



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

PDR

MAY 29 1981

WMUR:WM-49

MEMORANDUM FOR: John B. Martin, Director  
Division of Waste Management

FROM: Ross A. Scarano, Chief  
Uranium Recovery Licensing Branch

SUBJECT: STATUS REPORT - TECHNICAL ASSISTANCE TO STATE PROGRAMS (332141)

Throughout the past quarter, the WMUR staff has provided technical assistance to the Office of State Programs in connection with the preparation of "report cards" or status reports which have been sent to each Agreement State which has indicated an interest in entering into an amended agreement with the NRC covering the regulation of uranium recovery licensing activity. Such amended agreements would, according to Section 274 of the Atomic Energy Act, as amended, become effective on November 8, 1981. The purpose of the report cards is to inform the State officials of what progress has been made and, more importantly, of what steps still need to be taken before an amended agreement can become effective. These attached status reports include detailed reviews of the State's legislation and regulations, staff resource levels, and licensing practices.

Ross A. Scarano, Chief  
Uranium Recovery Licensing Branch

Attached Status Rpts:

DCS # 81 03261157  
# 81 02260005  
# 81 0300094  
# 81 02260014  
# 81 03261152  
# 81 03261149  
# 81 03110085



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OFFICE OF THE  
CHAIRMAN

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

March 16, 1981

*R. Seacrow NMSS  
which did not  
concur in this  
letter.  
rec'd 3/18*

The Honorable Robert F. List  
Governor of Nevada  
Carson City, Nevada 89701

Dear Governor List:

On July 1, 1972, Nevada became an Agreement State under Section 274 of the Atomic Energy Act of 1954, as amended. Under the provisions of this Act, Nevada assumed, under agreement with the AEC (now NRC), certain regulatory authority over the use of reactor produced isotopes, the source materials uranium and thorium, and small quantities of special nuclear materials.

Under Section 274 of the Atomic Energy Act as amended by the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), Agreement States can continue to regulate uranium mills and mill tailings after November 8, 1981, by entering into an amended agreement with the NRC. In UMTRCA, the Congress also provided for the first time, funds for grants to States to assist them in preparing their revised regulatory program. Nevada applied for and received a grant of \$14,100 under that program, thereby indicating the State's interest in pursuing this additional regulatory authority.

For some time, the NRC staff has been working with Dr. Ralph DiSibio, Director, Nevada Department of Human Resources, and his staff so that the amended agreement process may proceed smoothly. The purpose of this letter is to acknowledge the efforts of Dr. DiSibio and his staff and to identify remaining actions which Nevada must accomplish for a timely amended agreement.

To execute the amendment, the Commission must find not only that the State uranium milling regulatory program provides adequate protection of the public health and safety and is generally compatible with the Commission's program of regulation, but also that the State has adopted standards for the protection of the public health, safety and the environment from radiation hazards associated with uranium mill byproduct material, which are equivalent to, or more stringent than, those of the Commission.

In response to our request for a statement of continuing interest to seek an amendment to the agreement, Dr. DiSibio supplied us in August with copies of legislation and proposed legislation authorizing regulation of mills and implementing regulations. These have been evaluated against criteria (Enclosure 1) developed for this purpose with Agreement State input.

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The only deficiency we find in the legislation submitted is the lack of a provision for transfer of funds for long-term surveillance and maintenance to the Federal Government where the State elects not to take title to the land (Criterion 29c). Our comments on the regulations are contained in Enclosure 2.

Because Nevada does not have an active mill nor an imminent likelihood of an application, we understand that staffing to handle mill licensing and regulation has been deferred.

We cannot, however, complete a finding regarding Nevada's readiness for an amendment to its agreement unless all criteria have been met, including those for staffing. We suggest, therefore, that Nevada continue to work to put into place the necessary statutory and regulatory framework and define its organizational relationships, staff requirements and procedures.

In order that all parties can be aware of Nevada's intention to regulate mills and mill tailings in the event a mill is proposed in the State, we propose that if all criteria are met except for staffing, the following statement replace the effective date statement at the end of the enclosed proposed model amendment (Enclosure 3).

This amendment to the Agreement shall become effective upon certification by the Governor to the Commission that the personnel meeting the specifications in the State's submissions dated \_\_\_\_\_ have entered on duty with the State and upon a subsequent finding by the Commission that these personnel meet the criteria and that the State program continues to meet the criteria.

We presume that the State will reliably know of forthcoming applications, will obtain the necessary staff and then request full implementation of the agreement.

While, in our opinion, Nevada has done much of the work necessary to the amendment, items outlined above need to be set forth. It will be mutually helpful to receive a timetable as early as possible outlining Nevada's actions to resolve all issues.

In this timetable, we suggest a target date of July 1, 1981 for formal submission by Nevada of the application for amendment.

The Honorable Robert F. List

- 3 -

We will continue to work with your staff toward an amended agreement.  
If you have any questions, please have your staff contact Mr. G. Wayne  
Kerr, Director of NRC's Office of State Program. at 301/492-8170.

Sincerely,

Original Signed By  
Joseph M. Hendrie

Joseph M. Hendrie  
Chairman

Enclosures:  
As stated

bcc: Ralph DiSibio, Nevada, w/encl.  
John Vaden, Nevada w/encl.

Distribution:

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*[Signature]*

C/R NOTE: Treated as Chairman's Correspondence  
REF: CR-81-032

SECY C/R  
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3/13/81

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January 29, 1981

The Honorable Bruce King  
Governor of New Mexico  
Santa Fe, New Mexico 87503

Dear Governor King:

On May 1, 1974, New Mexico became an Agreement State under Section 274 of the Atomic Energy Act of 1954. Under the provisions of this Act, New Mexico assumed, under agreement with the AEC (now NRC), certain regulatory authority over the use of reactor-produced isotopes, the source materials uranium and thorium, and small quantities of special nuclear materials.

