



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

November 13, 1989

The Honorable John B. Breaux, Chairman
Subcommittee on Nuclear Regulation
Committee on Environment and Public Works
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

This is to inform the Subcommittee that by letter dated July 17, 1989 Governor Norman H. Bangerter on behalf of the State of Utah submitted a proposed amendment to the Agreement between the U.S. Nuclear Regulatory Commission and the State of Utah under Section 274 of the Atomic Energy Act of 1954, as amended.

An announcement of the proposed amended Agreement and the staff's assessment will be published in the Federal Register. A pre-publication copy of the Federal Register Notice is enclosed.

We will inform you when the Commission has completed its consideration of the proposed program.

Sincerely,

A handwritten signature in cursive script that reads "Dennis K. Rathbun".

Dennis K. Rathbun, Director
Congressional Affairs
Office of Governmental and
Public Affairs

Enclosure:
As stated

cc: Senator Alan K. Simpson

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

November 13, 1989

The Honorable Morris K. Udall, Chairman
Subcommittee on Energy and the Environment
Committee on Interior and Insular Affairs
United States House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

This is to inform the Subcommittee that by letter dated July 17, 1989 Governor Norman H. Bangerter on behalf of the State of Utah submitted a proposed amendment to the Agreement between the U.S. Nuclear Regulatory Commission and the State of Utah under Section 274 of the Atomic Energy Act of 1954, as amended.

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Enclosure:
As stated

cc: Representative James V. Hansen



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

November 13, 1989

The Honorable Philip R. Sharp, Chairman
Subcommittee on Energy and Power
Committee on Energy and Commerce
United States House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

This is to inform the Subcommittee that by letter dated July 17, 1989 Governor Norman H. Bangert on behalf of the State of Utah submitted a proposed amendment to the Agreement between the U.S. Nuclear Regulatory Commission and the State of Utah under Section 274 of the Atomic Energy Act of 1954, as amended.

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Dennis K. Rathbun, Director
Congressional Affairs
Office of Governmental and
Public Affairs

Enclosure:
As stated

cc: Representative Carlos J. Moorhead



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

November 13, 1989

The Honorable J. Bennett Johnston, Chairman
Subcommittee on Energy and Water Development
Committee on Appropriations
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

This is to inform the Subcommittee that by letter dated July 17, 1989 Governor Norman H. Bangerter on behalf of the State of Utah submitted a proposed amendment to the Agreement between the U.S. Nuclear Regulatory Commission and the State of Utah under Section 274 of the Atomic Energy Act of 1954, as amended.

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Dennis K. Rathbun, Director
Congressional Affairs
Office of Governmental and
Public Affairs

Enclosure:
As stated

cc: Senator Mark O. Hatfield



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

November 13, 1989

The Honorable Tom Beville, Chairman
Subcommittee on Energy and Water Development
Committee on Appropriations
United States House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

This is to inform the Subcommittee that by letter dated July 17, 1989 Governor Norman H. Bangerter on behalf of the State of Utah submitted a proposed amendment to the Agreement between the U.S. Nuclear Regulatory Commission and the State of Utah under Section 274 of the Atomic Energy Act of 1954, as amended.

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Dennis K. Rathbun, Director
Congressional Affairs
Office of Governmental and
Public Affairs

Enclosure:
As stated

cc: Representative John T. Myers

November 13, 1989

The Honorable John B. Breaux, Chairman
Subcommittee on Nuclear Regulation
Committee on Environment and Public Works
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

This is to inform the Subcommittee that by letter dated July 17, 1989 Governor Norman H. Bangert on behalf of the State of Utah submitted a proposed amendment to the Agreement between the U.S. Nuclear Regulatory Commission and the State of Utah under Section 274 of the Atomic Energy Act of 1954, as amended.

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Sincerely,

original signed by/

Dennis K. Rathbun, Director
Congressional Affairs
Office of Governmental and
Public Affairs

Enclosure:
As stated

cc: Senator Alan K. Simpson

Distribution

SA RF
Dir RF
KSchneider
RDoda
SSchwartz
DRathbun

*Identical letters sent to M. Udall, P. Sharp, T. Beville, and J. B. Johnston.

