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Part 40
(68FR51516)

Glen Canyon Group/Sierra Club

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DOCKETED
USNRC

November 21, 2003

December 2, 2003 (11:25AM)

Ms. Annette L. Vietti-Cook
Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
Attention: Rulemakings and Adjudications Staff

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

RE: "State of Utah: NRC Staff Assessment of Utah's Proposed Alternative Standard To Use Utah's Existing Groundwater Regulation in Lieu of the Nuclear Regulatory Commission Regulations." 68 Fed. Reg. 51516-51518 (August 27, 2003). And "Supplementary information on hearing process; availability of documents; extension of comment period." 68 Fed. Reg. 60885 (October 24, 2003).

Dear Ms. Vietti-Cook:

Below please find comments on the State of Utah's Proposed Alternative Standard to Use Utah's Existing Groundwater Regulation in Lieu of the Nuclear Regulatory Commission Regulations. 68 Fed. Reg. 51516-51518 (August 27, 2003). The comments will also address the notice providing supplementary information on the hearing process, availability of documents, and extension of the comment period. 68 Fed. Reg. 60885 (October 24, 2003).

These comments in no manner indicate that we believe that the Nuclear Regulation Commission (NRC) has properly established procedures (by way of rule, regulation, or order) for the Alternate Standards Provision of Section 274o of the Uranium Mill Tailings Radiation Control Act of 1978. The applicable portion of Section 270o (42 U.S.C Section 2021(o)) states:

In adopting requirements pursuant to paragraph (2) of this subsection with respect to sites at which ores are processed primarily for their source material content or which are used for the disposal of byproduct material as defined in section 2014(e)(2) of this title, the State may adopt alternatives (including, where appropriate, site-specific alternatives) to the requirements adopted and enforced by the Commission for the same purpose if, after notice and opportunity for public hearing, the

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Commission determines that such alternatives 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 nonradiological 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 2022 of this title.

1. PROCEDURAL CONSIDERATIONS

1.1 September 8, 2003, Motion/Petition, as Supplemented on September 24 and October 28, 2003

On September 8, 2003, in response to the August 27, 2003, Federal Register Notice (FRN), writer submitted a 10 C.F.R. Section 2.808 Motion or, at the Commission's Discretion, 10 C.F.R. Section 2.802 Petition, Responding to 68 Fed. Reg. 51516-51518 (August 27, 2003). This motion/petition was supplemented on September 24 and October 28, 2003. Thus far, a written, timely reply to these submittals has not been received.

The September 8 and 24 and October 28 submittals are included herein by reference. The Commission should address all concerns in those submittals with particularity and specificity.

On October 24, 2003, the NRC published an FRN (68 Fed. Reg. 60885) that extended the comment period (the "hearing"), noticed the availability of documents, and gave a bit more information on the "hearing process" than was provided in the August 27 notice. The October 24 notice addressed a few of the things brought to the attention of the Secretary in the September 8 and 24 submittals. However, there was no statement in the October 24 FRN indicating that it was in any way connected to or responsive to my September 8 and September 24 submittals.

Both the August 27 and October 24 FRNs indicated that an interested person could contact Dennis Sollenberger for "further information." On October 26, an e-mail was sent to Mr. Sollenberger asking for "further information." Thus far, there has been no reply to that inquiry. Therefore, some of those matters will be discuss here. Some of these matters were brought forward in the September submittals, but were not resolved in the October 24 FRN.

1.2 October 24, 2003 Federal Register Notice

The October 24 Federal Register Notice (FRN) is published under the "Proposed Rule" section of the Federal Register. This is confusing because there is not way to identify the specific rule or rules or Commission policy or policies that are being proposed. We do not understand why this notice was published as a "Proposed Rule" pursuant to the Administrative Procedure Act and NRC Management Directive 6.3 (The Rulemaking Process).

1.2.1 The Commission should specifically identify what specific proposed rule(s) or proposed policy(ies) is being noticed in the October 24 "proposed rule"?

1.2.2. The FRN states: "The Commission has the discretion to determine how to implement this requirement in Section 274o of the Act," and "the Commission has, in its discretion, adopted the notice and comment process in Subpart H of 10 CFR Part 2 to fulfill its notice and hearing requirement in Section 274o of the Act."

Does the Commission consider the above statements to be an announcement of a proposed rule or regulation with respect the procedures will be used to implement the Alternate Standards Provision of Section 274o?