Under Section 274 of the Atomic Energy Act as amended by the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), Agreement States can continue to regulate uranium mills and mill tailings after November 8, 1981, by entering into an amended agreement with the NRC. In UMTRCA, the Congress also provided for the first time, funds for grants to States to assist them in preparing their revised regulatory program. New Mexico applied for and received a grant of \$133,900 under that program, thereby indicating the State's interest in pursuing this additional regulatory authority.

For some time, the NRC staff has been working with Mr. Thomas E. Baca, Director, Environmental Improvement Division of the Department of Health & Environment, and his staff so that the amended agreement process may proceed smoothly. The purpose of this letter is to acknowledge the efforts of Mr. Baca and his staff and to identify remaining actions which New Mexico must accomplish for a timely amended agreement.

As a result of information exchanged between the NRC and New Mexico, in July, 1980, we provided Mr. Baca with our initial assessment of the readiness of New Mexico for an amended agreement to regulate uranium mills and tailings. Criteria for this purpose have been developed with Agreement State input and State comments were factored in when consistent with NRC rules and policies (Enclosure 1). Additional information was provided by Mr. Baca which we have evaluated. The results of this evaluation are discussed in Enclosure 2 to this letter. I would like to highlight two of the actions still needed:

1. New Mexico has not yet promulgated complete regulations to comply with UMTRCA. This is a prime requisite for an amended agreement.

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The Honorable Bruce King

- 2 -

2. Prompt action in advance of the amended agreement, as required by the UMTRCA and noted in previous NRC correspondence with the State, should be taken by New Mexico to develop upgraded tailings management programs that meet UMTRCA requirements at existing mill sites.

To execute the amendment, the Commission must find not only that the State uranium milling regulatory program provides adequate protection of the public health and safety and is generally compatible with the Commission's program of regulation, but also that the State has adopted standards for the protection of the public health, safety and the environment from radiation hazards associated with uranium mill byproduct material, which are equivalent to, or more stringent than, those of the Commission. It will be mutually helpful to receive a timetable as early as possible outlining New Mexico's actions to resolve all the issues discussed in Enclosure 2. In this timetable, we suggest a target date of August 1, 1981, for formal submission by New Mexico of the application for amendment.

While, in our opinion, New Mexico has taken steps toward compliance with UMTRCA, more needs to be accomplished before an amended agreement can be reached. We will continue to work closely with your staff towards this end. If you have any questions, please have your staff contact Mr. G. W. Kerr, Director of NRC's Office of State Programs.

Sincerely,

Original Signed By  
John F. Ahearne

John F. Ahearne  
Chairman

Enclosures:  
As stated

C/R NOTE: Circulated as Chairman's  
correspondence 1/23/80.  
Ref. CR-81-009.

cc: T. Baca, New Mexico w/encls.  
T. Wolff, New Mexico w/encls.

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EDC R/F

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## NEW MEXICO

### Regulations

The New Mexico regulations do not cover all of the points in Appendix A, to 10 CFR 40 and 150.31(b) (which constitute minimum national standards concerning technical, financial and institutional control aspects of uranium mill tailings disposal under Atomic Energy Act (AEA) Sec. 274.o(2), as amended). While there are some limited technical requirements in the State regulations, (for example, §§ 3-300 K and L and Part 12), 10 CFR 40 Appendix A, Introduction, and Criteria 1-9 and 12 are not covered. Long-term funding (Criterion 10) and land ownership transfer requirements (Criterion 11) are addressed in the regulations; comments on these sections of the New Mexico regulations are provided in later parts of this enclosure.

Also, with regard to regulation development, the State must develop a program for implementation of U. S. EPA fuel cycle radiation protection standards (40 CFR 190) at mills in addition to regulations to be developed under Section 274.o(2).

In connection with developing regulations, the State should recognize that Uranium Mill Tailings Radiation Control Act of 1978, as amended (UMTRCA) states that duplication of proceedings conducted by the Commission is not necessary (last sentence of 274.o of AEA). Since the Commission developed the substantive regulations (45 FR 65521) on uranium mills through a full and public rulemaking proceeding (NUREG-0706), the State may wish to incorporate the record developed by the NRC as a part of any rulemaking that may be necessary under State law.

It is also noted that UMTRCA requires that Agreement States have, as of November 1981, regulations which are equivalent to the extent practicable, or more stringent than Commission regulations on uranium milling (10 CFR 150.31(b)(2)). The Commission considers that its recently promulgated regulations are practicable to implement in Agreement States as they are based upon the analysis in the final GEIS\* which addressed operations in both Agreement and Non-Agreement States. The Commission regulations constitute minimum national standards.

### Immediate Action at Existing Mills

A letter from NRC Chairman Ahearne to Governor King dated June 12, 1980, noted there is need to take prompt action to upgrade tailings management practices at existing uranium mills. While the full upgrading of New Mexico's regulatory program, including issuance of the regulations discussed above, is not required until November of 1981, the State must meet upgraded requirements of the UMTRCA to the maximum extent practicable, in the interim as required by UMTRCA, Section 204(h)(1). During the interim period (before November 1981) 10 CFR 150.31(a) requires Agreement States to implement NRC regulations to the maximum extent practicable as stated in the FR Notice issuing the regulations (see 45 FR 65530). The Commission considers it practicable and necessary for Agreement States' mill operators:

\*GEIS - Final Generic Environmental Impact Statement on Uranium Milling (NUREG-0706).

