

(ML013250419). By letter dated November 19, 2001 from William J. Sinclair, Director, Division of Radiation Control, Utah submitted a draft application to amend its Agreement (ML013250578). NRC sent comments on the draft application to Utah by letter dated February 21, 2002

(ML020530319). The draft application did not contain either draft or final regulations for the control of 11e.(2) byproduct material. Utah subsequently developed draft and final regulations on which the NRC staff provided comments (ML021490340, ML021790511, ML022110416, and ML023290240). Under the proposed amendment, four NRC licenses would transfer to Utah.

In its review of Utah's draft regulations, the staff identified that Utah proposed to use its existing groundwater protection standards to protect the waters of the State from uranium milling operations, in lieu of the groundwater protection requirements in Appendix A. Utah's regulations are based on the EPA's hazardous waste program and differ in several respects from the groundwater protection provisions in Appendix A. Therefore, the Commission has determined that Utah's proposed approach constitutes the use of alternative standards.

The NRC had not previously identified any instances in which an Agreement State had proposed alternative standards under section 274o and, therefore, the implementing process for this provision had not been previously developed. Upon receiving the Utah request, the NRC undertook development of an implementing process which included a Commission determination that notice through the **Federal Register** and a hearing process similar to the process in subpart H of 10 CFR part 2, "Rulemaking," would fulfill the NRC's requirements in section 274o. Additionally, as part of that process, the NRC staff requested that Utah provide an analysis that compares the differences between the Utah regulations and NRC's regulations, and demonstrates that, notwithstanding these differences, the Utah groundwater regulations meet the provisions in section 274o. Utah submitted its response supporting the substitution of Utah's groundwater regulations for NRC's regulations, by letter dated October 23, 2002 (ML022980335).

This notice is being published in fulfillment of the requirement to notice and provide an opportunity for public hearing in this instance.

#### Discussion

In its application for the amended Agreement, Utah stated that the

Director, Division of Radiation Control, was designated, by the Water Quality Board, as a Co-Executive Secretary of the Water Quality Board (see Utah Code Annotated (UCA) 19-5-106 and 19-5-104(1)(k)). As Co-Executive Secretary, the Director, Division of Radiation Control, has legal authority to issue, administer, and enforce specific groundwater permits under the Utah Water Quality Rule R317-6 as applied to the current four 11e.(2) byproduct material facilities that would transfer to Utah. The four current NRC licensed facilities are: Envirocare, Rio Algom, International Uranium Corporation, and Plateau Resources Limited. Therefore, the Division of Radiation Control has substituted the Utah Administrative Code R317-6, Groundwater Quality Protection, for certain of the groundwater standards provided in 10 CFR part 40, Appendix A (specifically Criteria 5B(1) through 5H, 7A, and 13). In addition, under State procedures, appeals of enforcement proceedings and permit issues relating to groundwater would be administered through the Water Quality Board.

NRC considers the substitution of R317-6 for the groundwater protection regulations in 10 CFR part 40, Appendix A, Criteria 5B(1) through 5H, 7A, and 13 to be the substitution of an alternative standard. The substitution was proposed in Utah Administrative Code R313-24-4(1)(b). On October 23, 2002, Utah provided a comparative analysis of R317-6 to the Appendix A standards listed above (ML022980335). Utah's analysis concludes that R317-6 provides an equivalent level of protection of the groundwater as the NRC standards. Implementation of R317-6 would be accomplished through issuance of a separate groundwater discharge permit for the specific site in addition to the radioactive materials license. Of the four current NRC licensed facilities, two of the facilities (Envirocare and Plateau Resources Limited) have existing Utah groundwater discharge permits, International Uranium Corporation is in discussions with Utah for a groundwater discharge permit, and Rio Algom is currently implementing a groundwater remediation program.

NRC staff reviewed the Utah groundwater protection regulations (R317-6), the Utah comparative analysis for R317-6, and the administrative approach in the Utah groundwater protection permitting process to determine if the resulting overall approach meets the requirements for alternative standards in section 274o. The NRC staff review focused on three major areas: the administrative

procedure including the permitting process, the specific numerical limits in the regulations, and the hazardous constituents that must be considered in setting standards at a specific site.

Utah's administrative process of issuing separate groundwater discharge permits as well as the other procedural requirements in R317-6 differ from the process in Criteria 5B(1) through 5H and 7A. However, staff's review concluded that they accomplish the same regulatory outcome of establishing a site-specific groundwater protection program for both radiological and nonradiological hazards associated with 11e.(2) byproduct material that is consistent with the groundwater protection regulations of the Commission.

The NRC staff review of the specific numerical limits in R317-6 determined that the specific values in R317-6 were based on the EPA drinking water limits (primary and some secondary limits) and that Utah had updated its groundwater protection regulations to reflect current EPA drinking water regulations in 40 CFR parts 141 and 142. Although the numerical limits in NRC regulations are also based on EPA drinking water limits, they are based on EPA limits in effect in 1983 when EPA issued its uranium milling regulations in 40 CFR part 192, subparts D and E. Thus, Utah's rules reflect some differences, discussed further below, that are included in the current issuances of EPA's drinking water limits.

The Utah groundwater regulations apply to all facilities in the State unless specifically exempted in the regulations, *i.e.*, the effect of using R317-6 is to apply consistent groundwater regulations to uranium milling facilities as well as other industries in the State of Utah. The NRC staff review identified the following differences between the specific numerical limits in R317-6 and the NRC regulations: (1) Four chemical constituents listed in R317-6 have higher (less stringent) values than specified in NRC's regulations; (2) several chemical constituents listed in R317-6 have lower (more stringent) values than specified in NRC's regulations; and (3) R317-6 also includes specific numerical values for chemical constituents that are not listed in NRC regulations, but are listed in the EPA primary or secondary drinking water standards (and thus may be more stringent than NRC regulations). Given this, and as discussed further below, the NRC staff concludes that the Utah regulation, R317-6, has the same objective and basis as the NRC regulations, although the Utah