

December 13, 2011

Mr. Scott Surovchak, Site Manager
Shirley Basin South
U.S. Department of Energy
Office of Legacy Management
11025 Dover St. Suite 1000
Westminster, CO 80021-5573

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION STAFF REVIEW OF
U.S. DEPARTMENT OF ENERGY REPORTS ON SHIRLEY BASIN SOUTH
DATED MARCH AND JUNE 2011

Dear Mr. Surovchak:

I am writing in response to two U.S. Department of Energy (DOE) reports pertaining to the Shirley Basin South, Wyoming Uranium Mill Tailings Radiation Control Act (UMTRCA) site. Specifically, the reports entitled "Evaluation of Elevated Radium-226 and Radium-228 Concentrations at the Shirley Basin South, Wyoming UMTRCA Title II Disposal Site," dated March 2011, and "Groundwater Monitoring Evaluation for the Shirley Basin South, Wyoming UMTRCA Title II Disposal Site," dated June 2011.

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the reports and has concluded that they do not contain sufficient information for the staff to concur with DOE's conclusions regarding the source of the elevated radium-226 and radium-228 at the site or DOE's proposal for revising the alternate concentration limits for the site. Due to the complexity of the site, and to ensure that DOE staff is aware of the type and level of detail of information necessary for NRC staff to continue to consider DOE's proposals, we suggest a conference call between NRC and DOE staffs to discuss the content of the reports and the NRC staff findings. We also believe that it would be helpful if staff from the Wyoming Department of Environmental Quality participated in this discussion and, if you have no objection, we will invite them to participate in the call. If you agree, please contact me to arrange this discussion.

In accordance with 10 CFR 2.390 of the NRC "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html>.

S. Surovchak

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If you have any questions concerning the NRC staff comments, please contact me at 301-415-6749 or by email at Dominick.Orlando@nrc.gov

Sincerely,

/RA/

Dominick A. Orlando, Senior Project Manager
Special Projects Branch
Decommissioning and Uranium Recovery
Licensing Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

Docket No.: 040-6659

cc: Shirley Basin South dist. list

S. Surovchak

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DATE	12/12/11	12/12/11	12/13/11	12/13/11

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