- (a) to begin now (as opposed to after November 1981) to develop programs meeting the regulations;
- (b) to submit such programs to the Agreement States on the same schedule as non-Agreement State operations;
- (c) and to immediately implement steps to deal with presently occurring impacts such as blowing of tailings and uncontrolled seepage.

The need to take prompt action at existing mills has been raised in correspondence numerous times by the NRC staff over the past several years. As a result of conversations with the NMEID staff and our examination of materials in State files during the periodic review of the State's program, it cannot be explicitly determined if NMEID has taken documented steps to require existing mill operators to develop specific tailings management programs.

#### Long-Term Surveillance and Monitoring

We recognize that New Mexico legislation and regulations contain provisions for a "Continued Care Fund"...for use in remedying and preventing situations which may be harmful to the health, safety, welfare or property of the people, involving abandoned wastes or inoperative facilities which are or were operated by depositors to the continued-care fund." It is our understanding that this is a fund which will also cover the costs associated with long-term monitoring.

It appears that the total amount of each operator's deposit to the fund is more than sufficient at the present time to satisfy the escalating fee requirement established by the NRC in Criterion 10 of NRC regulations. However, in view of the differing structures of the Federal and State long-term monitoring fund there is the possibility that at some time in the future the fixed amount specified in the New Mexico Regulation (\$1,000,000) may no longer be sufficient.

Existing New Mexico legislation or regulations nowhere require efforts to eliminate the need for active, ongoing maintenance of sites over the long term. This is a fundamental requirement of 10 CFR 40, App. A Criteria 1 and 12 and is consistent with Sec. 161.x.(2) (A) of AEA as amended. While there may be some uncertainty over the degree of ongoing surveillance that will be needed over the long-term, the clear thrust of legislation and regulations must be to require elimination of active maintenance (see also 12.3.11 and 14.3 of NUREG-0706.) This concept should be stated explicitly in State regulations so that the existence of a "Continued Care" fund does not encourage programs which need ongoing active maintenance.



### Reservations of Authority to the NRC

With regard to land ownership, the State regulations appear to have adequate provisions for requiring the licensee to obtain title to disposal sites for eventual transfer to the State or Federal government. Section 3-300 J(2), however, contains reservations of authority to the State, regarding such transfer. These authorities are reserved to the Commission by section 83(a) of the Atomic Energy Act, as amended. The determination as to whether title transfer to the government is necessary to protect the public health and safety or welfare or to minimize or eliminate danger to life or property can only be made by the Commission. -

The final determination that all decommissioning, decontamination and reclamation requirements of the Commission have been met prior to license termination and land transfer is to be made by the Commission (10 CFR 150.15a and Atomic Energy Act, Sec. 83.c). Sections 12-300 E and J appear to conflict with this reserved authority.

In connection with land ownership transfer requirements, it should be noted that the only areas which can be committed to long term government custody are the tailings disposal sites and not areas such as evaporation ponds or areas contaminated from active milling operations. These areas must be decontaminated for unrestricted use. (See Criterion 9 of Appendix A, to 10 CFR 40.) This matter is raised at this time so that it might be clarified in the revision to State regulations which should be done to meet Atomic Energy Act Sec. 274.d.

### Written Environmental Impact Assessments

We are aware that New Mexico prepared a written assessment in the recent Gulf case which satisfied the provisions of Section 274.o(3)(C) of the Atomic Energy Act. There appears to be no requirement, however, in State statutes for a written environmental analysis to be prepared by the State. Such assessments should be prepared for all licensing actions having significant impact on the human environment, i.e., new licensing actions, renewals, and major amendments. All aspects of the assessment, required by AEA 274.o(3)(C) (including those conducted by other State agencies, such as the Water Pollution Control Bureau) must be included in the documented analysis.

It is considered necessary that this documented assessment be made available for public review and comment for some reasonable amount of time before proceedings (including hearings) on issuance of the license begin. (10 CFR 150.31(b)(3)(i)(A)).

### Organizational Relationships Within States

Although a lead agency has been designated as being primarily responsible for the preparation of the independent assessment and other agencies which will participate in the review are identified, the time sequence

in which the other groups become involved is not clear. For example, it appears that both the Water Pollution Control Bureau and the State Engineer have independent regulatory responsibility over certain aspects of an operation. Since neither of these organizations are under the supervision of the Radiation Protection Bureau Chief, coordination of the overall assessment needs to be clarified in accordance with Criterion 33(c).

The New Mexico response dated September 8, 1980, identified the need for outside consulting services in a number of areas. With the exception of the \$50,000 appropriation for radionuclide analyses, the New Mexico response of September 8, 1980, does not address funding costs incurred as a result of the use of consultants or how such costs are considered during the process of budget preparation. The response does not reveal if the utilization of these consultants has been approved or budgeted. An estimate of each consultant's time for a particular mill licensing action should be identified. (Criterion 33 a through d).

#### Staff Resources

Information contained in the State September 8, 1980, response indicates that the staff will rely heavily upon the Water Pollution Control Bureau personnel for experience in hydrology. This does not represent a problem; however, it must be documented that such qualified personnel are available on a routine basis for assisting in preparation of the lead agency's assessment and other licensing activities, that is, in person years the amount of their time which can and will be devoted to uranium recovery licensing and regulation, must be documented (Criterion 34(c)). It is recommended that since these other Bureaus and Departments have their own responsibilities for mill licensing projects, the Radiation Protection Bureau initiate formal written agreements, e.g., Memorandum of Understanding, to solidify the coordination and timing of the lead agency assessment. Such agreements as well as budget documents can be the mechanisms used to demonstrate the commitment of other agency personnel.

