3/1/04

ASSESSMENT

of the proposed

UTAH PROGRAM FOR THE REGULATION OF 11e.(2) BYPRODUCT MATERIALS[1]

as described in the

Request for an Amended Agreement

This assessment, prepared by the NRC staff, examines the proposed radiation control program of the State of Utah with respect to the ability of the program to regulate the possession, use, and disposal of 11e.(2) byproduct materials and the facilities that generate such material subject to the Atomic Energy Act of 1954 (Act), as amended. The assessment was performed using the criteria in the Commission's policy statement "Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement" (referred to below as the "criteria")[2] using an internal procedure (SA-700, Processing an Agreement) developed by the Office of State and Tribal Programs. Each criterion applicable to a program for 11e.(2) byproduct material and the NRC staff's assessment related thereto, is addressed separately below.

The staff did not evaluate the first 28 criteria which address the other radioactive material program requirements since Utah has been an Agreement State for those materials since 1984 as well as for low-level radioactive waste since 1990. The staff considered the last Integrated Materials Performance Evaluation Program (IMPEP) review which was satisfactory for all indicators to demonstrate that Utah has a program that meets these criteria. Therefore, the staff has only addressed the criteria for 11e.(2) byproduct material.

OBJECTIVES

Criteria for States Regulating Uranium or Thorium Processors and Wastes Resulting Therefrom After November 8, 1981

29. Authority. **State statutes or duly promulgated regulations should be enacted, if not already in place, to make clear State authority to carry out the requirements or Public Law 95-604, Uranium Mill Tailings Radiation Control Act (UMTRCA) as follows:**

    a. Authority to regulate the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.

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[1] 11e.(2) byproduct materials are those materials as defined in Section 11e.(2) of the Act and the facilities that generate such material over which regulatory authority may be transferred to a State under the provisions of Section 274.

[2] NRC Statement of Policy published in the Federal Register January 23, 1981 (46 FR 7540-7546), a correction was published July 16, 1981 (46 FR 36969) and a revision of Criterion 9 published in the Federal Register July 21, 1983 (48 FR 33376).

The NRC staff review verified that Utah law authorizes the assumption of regulatory authority over "11e.(2) byproduct material" which is defined in the Radiation Control Act at 19-3-102(3) as “byproduct material” as define in 42 U.S.C. Sec. 2014(e)(2), “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 Governor is authorized in Section 19-3-113 to enter into agreements with the Federal government providing for discontinuance of the Federal government’s responsibilities with respect to sources of ionizing radiation and the assumption thereof by the State. The Utah Department of Environmental Quality, Division of Radiation Control, has been designated as the agency to carry out these responsibilities.

Staff notes that there are four NRC licensees in Utah currently authorized to conduct activity which produce or dispose of 11e.(2) byproduct material as defined in Section 11e.(2) of the Act, as amended.

References: Utah Radiation Control Act, Sections 19-3-104 and 19-3-113.

b. That an adequate surety (under terms established by regulation) will be provided by the licensee to assure the completion of all requirements established by the (cite appropriate State agency) for the decontamination, decommissioning, and reclamation of sites, structures, and equipment used in conjunction with the generation or disposal of such byproduct material.

The NRC staff review verified that Utah law authorizes the Radiation Control Board to adopt rules requiring financial assurance. The Board has adopted the NRC financial assurance requirements in Criteria 9 and 10 of Appendix A to 10 CFR Part 40 by reference in R313-24. The current financial assurances held by NRC for the four current NRC licensees will be transferred to the State of Utah as part of the license transfer process.

Reference: Utah Radiation Control Act, Section 19-3-104(4)(d)(i) and Utah Administrative Code R313-24.

c. If in the States’ licensing and regulation of byproduct material or of any activity which produces byproduct material, the State collects funds from the licensee or its surety for long-term surveillance and maintenance of such material, the total amount of the funds collected by the State shall be transferred to the U.S. if custody of the byproduct material and its disposal site is transferred to the Federal Government upon termination of the State license. (See 10 CFR 150.32.) If no default has occurred and the reclamation or other bonded activity has been performed, funds for the purpose are not to be transferred to the Federal Government. The funds collected by the State shall be sufficient to ensure compliance with the regulations the Commission establishes pursuant to Section 161X of the Atomic Energy Act.