1.2.3 Does the Commission consider the statements above to be an announcement of a final rule or regulation with respect the procedures will be used to implement the Alternate Standards Provision of Section 274o?

1.2.4 Does the Commission consider the statements above to be an announcement of a Commission order with respect the procedures will be used to implement the Alternate Standards Provision of Section 274o?

1.2.5 Does the Commission consider the statements above statements of general policy or interpretations of general applicability?

1.2.6 If they are none of these, what exactly are they?

1.2.7 If the statements above are not an announcement of a proposed or final rule or regulation, or an order, where has the Commission been given the discretion by statute to establish procedures to implement the Alternate Standards Provision of Section 274o without specifically issuing a rule, regulation, or order to that effect and providing an opportunity for public comment?

1.2.8 Thus far, it is plain that the NRC is purposefully and illegally circumventing the provisions of the Administrative Procedure Act by not issuing a rule, regulation, or order announcing the establishment of procedures implementing the

Alternate Standards Provision of Section 274o and by not providing an opportunity for the public to comment on the public notice of such rule, regulation, or order.

Public trust in the NRC goes down another notch.

2. ENVIRONMENTAL ANALYSIS

2.1 August 27 Federal Register Notice

The August 27 FRN (page 51518), under "Environmental Analysis" states:

The environmental impact of a Commission determination that an Agreement State's alternative standards that have been found to provide a level of protection that is equivalent to, to the extent practicable, or more stringent than standards promulgated by NRC or the Administrator of EPA under section 275 are within the generic impact analysis conducted by NRC and EPA in promulgating their standards and requirements (NUREG-0706, "Final Generic Environmental Impact Statement on Uranium Milling," and EPA 520/1-83-008, "Final Environmental Impact Statement for Standards for the Control of Byproduct Materials from Uranium Processing"). Any site-specific application of alternative standards in Agreement States will be evaluated under the State's environmental assessment required of the State under the section 274o.

In other words, the environmental impact of a Commission determination regarding the State of Utah's (the State's) use of alternate standards under the provisions of Section 274o are within the two NRC and Environmental Protection Agency (EPA) programmatic Environmental Impact Statements. The NRC "Final Generic Environmental Impact Statement on Uranium Milling" (FEIS) was dated September 1980, the EPA "Final Environmental Impact Statement for Standards for the Control of Byproduct Materials from Uranium Processing" is dated September 1983. So, these documents are over twenty years old and are very out of date. They obviously should be revised.

2.2 Question to be Addressed

The question that will be addressed below is whether the generic environmental analyses contemplate the type of activities at licensed uranium recovery facilities that the State of Utah proposes to regulate under the proposed Alternate Groundwater Standards.

2.3 Utah Final Application for Uranium Mills and Mill Tailings and NRC Guidance on the Processing of Feed Material other than Natural Ore

The State of Utah, in the Utah Final Revised Application Amended Agreement for Uranium Recovery Regulation, submitted to the NRC on July 18, 2003

(ML032060090), provides a statements regarding the States intentions with respect nonconventional uranium milling activities "such as the processing of alternate feed materials" (i.e., materials other than "natural ore"). The Utah Final Application for Uranium Mills and Mill Tailings states, in part:

The State of Utah recognizes the importance of and supports the uranium mining and milling industry. The State recognizes that to remain viable at this time, uranium mills must be able to engage in activities other than milling conventional mined uranium ores such as processing alternate feed materials for the recovery of uranium alone or together with other minerals. . . . It is also the intent of the State to follow the guidance affirmed by the Commission for review and decision of receipt of alternate feed materials by uranium mills. Each alternate feed amendment will be considered a major amendment for the purposes of licensing and will follow procedures as described in this final application. The alternate feed guidance as described in NRC Regulatory Issues Summary 2000-23 is included in Appendix L of the application.

2.3.1 The NRC November 2000 Regulatory Issues Summary 2000-23 (RIS 2000-23) contains the NRC "Interim Guidance on the Disposal of Non-Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailing Impoundments" and "Interim Position and Guidance on the Use of Uranium Mill Feed Materials Other Than Natural Ores."

The "interim" guidances were not noticed in the Federal Register in draft or final form for public comment. Further, the NRC failure to properly notice the interim guidances in the Federal Register was a violation of statute (5 U.S.C. Section 552(a)(1)(D)).

State intends to adopt an NRC guidance that was never properly adopted by the Commission.

How does the Commission justify this?