R. L. Carson  
ASMS

FEB 10 1981

The Honorable John Spellman  
Governor of Washington  
Olympia, Washington 98504

Dear Governor Spellman:

On December 31, 1966, Washington became an Agreement State under Section 274 of the Atomic Energy Act of 1954, as amended. Under the provisions of this Act, Washington assumed, under agreement with the AEC (now NRC), certain regulatory authority over the use of reactor produced isotopes, the source materials uranium and thorium, and small quantities of special nuclear materials.

Under Section 274 of the Atomic Energy Act as amended by the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), Agreement States can continue to regulate uranium mills and mill tailings after November 8, 1981, by entering into an amended agreement with the NRC. In UMTRCA, the Congress also provided for the first time, funds for grants to States to assist them in preparing their revised regulatory program. Washington applied for and received a grant of \$30,000 under that program, thereby indicating the State's interest in pursuing this additional regulatory authority.

For some time, the NRC staff has been working with Mr. Gerald E. Thomas, Acting Secretary, Department of Social and Health Services, and his staff so that the amended agreement process may proceed smoothly. The purpose of this letter is to acknowledge the efforts of Mr. Thomas and his staff and to identify remaining actions which Washington must accomplish for a timely amended agreement.

As a result of information exchanged between the NRC and Washington, in July, 1980, we provided the Department with our initial assessment of the readiness of Washington for an amended agreement to regulate uranium mills and tailings. Criteria for this purpose have been developed with Agreement State input and State comments were factored in when consistent with NRC rules and policies (Enclosure 1). Additional information was provided by the Department which we have evaluated. The results of this evaluation are discussed in Enclosure 2 to this letter and I would like to highlight specific actions still needed:

1. Revisions to Washington's regulations will be needed to comply with UMTRCA. This is a prime requisite for an amended agreement.
2. Prompt action in advance of the amended agreement as required by the UMTRCA should be taken by Washington to develop upgraded tailings management programs that meet UMTRCA requirements at existing mill sites.

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BY NAME	Kucik					
DATE	1/28/81	81030	30094			

## ENCLOSURE 2

### WASHINGTON

#### Written Assessments

The State Environmental Policy Act and implementing guidelines appear to contain adequate authority and requirements for a written analysis of the impact of a proposed activity which would satisfy the requirements of §274o(3)(C) of the Atomic Energy Act (AEA), as amended (§WAC 197-10-100, 405, 420, 425). It is understood that the State guidelines permit preparation of the EIS by persons outside the lead agency under the direction of a responsible official within the lead agency. In fact, it is noted that the applicant was listed as a contributor to the recent draft statement prepared on the Dawn project. This has the appearances of conflict of interest. The State must do an independent assessment of each of the environmental impact areas delineated in §274o(3)(C) of the AEA; assessments by applicants or operators cannot be accepted without independent review by the State. It should be demonstrated how independence in the State assessment is assured. (10 CFR §150.31(b)(3)(iii)). The written assessments required by State regulations appear to satisfy the requirement of Section 274o(3)(C)(iv) with the exception that there is no provision for addressing decontamination.

#### Regulations

It is noted that the Uranium Mill Tailings Radiation Control Act (UMTRCA) requires that Agreement States have, as of November 1981, regulations which are equivalent to the extent practicable, or more stringent than Commission regulations on uranium milling. The Commission considers that its recently promulgated regulations are practicable to implement in Agreement States as they are based upon the analysis in the final GEIS which addressed operations in both Agreement and non-Agreement States. The Commission regulations constitute minimum national standards (10 CFR §150.31).

In connection with this, the staff has reviewed Washington's regulations, including those which were scheduled for adoption on November 24, 1980. Although the State's regulations address many of the significant issues, they do not adequately cover all of the points in Appendix A to 10 CFR 40 and 10 CFR §150.31(b) (which, as indicated above, constitute minimum national standards concerning technical, financial and institutional control aspects of uranium mill tailings disposal). Comments on the specific provisions of the State's regulations in terms of their equivalency to minimum national standards are contained in later sections of this enclosure.

In connection with developing these regulations, the State should recognize that the UMTRCA states that duplication of proceedings conducted by the Commission is not necessary (last sentence of Section 274o of the AEA, as amended). Since the Commission developed the substantive regulations (45 FR 65521) on uranium mills through a full and public rulemaking proceeding (NUREG-0706), the State may wish to incorporate the record developed by the NRC as a part of any rulemaking that may be necessary under State law. In fact, the simplest approach might be for the State to adopt language identical to that contained in the NRC regulations.



3. In our evaluation of the readiness of Washington, additional staffing will be needed by Washington to meet upgraded requirements of UMTRCA. We will give the same weight to resource commitments as is given to statutory and regulatory enactments.

I wish to acknowledge and commend the State's efforts to expeditiously revise and conform its regulations to meet the requirements of UMTRCA. These past revisions were made based upon earlier draft NRC regulations. Final regulations for uranium mills were issued by NRC on October 3, 1980, the reporting requirements of which became effective January 5, 1981. Many, although not all, of our comments on the Washington regulations reflect differences between the draft and final NRC regulations. We will be pleased to meet with your staff to discuss these differences and to explain our other comments.

To execute the amendment, the Commission must find not only that the State uranium milling regulatory program provides adequate protection of the public health and safety and is generally compatible with the Commission's program of regulation, but also that the State has adopted standards for the protection of the public health, safety and the environment from radiation hazards associated with uranium mill byproduct material, which are equivalent to, or more stringent than, those of the Commission. It will be mutually helpful to receive a timetable as early as possible outlining Washington's actions to resolve all the issues discussed in Enclosure 2. In this timetable, we suggest a target date of August 1, 1981, for formal submission by Washington of the application for amendment.

