



CAMECO RESOURCES
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August 13, 2009

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Mr. Doug Mandeville
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
#2 White Flint, T7E18
Rockville MD 20852-2738

RE: Request for Alternate Schedule for Completion of Decommissioning (Groundwater Restoration), Source Material License SUA-1548, Docket No. 40-8964

Dear Mr. Mandeville:

Please find attached Power Resources, Inc d/b/a Cameco Resources (CR's) request for approval of alternate schedules for completion of groundwater restoration pursuant to 10 CFR 40.42(d). As detailed within the attached submittal, approval of this request is not detrimental to the health and safety of workers or the public and is otherwise in the public interest.

If you have questions please contact Krista Wenzel at (307) 358-6541 ext. 462.

Regards,

A handwritten signature in black ink, appearing to read 'T. Cannon', written over a circular scribble.

Thomas L. Cannon
General Manager

Attachment: Alternate Decommissioning Schedule

cc: S. Collings T. Cannon T. Young S. Bakken
K. Wenzel D. Kolkman J. McCarthy A. Faunce
T. Bunting L. Spackman, WDEQ/LQD File SR4.6.4.4
File SR4.3.3.1 w/o atch

Smith Ranch-Highland Uranium Project
Alternate Schedule for Completion of Groundwater Restoration
August 13, 2009

Introduction

As required by 10 CFR 40.42(d), Smith Ranch - Highland Uranium Project (SR-HUP) is submitting a request for alternate schedules for groundwater restoration because modelling and other factors indicate a restoration duration exceeding 24 months is necessary for specific mine units. An overview of SR-HUP actions is provided as well as a discussion of each wellfield.

CR has been working diligently in coordination with the Wyoming Department of Environmental Quality (WDEQ) and the Nuclear Regulatory Commission to accelerate restoration progress. This was driven by the issuance by the WDEQ of a Notice of Violation (NOV) in March of 2008 regarding the slow pace of groundwater restoration. Over the past year and a half, CR has increased the number of restoration personnel on staff and has increased capital and maintenance expenditures to meet the short- and longterm restoration schedule. In addition, surety amounts have been increased to ensure they reflect the cost of restoration. Details of these and additional actions have been presented to the NRC in two public forums.

CR is committed to meet regulatory and public expectations regarding timely restoration of its mine units. Approval of the alternate shedule will not be detrimental to the health and safety of workers or the public; this is demonstrated by the requirements within the facility's license and by NRC inspections of the facility. In particular, monitoring wells around the wellfields continue to be sampled semi-monthly to ensure mining fluids are adequately controlled.

The key to accelerating restoration is the availability to dispose of water from restoration activities. An unexpected delay occurred in the issuance of the permit for additional deep disposal wells. The typical timeframe for permitting was extended by more than 8 months while additional regulatory positions were developed. The process is now considered to be on schedule and public notice for the permit was published on August 8, 2009. In addition, restoration was delayed to allow for reviews of the use of bioremediation treatment with the WDEQ to reduce the timeframe for reverse osmosis treatment. The use of bioremediation treatment is likely to result in a much reduced restoration timeline as well as reduced water disposal needs. These reviews were finalized and bioremediation begin in Mine Unit C in April 2009.

While restoration capability at SR-HUP has improved significantly, there are certain aspects that have required and will continue to require focused attention. One of these is the need for maintenance in some of the wellfields. Maintenance may include replacements of fittings in headerhouses and on pipelines and wellheads. In addition, production wells that were used as monitoring wells in the production area during baseline need to be converted back to become production zone monitoring wells again. The maintenance needs have been identified,

maintenance has been scheduled and staffing has increased in our Restoration Department and Wellfield Operations Departments to resolve these issues.

In response to the WDEQ NOV, CR expended a significant effort developing an achievable restoration schedule. The development of this schedule was supported by enhanced groundwater modelling efforts, formulation of a thorough disposal water analysis, and planning and commencement of spending for over \$8 million in capital improvements. To help achieve the restoration schedule presented to and approved by the WDEQ, CR completed the following actions: 1) submission of an application for additional deep disposal wells and 2) significant refinement and implementation of a mine unit pipeline maintenance schedule.

Alternate Schedules

Alternate restoration schedules are requested for the following mine units. The corresponding restoration timetable was provided as a minor revision to the license on July 31, 2009. With the exception of Mine Unit C which is currently in the bioremediation phase, the timetables do not consider bioremediation timeframes. These are projected to be included in the future as more wellfields are restored using bioremediation. The timelines in this request and in the license will be refined as necessary as CR moves forward. A synopsis and restoration timeframe for each wellfield follows.

Mine Unit C

To date there have been 18.5 pore volumes of groundwater sweep and clean water injection in Mine Unit C. The bioremediation phase of restoration began in April 2009 and the mine unit is projected to be in the stability phase in late 2009. Complete restoration including regulatory approval of this mine unit is projected for the second quarter of 2011.

Mine Unit D

Restoration in Mine Unit D is scheduled to commence in January 2010; restoration is delayed due to disposal water capacity limits in the purge storage reservoir and deep disposal wells. In addition, the mine unit header houses, pipeline, and wellheads are scheduled for maintenance work. Several injection wells in the mine unit have not passed mechanical integrity tests and replacement injection wells are scheduled to be drilled prior to the start of restoration activities. Complete restoration including regulatory approval of this mine unit is projected for the third quarter of 2012.

Mine Unit D-Extension

Restoration in Mine Unit D-Extension is scheduled to commence in April 2011; restoration is delayed due to disposal water capacity limits in the purge storage reservoir and deep disposal wells. In addition, the mine unit header houses, pipeline, and wellheads are scheduled for maintenance work. Complete restoration including regulatory approval of this mine unit is projected for the third quarter of 2013.

Mine Unit E

Restoration in Mine Unit E is scheduled to commence in July 2010; restoration is delayed due to disposal water capacity limits in the purge storage reservoir and deep disposal wells. In addition, the mine unit header houses, pipeline, and wellheads are scheduled for maintenance work. Several injection wells in the mine unit have not passed mechanical integrity tests and replacement injection wells are scheduled to be drilled prior to the start of restoration activities. Complete restoration including regulatory approval of this mine unit is projected for the first quarter of 2016.

Mine Unit F

Restoration is scheduled to commence in February 2012; restoration is delayed due to disposal water capacity limits in the purge storage reservoir and deep disposal wells. In addition, the mine unit header houses, pipeline, and wellheads are scheduled for maintenance work. Complete restoration including regulatory approval of this mine unit is projected for the second quarter of 2025.

Mine Unit 1

To date there have been 2.6 pore volumes of groundwater sweep and clean water injection in Mine Unit 1. A request for bioremediation has been discussed with WDEQ. An agreement with WDEQ to move forward is anticipated in the third quarter of 2009. Mine Unit 1 is projected to be in the stability phase in July 2010. Complete restoration including regulatory approval of this mine unit is projected for the first quarter of 2013.

Mine Unit 4/4A/4-Extension

Restoration is scheduled to commence in July 2010; restoration is delayed due to water disposal capacity limits in deep disposal wells. Complete restoration including regulatory approval of this mine unit is projected for the fourth quarter of 2018.