The NRC staff review verified that Utah law authorizes the promulgation of financial assurance requirements for 11e.(2) byproduct material and uranium mills. Utah adopted the NRC financial assurance requirements in Appendix A by reference which require the collection of funds for long-term surveillance. These regulations require that such funds must be transferred to the long-term custodian of the site prior to the State terminating the license.

References: Utah Code Annotated, 19-3-104(4)(d)(i); and Utah Administrative Code R313-24-4.

d. In the issuances of licenses, an opportunity for written comments, public hearing (with transcript) and cross examination is required.

See discussion under e. below.

e. In the issuances of licenses, a written determination of the action to be taken based upon evidence presented during the public comment period and which is subject to judicial review is required.

The NRC staff review determined that Utah, under the Radiation Control Act, requires a notice of the licensing action and opportunity for hearing in accordance with its Administrative Procedures in R313-17. R313-17 is based on and follows the Utah Administrative Procedures Act (UAPA), Section 63-46b-1 et seq. R313-17 provides an opportunity for written comment, as well as public hearing prior to the issuance or amendment of a license. New licenses and major amendments will be available for public comment for at least 30 days following publication of a notice. All licensing actions taken by the Division of Radiation Control may be appealed to the Radiation Control Board. All final decisions of the Radiation Control Board including licensing, enforcement, and rulemaking actions may be appealed within 30 days (UCA 63-46b-14) with the Utah Court of Appeals (UCA 63-46b-60).

References: Utah Radiation Control Act, 19-3; Utah Administrative Procedure Act, 63-46b; Utah Administrative Code, R313-17.

f. A ban on major construction prior to completion of the written environmental analysis stipulated in Criterion 31.

The NRC staff review verified that Utah has addressed banning commencement of construction prior to license issuance in its regulations at R313-24-3(d)(2).

Reference: Utah Administrative Code, R313-24.

g. An opportunity shall be provided for public participation through written comments, public hearings, and judicial review of rules.

In the State of Utah, all State agencies are required to use the State's administrative rulemaking procedures of the State Division of Administrative Rules. These procedures provide the general authority and process for public notice and comment and public

hearings with regard to issuing rules or regulations. Section R15-1-9 states, “Persons may appeal the decision of the agency head or division by petitioning the district court for judicial review as provided by law.” The Division of Radiation Control has implemented this in its regulations at R313-17.

References: Utah Administrative Code, R15-1, Administrative Rules, and R313-17, Administrative Procedures. Utah Code, 63-46b, Administrative Procedure Act.

30. Supporting Legislation. **In the enactment of any supporting legislation, the State should take into account the reservations of authority to the U.S. in UMTRCA as stated in 10 CFR 150.15a and summarized by the following:**

a. The establishment of minimum standards governing reclamation, long-term surveillance or maintenance, and ownership of the byproduct material.

b. The determination that prior to the termination of a license, the licensee has complied with decontamination, decommissioning and reclamation standards, and ownership requirements for sites at which byproduct material is present.

c. The requirement that prior to termination of any license for byproduct material, as defined in Section 11e.(2), of the Atomic Energy Act or for any activity that results in the production of such material, title to such byproduct material and the disposal site be transferred to the Federal Government or State at the option of the State, provided such option is exercised prior to termination of the license.

d. The authority to require such monitoring, maintenance, and emergency measures after the license is terminated as necessary to protect the public health and safety for those materials and property for which the State has assumed custody pursuant to Pub. L. 95-604.

e. The authority to permit use of the surface or subsurface estate, or both of the land transferred to the United States or State pursuant under provision of the Uranium Mill Radiation Tailings Control Act.

f. The authority to exempt land ownership transfer requirements of Section 83(b)(1)(A).