*See previous concurrence

OFC	:SLIYP:SA	:SLIYP:SA:AD	:SLIYP:D	:GPA:DD	:GPA:D	:CA:D	
NAME	:KSchneider:dd:VMiller	:CKammerer	:SSchwartz	:HRDeaton	:DRathbun		GF 11/14
DATE	:11/3/89*	:11/7/89*	:11/7/89*	:11/ /89	:11/8/89	:11/ /89	

FEDERAL REGISTER NOTICE
HIGHLIGHTS
NUCLEAR REGULATORY COMMISSION
NOTICES
PROPOSED AMENDED AGREEMENT WITH STATE OF UTAH

Enclosure 1

NUCLEAR REGULATORY COMMISSION
NOTICE OF PROPOSED AMENDED AGREEMENT WITH STATE OF UTAH

State of Utah
Staff Assessment of Proposed Amended Agreement
Between the NRC and the State of Utah

AGENCY: U.S. Nuclear Regulatory Commission

ACTION: Notice of Proposed Amended Agreement with State of Utah.

SUMMARY: Notice is hereby given that the U.S. Nuclear Regulatory Commission is publishing for public comment the NRC staff assessment of a proposed amended agreement received from the Governor of the State of Utah for the assumption of certain of the Commission's regulatory authority pursuant to Section 274 of the Atomic Energy Act of 1954, as amended. Comments are requested on the public health and safety aspects of the proposal.

A staff assessment of the State's proposed amended program for control over sources of radiation is set forth below as supplementary information to this notice. A copy of the proposed amended agreement, program narrative, including the referenced appendices, applicable State legislation and Utah regulations, is available for public inspection in the Commission's public document room at 2120 L Street, NW, Washington, DC. Exemptions from the Commission's regulatory authority, which would implement this proposed amended agreement, have been published in the Federal Register and codified as Part 150 of the Commission's regulations in Title 10 of the Code of Federal Regulations.

DATES: Comments must be received on or before (30 days after initial publication).

ADDRESSES: Submit comments to: the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555. ATTN: Document and Services Branch. Comments may also be delivered to 7920 Norfolk Avenue, Bethesda, Maryland from 8:15 a.m. to 5:00 p.m. Monday through Friday. Copies of comments received by NRC may be examined at the NRC Public Document Room, 2120 L Street, NW, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Vandy L. Miller, State, Local and Indian Tribe Programs, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, telephone: 301-492-0326.

SUPPLEMENTARY INFORMATION: Assessment of Proposed Amended Utah Program to Regulate Certain Radioactive Materials Pursuant to Section 274 of the Atomic Energy Act of 1954, as amended.

The Commission has received a proposal from the Governor of Utah for the State to amend its agreement with the NRC whereby the NRC would relinquish and the State would assume regulatory authority for land

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disposal of source, byproduct and special nuclear material received from other persons pursuant to Section 274 of the Atomic Energy Act of 1954, as amended.

Section 274e of the Atomic Energy Act of 1954, as amended, requires that the terms of the proposed agreement be published for public comment once each week for four consecutive weeks. Accordingly, this notice will be published four times in the Federal Register.

I. Background

- A. Section 274 of the Atomic Energy Act of 1954, as amended, provides a mechanism whereby the NRC may transfer to the States certain regulatory authority over agreement materials¹ when a State desires to assume this authority and the Governor certifies that the State has an adequate regulatory program, and when the Commission finds that the State's program is compatible with that of the NRC and is adequate to protect the public health and safety. Section 274g directs the Commission to cooperate with the States in the formulation of standards for protection against radiation hazards to assure that State and Commission programs for radiation protection will be coordinated and compatible. Further, Section 274j provides that the Commission shall periodically review such agreements and actions taken by the States under the agreements to ensure compliance with the provisions of this section.
- B. On March 29, 1984, the Governor of Utah signed an agreement with the NRC for the assumption of regulatory authority for byproduct material as defined in Section 11e.(1) of the Act, source material and special nuclear material in quantities not sufficient to form a critical mass. In a letter dated July 17, 1989, Governor Norman H. Bangert of the State of Utah requested that the Commission enter into an amended agreement with the State pursuant to Section 274 of the Atomic Energy Act of 1954, as amended, under which the State would also assume responsibility for regulating the land disposal of these materials received from other persons. The Governor certified that the State of Utah has a program for control of radiation hazards which is adequate to protect the public health and safety with respect to the materials within the State covered by the proposed amendment to the agreement, and that the State of Utah desires to assume regulatory responsibility for such materials. The text of the proposed agreement is shown in Appendix A.