2.3.2 The "interim" guidances are substantive amendments to the 1995 "Final Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailings Impoundments" and Final Position and Guidance on the Use of Uranium Mill Feed Materials Other Than Natural Ores," (60 Fed. Reg. 49296-49297, September 22, 1995). The term "interim" was used for the 2000 guidances because there was to be a new set of NRC regulations issued as a Part 41, and somehow the guidances would be related to that issuance. At this time, the NRC no longer intends to issue a Part 41 or substantively revise Part 40. So, the "interim" guidances are really "final" guidances.

2.3.3 The 1995 Final Position and Guidance and the 2000 Interim Position and Guidance on the processing of "alternate feed material" contain a new definition of the word "ore," as that word is used in the statutory definition of 11e.(2) byproduct material.

The Guidances' definition of "ore" (to be used only for the purpose of facilitating the processing of alternate feed) states:

Ore is a natural or native matter that may be mined and treated for the extraction of any of its constituents or any other matter from which source material is extracted in a licensed uranium or thorium mill. [Emphasis added.]

The 1995 and 2000 Guidances did not consider and evaluate the health, safety, and environmental impacts of the processing of "any other matter" at licensed uranium or thorium mills. No environmental analysis accompanied the issuance of the Guidances.

2.3.4 The State, therefore, intends to permit the processing of "alternate feed material" and proposes to use alternate groundwater standards when considering such nonconventional mill activities.

The processing of so-called "alternate feed material" involves the processing of materials other than "natural ore." It involves the processing of materials that are wastes from other mineral processing activities. The physical, chemical, and radiological characteristics of "other matter" that is processed are, in many instances not the same as or similar to, the characteristics of "natural ores." This other matter often contains Resource Conservation and Recovery Act (RCRA) hazardous wastes. Often the radiological constituents of the materials are much higher than and different from those usually found in uranium mill tailings from the processing of the "natural ores," which were evaluated by the EPA and NRC when they developed their programmatic environmental analyses and promulgated their regulations.

Both the EPA and the NRC (as directed by the Uranium Mill Tailings Radiation Control Act of 1978) established an extensive regulatory program for uranium milling and the processing of "natural ores." The regulations promulgated by the NRC (amendments to 10 C.F.R. Part 40) and the EPA (40 C.F.R. Part 192) were based upon and supported by the 1980 NRC GEIS and the 1983 EPA FEIS.

2.4 NRC Final Generic Environmental Impact Statement on Uranium Milling

The Final Generic Environmental Impact Statement on Uranium Milling makes a clear statement regarding the scope of the GEIS and what conventional and nonconventional uranium milling entails:

As stated in the NRC Federal Register Notice (42 FR 13874) on the proposed scope and outline for this study, conventional uranium milling operations in both Agreement and Non-Agreement States, are evaluated up to the year 2000. Conventional uranium milling as used herein refers to the milling of ore mined primarily for the recovery of uranium. It involves the processes of crushing, grinding, and leaching of the ore, followed by chemical separation and concentration of uranium.

Nonconventional recovery processes include in situ extraction of ore bodies, leaching of uranium-rich tailings piles, and extraction of uranium from mine water and wet-process phosphoric acid. These processes are described to a limited extent, for completeness. [GEIS, Volume I, at 3.]

The "nonconventional" methods of uranium production that were assessed, were solution mining and recovery of uranium as a byproduct of other mineral extraction operations (such as copper and phosphate). The GEIS did not consider the processing of wastes from mineral processing operations (including commingled soils and waste materials from other sources) at uranium or thorium mills. There is no discussion of the processing of feed material other than ore, as the term "ore" is used in the GEIS. The processing of feed materials other than ore, as either a conventional or nonconventional milling operation, was not within the scope of the GEIS.

The GEIS is very clear about what it considers "ore" to be and gives no indication whatsoever that materials other than ore, such as the tailings or waste from mineral processing operations (including commingled contaminated soils and waste materials from other sources) are considered to be "ore." The GEIS gives no indication whatsoever that such wastes are "ore," even if they were processed at a uranium or thorium recovery facility for their "source material content."

The GEIS did not evaluate, and the public did not have an opportunity to comment upon, any of the possible health, safety, and environmental impacts of the processing of other mineral processing wastes at uranium or thorium processing facilities. There was no evaluation of the issues related to the transportation of such wastes, nor were reasonable alternatives to the transportation, receipt, processing, and disposal of such wastes at uranium or thorium mills ever evaluated.