The NRC staff review verified that the Utah Administrative Code does not include the provisions reserved to the Nuclear Regulatory Commission in 10 CFR 150.15a. The NRC staff also verified that the regulatory requirements implementing requirements reserved to NRC in Appendix A to 10 CFR Part 40 were not adopted (see Section R313-24-4(c)). NRC staff concludes that Utah has not adopted any requirements reserved to NRC and, therefore, Utah meets the requirements of criterion 30.

References: Utah Administrative Code, Section R313-24-4(c).

31. Environmental Assessment. **It is preferable that State statutes contain the provisions of Section 6 of the Model Act. But the following may be accomplished by adoption of either procedures by regulation or technical criteria. In any case, authority for their implementation should be adequately supported by statute, regulation or case law as determined by the State Attorney General.**

In the licensing and regulation of ores processed primarily for their source material content and for the disposal of byproduct material, procedures shall be established which provide a written analysis of the impact on the environment of the licensing activity. This analysis shall be available to the public before commencement of hearings and shall include:[3]

a. An assessment of the radiological and nonradiological public health impacts;

b. An assessment of any impact on any body of water or groundwater;

c. Consideration of alternatives to the licensed activities; and

d. Consideration of long-term impacts of licensed activities (see Item 36b. (1).

The NRC staff review verified that Utah has adopted a requirement (R3134-24-3(1)) that an environmental report be part of a license application for a new license, renewal, or major amendment. The environmental report must address areas addressed in criterion 31. The analysis of these aspects will be included in the safety evaluation report for new or renewed licenses and in a statement of basis for major amendments. NRC staff concludes that the Utah program meets the requirements of criterion 31.

References: Utah Administrative Code, R313-24.

32. Regulations. **State regulations should be reviewed for regulatory requirements, and where necessary incorporate regulatory language which is equivalent to the extent practicable or more stringent than regulations and standards adopted and enforced by the Commission, as required by Section 274o (see 10 CFR 40 and 10 CFR 150.31(b)).**

[3]It is strongly recommended that a 30-day period be provided for public review.

The NRC staff review verified that Utah has adopted applicable portions of 10 CFR Part 40 by incorporation by reference into R313-24. Utah has included 11e.(2) byproduct material disposal and uranium milling facility licensing and inspection actions under its basic licensing and inspection procedures as well as the specific requirements in R313-24. The NRC staff has reviewed all the Utah regulation changes to incorporate the requirements for 11e.(2) byproduct material and uranium milling in accordance with the Office of State and Tribal Procedures in SA-200 and SA-201.

The staff identified that Utah has adopted by reference Utah groundwater requirements that were different than the requirements in Appendix A to 10 CFR Part 40. These different requirements are being addressed as alternative standards under Section 274o of the Act. The staff prepared a Federal Register (FR) notice (68 FR 51516) which provides the notice and opportunity for hearing, through the notice and comment process, required in Section 274o. The comment period was extended (68 FR 60885) to allow 30 days following the availability, electronically, of two documents referenced in the August 27, 2003 FR notice. The comments received will be evaluated and the information will be provided to the Commission for a final determination as required in Section 274o.

The NRC staff concludes that Utah meets the requirements of criterion 32 subject to the final determination by the Commission on the alternative groundwater standards.

References: Utah Administrative Code, R313-15, R313-17, R313-22, R313-70, and R313-24. SECY-03-0025 and COMSECY-03-0038. Federal Register notices 68 FR 51516 and 68 FR 60885.

33. Organizational Relationships Within the States. **Organizational relationships should be established which will provide for an effective regulatory program for uranium mills and mill tailings.**

a. Charts should be developed which show the management organization and lines of authority. This chart should define the specific lines of supervision from program management within the radiation control group and any other department within the State responsible for contributing to the regulation of uranium processing and disposal of tailings. When other State agencies or regional offices are utilized, the lines of communication and administrative control between the agencies and/or regions and the Program Director should be clearly drawn.