The specific authority requested is for permanent disposal of low-level waste containing the material for which Utah has assumed regulatory authority under the 1984 agreement but not containing uranium and

¹ A. Byproduct materials as defined in 11e.(1)
B. Byproduct materials as defined in 11e.(2)
C. Source materials; and
D. Special nuclear materials in quantities not sufficient to form a critical mass

thorium mill tailings (byproduct material as defined in Section 11e.(2) of the Act). The State does not wish to assume authority over-uranium recovery activities. The State, however, reserves the right to apply at a future date to NRC for an amended agreement to assume authority in this area. The proposed amendment to the agreement covers the following areas:

1. Amending Article I of the Agreement of March 29, 1984 to add land disposal of source, byproduct and special nuclear material received from other persons to the list of materials covered by the agreement.
 2. Amending Article II of the Agreement of March 29, 1984 to delete land disposal of source, byproduct and special nuclear material received from other persons from the list of materials and activities over which the Commission continues to retain regulatory authority and responsibility.
 3. Specifies the effective date of the amended agreement.
- C. Utah Code Annotated (UCA) 26-1-27 through 26-1-29 authorizes the State Department of Health to issue licenses to, and perform inspections of (see, also, UCA 26-23-8), users of radioactive materials under the 1984 agreement and otherwise carry out a total radiation control program. Utah Radiation Control Rules URC-10 through URC-80 adopted November 8, 1982 under authority of 26-1-27 through 26-1-29 Utah Code Annotated 1953, as amended, provide standards, licensing, inspection, enforcement and administrative procedures for agreement and non-agreement materials. These regulations have been determined to be compatible with the Commission's regulations. Utah Radiation Control Rules R447-10 through R447-70 were amended and recodified in July 1989. Regulations R447-25 were adopted in July 1988 for licensing requirements for land disposal of radioactive waste.
- D. On March 29, 1984, under enabling legislation in UCA 26-1-29, Utah assumed regulatory authority for byproduct material as defined in Section 11e.(1) of the Act, source material and special nuclear material in quantities not sufficient to form a critical mass. The program audits conducted since that time have resulted in an NRC finding that the Utah radiation control program is compatible with that of the NRC and is adequate to protect public health and safety. In addition to Utah's agreement program, Utah is involved in several environmental radiation issues including monitoring indoor radon, monitoring uranium mill tailings, particularly at the Vitro uranium mill, and monitoring and assessment of the State environmental program. In addition, the Department issued to Envirocare of Utah, Inc., a license to receive, store, and dispose, by shallow land burial, naturally occurring radioactive material (NORM) waste with a

radium-226 concentration not to exceed 2,000 picocuries per gram. NORM material is not regulated by the Nuclear Regulatory Commission.

- E. The State's proposed programs for low-level radioactive waste disposal are assessed under Criteria numbers 9, "Radioactive Waste Disposal" and 20 "Qualification of Regulatory and Inspection Personnel." Additional criteria relating to prior evaluation of uses of radioactive materials, inspection and administration,² are addressed as appropriate to supplement information found in the staff assessment of the original Utah proposed agreement published in the Federal Register on December 30, 1983 (48 FR 57674-57684).

II. NRC STAFF ASSESSMENT OF THE PROPOSED AMENDMENT TO UTAH PROGRAM FOR CONTROL OF AGREEMENT MATERIALS

Reference: Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement.³

OBJECTIVES

9. Radioactive Waste Disposal.

(a) Waste disposal by material users. The standards for the disposal of radioactive materials into the air, water and sewer, and burial in the soil shall be in accordance with 10 CFR Part 20. Holders of radioactive material desiring to release or dispose of quantities or concentrations of radioactive materials in excess of prescribed limits shall be required to obtain special permission from the appropriate regulatory authority.

Requirements for transfer of waste for the purpose of ultimate disposal at a land disposal facility (waste transfer and manifest system) shall be in accordance with 10 CFR 20.

The waste disposal standards shall include a waste classification scheme and provisions for waste form, applicable to waste generators, that is equivalent to that contained in 10 CFR Part 61.

(b) Land Disposal of waste received from other persons. The State shall promulgate regulations containing licensing requirements for land disposal of radioactive waste received from other persons which are compatible with the applicable

²Criteria 13, "Prior Evaluation of Hazards and Uses Exceptions," 14, "Evaluation Criteria," 16, "Inspection, Purpose, Frequency," and 27, "Coverage, Amendments Reciprocity."

³NRC 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).

technical definitions, performance objectives, technical requirements and applicable supporting sections set forth in 10 CFR Part 61. Adequate financial arrangements (under terms established by regulation) shall be required of each waste disposal site licensee to ensure sufficient funds for decontamination, closure and stabilization of a disposal site. In addition, Agreement State financial arrangements for long-term monitoring and maintenance of a specific site must be reviewed and approved by the Commission prior to relieving the site operator of licensed responsibility (Section 151(a)(2), Pub. L. 97-425).

