

ATTACHMENT 3

NRC Staff Analysis of Utah's Proposal

The NRC staff evaluated Utah's proposed alternative groundwater protection standards and concluded that the State's proposed requirements are equivalent or more stringent than the Federal program counterpart requirements contained in 10 CFR Part 40, Appendix A. The staff identified and resolved three potential differences in the State's proposed requirements that initially appeared to be departures from the Federal program elements.

1. *Utah had not provided a comparison of comparable State requirements for Criterion 7 (one-year pre-operational monitoring).*

Upon further review, staff identified that the Utah regulations, as amended, include Criterion 7, Appendix A to 10 CFR Part 40 by reference in their current regulations. Difference resolved.

2. *Utah had not provided a comparison of comparable State requirements for evaluating cumulative impacts to surface water or groundwater in Criterion 5B(6) (ACL evaluation).*

This difference was resolved by the State's subsequent description of the programmatic process for evaluating the synergistic effects of various groundwater contaminants on human health and the environment. The Utah regulations (UAC R317-6-6.15(G)(2)) allow the Board to address cumulative effects of multiple contaminants to protect both public health and the environment.

3. *Four of Utah's groundwater quality standards (GWQS) are higher than the concentration limits in Table 5C, specifically:*

Groundwater Protection Standard Comparison		
Constituent	Table 5C	Utah GWQS
Barium	1.0 mg/L	2.0 mg/L
Chromium	0.05 mg/L	0.1 mg/L
Selenium	0.01 mg/L	0.05 mg/L
Silver	0.05 mg/L	0.1 mg/L

These differences are the result of Environmental Protection Agency (EPA) revisions to the drinking water maximum contaminant limits (MCLs) since the promulgation of the NRC limits in Table 5C. The Atomic Energy Act of 1954, as amended by the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), directed the EPA to set generally applicable standards for the licensing and reclamation of uranium milling facilities. EPA accomplished this in 1983 by promulgating those requirements in 40 CFR 192, Subparts

D&E, and referencing the numerical groundwater limits from other chapters of Title 40 CFR, as they were in effect in 1983. UMTRCA also required the NRC to conform its regulations to the generically applicable EPA standards, which are 40 CFR 192, Subparts D&E. NRC accomplished this in 1987 with rule revisions to 10 CFR 40, Appendix A, which codified Table 5C.

Since then, EPA revised the MCLs for various non-radiological groundwater constituents and promulgated those revisions in 40 CFR 141. However, EPA has not incorporated those revisions into 40 CFR 192. As a consequence, NRC has not revised Table 5C. Utah, which is also an EPA-authorized State, revised its GWQS to comply with the revised Federal limits in 40 CFR 141.

Staff has previously used the newer EPA MCLs as a basis for approving groundwater alternate concentrations limits at its licensed facilities, keeping with the spirit of maintaining conformity between the generically applicable EPA standards. Although four of the State GWQSs are higher than those published in Criterion 5C, the staff does not consider Utah's standards to be inconsistent with the intent of NRC conformity with EPA's generically applicable standards promulgated under Section 275 of the Atomic Energy Act, as amended. The apparent difference is because the administrative revisions to the regulations 40 CFR 192, Subparts D&E, have not kept pace with changing numerical limits in 40 CFR 141. The staff would consider the Utah regulations to provide an equivalent level of protection as the NRC regulations.

4. *Utah has Some MCLs With Lower Numeric Values than NRC and Set Values for Constituents not Specified by NRC*

Several of the other MCL numerical values in the Utah regulation are lower than the comparable NRC values. In addition, Utah has set MCL numerical values for constituents not specified as hazardous constituents in Appendix A to 10 CFR Part 40. Both of these differences would appear to make the Utah regulation more stringent than the comparable NRC regulation.