REQUEST REPLY

8/8/03



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

COMSECY-03-0038

Approved.

July 25, 2003

MEMORANDUM TO:

Chairman Diaz

Commissioner McGaffigan
Commissioner Merrifield

FROM:

William D. Travers

Executive Director for Operations

SUBJECT:

FEDERAL REGISTER NOTICE - UTAH ALTERNATIVE

GROUNDWATER PROTECTION REGULATIONS

In Staff Requirements Memorandum-SECY-03-0025 dated April 21, 2003, the Commission approved the staff's proposal for processing the State of Utah's request to use alternative standards. As stated in SECY-03-0025, the staff has prepared a <u>Federal Register</u> (FR) notice which provides for a hearing process similar to the process in Subpart H of 10 CFR Part 2, "Rulemaking," to implement the notice and hearing requirement in Section 2740 of the Atomic Energy Act, as amended. The resolution of the alternative standards issue is a key step in the process of completing the evaluation of the Utah proposal to amend its 274b Agreement to include 11e.(2) byproduct material and the facilities that generate such material (uranium mills). The staff is proceeding with the evaluation of the application and will process the application in parallel with the alternative standards hearing process.

Even though the Commission has approved this approach, due to its unique nature, the FR notice is attached for Commission review and any comments. The staff intends to proceed with publication of the FR notice in 10 working days unless directed otherwise by the Commission.

SECY, please track.

Attachment: As stated

cc: SECY

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OPA

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Agreement to add authority for 11e.(2) byproduct material by a letter of intent from Governor Michael Leavitt dated June 26, 2001 (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 of 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. NRC periodically reviews the performance of the Agreement States to assure compliance with the provisions of Section 274.

X

In its review of Utah's draft regulations, the staff identified that Utah proposed to use its existing groundwater protection standards in lieu of the groundwater protection requirements in Appendix A. The NRC staff considers the Utah groundwater regulations as alternative standards to the requirements in Appendix A. (The Act was amended in 1983 to add the last paragraph of Section 274o which requires the Commission to determine if Agreement State alternative standards are acceptable in lieu of those promulgated by NRC or EPA under Section 275.) Section 274o requires that the Commission make a determination, after notice and opportunity for public hearing, that such alternative standards will achieve a level of stabilization and containment of the sites concerned, and a level of protection for public health, safety, and the environment from radiological and non-radiological hazards associated with such sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be



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Approve, subject to the attached edits to

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THE PAGE NUMBERS REFER TO WHERE THE TEXT APPEARS IN THE FRN TRANSMITTED VIA COMSECY-03-0038

The Division has posted documents related to its amendment application including the alternative groundwater regulations on the Division's web site at:

http://www.deq.state.ut.us/EQRAD/milllst.htm.

Copies of comments received by NRC may be examined at the NRC Public Document Room, 11555 Rockville Pike, Public File Area O-1-F21, Rockville, Maryland. Copies of the Division's submittal and copies of the NRC Staff correspondence with the Division are also available for public inspection in the NRC's Public Document Room. The ADAMS Accession Numbers are presented with the first mention of each document (ML_______).

FOR FURTHER INFORMATION CONTACT: Dennis M. Sollenberger, Office of State and Tribal Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Telephone (301) 415-2819 or e-mail dms4@nrc.gov.

SUPPLEMENTARY INFORMATION:

Background

Since Section 274 of the Act was added in 1959, the Commission has entered into Agreements with 33 States that authorize a State to regulate the use of radioactive material within the State. NRC periodically reviews the performance of the Agreement States to assure compliance with the provisions of Section 274. The Act was amended in 1983 to add the last paragraph of Section 2740 which requires the Commission to make a determination, after notice and opportunity for public hearing, that alternative standards will achieve a level of stabilization and containment of the sites concerned, and a level of protection for public health, safety, and the environment from radiological and non-radiological hazards associated with

such sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by standards and requirements adopted and enforced by the Commission for the same purpose and any final standards promulgated by the Administrator of the Environmental Protection Agency (EPA) in accordance with Section 275.

The State of Utah Agreement became effective April 1, 1984, but did not include authority for 11e.(2) byproduct material or the land disposal of source, byproduct and special nuclear material received from other persons. In 1990, Utah amended its Agreement to include land disposal of source, byproduct and special nuclear material received from other persons. In 1996, Utah returned its authority for the evaluation of radiation safety information on sealed sources and devices containing byproduct, source, or special nuclear materials and the registration of the sealed sources or devices for distribution, as provided for in regulations. The State of Utah initiated further amendment of their current Section 274b Agreement to add authority for 11e.(2) byproduct material by a letter of intent from Governor Michael Leavitt dated June 26, 2001 (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 of 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. NRC periodically reviews the performance of the Agreement States to assure compliance with the provisions of Section 274.

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 mining 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. NRC staff considers the Utah groundwater regulations as alternative standards to the requirements in Appendix A: (The Act was amended in 1983 to add the last paragraph of Section 274o which requires the Commission to determine if Agreement State alternative standards are acceptable in lieu of those promulgated by NRC or EPA under Section 275.) Section 2740 requires that the Gommission make a determination, after notice and opportunity for public hearing, that such alternative standards will achieve a level of stabilization and containment of the sites concerned, and a level of protection for public health, safety, and the environment from radiological and non-radiological hazards associated with such sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by standards and requirements adopted and enforced by the Commission for the same purpose and any final standards promulgated by the Administrator of the Environmental Protection Agency in accordance with Section 275.

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 <u>Federal Register</u> and a hearing process similar to the process in Subpart H of 10 CFR Part 2, "Rulemaking," would fulfill the NRC's requirements in

nonradiological hazards associated with 11e.(2) byproduct material that is are 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 Part 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 R617-6 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 regulation has been updated as EPA has

updated its drinking water regulations in 40 CFR Parts 141 and 142 to reflect current constituents and limits.

Utah's specific constituents and limits-values (higher, lower, and not identified in NRC regulations) are based on the EPA maximum concentration limits (MCLs) in its primary or secondary drinking water standards, as updated by EPA. As noted above, NRC standards are based on the MCLs in effect in the EPA's 1983 when EPA issued its uranium milling operations. primary drinking water standards. Therefore, the different values for the MCLs are due to EPA updating Its MCLs in 10 CFR Parts 141AND 142 based on newer scientific information. NRC staff has used the newer values when NRC licensees have proposed their use as part of an Alternate Concentration Limit (ACL) proposal as permitted in Appendix A, to 10 CFR Part 40. Based on this information, NRC staff concludes that the Utah groundwater protection regulation (R317-6) has the same objective as NRC's regulations and is based on the same EPA standards that form the basis for the NRC regulations even though 7the Utah regulation, however; is based on the more recent version of the EPA regulations. Thus, the differences between the proposed Utah groundwater protection regulations and the 10 CFR Part 40, Appendix A groundwater protection standards are essentially the differences between the two versions of the EPA regulations. Because NRC regulations in this area must conform to those in 40 CFR Part 192, Subparts D and E, until such time as EPA updates these regulations, NRC is not able, by law, to update its regulations. However, the public health, safety, and environmental protection objectives are the same in both regulations.

The Utah regulation at R317-6-6.3.I.6 also includes a reference to the EPA RCRA Groundwater Monitoring Technical Enforcement Guidance Manual (1986) for use in selecting constituents for groundwater monitoring and this document uses the current list of constituents in 40 CFR Part 261, Appendix VIII, which has been updated by EPA since it was used earlier as