The Utah regulations contain provisions relating to the disposal of radioactive materials into the air, water and sewer and burial in soil which are essentially uniform with those of 10 CFR Part 20. Waste transfer and manifest system requirements for transfer of waste for ultimate disposal at a land disposal facility are included in the Utah regulations. The waste disposal requirements include a waste classification scheme and provisions for waste form equivalent to that in 10 CFR Part 61.

The Utah regulations provide for land disposal of low-level radioactive waste received from other persons which are compatible with the applicable technical definitions, performance objectives, technical requirements and supporting sections set out in 10 CFR Part 61. The Utah regulations include provisions for financial arrangements for decontamination, closure and stabilization. Under the Nuclear Waste Policy Act of 1982 (Pub. L. 97-425), the financial arrangements for long term monitoring and maintenance at specific sites in Utah will be subject to Commission review and approval prior to Utah relieving the site operator of licensed responsibility.

References: URC-R447-15-310, URC-R447-15-302, URC-R447-15-303, URC-R447-304, URC-R447-15-305, URC-R447-15-306, URC-R447-15-307, URC-R447-15-308, URC-447-15-309, URC-R447-15-311, URC-R447-25; Section 151(a)(2), Pub. L. 97-425.

PRIOR EVALUATION OF USES OF RADIOACTIVE MATERIALS

13. Prior Evaluation of Hazards and Uses, Exceptions. In the present state of knowledge, it is necessary in regulating the possession and use of byproduct, source and special nuclear materials that the State regulatory authority require the submission of information on, and evaluation of, the potential hazards and the capability of the user or possessor prior to his receipt of the materials. This criterion is subject to certain exceptions and to continuing reappraisal as knowledge and experience in the atomic energy field increase. Frequently there are, and increasingly in the future there may be, categories of materials and uses as to which there is sufficient knowledge to permit possession and use without prior

evaluation of the hazards and the capability of the possessor and user. These categories fall into two groups -- those materials and uses which may be completely exempt from regulatory controls, and those materials and uses in which sanctions for misuse are maintained without pre-evaluation of the individual possession or use. In authorizing research and development or other activities involving multiple uses of radioactive materials, where an institution has people with extensive training and experience, the State regulatory authority may wish to provide a means for authorizing broad use of materials without evaluating each specific use.

Prior to the issuance of a specific license for the disposal of radioactive materials, the Utah Bureau of Radiation Control will require the submission of information on, and will make an evaluation of, the potential hazards of such uses, and the capability of the applicant.

References: URC-R447-25, Utah Program Statement, Section III.D "Procedures for Review of a Low-Level Radioactive Waste Disposal License Application."

14. Evaluation Criteria. In evaluating a proposal to use radioactive materials, the regulatory authority shall determine the adequacy of the applicant's facilities and safety equipment, his training and experience in the use of the materials for the purpose requested, and his proposed administrative controls. States should develop guidance documents for use by license applicants. This guidance should be consistent with NRC licensing and regulatory guides for various categories of licensed activities.

In evaluating a proposal for disposal of radioactive material, the Utah Bureau of Radiation Control will make the findings required by URC-R447-25-11, including, among others, findings that the issuance of the license will not constitute an unreasonable risk to the health and safety of the public and that the applicant is qualified by reason of training and experience to carry out the disposal operations requested in a manner that protects health and minimizes danger to life or property.

Other special requirements for the issuance of specific licenses are contained in the regulations.

References: URC-R447-25, see, especially, R447-25-11, Utah Program Statement, Section III.D. "Procedures for Review of a Low-Level Radioactive Waste Disposal License Application."

INSPECTION

16. Purpose, Frequency. The possession and use of radioactive materials shall be subject to inspection by the regulatory authority and shall be subject to the performance of tests, as required by the regulatory authority. Inspection and testing is conducted to determine and to assist in obtaining compliance with regulatory requirements. Frequency of inspection shall be related directly to the amount and kind of material and type of operation licensed, and it shall be adequate to insure compliance.

Utah low-level waste disposal licensees will be subject to inspection by the Bureau of Radiation Control. Upon instruction from the Bureau, licensees shall perform or permit the Bureau to perform such reasonable tests and surveys as the Bureau deems appropriate or necessary. The frequency of inspections is dependent upon the type and scope of the licensed activities and will be at least as frequent as inspections of similar licensees by NRC. Generally, inspections will be unannounced.

References: Utah Program Statement, Section III.E "Compliance Program for a Low-Level Radioactive Waste Disposal Facility."