While, in our opinion, Washington has taken many steps toward compliance with UMTRCA, more needs to be accomplished before an amended agreement can be reached. We will continue to work closely with your staff towards this end. If you have any questions, please have your staff contact Mr. G. W. Kerr, Director of NRC's Office of State Programs.

Sincerely,

*/s/*  
John F. Ahearne  
Chairman

Enclosures:  
As Stated

cc: G. Thomas, Washington w/encls.  
J. Beare, Washington w/encls.

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D. Kunihiro, R-V  
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SA	1/17/81	1/17/81	1/17/81	1/2/81	1/2/81	1/7/81	1/ /81
SA	1/17/81	1/17/81	1/17/81	1/2/81	1/2/81	1/7/81	1/ /81

A detailed review of the Washington regulations is attached.

Immediate Action at Existing Mills

During the interim period (before November 1981) §204(h)(1) of UMTRCA, as amended requires Agreement States to implement NRC regulations to the maximum extent practicable, as stated in the FR Notice issuing the regulations (see 45 FR 65530). The Commission considers it practicable and necessary for Agreement States' mill operators:

- (a) to begin now (as opposed to after November 1981) to develop programs meeting the regulations;
- (b) to submit such programs to the Agreement States on the same schedule as non-Agreement State operations;
- (c) and to immediately implement steps to deal with presently occurring impacts such as blowing of tailings and uncontrolled seepage.

By nature of its participation in the environmental assessment conducted in connection with the Dawn Mining Company license renewal, the NRC staff is aware that some steps are being taken to upgrade operations at this facility. However, at the present time, we are unaware of any steps which Washington has taken in this matter pertaining to the Western Nuclear, Sherwood facility.

Staff Resources and Organizational Relationships

The Washington response indicates that 2.55 staff years' effort is currently dedicated to uranium mill licensing activity. As indicated, this is appropriate for handling a major license renewal; however, it does not take into account the other miscellaneous licensing activities referred to in Criterion 34(a) (Enclosure 1). The specific agreements which document that such services are, in fact, available should be provided. The experience of the individuals who contribute to the 2.55 staff years of effort should also be provided in order for NRC to determine whether these, supplemented by the consultants and other contributing agency personnel referred to, constitute an adequately qualified staff.

The Washington response further indicates that the State understands and acknowledges the requirements of Criterion 33 (a-c). The response states that Department of Social and Health Services (DSHS) staff have begun developing interagency agreements with other State organizations. Charts indicating which other State organizations will contribute to an environmental assessment (presumably those offices with which DSHS is developing agreements) should be provided. A discussion of the area and level of each group's involvement in a review and their corresponding contribution to an assessment would be helpful in understanding State compliance with Criterion 33a. The State response should also include a discussion of contributions

from groups within the DSHS other than the Radiation Control Section. The arrangements for making such resources available should be documented, confirmed by budgetary cost centers, and should clearly indicate the lines of communication and administrative control exercised by the lead agency in order to ensure that the required independent environmental appraisal will be completed.

With respect to consultants, we need to know the degree to which the State will rely on consultants, identification of those substantive areas for which consultants will be contracted, an indication of the qualification requirements for such consultants, and the budget planning that will be provided to assure these consultative services will be available on a routine and continuing basis.

#### Inspections

In Mr. Strong's September 24, 1980 letter to Mr. Kerr, it was stated that inspections of uranium mills will be performed by doing one quarter of a complete inspection four times a year (p.3, Item VI.C.1). We see no problem with this inspection plan provided it is clear that at the end of a year a complete inspection has been performed.

#### Public Hearings

Opportunity for public hearing must be provided regardless of environmental significance. In addition, the scope of the hearing must extend to the question of license issuance, not merely to the adequacy of the reclamation, disposal, decommissioning and decontamination plan (Section 274c.(3)(A)(i), AEA).

ATTACHMENT

DETAILED REVIEW OF WASHINGTON REGULATIONS  
IN TERMS OF APPENDIX A, 10 CFR 40

Our review was conducted by comparing the Washington regulations with Appendix A, 10 CFR 40. A mark-up of Appendix A is included and each point which the State regulations must cover in an equivalent manner has been annotated ("A", "A-1", "B-1", etc.). The results of our review are summarized in the following table where we indicate those points that were adequately covered or not covered in the present Washington regulations. Following the table, we have provided clarifying comments.

ANNOTATED POINTS OF APPENDIX A

<u>Section</u>	<u>Not Covered Adequately</u>	<u>Covered</u>
Introduction	B, C, D	A 402-52-005 <sup>+</sup> -010(5)
Criterion 1	B, C, A-2, A-3	A-1 -015(1) D -020
Criterion 2	A*	
Criterion 3	B, C	A,* D -015(3)
Criterion 4	C-1,* C-2, C-3, E, F, G-1, G-2, G-3, G-4, G-5, (G*), H,* I,* J	A -015(2)(a) B -015(2)(e) D -020(2) K* -015(3) L* -015(5)
Criterion 5	A,* B, C-2, C-3, E-2, E-3, E-4, G, H, I, J, K-1, K-2, K-3, K-4, K-5, K-6	C-1 -015(6)(2) D* -015(6)(b) E-1 -015(6)(b) F -015(6)(c) L -015(6)(d)
Criterion 6	B, E-1, E-2, F*	A, C, D -020(2)

+ Section of the Washington regulations where the identified item from NRC regulations is covered. Unless otherwise stated, the citation of Washington regulations is in abbreviated form and applies to Section WAC 402-52 (for example, Section WAC 402-52-010(1) is cited as -010(1).)

