

FEB 10 1994.

Mr. William J. Sinclair  
Executive Secretary  
Utah Radiation Control Board  
168 North 1950 West  
P.O. Box 144850  
Salt Lake City, UT 84114-4850

Dear Mr. Sinclair:

Thank you for the opportunity to comment on the State of Utah's draft Radioactive Waste Management Plan (Plan). We apologize for not being able to meet the January 18, 1994 comment deadline but, from conversations with your staff, we understand that our comments will still be accepted.

NRC's staff review was limited to evaluating the Plan for accuracy of statements and compatibility with NRC's regulatory practice and regulations. It did not extend to an examination of the provisions in the State's Radiation Control Act.

Overall, the NRC staff found the Plan to be concise and well written with definitions that promote a good understanding of the elements that are intended to be addressed. They noted, however, that the stated purpose of the "Forward" and "Elements" sections does not appear to be met in the ensuing body of the report (i.e., the Plan does not present explicit evaluations or recommendations to be followed by the State, for example, there is no specific evaluation of waste treatment or disposal options or the establishment of specific waste reduction goals pertinent to the State).

The staff's more detailed comments are enclosed. If you have any questions or require additional clarification, please contact John J. Surmeier, Chief, Low-Level Waste Branch, Division of Low-Level Waste Management and Decommissioning, Office of Nuclear Materials Safety and Safeguards. Mr. Surmeier may be reached at (301) 504-3785.

Again, thank you for the opportunity to review Utah's draft Plan.

Sincerely,  
Original Signed By  
RICHARD L. BANGART  
Richard L. Bangart, Director  
Office of State Programs

9402150411 940210  
PDR STPRG ESQUT  
PDR

Enclosure:  
As stated

140060

Distribution:

DIR RF (S-15) PLOhaus  
RLBangart TCombs  
SSchwartz JSurmeier, NMSS/LLWM  
UTAH File

DCD  
PDR YES X NO     

R13

OFC	OSP	OSP	OSP:DD	OSP:D			
NME	TCombs:kk	PLoahus	SSchwartz	RLBangart			
DTE	02/09/94	02/9/94	02/9/94	02/10/94			

G:\UTPLAN.TRC

JKOZ  
11

REVIEW COMMENTS BY  
DIVISION OF LOW-LEVEL WASTE MANAGEMENT AND DECOMMISSIONING  
ON STATE OF UTAH RADIOACTIVE WASTE MANAGEMENT PLAN

1. (Page 1-2, 3rd paragraph). The definition of source material is not consistent with the definition of source material in the Atomic Energy Act of 1954 (AEA) or U.S. Nuclear Regulatory Commission's regulations. Also, the definition presented on page 1-2 appears incorrectly to place an upper concentration limit of 1/20 of one percent for uranium or thorium to be considered as source material. Suggest that the definition in the AEA or in NRC regulations be used. In addition, suggest deleting the last sentence to avoid confusion as to the origin of the term "byproduct material."
2. (Page 1-2, 4th paragraph). Reconsideration of the wording in the last sentence of the fourth paragraph is suggested because it appears to imply that the NRC's regulations require a specific type of waste packaging. There is flexibility in the selection of the type of waste packaging in NRC's regulations, as long as the requirement for a structurally stable waste form [61.56 (b)(1)] is met.
3. (Page 1-3, 1st and 4th paragraphs). The correct reference to 10 CFR Part 61 provisions for these paragraphs is 61.7 (b)(2), rather than 61.7 (b)(3).
4. (Page 1-4, 2nd paragraph). The definition of "mixed waste" is in error. Suggest revising the definition to "Mixed wastes are wastes that contain hazardous waste defined under the Resource Conservation and Recovery Act (RCRA) that also contain radioactive material subject to the AEA. RCRA defines hazardous waste as waste that is listed in 40 CFR 261 Subpart D, or waste that exhibits one of the characteristics listed in 40 CFR 261 Subpart C (corrosivity, reactivity, ignitability or toxicity)." These revisions better reflect the actual wastes that are considered mixed wastes.
5. (Page 1-4, 4th paragraph). The last sentence indicates: "Until recently, certain types of mixed wastes have been referred to as orphan wastes." It is unclear: 1) which wastes the statement refers to; and 2) the manner in which the situation concerning these wastes has recently changed. Suggest deleting this sentence, or revising it to reflect which mixed wastes are no longer "orphan wastes," and how these wastes are now being managed.