The Utah Department of Environmental Quality, Division of Radiation Control, has been designated as the agency to carry out these responsibilities. The Low-Level Waste and Environmental Monitoring Section within the Division of Radiation Control will be responsible for implementing the 11e.(2) byproduct material disposal and uranium milling program. The Radiation Control Board is responsible for issuance of all radioactive material licenses and issuance of all regulations implementing the Radiation Control Act (Utah Code Annotated (UCA) 19-3).

The Radiation Control Act (UCA 19-3) created the Radiation Control Board (Board) which is appointed by the Governor with advice and consent of the Senate and guides development of State radiation control policy and rules in the State. The Board members represent the various segments of the regulated community, the general public, and environmental interests. The Board typically meets on a monthly basis except February and July. The Board travels to various areas of Utah to be available to the licensees and the public. Board members are subject to the Utah Public Officers' and Employees' Ethics Act. Information regarding disclosure and conflict of interest for Board members was submitted as Appendix A to the amendment application. The Board has delegated its responsibility for issuance of licenses and enforcement actions to the Executive Secretary of the Board. The Executive Secretary of the Board typically is the Director of the Division of Radiation Control which is the current status. The Division of Radiation Control staff conduct the technical reviews and develop the proposed licenses or amendments for signature by the Director, Division of Radiation Control. The Director, Division of Radiation Control, is also an Executive Secretary for the Water Quality Board for the purposes of addressing water quality issues for uranium milling facilities and 11e.(2) byproduct material. At his time, the Division of Radiation Control does not intend to use other State organizations in their formal technical review process.

b. Those States that will utilize personnel from other State Departments or Federal agencies in preparing the environmental assessment should designate a lead agency for supervising and coordinating preparation of this environmental assessment. It is normally expected that the radiation control agency in Agreement States will be the lead agency. The basic premise is that the lead agency is required to prepare the environmental assessment. Utilization of an applicant's environmental report in lieu of a lead agency assessment of the proposed project is not adequate or appropriate. However, the lead agency may prepare an environmental assessment based upon an applicant's environmental report. Other credible information may be utilized by the State as long as such information is verified and documented by the State.

The Division of Radiation Control will be the lead agency for the preparation of environmental assessments for uranium milling and 11e.(2) byproduct material. The Division may use an outside consultant or contractor for technical review (science and engineering support) after the Division has the mutual consent of the licensee to pay reasonable expenses under Utah fee regulations. Legal assistance from the Attorney General's office is also available as needed. The Division recently informed NRC staff by telephone that they have entered into a new science and engineering support task order contract that can be utilized for low-level radioactive waste or 11e.(2) byproduct material (uranium milling) issues.

c. When a lead agency is designated, that agency should coordinate preparation of the statement. The other agencies involved should provide assistance with respect to their areas of jurisdiction and expertise. Factors relevant in obtaining assistance from other agencies include the applicable

statutory authority, the time sequence in which the agencies become involved, the magnitude of their involvement, and relative expertise with respect to the project's environmental effects.

In order to bring an environmental assessment to a satisfactory conclusion, it is highly recommended that an initial scoping document be developed which clearly delineates the area and scope of work to be performed by each agency within a given time constraint.

The Division environmental review process does not involve other State organizations at this time. The consultant, if it is used, would be under the direct supervision of the Division staff. The Utah process does not follow the Federal process. The Federal process is not a matter of compatibility, but Utah must address the technical review areas and prepare a written environmental assessment. Utah will prepare its environmental assessment as part of the licensing review process and will make the assessment documentation available when it notices its proposed licensing action. The comments on the assessment will be addressed prior to issuing the final licensing action.

d. For those areas in the environmental assessment where the State cannot identify a State agency having sufficient expertise to adequately evaluate the proposal or prepare an assessment, the State should have provisions for obtaining outside consulting services. In those instances where non-governmental consultants are utilized, procedures should be established to avoid conflict of interest consistent with State law and administrative procedures.

