

November 7, 2008

Mr. Donald R. Metzler
Moab Federal Project Director
U.S. Department of Energy
200 Grand Avenue
Grand Junction, CO 81501

SUBJECT: REVIEW OF SUPPLEMENTAL STANDARDS APPLICATION FOR MOAB
VICINITY PROPERTY VP019

Dear Mr. Metzler:

The U.S. Nuclear Regulatory Commission (NRC) staff has completed its review of the Completion Report and Supplemental Standard Application for Moab Vicinity Property VP019 submitted to NRC by your letter dated September 9, 2008. You propose utilization of supplemental standards for 6 acres of steep rocky hillsides and sandstone cliffs.

Based on its review of the information provided, the NRC staff concurs in the application of supplemental standards for VP019. A technical evaluation documenting the staff's review is enclosed.

If you have any questions concerning this letter, please contact the NRC project manager, Myron Fliegel, either by telephone at (301) 415-6629, or by e-mail at myron.fliegel@nrc.gov.

In accordance with 10 CFR 2.390 of the NRC's "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 (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,

/RA/

Keith I. McConnell
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. WM-110

Enclosure: Technical Evaluation Report

cc: J. Berwick, DOE

November 7, 2008

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Moab Federal Project Director
U.S. Department of Energy
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Grand Junction, CO 81501

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VICINITY PROPERTY VP019

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cc: J. Berwick

Distribution:
T. Youngblood J. Whitten

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OFC	FSME	FSME	FSME	FSME
NAME	M. Fliegel	B.Garrett	B. VonTill	K. McConnell
DATE	10/8/08	10/8/08	11/7/08	11/7/08

OFFICIAL RECORD COPY

TECHNICAL EVALUATION REPORT
COMPLETION REPORT AND SUPPLEMENTAL STANDARD APPLICATION FOR MOAB
VICINITY PROPERTY
VP019

DATE: October 30, 2008

SITE: Moab Vicinity Property (VP019)

PROJECT MANAGER: Myron Fliegel

TECHNICAL REVIEWERS: Thomas Youngblood

EVALUATION AND CONCLUSIONS:

The Department of Energy (DOE) submittal dated March 3, 2008, and revised in a September 9, 2008 submittal requested the U.S. Nuclear Regulatory Commission (NRC) to concur in the application of supplemental standards under 40 CFR 192 for portions of a vicinity property (VP019) adjacent to the Moab processing site. DOE proposes a no remediation alternative for two specified areas of VP019 and the use of supplemental standards. The use of supplemental standards by DOE requires review and concurrence by the NRC.

This vicinity property is owned by Don Policaro. The property is bounded on the north by the DOE Moab processing site, on the east by the Colorado River, and on the west and south by Bureau of Land Management property. Utah Highway 279 passes through the property. Radiological soil contamination on VP019 originated from windblown materials from the adjacent Moab processing site.

DOE proposes to use supplemental standards for two areas of approximately 6 acres total. A 5.96 acre area is located west of Utah Highway 279. This area consists of a steep slope that rises to approximately 400 feet above the road grade. A smaller strip of land borders the eastern side of the Utah Highway 279 right-of-way for 700 feet. This strip is the steep embankment built for the roadway and is too steep and rocky to walk up.

DOE estimates the radium-226 soil concentration in VP019 to be 50 picoCuries per gram (pCi/g) which exceeds the 40 CFR 192 radium-226 soil standards. The DOE Supplemental Standards Application indicates that remediation of the two areas of this property would result in unacceptable health and safety hazards to workers due to the steep and rocky nature of the terrain. DOE also indicates that remediation would cause ecological damage to fragile desert terrain and that revegetation would be difficult or impossible.

A DOE dose assessment considered the public radiation exposure for use of the two areas of the property by a hiker and biker. The dose estimates for the hiker and biker are approximately 1 millirem per year from exposure to the residual radioactive contamination on the property.

NRC staff has reviewed the DOE rationale for the use of supplemental standards and the technical bases of the DOE dose assessment for public use of the unremediated portions of the property. NRC staff concludes that the use of supplemental standards is warranted given the location of the contamination. Based on the DOE estimates and its independent analysis of those dose estimates, NRC staff concludes that the potential maximum dose to a member of the public would be considerably less than 25 millirem per year. This is the NRC radiological

criterion to allow unrestricted release of a property subject to NRC requirements for decommissioning.

Based on its review and independent analysis, NRC concludes that the potential safety and health hazards to workers for remediation of the property do not appear to be justified to avoid the small public dose that may result. Therefore, NRC staff concludes that criterion (a) of 40 CFR 192.21 "Criteria for applying supplemental standards" applies and thus concurs with the DOE application of supplemental standards for VP019.