The risk assessments used by the agencies did not contemplate "other matter" being processed and disposed of in tailings impoundments.

Since 1980 there has been no generic National Environmental Policy Act (NEPA) document that addressed the processing of materials other than natural ore at licensed uranium or thorium mills. There is no site-specific EIS or supplement to a site-specific EIS that addresses the processing of feed materials other than natural ore or the disposal of the wastes from such processing. The various disposal alternatives associated with disposal uranium bearing wastes from other mineral processing activities have never been evaluated in any NEPA document.

2.3.4 There is no evidence that GEIS referenced in the August 27 FRN addressed uranium recovery from materials other than "natural ore" (i.e., "ore"). There is no environmental analysis of the processing of materials other than "natural ore" found within the generic impact analysis conducted by NRC in promulgating their standards and requirements. The nonconventional uranium recovery activities contemplated by the State were not within the scope of the GEIS.

Therefore, how can the NRC use the GEIS as a basis for making any determination regarding the acceptability of Utah's alternate groundwater standards for

nonconventional uranium recovery activities (i.e., the processing of materials other than "natural ore") that were never considered by the generic impact analysis conducted by the NRC?

The NRC cannot use the GEIS or any other NRC NEPA document as a basis for making any such determination.

2.4 EPA Final Environmental Impact Statement for Standards for the Control of Byproduct Materials from Uranium Ore Processing

The 1983 EPA FEIS provides a statement in the "Introduction":

In the Uranium Mill Tailings Radiation Control Act of 1978, Public Law 95-604, 42 USC 7901 (henceforth designated as "the Act"), Congress directed the Environmental Protection Agency (EPA) to "promulgate standards of general application for the protection of the public health, safety, and the environment from radiological and non-radiological hazards associated with the processing and with the possession, transfer, and disposal of byproduct material at sites at which ores are processed primarily for their source material content or which are used for the disposal of such byproduct material." The term "byproduct material" as defined by the Act means, for these sites, "... the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content." The Act assigns the responsibility for implementation and enforcement of these standards to the Nuclear Regulatory Commission and its Agreement States through their licensing activities.

There is no indication that the EPA ever issued a policy statement, guidance, or regulation that changed the EPA's regulatory definition of "byproduct material," as defined by the Act. The EPA did not adopt NRC 1995 and 2000 Guidances related to the processing of materials other than natural ore. There is no evidence that the EPA issued any written statement in support of the establishment of those NRC Guidances.

2.4.1. Scope of Standards. The FEIS provides information on the scope of the standards at 1.1 (page 1-1 to 1-2). The Scope of Standards section states in part:

Only conventional uranium mills, heap-leaching operations, and above-ground wastes from solution mining are covered by these proposed standards. . . . The Act was directed primarily toward the solution of environmental problems from the radioactive tailings piles resulting from conventional milling operations.

2.4.2 Conventional Milling Processes. The FEIS goes on to describe conventional milling processes in Section 2.2 (pages 2-2 to 2-5). Conventional Milling Processes section states, in part:

In the uranium milling process, uranium is extracted from the crude ore and concentrated into an intermediate semirefined product called "yellowcake."

2.4.3 The FEIS primarily addressed conventional uranium milling. The "nonconventional" methods of uranium production that were assessed were solution mining and heap-leaching operations for the recovery of uranium. There is no discussion of the processing of wastes from mineral processing operations (i.e., the processing of feed material other than ore, as that term is used in the FEIS). The FEIS did not consider the processing of wastes from other mineral processing operations (materials other than "natural ore") as a type of conventional or nonconventional milling operation.

The FEIS did not consider the processing of wastes from mineral processing operations (including commingled soils and waste materials from other sources) at uranium or thorium mills. The FEIS was very clear about what it considered "ore" to be and gave no indication whatsoever that materials other than ore, such as the tailings or waste from mineral processing operations (including commingled contaminated soils and waste materials from other sources) are considered to be "ore." The FEIS gave no indication whatsoever that such wastes are "ore," even if they were processed at a uranium or thorium recovery facility for their "source material content."

The FEIS does not evaluate the radiological and non-radiological constituents of materials other than "natural ore." No data related to the radiological and non-radiological characteristics of such materials was presented in the FEIS. The FEIS did not evaluate, and the public did not have an opportunity to comment upon, any of the possible health, safety, and environmental impacts of the processing and disposal of materials other than "natural ore" at uranium or thorium processing facilities.

