville, MD 20852-2738

RE: Smith Ranch-Highland Uranium Project
NRC License SUA-1548, Docket No. 40-8964
License Amendment Request- Addition of Reynolds Ranch Amendment Area

Dear Mr. Janosko:

PRI desires to amend the current NRC License SUA-1548 for the Smith Ranch-Highland Uranium Project (SR-HUP) to accommodate in situ mining activities at the planned Reynolds Ranch Amendment Area. This amendment area contains approximately 8,704 acres contiguous with the northern part of the existing SR-HUP license area boundary. Activities planned for this area include construction and operation of a Satellite facility, deep disposal well, installation and operation of potential wellfields and monitor well rings, and construction of access roads. Therefore, to accomplish these actions, please find included a revised Volume I (Chapters 1-10) of the existing SR-HUP License Application, along with Volume II, III, and IV containing required baseline information specific to the Reynolds Ranch Amendment Area. An additional copy of these volumes is concurrently being forwarded directly to Mr. John Lusher- NRC Project Manager. Please consider this submittal a License Amendment Request.

As discussed with Mr. John Lusher, NRC Project Manager, existing Volume I, which contains Chapters 1 through 10 for the SR-HUP, and which was approved by License Amendment No. 5 (dated August 18, 2003) has been revised to include the construction and operation of facilities at the Reynolds Ranch Amendment Area.

New "baseline" information was obtained to support NRC Licensing and Wyoming Department of Environmental Quality- Land Quality Division (WDEQ-LQD) permitting requirements for the Reynolds Ranch Amendment Area. In order to maintain consistency between submittals to both agencies, the same baseline information is being submitted to the NRC and WDEQ-LQD. Baseline information submitted for the Reynolds Ranch Amendment Area is contained in Volumes II, III, and IV, which includes:



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1. Appendix A- Owners of Record of Surface and Mineral Rights Within the Permit Area (Reynolds Ranch), and Surface Landowner's Consent forms. Map A-1- Surface Ownership Within the Reynolds Ranch Amendment Area and Within One-Half Mile of the Permit Boundary. Map A-2- Mineral Ownership Within the Reynolds Ranch Amendment Area and Within One-Half Mile of the Permit Boundary.
2. Appendix B- Owners of Record of Surface and Mineral Rights Adjacent to the Permit Area (Reynolds Ranch).
3. Appendix C- Location of Lands by Legal Subdivision. Revised Map C-1a (Permit Area) shows the existing Smith Ranch Uranium Project Permit Area and the Reynolds Ranch Amendment Area, Satellite Facility, and approximate wellfield areas.
4. Appendix D1- Baseline Land Use information for the Reynolds Ranch Amendment Area.
5. Appendix D2- Brief history of the Reynolds Ranch Amendment Area.
6. Appendix D3- Baseline Archeology Studies for the Reynolds Ranch Amendment Area. Includes a Class III Cultural Resource Inventory conducted by Pronghorn Archeological Services in 1997, and an Assessment of Effect For the Bozeman Trail and Other Historic Sites conducted by Rosenberg Historical Consultants in 1997.
7. Appendix D4- Baseline Climatology data for east-central Wyoming. Includes 2003 weather summary and normals, means, and extremes from the National Weather Service (NWS) weather station located at the Natrona County International Airport, Casper, Wyoming. Also includes a regional general climate summary.
8. Appendix D5- Baseline Regional and Site Geology for the Reynolds Ranch Amendment Area. Includes geologic cross-sections of the Reynolds Ranch Amendment Area, listing and mapping of abandoned drill holes, and regional and site-specific geologic descriptions.
9. Appendix D6- Baseline Hydrology for the Reynolds Ranch Amendment Area. Includes list of surface and groundwater rights, Potentiometric surface maps, pump test results, and water quality data for potential mining zones, stock/domestic wells, and select surface water sites.
10. Appendix D7- Baseline Soil Assessment for the Reynolds Ranch Amendment Area. Includes Order 3 soil survey conducted by the U. S. Soil Conservation Service (SCS) and a map delineating SCS soil unit boundaries for the Reynolds Ranch Amendment Area. Also included is an Order 1-2 survey of the Reynolds

Ranch Amendment Area conducted by BKS Environmental Associates, Inc. in 1997.

11. Appendix D8- Baseline Vegetation Study for the Reynolds Ranch Amendment Area. The study was conducted by BKS Environmental Associates in 1997.
12. Appendix D9- Baseline Wildlife Studies for the Reynolds Ranch Amendment Area and 2-mile buffer surrounding the amendment area. Included are wildlife studies conducted in 1997 and 1998 by Hayden-Wing Associates Environmental Consultants.
13. Appendix D10- Baseline Radiological Assessments of the Reynolds Ranch Amendment Area.

Radon-222 doses to the public from the proposed Satellite and wellfield operations at the Reynolds Ranch Amendment Area were predicted using the MILDOS model. Results from the model are contained in Chapter 7 of Volume I.

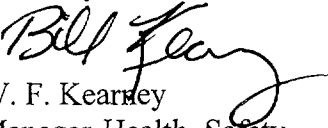
The Reynolds Ranch Satellite Facility will be similar in design and function to the SR-HUP Satellite facilities currently in operation and will have a maximum throughput capacity of 4,500 gpm. The deep disposal well will also be very similar in design, depth, and injection rates to the two deep disposal wells currently in use at the Smith Ranch Project. A permit for a Class I, Non-Hazardous deep disposal well at Reynolds Ranch was submitted to the WDEQ-WQD under cover dated November 2, 2004. Additionally, wellfield development, construction, operations, restoration, and decommissioning activities will be conducted in a manner consistent with existing operation and reclamation methods used at the SR-HUP.

Depending upon approval of this License Amendment and approval of the WDEQ-LQD Mine Permit Amendment and the deep disposal well permit application, PRI currently anticipates that wellfield development, Satellite Facility construction, and disposal well construction will take place in 2006-2007. Production from the first wellfield is currently expected to start in early 2008.

Concurrent with this License Amendment Request, PRI is also submitting a Mine Permit Amendment Request to the WDEQ-LQD. PRI is hopeful that a timely review and approval of this License Amendment Request by the NRC can be conducted to accommodate planned development activities for the Reynolds Ranch Amendment Area. PRI utilized NUREG-1569 "Standard Review Plan for In Situ Leach Uranium Extraction License Applications" to ensure all important subjects were covered, and to assist with NRC's review. It is also PRI's understanding that an Environmental Impact Statement (EIS) may be required since proposed operations in this area have not been previously evaluated by the NRC.

PRI appreciates your attention to this License Amendment Request. If you or your staff has any questions, please call me at 307-358-6541 ext. 62 or Ken Milmine, Sr. Environmental Scientist, at ext. 46.

Sincerely,


W. F. Kearney
Manager-Health, Safety
& Environmental Affairs

WFK/klm

cc: File SR-4.6.4
S. P. Collings w/o atta
C. Foldenauer w/o atta
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