\* Clarifying comments are made on this item following the table.



<u>Section</u>	<u>Not Covered Adequately</u>	<u>Covered</u>
Criterion 7.		A -015(7) B -010(6)
Criterion 8	B, C-1, C-2, C-3, C-4, C-5, C-6, (C*), E	A -025(1), -010(7) -010(4) D -010(7) F -025(3)
Criterion 8a	A*, B	
Criterion 9	B-2, B-3, C,* D, E, F,* G,* H, I, K	A-1 402-22-070(6)(b) A-2 402-22-070(6)(b) B-1 402-22-070(6)(b) J* 402-22-070(6)(b)
Criterion 10*	A, B, C	
Criterion 11*	A,* D, E	B 402-22-070(6)(c) C 402-22-070(6)(c)
Criterion 12	B, C	A 402-52-020

CLARIFYING COMMENTSIntroduction:

None

Criterion 1:

None

Criterion 2:

1. WAC-402-52-015 needs to make a stronger statement regarding the non-proliferation of small waste disposal sites. The present state requirement is only that consideration be given to the utilization of existing sites. The requirement should indicate that wastes from small operations shall be disposed of at existing sites unless the impacts of such offsite disposal clearly outweigh the benefits or demonstrate it to be impracticable.

\* Clarifying comments are made on this item following the table.

Criterion 3:

1. Item\*\* A - See Comment No. 4, under "Other Comments," below.

Criterion 4:

1. Items C-1 and H -- WAC 402-52-020(2) (first part) addresses this generally but does not clearly indicate gradual slopes and contouring are necessary primarily for erosion control.
2. WAC 402-51-010(6), -015(d), -020(4) refer to use of drainage or diversion ditches near impoundments; it must be explicitly stated that such structures are not acceptable for long-term diversion of waters unless small upstream drainages are involved and it can be clearly shown that they will not require active maintenance.
3. WAC 402-52-015(d) calls for upstream catchments to be provided. This conflicts with item A and should be deleted.
4. Item G -- WAC-402-52-020(5) does not cover all points under item G. Furthermore, it wrongly suggests that some materials (such as cement and petroleum products) which would not provide sufficient long-term stabilization might be acceptable.
5. Item I -- WAC-402-52-020(3) should be extended to cover those areas on the impoundment which may collect some direct precipitation runoff and drainage.
6. Items K and L - See Comment No. 4, under "Other Comments," below.

Criterion 5:

1. Item A -- WAC 402-52-015(2)(c) inappropriately suggests that seepage can be controlled by locating impoundments away from water courses. WAC 402-52-015(6) has the appropriate wording.
2. Item D -- WAC 402-52-015(6)(b) should include a requirement for consideration of conservation.

\*\* Where mentioned, "item" refers to those items in NRC regulations identified in Attachment.

Criterion 6:

1. Item F -- WAC 402-52-015(2) should be revised to indicate that cover materials of elevated activity are significant only near the surface as written in NRC regulations.

Criterion 8:

1. Item C -- Sections WAC 402-52-025(2) and (3) generally treat the subject of yellowcake stack control. The detail in item C is not provided, however.

Criterion 8a:

1. Item A -- The "regular" inspection required in WAC-402-52-010(6) should be revised to specifically require daily inspections.

Criterion 9:

1. Item A-1 -- Although WAC-402-22-070(6)(b) requires a bond before issuance of a license for a new operation, the requirement is only for receipt prior to issuance of license renewal for existing sites. This is not acceptable as indicated above, under Immediate Action at Existing Sites. It is necessary for mill operators to develop programs meeting the regulations now.
2. Item C -- Although the Washington regulations require a pay-as-you-go fund for long-term site control, the minimum total charge should be covered by the surety amount from the beginning of operations.
3. Items F and G -- Although there is a provision in WAC-402-22-070(6)(b) for review and adjustment of the required bond amount by the State regulatory agency, the specific factors which will be considered in this review and, therefore, which could possibly lead to a revision in the required bond amount, should be addressed.
4. The ability to exempt licensees, new section RCW 70.110 §13, is contrary to 10 CFR 40 Appendix A, Criterion 9 which requires surety for each mill operator before operations begin.

Criterion 10:

1. In view of the differing structures of the Federal and State long-term monitoring funds, there is the possibility that, at some time in the future the fixed maximum amount specified in the Washington regulations (\$1,000,000) may not be sufficient.

2. Although the Washington regulation (WAC-402-52-020) indicates that no active maintenance can be necessary to preserve isolation, this concept should be explicitly stated where the "Radiation Perpetual Maintenance Fund" is discussed so that the existence of this fund as entitled does not encourage programs which need on-going active maintenance.

Criterion 11:

1. Section RCW 70.121.060 appears to indicate that the State has some discretion concerning the ability of the operator to transfer title. This judgement is reserved by Section 83(b) of the Atomic Energy Act to the Commission.
2. Item A -- The section of the requirement for the license to contain terms to provide for ownership transfer applicable to existing licensees should apply prior to renewal of the license, as stated in WAC-402-22-070(6)(c), and/or prior to termination of the license.
3. New Section WAC 402-22-070(6)(c) provides that the owner, prior to issuance of the license, must agree to transfer title to tailings disposal lands upon license termination. It does not require transfer as a condition precedent to license termination. Under present wording it is at least theoretically possible for the license to terminate and the owner to thereafter breach his agreement to transfer title.
4. New Section WAC-402-22-070(6)(c). New Section WAC 70.110 Sec. 3(b). Exemption from these requirements should run only to lands owned by any Indian Tribe which are subject to a restriction against alienation imposed by the U.S. Exemption for all Indian-owned land is much too broad.