2.4.4. There is no evidence that FEIS referenced in the August 27 FRN addressed uranium recovery from materials other than "natural ore" (i.e., "ore"). There is no environmental analysis of the processing of materials other than "natural ore" found within the generic impact analysis conducted by EPA in promulgating their standards and requirements. The nonconventional uranium recovery activities contemplated by the State were not within the scope of the FEIS.

Therefore, how can the Commission use the FEIS as a basis for making any determination regarding the acceptability of Utah's alternate groundwater standards for activities (i.e., the processing of materials other than "natural ore") that that were in no manner considered by the generic impact analysis conducted by the EPA?

The Commission cannot use the FEIS as a basis for making any such determination.

2.5 NRC Regulatory Program, 10 C.F.R. Part 40

Responsive to UMTRCA, the NRC incorporated the UMTRCA definition of 11e.(2) byproduct material (with clarification) into their regulations at 10 C.F.R. § 40.4:

"Byproduct Material" means the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content, including discrete surface wastes resulting from uranium solution extraction processes. Underground ore bodies depleted by such solution extraction operations do not constitute "byproduct material" within this definition. [44 Fed. Reg. 50012-50014 (August 24, 1979).]

The NRC also explained the need for the new definition:

Section 40.4 of 10 CFR Part 40 is amended to include a new definition of "byproduct material." This amendment, which included uranium and thorium mill tailings as byproduct material licensable by the Commission, is required by the recently enacted Uranium Mill Tailings Radiation Control Act.

The NRC promulgated further regulations amending Part 40, in 1980, 45 Fed. Reg. 65521-65538 (October 3, 1980). In the summary, the NRC states:

The U.S. Nuclear Regulatory Commission is amending its regulations to specify licensing requirements for uranium and thorium milling activities, including tailings and wastes generated from these activities. The amendments to parts 40 and 150 take into account the conclusions reached in a final generic environmental impact statement on uranium milling and the requirements mandated in the Uranium Mill Tailings Radiation Control Act of 1978, as amended, public comments received on a draft generic environmental impact statement on uranium milling, and public comments received on proposed rules published in the Federal Register. [Footnotes omitted.]

There is no evidence in the NRC regulations adopted pursuant to UMTRCA contemplated the processing of materials other than natural ore at licensed uranium mills. The term "alternate feed" or the processing of "other matter" does not appear in 10 C.F.R. Part 40 or elsewhere in NRC regulations. See Proposed Rule at 44 Fed. Reg. 50012 (August 24, 1979), Final Rule at 45 Fed. Reg. 65521, (October 3, 1980); Proposed Rule, 49 Fed. Reg. 46418 (November 26, 1984), Final Rule, 50 Fed. Reg. 41852 (October 16, 1985); Advanced Notice of Proposed Rulemaking at 49 Fed. Reg. 46425 (November 26, 1984), Proposed Rule at 51 Fed. Reg. 24697 (July 8, 1986), Final Rule at 52 Fed. Reg. 43553 (November 13, 1987).

The NRC regulations were based upon the 1980 GEIS and later upon EPA Part 192 standards, which were promulgated based upon the 1983 EPA FEIS. None of those documents reveal that either the EPA or NRC ever contemplated the processing of materials other than natural ores, or addressed the health, safety, and environmental impacts of that type of nonconventional milling activity at licensed uranium and thorium mills.

2.6 Environmental Protection Agency Standards (40 C.F.R. Part 192)

UMTRCA directed the EPA to establish standards for uranium mill tailings and directed the NRC to implement those standards. That statute, as codified in 42 U.S.C. 2022, states in pertinent part:

Sec. 2022. Health and environmental standards for uranium mill tailings

(b) Promulgation and revision of rules for protection from hazards at processing or disposal site.

(1) As soon as practicable, but not later than October 31, 1982, the Administrator shall, by rule, propose, and within 11 months thereafter promulgate in final form, standards of general application for the protection of the public health, safety, and the environment from radiological and nonradiological hazards associated with the processing and with the possession, transfer, and disposal of byproduct material, as defined in section 2014(e)(2) of this title, at sites at which ores are processed primarily for their source material content or which are used for the disposal of such byproduct material. . . . [Emphasis added.]