Medical consultants recognized for their expertise in emergency medical matters, such as the Oak Ridge and Hanford National Laboratories, relating to the intake of uranium and its diagnosis thereof associated with uranium mining and milling should be identified and available to the State for advice and direct assistance.

During the budget preparation, the State should allow for funding costs incurred by the use of consultants. In addition, consultants should be available for any emergencies which may occur and for which their expertise would be needed immediately.

In addition to the technical contract discussed above, Utah identified two possible medical consultants that could be used by Utah for the uranium milling program. The Division has budgeted for the science and engineering support contractor and has funds available for the other consultants if necessary. Expenses of the contract or consultants may be charged to specific licensees when prior arrangements have been made. The contract has provisions to avoid conflicts of interest. The consultants and task order contract can both be utilized on short notice.

The NRC staff review determined that the provisions of criterion 33 have been addressed by the Utah program.

34. Personnel. **Personnel needed in the processing of the license application can be identified or grouped according to the following skills: Technical; Administrative; and Support.**

a. Administrative personnel are those persons who will provide internal guides, policy memoranda, reviews and managerial services necessary to assure completion of the licensing action. Support personnel are those persons who provide secretarial, clerical support, legal, and laboratory services. Technical personnel are those individuals who have the training and experience in radiation protection necessary to evaluate the engineering and radiological safety aspects of a uranium concentrator. Current indications are that 2 to 2.75 total professional person years' effort is needed to process a new conventional mill license, in situ license, or major renewal, to meet the requirements of UMTRCA. This number includes the effort for the environmental assessment and the in-plant safety review. It also includes the use of consultants. Heap leach applications may take less time and is expected to take 1.0 to 1.5 professional staff years' effort, depending on the circumstances encountered. Current indications are that the person years effort for support and legal services should be one secretary for approximately 2 conventional mills and ½ staff years for legal services for each non-contested mill case. The impact on environmental monitoring laboratory support services is difficult to estimate but should be added into the personnel requirements.

In addition, consideration should be given to various miscellaneous post-licensing ongoing activities including the issuance of minor amendments, inspections, and environmental surveillance. It is estimated that these activities may require about 0.5 to 1 person years effort per licensed facility per year, the latter being the case for a major facility. These figures do not include manpower for Title I activities of UMTRCA.

b. In evaluating license applications the State shall have access to necessary specialities, e.g., radiological safety, hydrology, geology and dam construction and operation.

In addition to the personnel qualifications listed in the "Guide for Evaluation of State Radiation Control Programs," Revision 3, February 1, 1980, the regulatory staff involved in the regulatory process (Radiation) should have additional training in Uranium Mill Health Physics and Environmental Assessments.

c. Personnel in agencies other than the lead agency are included in these total person year numbers. If other agencies are counted in these numbers then it shall be demonstrated that these personnel will be available on a routine and continuing basis to a degree claimed as necessary to successfully comply with the requirements of UMTRCA and these criteria. The arrangements for making such resources available shall be documented, such as an interagency memorandum of understanding and confirmed by budgetary cost centers.

The NRC will be transferring four licenses to Utah. One operational mill, one commercial 11e.(2) byproduct material disposal facility, and two conventional mills in reclamation with approved reclamation plans. Based on the above criteria, the NRC staff estimates that Utah would need about 4-5 technical and support staff to conduct the licensing, including environmental assessment, and inspection activities for these four facilities.

Utah performed a staffing analysis which identified the need for four staff (three technical and one support) to conduct the 11e.(2) byproduct material (uranium milling) program. The staffing analysis included licensing casework (new, renewals, and amendments including environmental assessments), inspections, regulation and guidance updates, and contingency resources for unplanned actions. Utah intends to use the existing technical staff for initial implementation of the uranium milling program. The technical staff in the uranium milling program would include a hydrologist, an engineer, and a health physicist. Support staff would include an office technician and legal support as needed. Management of the uranium milling program would be under the direction of the Low-Level Waste and Environmental Monitoring Section Manager. Utah intends to hire three new staff (health physicist, engineer, and office technician) to supplement the existing staff. The new staff will also assist other programs, as needed.

