

September 29, 2000

Ms. Donna Bergman-Tabbert, Manager
U.S. Department of Energy
Grand Junction Office
2597 B3/4 Road
Grand Junction, CO 81503

SUBJECT: ACCEPTANCE OF THE FINAL SITE OBSERVATIONAL WORK PLAN FOR
THE URANIUM MILL TAILINGS REMEDIAL ACTION PROJECT SITE AT
NEW RIFLE, COLORADO

Dear Ms. Bergman-Tabbert:

In letters dated September 22, 1999, and September 29, 1999, respectively, the U.S. Department of Energy (DOE) submitted the Final Site Observational Work Plan (SOWP) and Ground Water Compliance Action Plan (GWCAP) for the Uranium Mill Tailings Remedial Action Project site at New Rifle, Colorado. Additionally, by letter dated June 13, 2000, the DOE submitted a "white paper" proposing a compliance strategy for vanadium contamination in the ground water at the New Rifle site. The staff has completed its review of the New Rifle SOWP which included a site visit and meeting with DOE on July 27, 2000. The staff concludes that the New Rifle SOWP is generally acceptable as DOE's proposed strategy to remediate the ground water at the former New Rifle mill site, consistent with the U.S. Environmental Protection Agency ground water standards (40 CFR Part 192). However, the staff's review of the New Rifle SOWP identified several issues which must be resolved to complete the review of the New Rifle GWCAP and June 13, 2000, "white paper" and enable the staff to make its findings regarding the acceptability of the GWCAP. These issues consist of the following:

1. DOE indicates in the SOWP that it will not satisfy the requirements in 40 CFR Part 192.12(c)(2)(A) for natural flushing for vanadium. Vanadium concentrations will not be reduced to DOE's risk based limit and proposed Alternate Concentration Limit (ACL) of 0.33 milligrams per liter (mg/L). DOE estimates that after 100 years of flushing, the maximum predicted vanadium concentration will be 4.37 mg/L. Vanadium will not meet the proposed ACL of 0.33 mg/L until after 300 years, based on the fate and transport model. The staff held some preliminary discussions with DOE on the potential use of a higher ACL for vanadium (32 mg/L) with the use of institutional controls. The use of institutional controls at the New Rifle site is being considered by the staff for the GWCAP which is currently under review.
2. DOE should submit a formal application for ACLs at New Rifle for NRC review. This application should include consideration of other alternatives for ground water remediation at the New Rifle site. In this regard, "hot spot" ground water pumping should be considered. The NRC staff understands that a pilot ground water pumping program will be implemented at New Rifle. The staff should be kept apprised of this effort.

D. Bergman-Tabbert

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3. DOE has proposed the natural flushing option, however, if the ground water is currently or projected to become a source for a *public water system* subject to the provisions of the Safe Drinking Water Act (SDWA) during the extended period, DOE will not satisfy 40 CFR Part 192.12.(c)(2)(A). DOE must provide documentation in the GWCAP which indicates that ground water is not currently used, nor projected to be used, as a *public water system* for the area impacted by the ground water plume.

The definition of a *public water system* under the SDWA per 40 CFR Part 141.2 is:

Public water system or PWS means a system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year. Such term includes: any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system; and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Such term does not include any "special irrigation district." A public water system is either a "community water system" or a "noncommunity water system."

4. DOE should include a map for the GWCAP outlining land/ground water use over the area impacted by the ground water plume and proposed institutional controls.

If you have any questions regarding this letter, please contact Rick Weller, the Project Manager for the New Rifle site, at (301) 415-7287 or by e-mail to RMW2@nrc.gov.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," 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/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Philip Ting, Chief
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards

Docket No.: WM-62

cc: D. Metzler, DOE GJO
R. Plieness, DOE GJO
J. Jacobie, CDPHE Den

D. Bergman-Tabbert

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