Other Comments:

1. It is not clear that WAC-402-52-015, "Proposed Tailing Disposal Facilities," provides that the requirements, considerations and objectives contained therein are applicable at existing sites as it must. In general, while the alternatives for tailings disposal are more limited at existing sites than at new facilities, evaluation of programs at existing mills must be done in terms of all of the Appendix A to 10 CFR 40 Criteria, except as specifically noted in Appendix A. As described in 45 FR 65524 "Existing Sites" and NUREG-0706 Section 12.4, the determination of the exact extent to which measures are taken to meet Appendix A Criteria at existing mills can only be determined on a site specific basis; general exclusions for existing sites as indicated by WAC-42-52-015 are inappropriate.



2. WAC-402-52-010(2), if kept in final regulations, should go further than it does to prohibit erosion of the tailings retention system and not just of the tailings themselves.
3. WAC-402-52-010(9) should state that the Department cannot waive a requirement which is derived from NRC regulations which are minimum national standards.
4. The NRC staff will review amended Washington regulations to determine that the items identified in the above Table are fully covered in the amended regulations. However, in itemizing Appendix A Criteria as shown in Attachment 2, some of the "fine points" in the Appendix A Criteria are not brought out. The final wording of Appendix A Criteria was carefully worked out after considering numerous public comments on the draft criteria (see Appendix A to NUREG-0706). As a result, in revising its regulations, the State should carefully consider the wording of each of the Appendix A Criteria noted as "covered" in the Table, and where different words are used in State regulations to determine that it is not significant. An example of this is Item A of Criterion 3. The definition of below grade is not included in Washington regulations; this definition was added for clarification to NRC regulations following many comments on the matter in the draft NRC regulations.



OFFICE OF THE  
CHAIRMAN

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

*R. Deane, VMS*  
*File TEXAS*

January 29, 1981

The Honorable William P. Clements  
Governor of Texas  
Austin, Texas 78711

Dear Governor Clements:

- On March 1, 1963, Texas became an Agreement State under Section 274 of the Atomic Energy Act of 1954. Under the provisions of this Act, Texas assumed, under agreement with the AEC (now NRC), certain regulatory authority over the use of reactor produced isotopes, the source materials uranium and thorium, and small quantities of special nuclear materials.

Under Section 274 of the Atomic Energy Act as amended by the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), Agreement States can continue to regulate uranium mills and mill tailings after November 8, 1981, by entering into an amended agreement with the NRC. In UMTRCA, the Congress also provided for the first time, funds for grants to States to assist them in preparing their revised regulatory program. Texas applied for and received a grant of \$80,000 under that program, thereby indicating the State's interest in pursuing this additional regulatory authority.

For some time, the NRC staff has been working with Dr. Robert Bernstein, Commissioner, Texas Department of Health, and his staff so that the amended agreement process may proceed smoothly. The purpose of this letter is to acknowledge the efforts of Dr. Bernstein and his staff and to identify remaining actions which Texas must accomplish for a timely amended agreement.

As a result of information exchanged between the NRC and Texas, in July, 1980, we provided Dr. Bernstein with our initial assessment of the readiness of Texas for an amended agreement to regulate uranium mills and tailings. Criteria for this purpose have been developed with Agreement State input and State comments were factored in when consistent with NRC rules and policies (Enclosure 1). Additional information was provided by Dr. Bernstein which we have evaluated. The results of this evaluation are discussed in Enclosure 2 to this letter. I would like to highlight several of the actions still needed:

1. Texas has not yet promulgated enabling legislation and implementing regulations to comply with UMTRCA. This is a prime requisite for an amended agreement.
2. Prompt action in advance of the amended agreement as required by the UMTRCA should be taken by Texas to develop upgraded tailings management programs that meet UMTRCA requirements at existing mill sites.

8102260014

3. In our evaluation of the readiness of Texas, additional staffing will be needed by Texas to meet upgraded requirements of UMTRCA. ~~We will give the same weight to resource commitments as is given to statutory and regulatory enactments.~~

To execute the amendment, the Commission must find not only that the State uranium milling regulatory program provides adequate protection of the public health and safety and is generally compatible with the Commission's program of regulation, but also that the State has adopted standards for the protection of the public health, safety and the environment from radiation hazards associated with uranium mill byproduct material, which are equivalent to, or more stringent than, those of the Commission. It will be mutually helpful to receive a timetable as early as possible outlining Texas' actions to resolve all the issues discussed in Enclosure 2. In this timetable, we suggest a target date of August 1, 1981, for formal submission by Texas of the application for amendment.

While, in our opinion, Texas has taken some initial steps toward compliance with UMTRCA, there is much to be accomplished before an amended agreement can be reached. We will continue to work closely with your staff towards this end. If you have any questions, please have your staff contact Mr. G. W. Kerr, Director of NRC's Office of State Programs.

Sincerely,

Original Signed By  
John F. Ahearn

John F. Ahearn  
Chairman

Enclosures: As Stated.

cc: Dr. Bernstein, Texas w/encl.  
D. Lacker, Texas w/encl.

C/R NOTE: Circulated as Chairman's  
correspondence on 1/23/80.  
Ref. CR-81-009

SECY: C/R:gschuetze  
1/29/81

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RDoda w/encl.  
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SA RF

See previous file copy for IE correspondence.