PERSONNEL

20. Qualifications of Regulatory and Inspection Personnel. The regulatory agency shall be staffed with sufficient trained personnel. Prior evaluation of applications for licenses or authorizations and inspection of licensees must be conducted by persons possessing the training and experience relevant to the type and level of radioactivity in the proposed use to be evaluated and inspected. This requires competency to evaluate various potential radiological hazards associated with the many uses of radioactive material and includes concentrations of radioactive materials in air and water, conditions of shielding, the making of radiation measurements, knowledge of radiation instruments-- their selection, use, and calibration-- laboratory design, contamination control, other general principles and practices of radiation protection, and use of management controls in assuring adherence to safety procedures. In order to evaluate some complex cases, the State regulatory staff may need to be supplemented by consultants or other State agencies with expertise in geology, hydrology, water quality, radiobiology, and engineering disciplines.

To perform the functions involved in evaluation and inspection, it is desirable that there be personnel educated and trained in the physical and/or life sciences, including biology, chemistry, physics and engineering, and that the personnel have had training and experience in radiation protection. For example, the person

who will be responsible for the actual performance of evaluation and inspection of all of the various uses of byproduct, source and special nuclear material which might come to the regulatory body should have substantial training and extensive experience in the field of radiation protection. It is desirable that such a person have a bachelor's degree or equivalent in the physical or life sciences, and specific training in radiation protection.

It is recognized that there will also be persons performing a more limited function in evaluation and inspection. These persons will perform the day-to-day work of the regulatory program and deal with both routine situations as well as some which will be out of the ordinary. These persons should have a bachelor's degree or equivalent in the physical or life sciences, training in health physics, and approximately two years of actual work experience in the field of radiation protection.

The foregoing are considered desirable qualifications for the staff who will be responsible for the actual performance of evaluation and inspection. In addition, there will probably be trainees associated with regulatory program who will have an academic background in the physical or life sciences as well as varying amounts of specific training in radiation protection but little or no actual work experience in this field. The background and specific training of these persons will indicate to some extent their potential role in the regulatory program. These trainees, of course, could be used initially to evaluate and inspect those applications of radioactive materials which are considered routine or more standardized from the radiation safety standpoint, for example, inspection of industrial gauges, small research programs, and diagnostic medical programs. As they gain experience and competence in the field, trainees could be used progressively to deal with the more complex or difficult types of radioactive material applications. It is desirable that such trainees have a bachelor's degree or equivalent in the physical or life sciences and specific training in radiation protection. In determining the requirement for academic training of individuals in all of the foregoing categories proper consideration should be given to equivalent competency which has been gained by appropriate technical and radiation protection experience.

It is recognized that radioactive materials and their uses are so varied that the evaluation and inspection functions will require skills and experience in the different disciplines which will not always reside in one person. The regulatory authority should have the composite of such skills either in its employ or as its command, not only for routine functions, but also for emergency cases.

Licensing and Regulation of Permanent Disposal of Low-Level
Radioactive Waste

(a) Number of Personnel

There are approximately 230 specific licenses in the State of Utah. The Bureau of Radiation Control has responsibility for the low-level waste (LLW) management regulatory program as a joint function of Radioactive Materials and Machine Licensing Section and Environmental Monitoring and Mill Tailings Management Section. The assessment of the regulatory framework is included under Criterion 9, "Radioactive Waste Disposal." The Bureau of Radiation Control has identified seven staff members who will provide supervision, technical support and administrative assistance during the various phases of regulating a licensed low-level waste disposal facility. These personnel and summaries of their duties are:

Larry F. Anderson: Director, Bureau of Radiation Control. Responsible for administration of Bureau programs.

Mark S. Day: Environmental Health Engineer. Responsible for the Utah's inactive uranium mill tailings remedial action project.

Dane L. Finerfrock: Environmental Health Manager, Environmental Monitoring and Mill Tailings Management Section. Responsible for radon-in-residences monitoring, statewide environmental radiation monitoring, licensing and inspection of low-level radioactive waste disposal facilities, and inactive uranium mill tailings remedial action programs.

Blaine N. Howard: Health Physicist. Responsible for licensing and inspection in materials program.

John D. Hultquist: Environmental Health Scientist. Responsible for inspection of low-level waste disposal facilities, environmental monitoring and inactive uranium mill tailings remedial action project.

Craig W. Jones: Environmental Health Manager, Radioactive Materials and Machine Licensing Section. Responsible for the Agreement State program including licensing and inspection of low-level disposal facilities.