6. (Page 1-11, 2nd paragraph). Statements indicate that the Radiation Control Act defines low-level waste as waste containing only beta or gamma emitting radionuclides. Suggest that the definition be reviewed prior to finalization of the plan as this statement would appear to exclude alpha and neutron emitters from regulation as radioactive waste.
7. (Page 1-14, 1st paragraph). Suggest updating of last sentence in this paragraph to reflect that the NRC issued the license to dispose of uranium and thorium byproduct material [as defined by 11e(2)] on November 19, 1993.
8. (Page 2-9, 2nd paragraph). Suggest revising the later portion of the first sentence to "...hazardous wastes regulated under RCRA and PCBs regulated under the Toxic Substances Control Act (TSCA)." This revision better reflects which material is regulated under each Act.
9. (Page 3-4, 3rd paragraph). Suggest the initial part of the last sentence be revised to state, "The positive impact of polymer-solidified wastes are as follows: when properly produced and controlled, they can meet NRC requirements for a structurally stable waste form, they have ..."
10. (Page 3-4, 5th paragraph). The disadvantages of waste solidification with cement should include the chemical interaction with certain ingredients in the wastes that sometimes will prevent the successful stabilization of the waste form.
11. (Pages 3-7, 7th paragraph). Plaster is indicated to be one of the materials in the earthen cover over the above-ground vault. Plaster would not typically be used in cover systems, and perhaps the intent is to identify plastic membranes.
12. (Page 3-8, 3rd paragraph). To be consistent with NRC regulations in 10 CFR Part 61, this paragraph should be revised to clearly distinguish between structural stability requirements which are required for both Class B and C wastes for 300 years, and protection against inadvertent intrusion which is required for Class C wastes for up to 500 years.
13. (Page 4-3, items ix - xii). It appears that words are missing or misplaced from each of these items. Suggest that these sections be reviewed for clarity and revised as appropriate. Also, item "(4)" at the bottom of page 4-3 appears to distinguish between "land" and "ground" disposal. Suggest that this paragraph be revised to reflect the difference, if any, between these two types of disposal.
14. (Page 6-2, 6th paragraph). The correct name for the cited statute is the Low-Level Radioactive Waste *Policy* Act.

15. (Page 6-7, second to last paragraph). Statements indicate that EPA sets radiation standards under RCRA. This statement is in error as RCRA specifically excludes radioactive material subject to AEA authority from the definition of hazardous waste. EPA sets radiation standards under the authority of the AEA.
16. (Page 6-7, last paragraph). Suggest revising the first part of the first sentence to "EPA regulates the hazardous waste component of mixed waste...." This better reflects the regulatory responsibility of EPA for mixed waste.
17. (Page 6-8, 1st full sentence). This sentence states that mixed waste is the responsibility of NRC, EPA, and Utah. Since Utah is both an NRC Agreement State and an EPA mixed waste Authorized State, commercially generated mixed waste in Utah is the responsibility of the State of Utah for both the radioactive and hazardous waste components.
18. (Pages 6-9 through 6-11) The following additions or revisions are suggested for updating the discussions on the Atlas Uranium Mill Tailings Cleanup:
  - a. (History, page 6-9, last bullet). Change "be accountable" to "reimburse the licensee".
  - b. (Mill Decommissioning and Tailings Reclamation, page 6-9, third bullet). Add "mill tailings reclamation" before "plan".
  - c. (Recent Developments, page 6-10, first bullet). Change "LLW and Decommission Branch" to "Low-Level Waste Management and Decommissioning Division".
  - d. (Recent Developments, page 6-10, third bullet). Change "early November 1993" to "May 1994" and insert the word "final" before "schedule" on the third line.
  - e. (Recent Developments, page 6-10, last bullet). Change this bullet to state "A meeting of the technical working group was held on October 26, 1993, in Denver, Colorado. Periodic public meetings are expected to be scheduled by the NRC as the review progresses; but specific dates have not yet been established."