The Utah staffing analysis identified the type (hydrology, engineering, and health physics) and appropriate number of staff needed to administer the licensing and inspection program for 11e.(2) byproduct material. Utah identified at least two existing staff members that are qualified for each technical area needed. The Utah staff have been working with NRC staff during the time that NRC has been regulating these facilities and have gained experience in uranium milling operations. The Utah staff have previously conducted environmental assessments similar to that appropriate for uranium milling in their licensing of the commercial low-level waste disposal site. They have also conducted reviews of and commented on NRC assessments for the uranium milling facilities. The Division also has a technical assistance contractor that may assist the Division as necessary.

The NRC staff review of the Utah staff qualifications determined that there currently is a sufficient number of trained staff to administer the 11e.(2) byproduct materials (uranium milling) program. Utah has indicated that current technical staff will be used to initially implement the 11e.(2) byproduct material activities. Utah will hire three new staff and train them to support the uranium milling staff. The Utah fee schedule for uranium milling facilities goes into effect upon entering into the amended agreement and these

fees will be used to support the three new positions. Although the new staff will be hired just before the transfer of authority to Utah, the Utah program has sufficient existing qualified staff to implement the 11e.(2) byproduct material activities. The new staff will be trained and be assigned to activities in the Program as they are qualified. Utah stated that the impact to the existing Program of using existing staff until the new staff is fully trained is anticipated to be minimal.

The NRC staff review of Utah's needs analysis, current staff qualifications, and current staff assignments for 11e.(2) byproduct material activities determined that the provisions of criterion 34 for the number staff and qualifications of those staff were addressed by the Utah program. The NRC staff determined that the Utah program has an adequate number of staff and sufficient technical expertise to implement the proposed amended Agreement for 11e.(2) byproduct material.

35. Functions To Be Covered. **The States should develop procedures for licensing, inspection, and preparation of environmental assessments.**

a. Licensing

(1) Licensing evaluations or assessments should include in-plant radiological safety aspects in occupational or restricted areas and environmental impacts to populations in unrestricted areas from the plant.

(2) It is expected that the State will review, evaluate and provide documentation of these evaluations. Items which should be evaluated are:

(a) Proposed activities;
(b) Scope of proposed action;
(c) Specific activities to be conducted;
(d) Administrative procedures;
(e) Facility organization and radiological safety responsibilities, authorities, and personnel qualifications;
(f) Licensee audits and inspections;
(g) Radiation safety training programs for workers;
(h) Radiation safety program, control and monitoring;
(I) Restricted area markings and access control;
(j) At existing mills, review of monitoring data, exposure records, licensee audit and inspection records, and other records applicable to existing mills;
(k) Environmental monitoring;
(l) Emergency procedures, radiological;
(m) Product transportation; and
(n) Site and physical decommissioning procedures, other than tailings.
(o) Employee exposure data and bioassay programs.

Utah will use its Technical Procedures for License Review as well as NRC guidance in the form of Standard Review Plans and Regulatory Guides in the conduct of its licensing program. These procedures and guidance documents include evaluation of the areas listed above. Utah has previously licensed, including the preparation of an environmental assessment for, a commercial low-level waste disposal site with similar waste management practices to those at uranium milling facilities.

b. Environmental Assessment

(1) The environmental evaluation should consist of a detailed and documented evaluation of the following items:

(a) Topography;
(b) Geology;
(c) Hydrology and water quality;
(d) Meteorology;
(e) Background radiation;
(f) Tailings retention system;
(g) Interim stabilization, reclamation, and Site Decommissioning Program;
(h) Radiological Dose Assessment;
(1) Source terms
(2) Exposure pathway
(3) Dose commitment to individuals
(4) Dose commitment to populations
(5) Evaluation of radiological impacts to the public to include a determination of compliance with State and Federal regulations and comparisons with background values
(6) Occupational dose
(7) Radiological impact to biota other than man
(8) Radiological monitoring programs, pre-occupational and operational
(l) Impacts to surface and groundwater, both quality and quantity;
(j) Environmental effects of accidents; and
(k) Evaluation of tailings management alternatives in terms of regulations.