Raymond G. Nelson: Environmental Health Scientist. Responsible for regulation of low-level waste disposal facilities, environmental monitoring and inactive uranium mill tailings remedial action project.

Cindy Wignall: Environmental Health Technician. Responsible for supporting both sections as a technical assistant in meeting the Bureau's goals.

In addition, Utah has identified staff with expertise in various disciplines within the Department and other State agencies for support during the pre-operational and licensing stage. Expertise in disciplines not provided by Utah personnel either on staff or covered by agreements with other State agencies will be provided by contracts with the State.

(b) Training.

The academic and specialized short course training for those persons involved in the administration, licensing and inspection of low-level radioactive waste disposal facilities is shown below.

Larry F. Anderson - B.S. Chemistry, MPA (Health), Brigham Young University.

NIOSH Course 549, Recognition, Evaluation, and Control of Occupational Hazards. October 1972.

NIOSH Course 582, Sampling and Evaluating Airborne Asbestos Dust. April 10-12, 1973.

Utah State Division of Health, Visible Emission Evaluation Course. June 19, 1973.

American Industrial Hygiene Association, Industrial Toxicology Seminar. A 24-hour course ending April 30, 1975.

OSHA, Fundamentals of Occupational Injury Investigation. Short course ending April 1, 1977.

U.S. Nuclear Regulatory Commission, Radiological Emergency Response Operation Training Course. A 64-hour course ending January 27, 1978.

U.S. Environmental Protection Agency, Grants Administration Seminar. A 16-hour course ending May 16, 1989.

Safety International Training Center, Hydrogen Sulfide and Equipment for Instructors. A 12-hour course ending June 19, 1979.

Rocky Mountain Center for Occupational and Environmental Health, University of Utah, Health and Exposures in the Smelter Environment. A 20-hour course ending March 29, 1980.

U.S. Nuclear Regulatory Commission, Medical Uses of Radionuclides. A 40-hour course held in January 1984.

U.S. Nuclear Regulatory Commission, Industrial Radiography. A 40-hour course held May 1985.

Harvard School of Public Health, Biological Effects of Ionizing Radiation. A 40-hour course held in March 1989.

Mark S. Day - B.S. Civil and Environmental Engineering, Utah State University.

Center for Professional Advancement, Hydraulic Conveying. A 1-week course in 1974.

University of California, Resolution of Construction Claims. A 1-week course in 1983.

Management Consultants Incorporated, Federal Procurement of Construction Projects. A 1-week course in 1985.

Air Force Institute of Technology, Contingency Engineering.
A 2-week course in 1986.
Air Force Institute of Technology, Hazardous Waste Management.
A 2-week course in 1986.

Dane L. Finerfrock - B.S. Meteorology, D.S. Biology, University
of Utah.

Oak Ridge Associated Universities, Health Physics and Radiation
Protection. A 10-week course ending April 1981.

U.S. Nuclear Regulatory Commission, Radiological Emergency
Response Operation Training Course. A 64-hour course ending
August 8, 1980.

U.S. Nuclear Regulatory Commission, Safety Aspects of
Industrial Radiography. A 40-hour course held in
August 17, 1980.

Western Interstate Energy Board, Workshop on Low-Level
Radioactive Waste. A 16-hour course ending July 16, 1980.

U.S. Department of Health, Education and Welfare, Basic Course
for Investigators: Diagnostic X-Ray Surveillance. A 80-hour
course ending March 14, 1980.

U.S. Nuclear Regulatory Commission, Introduction Licensing
Practices and Procedures. A 80-hour course ending in
September, 1979.

U.S. Nuclear Regulatory Commission, Transportation of
Radioactive Materials. A 40-hour course ending in
November 16, 1984.

U.S. Nuclear Regulatory Commission, License Inspection
Procedures. A 40-hour course ending in June 18, 1985.

U.S. Environmental Protection Agency, Reducing Radon in
Structures. A 24-hour course ending in March 1989.

Blaine N. Howard - B.S. Math and Physics, Ricks College.
M.S. Radiological Health, New York University.

M.S. Physics and Math, Brigham Young University.

Bureau of Radiological Health, Medical X-Ray Protection.
Held October 30-November 10, 1972.

U.S. Nuclear Regulatory Commission, Radiological Emergency
Response Operation Training Course. A 64-hour course held
in 1978.

National Legislative Conference, States Role in Radioactive
Material Management. Held December 9-11, 1974.

U.S. Environmental Protection Agency, Drinking Water
- Regulations and Radioanalytical Workshop.
Held January 10-12, 1978.