# State of Utah

## DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF RADIATION CONTROL

Michael O. Leavitt  
Governor

Dianne R. Nielson, Ph.D.  
Executive Director

William J. Sinclair  
Director

168 North 1950 West  
P.O. Box 144850  
Salt Lake City, Utah 84114-4850  
(801) 536-4250 Office  
(801) 531-8128 Fax  
(801) 536-4414 T.D.D.

December 16, 1993

To Those Interested Parties:

A draft State of Utah Radioactive Waste Management Plan (the "Plan") has been prepared in accordance with Section 19-3-107 of the Radiation Control Act. The Utah Radiation Control Board is soliciting public comment on the Plan which focuses upon the following issues: radioactive waste capacity need in the state for the next 20 years; radioactive waste minimization and recycling; evaluation of radioactive waste treatment and disposal options; evaluation of radioactive waste facility siting; design, and operation; review of funding alternatives for radioactive waste management; and other major radioactive waste concerns as indicated in the plan.

We are notifying those that might want to review and comment on the Plan because of interest shown in radiation protection issues within the state. We would appreciate any input that you might have into this process. A thirty day public comment period on the Plan will commence on December 17, 1993, and will end at the close of business on January 18, 1994. Enclosed please find a copy of the public notice concerning the draft Utah Radioactive Waste Management Plan. If you desire a copy of the plan, the plan is available from the Division at cost of \$5.00. Thank you for your help in addressing this important Utah environmental issue.

Sincerely,

William J. Sinclair  
Executive Secretary  
Utah Radiation Control Board

Enclosures:

1. Draft radioactive waste management plan public notice

## PUBLIC NOTICE

A draft State of Utah Radioactive Waste Management Plan has been prepared in accordance with Section 19-3-107 of the Radiation Control Act. The Utah Radiation Control Board is soliciting public comment on the plan which focuses upon the following issues: radioactive waste capacity need in the state for the next 20 years; radioactive waste minimization and recycling; evaluation of radioactive waste treatment and disposal options; evaluation of radioactive waste facility siting; design, and operation; review of funding alternatives for radioactive waste management; and other major radioactive waste concerns as indicated in the plan.

A thirty day public comment period on the Plan will commence on December 17, 1993, when the public notice is published in the Salt Lake Tribune, Deseret News, and the Ogden Standard Examiner. In addition, the notice will be published in the Moab Times-Independent, the Tooele Transcript-Bulletin, and the San Juan Record. The comment period will end at the close of business on January 18, 1994. Copies of the Plan will be available for public review throughout the comment period during normal business hours at the following locations:

Division of Radiation Control  
Utah Department of Environmental Quality  
168 North 1950 West, Airport East Building #2  
Room 212  
Salt Lake City, Utah

Weber-Morgan District Health Department  
2570 Grant Avenue  
Ogden, Utah

Southeastern Utah District Health Department  
471 South Main, Suite 4  
Moab, Utah

Southeastern Utah District Health Department  
Courthouse  
Monticello, Utah

Tooele County Health Department  
47 South Main Street  
Tooele, Utah

Public hearings on the Plan are scheduled on the following dates and times:

January 5, 1994

7:00 PM to 9:00 PM  
Airport East Business Park  
Building #2, Room 201  
168 North 1950 West  
Salt Lake City, Utah

7:00 PM to 9:00 PM  
San Juan County Courthouse  
117 South Main  
Large Conference Room  
Monticello, Utah

January 6, 1994

7:00 PM to 9:00 PM  
Tooele County Courthouse  
North Auditorium  
47 South Main Street  
Tooele, Utah

7:00 PM to 9:00 PM  
St. Benedict's Hospital  
5475 South 500 East  
Oak Room  
Ogden, Utah

Prior to the public hearing, a short public information session will be held to discuss the major aspects of the Plan.

Copies of the plan are available for \$5.00 from the Division of Radiation Control (phone 536-4250). Written comments on the State of Utah draft radioactive waste management plan will be accepted until close of business on January 18, 1993, and should be submitted to:

William J. Sinclair, Executive Secretary  
Utah Radiation Control Board  
168 North 1950 West  
P.O. Box 144850  
Salt Lake City, UT 84114-4850

For further information contact Bill Sinclair, Craig Jones, or Dane Finerfrock with the Division of Radiation Control, (801) 536-4250.