(2) The States are encouraged to examine the need to expand the scope of the assessment into other areas such as:

(a) Ecology;
(b) Environmental effects of site preparation and facility construction on environment and biota;
(c) Environmental effects of use and discharge of chemicals and fuels; and
(d) Economic and social effects.

Section R313-24.3 of the Utah Administrative Code requires the licensee to submit an environmental report that will be reviewed and evaluated by the licensing staff as part of the licensing process. The staff evaluation will be documented in the environmental assessments. The areas of review cover all the areas listed above in (1) and for new facilities, the areas listed above in (2).

c. Inspections

(1) As a minimum, items which should be inspected or included during the inspection of a uranium mill should adhere to the items evaluated in the in-plant safety review. The principal items recommended for inspection are:

- **(a) Administration;**
- **(b) Mill circuit, including any additions, deletions, or circuit changes;**
- **(c) Accidents/Incidents;**
- **(d) Part 19 or equivalent requirements of the State;**
- **(e) Action taken on previous findings;**
- **(f) A mill tour to determine compliance with regulations, and license conditions;**
- **(g) Tailings waste management in accordance with regulations and license conditions (see NRC Reg. Guide 3.11.1);**
- **(h) Records;**
- **(I) Respiratory protection in accordance with license conditions or 10 CFR Part 20.**
- **(j) Effluent and environmental monitoring;**
- **(k) Training programs;**
- **(l) Transportation and shipping;**
- **(m) Internal review and audit by management;**
- **(n) Exit interview; and**
- **(o) Final written report documenting the results of the inspection and findings on each item.**

(2) In addition, the inspector should perform the following:

- **(a) Independent surveys and sampling.**

(3) Additional guidance is contained in appropriate NRC regulatory and inspection guides. A complete inspection should be performed at least once per year.

The Utah uranium milling program will consist of four facilities. Envirocare which is west of Salt Lake City and three facilities in southern Utah. The Envirocare 11e.(2) disposal facility will be incorporated into the overall Envirocare oversight and inspection program now in use for the low-level waste disposal site. The uranium milling health physicist will inspect each facility in southern Utah at least quarterly. This schedule will be adjusted based on the facility status and compliance history. This health physicist will also be responsible for the inspection of the 28 other licensees in southern Utah. The engineer and groundwater hydrologist will provide inspection support as needed in such areas as

groundwater sampling evaluations, split groundwater sampling, oversight of new engineering construction and oversight of closed facilities.

The Utah inspection program for uranium milling facilities will incorporate all the elements of the current materials inspection program and include the above areas. A complete inspection will be performed at least annually and will include independent surveys and sampling. The NRC inspection form for Uranium Mills as well as the NRC Inspection Manual Chapter 2801, "Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program," will be used as guidance documents by Utah inspectors. Enforcement actions will be in accordance with Utah Radiation Control Rules and exiting enforcement guidance. All enforcement actions may be appealed through the Utah Radiation Control Board and thereafter, to the appropriate court.

d. Operational Data Review

(1) In addition to the reporting requirements required by the regulations or license conditions, the licensee will submit in writing to the regulatory agency within 60 days after January 1 and July 1 of each year, reports specifying the quantity of each of the principal radionuclides released to unrestricted areas in liquid and in gaseous effluents during the previous six months of operation. This data shall be reported in a manner that will permit the regulatory agency to confirm the potential annual radiation doses to the public.

(2) All data from the radiological and non-radiological environmental monitoring program will also be submitted for the same time periods and frequency. The data will be reported in a manner that will allow the regulatory agency to conform the dose to receptors.