X-Ray Workshop, Richfield, Utah. March 14-15, 1979.

Actinides in Man and Animals Workshop, Snowbird, Utah.
October 15-17, 1979.

U.S. Nuclear Regulatory Commission, Medical Uses of
Radionuclides. A 40-hour course ending September 12, 1980.

NWTS Annual Information Meeting, Columbus, Ohio.
December 8-10, 1980.

Waste Management 1981--American Nuclear Society, Tuscon, Arizona. February 23-27, 1981.
U.S. Nuclear Regulatory Commission, Introduction Licensing Practices and Procedures. A 80-hour course ending in September 1982.
U.S. Nuclear Regulatory Commission, Inspection Procedures. A 40-hour course ending in July 30, 1982.
U.S. Nuclear Regulatory Commission, Radon Monitoring. A 40-hour course ending in November 1982.
Conference of Radiation Control Program Directors, Radiation Instruments. A 24-hour course ending September 1983.
U.S. Nuclear Regulatory Commission, Gas and Oil Well Logging. A 40-hour course ending in November 1988.
U.S. Nuclear Regulatory Commission, Safety Aspects of Industrial Radiography. A 40-hour course ending September 1989.

John D. Hultquist - B.S. Environmental Science/Biology, University of Tennessee.
U.S. Environmental Protection Agency, Basic Risk and Decision Making. A 16-hour course ending in March 1988.
Utah Division of Comprehensive Emergency Management, Fundamental Course for Radiological Monitors. An 8-hour course ending March 1989.
U.S. Environmental Protection Agency, Reducing Radon in Structures. A 24-hour course ending in March 1989.
U.S. Environmental Protection Agency, RCRA Ground Water Monitoring. A 24-hour course ending in April 1989.
Oak Ridge Associated Universities, Health Physics and Radiation Protection. A 5-week course ending August 1989.
U.S. Department of Energy, First Responders WIPP Training. An 8-hour course ending August 1989.
U.S. Environmental Protection Agency, Hazardous Material Response for First Responders. A 40-hour course ending in September 1989.

Craig W. Jones - B.S. Biology, M.S.P.H. (Industrial Hygiene), University of Utah.
U.S. Nuclear Regulatory Commission, Radiological Emergency Response Operation Training Course. A 64-hour course ending August 8, 1980.
Department of Health and Human Services, Radiopharmaceutical Quality Assurance. A 16-hour course ending November 1984.
U.S. Nuclear Regulatory Commission, Inspection Procedures. A 40-hour course ending in February 1985.
U.S. Environmental Protection Agency, Air Surveillance for Hazardous Materials. A 40-hour course ending in April 1985.
U.S. Nuclear Regulatory Commission, Medical Uses of Radionuclides. A 40-hour course ending June 1985.
Oak Ridge Associated Universities, Health Physics and Radiation Protection. A 5-week course ending August 1985.
U.S. Nuclear Regulatory Commission, Introduction Licensing Practices and Procedures. A 40-hour course ending in September 1985.

U.S. Nuclear Regulatory Commission, Radiation Protection Engineering. A 40-hour course ending in November 1987.
U.S. Nuclear Regulatory Commission, Gas and Oil Well Logging. A 40-hour course ending in November 1987.
U.S. Nuclear Regulatory Commission, Transportation of Radioactive Materials. A 40-hour course ending in August 1988.

Raymond G. Nelson - Completed 2 years towards B.S. in Geophysics, University of Utah.

U.S. Environmental Protection Agency, Basic Risk and Decision Making. A 16-hour course ending in September 1988.

Utah Division of Comprehensive Emergency Management, Fundamental Course for Radiological Monitors. An 8-hour course ending March 1989.

U.S. Environmental Protection Agency, Reducing Radon in Structures. A 24-hour course ending in March 1989.

U.S. Environmental Protection Agency, RCRA Ground Water Monitoring. A 24-hour course ending in April 1989.

U.S. Nuclear Regulatory Commission, Inspection Procedures. A 40-hour course ending in June 1989.

U.S. Nuclear Regulatory Commission, Transportation of Radioactive Materials. A 40-hour course ending in August 1989.

U.S. Department of Energy, First Responders WIPP Training. An 8-hour course ending August 1989.

U.S. Environmental Protection Agency, Hazardous Material Response for First Responders. A 40-hour course ending in September 1989.

Reference: Utah Program Statement, Section II.D "Low-Level Radioactive Waste Management," Section IV "Staffing, Supervision, and Equipment for a Low-Level Waste Program," and Appendix E.