Requirements established by the Commission under this chapter with respect to byproduct material as defined in section 2014(e)(2) of this title shall conform to such standards. Any requirements adopted by the Commission respecting such byproduct material before promulgation by the Commission of such standards shall be amended as the Commission deems necessary to conform to such standards in the same manner as provided in subsection (f)(3) of this section. Nothing in this subsection shall be construed to prohibit or suspend the implementation or enforcement by the Commission of any requirement of the Commission respecting byproduct material as defined in section 2014(e)(2) of this title pending promulgation by the Commission of any such standard of general application. In establishing such standards, the Administrator shall consider the risk to the public health, safety, and the environment, the environmental and economic costs of applying such standards and such other factors as the Administrator determines to be appropriate.

* * *

(d) Federal and State implementation and enforcement of the standards promulgated pursuant to subsection (b) of this section shall be the

responsibility of the Commission in the conduct of its licensing activities under this chapter. States exercising authority pursuant to section 2021(b)(2) of this title shall implement and enforce such standards in accordance with subsection (c) of such section. [42 U.S.C. 2022(b) and (d).]

Congress directed the EPA only to establish standards for "sites at which ores are processed primarily for their source material." The EPA, as mandated by UMTRCA, finalized the "Environmental Standards for Uranium and Thorium Mill Tailings at Licensed Commercial Processing Sites" in 1983. 48 Fed. Reg. 45925-45947, October 7, 1983. In the "Summary of Background Information" the EPA provides a discussion of "The Uranium Industry" (i.e., the industry that the regulations apply to):

The major deposits of high-grade uranium ores in the United States are located in the Colorado Plateau, the Wyoming Basins, and the Gulf Coast Plain of Texas. Most ore is mined by either underground or open-pit methods. At the mill the ore is first crushed, blended, and ground to proper size for the leaching process which extracts uranium After uranium is leached from the ore it is concentrated The depleted ore, in the form of tailings, is pumped to a tailings pile as a slurry mixed with water. Since the uranium content of ore averages only about 0.15 percent, essentially all the bulk ore mined and processed is contained in the tailings. [48 Fed. Reg. 45925, 45927, October 7, 1983.]

2.5.1 Plainly, when the EPA developed its standards for uranium and thorium mills, they stated, with specificity and particularity, what uranium ore was, what uranium milling consisted of, and what uranium mill tailings consisted of. EPA clearly stated that the standards applied to the processing of uranium and thorium ores at uranium and thorium mills. There is no reasonable evidence that would indicate that the standards promulgated by the EPA applied to the processing of wastes from other mineral processing operations at uranium and thorium mills.

Additionally, the EPA incorporated UMTRCA's definition of 11e.(2) byproduct material, as clarified by the NRC in 10 C.F.R. 40.4, into their standards at 40 C.F.R. Subpart D, § 192.31(b). Since that time, the EPA has not amended their definition of 11e.(2) byproduct material in a rulemaking proceeding, nor have they amended their definition by way of policy guidance. The EPA has not, in any manner, widened the use of the words "any ore" to include mineral processing waste. The EPA did not sanction the NRC's policy guidance with respect new definition of "ore" and 11e.(2) byproduct material.

Clearly, the EPA, as directed by Congress, has not in any manner contemplated the processing of wastes from other mineral extraction operations at uranium or thorium mills when establishing the "Environmental Standards for Uranium and Thorium Mill Tailings at Licensed Commercial Processing Sites."

2.5.2 The EPA did not address in any manner effluents that might result from the processing of feed materials that were the tailings and other processing wastes from other mineral extraction facilities.

In the various rulemaking proceedings that have taken place in the establishment of the EPA standards, the public was given no opportunity to consider or comment on the possibility that the EPA standards would also apply to the processing of wastes from other mineral processing operations (including commingled soils and waste materials from other sources) at uranium and thorium mills.

It is true that the EPA, in establishing their regulatory standards, contemplated the processing of ores at uranium and thorium mills. However, as shown above, processing of wastes from other mineral processing operations (including commingled soils and waste materials from other sources) at uranium and thorium mills is beyond the scope of the standards established by the EPA in response to UMTRCA.

2.5.3 As shown above, there is no evidence that the standards and requirements promulgated by the EPA under Section 275 of UMTRCA considered uranium recovery from materials other than "natural ore" (i.e., "ore"). The nonconventional uranium recovery activities contemplated by the State were not within the scope of 40 C.F.R. Part 192.

Therefore, how can the NRC make any determination regarding the acceptability of Utah's alternate groundwater standards for activities (i.e., the processing of materials other than "natural ore") that that were in no manner considered by the standards and requirements promulgated by the EPA?