The Division staff will perform operational data reviews of the semi-annual radioactive material effluent reports as well as the semi-annual environmental monitoring reports. The licensee is required to specify the quantity of each of the principle radionuclides released to unrestricted areas in both liquid and gaseous effluents during the previous six months of operation (R313-24-4, incorporates 10 CFR 40.65 by reference). The data for the effluent releases will be required in a manner that will permit the Utah staff to confirm the potential annual radiation doses to the public and confirm the dose to receptors.

The NRC staff review determined that the provisions of criterion 35 are addressed by the Utah program. In general, Utah has adopted NRC regulations by reference or adopted equivalent requirements, and committed to using the NRC guidance in conducting its regulatory program. The staff concludes that the Utah program satisfies the requirements of criterion 35.

36. Instrumentation. **The State should have available both field and laboratory instrumentation sufficient to ensure the licensee's control of materials and to validate the licensee's measurements.**

a. The State will submit its list of instrumentation to the NRC for review. Arrangements should be made for calibrating such equipment.

b. Laboratory-type instrumentation should be available in a State agency or through a commercial service which has the capability for quantitative and qualitative analysis of radionuclides associated with natural uranium and its decay chain, primarily; U-238, Ra-226, Th-320, Pb-210, and Rn-222, in a variety of sample media such as will be encountered from an environmental sampling program.

Analysis and data reduction from laboratory analytical facilities should be available to the licensing and inspection authorities in a timely manner. Normally, the data should be available within 30 days of submittal. State acceptability of quality assurance (QA) programs should also be established for the analytical laboratories.

c. Arrangements should also be completed so that a large number of samples in a variety of sample media resulting from a major accident can be analyzed in a time frame that will allow timely decisions to be made regarding public health and safety.

d. Arrangements should be made to participate in the Environmental Protection Agency quality assurance program for laboratory performance.

The Utah program submitted a list of instruments that are sufficient in number and for the types of field and laboratory instruments needed to implement a uranium milling program (Appendix F of Utah application). The instruments are calibrated at least annually and semi-annually for those used in the materials program (calibration procedures in Appendix F of Utah application). The Division has laboratory instruments for sample analysis as well as the capability at the State Health Laboratory which is sufficient for routine qualitative and quantitative analysis of radionuclides associated with natural uranium and its decay chain in a variety of sample media. In addition, the Division has the capability to contract commercially for analyses of samples when necessary. In the case of a major accident, the State Health Laboratory could perform a large number of sample analyses. If the State Health Laboratory capability is exceeded, the State Health Laboratory may have to contract a commercial laboratory for a timely turn around. The State Health Laboratory participates in the National Environmental Laboratory Accreditation Program and maintains its own quality assurance program. The Environmental Protection Agency's program for laboratory performance is no longer available.

The staff concludes that the Utah program satisfies the requirements of criterion 36.

STAFF CONCLUSION

Section 274d of the Atomic Energy Act of 1954, as amended, states that "The Commission shall enter into an agreement under subsection b of this section with any State if:

(1) The Governor of that State certifies that the State has a program for the control of radiation hazards adequate to protect the public health and safety with respect to the materials within the State covered by the proposed agreement, and that the State desires to assume regulatory responsibility for such materials; and

(2) The Commission finds that the State program is in accordance with the requirements of subsection o. and in all other respects compatible with the Commission's program for the regulation of such materials, and that the State program is adequate to protect the public health and safety with respect to the materials covered by the proposed amendment."

The NRC staff has reviewed the proposed Agreement, the certification of Utah Governor Leavitt, and the supporting information provided by the staff of the Bureau of Radiation Control of the Utah Department of Environmental Quality, and concludes that the State of Utah satisfies the criteria in the Commission's policy statement "Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement," and therefore meets the requirements of Section 274 of the Act. The proposed Utah program to regulate 11e.(2) materials, as comprised of statutes, regulations, procedures, and apparatus, is compatible with the program of the Commission and is adequate to protect public health and safety with respect to the materials covered by the proposed Agreement.