ADMINISTRATION

27. Coverage, Amendments, Reciprocity.

The proposed amendment to the Utah agreement provides for the assumption of regulatory authority over land disposal of source, byproduct and special nuclear material received from other persons.

Reference: Proposed Amendment to Agreement, Section I.

III. STAFF CONCLUSION

Section 274d of the Atomic Energy Act of 1954, as amended, states:

"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 agreement."

The staff has concluded that the State of Utah meets the requirements of Section 274 of the Act. The State's statutes, regulations, personnel, licensing, inspection and administrative procedures are compatible with those of the Commission and adequate to protect the public health and safety with respect to the materials covered by the proposed amendment to the Utah agreement. Since the State is not seeking authority over uranium milling activities, subsection o. is not applicable to the proposed amendment to the Utah amended agreement.

DATED AT ROCKVILLE, MARYLAND, THIS

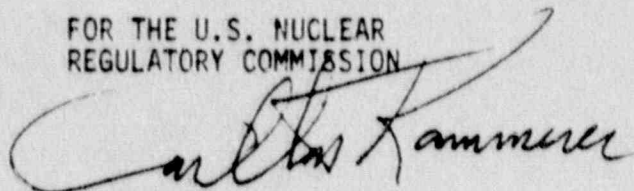
7th

DAY OF

November

198 .

FOR THE U.S. NUCLEAR
REGULATORY COMMISSION



Carlton Kammerer, Director
State, Local and Indian Tribe Programs
Office of Governmental and Public Affairs

AMENDMENT TO AGREEMENT
BETWEEN THE
UNITED STATES NUCLEAR REGULATORY COMMISSION
AND THE STATE OF UTAH
FOR DISCONTINUANCE OF CERTAIN COMMISSION REGULATORY AUTHORITY AND
RESPONSIBILITY WITHIN THE STATE PURSUANT TO
SECTION 274 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED

WHEREAS, the United States Nuclear Regulatory Commission (hereinafter referred to as the Commission) entered into an Agreement (hereinafter referred to as the Agreement of March 29, 1984) with the State of Utah under section 274 of the Atomic Energy Act of 1954, as amended (hereinafter referred to as the Act), which Agreement became effective on April 1, 1984, and provided for discontinuance of the regulatory authority of the Commission within the State under Chapters 6, 7, and 8 and Section 161 of the Act with respect to byproduct materials as defined in section 11e.(1) of the Act, source materials, and special nuclear materials in quantities not sufficient to form a critical mass; and

WHEREAS, the Governor of the State of Utah is authorized under Utah Code Annotated 26-1-29 to enter into this amendment to the Agreement of March 29, 1984, between the Commission and the State of Utah; and

WHEREAS, the Governor of the State of Utah has requested this amendment in accordance with section 274 of the Act by certifying on (date to be inserted) that the State of Utah has a program for the control of radiation hazards adequate to protect the public health and safety with respect to the land disposal within the State of source, byproduct and special nuclear material received from other persons and that the State desires to assume regulatory responsibility for such materials; and

WHEREAS, The Commission found on (date to be inserted), that the program for regulation of materials covered by this amendment is in accordance with the requirements of the Act and in all other respects compatible with the Commission's program for the regulation of such materials and is adequate to protect public health and safety; and

WHEREAS, the State and the Commission recognize the desirability and importance of cooperation between the Commission and the State in the formulation of standards for protection against hazards of radiation and in assuring that the State and Commission programs for protection against hazards of radiation will be coordinated and compatible; and

WHEREAS, this amendment to the Agreement of March 29, 1989, is entered into pursuant to the provisions of the Atomic Energy Act of 1954, as amended.

NOW, THEREFORE, it is hereby agreed between the Commission and the Governor of the State, acting on behalf of the State, as follows:

Section 1. Article I of the Agreement of March 29, 1984, is amended by deleting "and" at the end of paragraph B., by adding ";and," after the words "critical mass" in paragraph C., and by inserting the following new paragraph immediately after paragraph C.:

D. The land disposal of source, byproduct and special nuclear material received from other persons.

Section 2. Article II of the Agreement of March 29, 1984, is amended by deleting paragraph E. and by redesignating paragraph F. as paragraph E.

This amendment shall become effective on (date to be inserted), and shall remain in effect unless and until such time as it is terminated pursuant to Article VIII of the Agreement of March 29, 1984.

Done at Salt Lake City, Utah, in triplicate, this _____ day of _____, 1989.

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION

Kenneth M. Carr,
Chairman

FOR THE STATE OF UTAH

Norman H. Bangenter,
Governor