Whether the EPA standards provide a level of protection to health, safety, and the environment when applied to the nonconventional uranium recovery activities at licensed uranium and thorium recovery facilities is a complete unknown, because neither the EPA standards nor the underlying FEIS contemplated such activities.

Therefore, the Commission cannot determine if the State's alternative standards would provide "a level of protection that is equivalent to, to the extent practicable, or more stringent than standards promulgated by NRC or the Administrator of EPA under section 275."

2.7 Application of Standards on a Site Specific Basis

Apparently, State intends to consider requests to permit the processing of feed materials other than "natural ore" on an site-specific basis. Since the applicable NRC and EPA requirements and standards were not promulgated contemplating such nonconventional uranium recovery activities, the approval of such activities would constitute the application of site-specific "alternate standards" and would require an NRC notice and opportunity for public hearing under the Alternate Standards Provisions of Section 274o.

2.8 Current Environmental Protection Agency Concerns

A January 16, 2007 letter from the EPA to the Secretary in response to an NRC FRN noticing a National Mining Association rulemaking petition (66 Fed. Reg. 55604, November 2, 2001) provides a look at current EPA concerns regarding the disposal of materials not physically, chemically, and radiologically similar to the mill tailings impoundments. These materials are found in alternate feed materials and non-11e.(2) byproduct materials that are addressed in the 1995 and 2000 NRC Guidances.

In the 2001 letter, the EPA referred to an attached November 17, 1999, EPA letter to the NRC. The EPA goes on to state:

Disposal of materials not physically, chemically, and radiologically similar to the mill tailings impoundments (such as Toxic Substance Control Act, Resource Conservation Act, and most Comprehensive Environmental Response Compensation and Liability Act wastes) have the potential of presenting problems for the EPA and the Agreement or Authorized States. As an example of those problems, we noted among other issues, potential risks from the eventual or potential failure of containment cells; there are no risk assessments on the combination or resultant effect of mixing these different types of wastes with uranium/thorium byproduct/tailings materials and impacts on ground water. These concerns also extend to monitoring and sampling for these additional contaminant types, and to ensure that corrective action requirements are met in the event of a release. Since siting and approvals of mill tailing impoundments were made based on their usage for a specific type of radioactive waste, the expansion of a facility to incorporate other types of hazardous wastes may go well beyond community and State agreements.

Our April 5, 2001, letter to NRC regarding the application of International Uranium U.S.A. to amend its source materials license to utilize alternate feed from the MolyCorp rare earths facility in California (see Enclosure 2) further expressed our concerns and the need for consultations with affected States on reprocessing and disposal of possible RCRA hazardous waste.

Mill tailings impoundments were designed to serve as a long-term control measure for radon and other hazardous emissions from source material extraction wastes, and to prevent radiation exposures resulting from inadvertent uses of these wastes by members of the public. It appears that these impoundments are being suggested by the petitioner to serve in a different capacity than for which they were designed and approved. Additional uses as a long-term repository (disposal) for a wide variety and volume of low-level, mixed, and hazardous wastes require appropriate consideration. Such consideration would include a formal review of the

new uses for these facilities under the National Environmental Policy Act and possibly licensing and authorization under other relevant environmental statutes.

The January 2001 EPA letter and its attachments are incorporated herein by reference.

3. STAKEHOLDER GROUP

The State included in its Final Application a "Description of the proposed Utah Groundwater Program for uranium mills and tailings" (October 2002). That submittal described stakeholder group that the Utah Department of Environmental Quality put together to consider, in part, how best to address the groundwater authority issue.

I would like to point out that important "stakeholders" were not invited to participate in this task force. There were no citizen members, environmental group representatives, representatives of the town of Bluff, and, most importantly, no members or representatives of the impacted tribal communities. The only operating uranium recovery facility in Utah is right next to the Ute Mountain Ute White Mesa Band land and residential community. There is also a nearby Navajo tribal community. The White Mesa Ute community and the town of Bluff are "down gradient" from the uranium recovery facility on White Mesa. An important sole-source aquifer lies beneath White Mesa.

Meetings of the stakeholder group were all held in Salt Lake City, not in the communities near any of the affected uranium recovery or disposal facilities. There were no notices or articles in my local newspaper about the existence of the stakeholder group or its meetings. The task force did not seek community input on the questions before it. It was not a fair process.

The task force was not an appropriate vehicle for public participation in the establishment of Utah's Agreement State uranium recovery program.

4. UTAH GROUNDWATER PROGRAM

Below is a discussion of some of the aspects of the proposed Utah groundwater program as compared with the NRC program. This will follow the State's October 22, 2002, "Discussion of Equivalent Utah Statutory Authority and/or Rules."

4.1 "Point of Compliance" (page 2 of 20)

The NRC regulatory language states that the "point of compliance" is the site specific location in the uppermost aquifer where the ground-water protection standard must be met. This seems to imply that there is only one "point" where groundwater protection standards must be met. This should not be the case.

At licensed uranium recovery facilities there can be several sources of groundwater contamination that can impact the groundwater in areas that might not be

connected. The points of compliance must be determined by the location of the sources of potential contamination and their relationship to the local groundwater and surface water configurations.

At the former Atlas Uranium Mill, near Moab, Utah, an extensive plume of groundwater contamination coming from the mill area (rather than the tailings impoundment) was discovered long after the mill had ceased operation. The licensee did not discover this contamination because, under NRC regulation, they had never been required to monitor the groundwater coming from the mill and other balance of site areas of potential groundwater contamination. Therefore, no appropriate points of compliance were established. Therefore, no appropriate groundwater action program was put in place to remediate that groundwater contamination. Therefore, there was never any surety funds required in order to assure that the plume would be addressed. Therefore, the major plume of uranium contamination continued to seep into the Colorado River, which is the source of drinking water for many communities down stream. The pollution remains unabated (except for "natural flushing" into the river). Whenever remediation does take place under Department of Energy direction, it will be at taxpayer expense.

It is obvious that, in order to protect the groundwater, more than one "point of compliance" might be necessary, and no potential source of contamination should be ignored. State regulatory practice must be more comprehensive and effective than NRC practice.

4.2 Criterion 5D (page 12 of 20)

This Criterion requires that a groundwater corrective action be put in place if established groundwater protective standards are exceeded. For the State's groundwater regime to be protective of the environment it must require that any groundwater corrective action program actually correct the contamination problem.

The NRC must not tolerate a State groundwater program that is "equivalent" to NRC's implementation of Criterion 5D. The NRC failed to assure that the former Atlas Mill instituted a groundwater corrective program that actually addressed the contamination from the tailings impoundment in a meaningful way. The approved NRC approved correction plan did not lead to the alleviation of the conditions that lead to excessive seepage impacts, nor did it restore groundwater quality.

If the NRC permits a State to regulate contaminated groundwater at uranium recovery facilities in the same flawed manner that the NRC regulated contaminated groundwater at the former Atlas Mill, it would detrimental to the health and safety of the public and the environment. State agency practice must be more stringent than NRC agency practice when it comes to implementation of groundwater corrective action programs.

4.3 Criterion 5F (page 15 of 20)

See discussion at 4.2 above.

4.4 Criterion 7A (page 16 of 20)

The focus of the requirements for groundwater detection monitoring is primarily on leakage from the disposal areas. Here again, we have only to look at the Atlas Mill site to realize that leakage of hazardous constituents can occur from other mill site areas. All areas in the vicinity of potential sources of contamination, such as storage areas for ore and non-ore radioactive waste awaiting processing, product storage areas, mill processing areas, chemical storage areas, yellowcake and other mill product storage areas, etc., must be the subject of groundwater monitoring. The failure of the NRC's groundwater regulatory regime to identify a major radioactive contaminate plume at the Atlas Mill shows that NRC requirements and agency practice need to be significantly improved at the State level.

4.5 Criterion 13

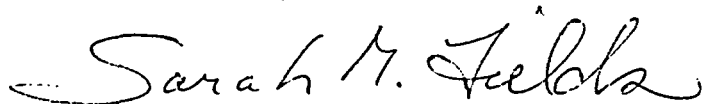
It should be understood that the constituents that are listed in Criterion 13 were not developed contemplating the receipt, processing, and disposal of wastes from mineral processing facilities (including contaminated soils from other sources) at licensed uranium and thorium mills.

4.6 Conclusion

In sum, the effective protection of the groundwater from activities at uranium and thorium recovery facilities is greatly dependent upon agency practice. For the State to have a program that successfully implements NRC or alternate groundwater standards, it must develop agency practices that are far more effective than previous NRC agency practices.

Thank you for this opportunity for comment. However, we have not been provided an opportunity for a "public hearing" in accordance with the Alternate Standards Provisions of Section 274o of UMTRCA.

Sincerely,

A handwritten signature in cursive script, reading "Sarah M. Fields".

Sarah M. Fields
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