OFFICE	SA <i>UE</i>	SA <i>h</i>	SP <i>h</i>	ELD	NMSS	EDO <i>h</i>
SURNAME	CGordon:meb	JLubenau	GWKey	<i>R. Forner by</i> <i>Phon. us legal obj.</i>	<i>J. Montague by R. Scarano</i> <i>R. Tele. and file changes</i>	
DATE	1/12/81	1/12/81	1/12/81	1/12/81	1/13/81	1/14/81

**National Advisory Committee on Occupational Safety and Health; Full Committee Meeting and Subgroup Meeting**

Notice is hereby given that the National Advisory Committee on Occupational Safety and Health (NACOSH) will meet on February 25-27, 1981 at the Frances Perkins Department of Labor Building, Room N4437, Third Street and Constitution Avenue, N.W., Washington, D.C. The meetings will begin at 9:00 a.m. the public is invited to attend.

The National Advisory Committee was established under Section 7(a) of the Occupational Safety and Health Act of 1970 (29 U.S.C. 655) to advise the Secretary of Labor and the Secretary of Health, Education and Welfare on matters relating to the administration of the Act.

Wednesday, February 25, 1981 will be devoted to Subgroup meetings. The Subgroups will discuss:

1. Reproductive Hazards.
2. Safety and Health Effects of New Energy Technologies.
3. Information Systems for NIOSH/OSHA Priority Setting.

The agenda for February 26 and 27 will include reports on OSHA and NIOSH activities, a discussion of repeat violations, and discussions of other safety and health matters relating to OSHA and NIOSH.

Written data or views concerning these agenda items may be submitted to the Division of Consumer Affairs. Such documents which are received before the scheduled meeting dates, preferably with 20 copies, will be presented to the Committee and included in the official record of the proceedings.

Anyone who wishes to make an oral presentation should notify the Division of Consumer Affairs before the meeting date. The request should include the amount of time desired, the capacity in which the person will appear and a brief outline of the content of the presentation. Oral presentations will be scheduled at the discretion of the chairman of the Committee to the extent which time permits.

For additional information contact Clarence Page, Division of Consumer Affairs, Occupational Safety and Health Administration, 3rd Street and Constitution Avenue, N.W., Rm. N3635, Washington, D.C. 20210. Telephone 202/523-8024.

Official records of the meetings will be available for public inspection at the Division of Consumer Affairs.

Signed at Washington, D.C., this 18th day of January 1981.

Eula Biingham,

Assistant Secretary of Labor.

(FR Doc. 81-253 Filed 1-22-81; 8:45 am)  
BILLING CODE 4510-25-41

**NUCLEAR REGULATORY COMMISSION**

**Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement**

AGENCY: U.S. Nuclear Regulatory Commission.

ACTION: Statement of Policy.

**SUMMARY:** The Nuclear Regulatory Commission has revised its statement of policy regarding criteria for guidance of States and NRC in discontinuance of NRC regulatory authority and assumption of regulatory authority by States through agreement. This action is necessary to make editorial changes to update the policy statement, to allow States to enter into agreements for low-level waste only, and to incorporate the provisions and requirements of the Uranium Mill Tailings Radiation Control Act of 1978. Adoption of this policy will allow interested States to enter into agreements with the NRC and regulate low-level waste sites only. Additionally, those States that meet the criteria for the regulation of uranium mills and tailings may exercise regulatory authority over these sources as provided by the Uranium Mill Tailings Radiation Control Act of 1978, as amended.

The revised statement of policy reflects the following principal changes:

1. Modification of Criterion 27 to allow a State to seek an agreement for the regulation of low-level waste as a separate category.

2. Inclusion of additional criteria for States wishing to continue regulating uranium and thorium processors and mill tailings after November 8, 1981.

3. Editorial and clarifying changes to make the statement current.

**DATES:** This policy statement is effective January 23, 1981.

**FOR FURTHER INFORMATION CONTACT:** John F. Kendig, Office of State Programs, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, telephone: 301-492-7787.

**SUPPLEMENTARY INFORMATION:**

1. These criteria were developed to implement a program, authorized by Pub. L. 85-373 which was enacted in the form of a new section to the Atomic Energy Act (Section 274) and approved by the President on September 23, 1959

and amended by Pub. L. 95-604 approved November 8, 1978. These criteria are intended to indicate factors which the Commission intends to consider in approving new or amended agreements. They are not intended to limit Commission discretion in viewing individual agreements or amendments. In accordance with these statutory provisions, when an agreement between a State and the NRC is effected, the Commission will discontinue its regulatory authority within that State over one or more of the following materials: byproduct material as defined in Section 11e(1) of the Act (radioisotopes), byproduct material as defined in Section 11e(2) of the Act (mill tailings or wastes), source material (uranium and thorium), special nuclear material (uranium 233, uranium 235 and plutonium) in quantities not sufficient to form a critical mass and permanent disposal of low-level waste containing one or more of the materials stated above but not including mill tailings.

2. An agreement may be effected between a State and NRC: (1) upon certification by the Governor 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 the State desires to assume regulatory responsibility for such materials; and (2) after a finding by the Commission that the State program is in accordance with the requirements of subsection c of section 274 and in all other respects compatible with the Commission's program for the regulation of such materials, and is adequate to protect the public health and safety with respect to the materials covered by the proposed agreement. It is also necessary that the State have enabling legislation authorizing its Governor to enter into such an agreement.

3. The original criteria were published on March 24, 1961 (26 FR 2537) after discussions with various State officials and other State representatives, to provide guidance and assistance to the States and the AEC (now NRC) in developing a regulatory program which would be compatible with that of the NRC. The criteria were circulated among States, Federal agencies, labor, and industry, and other interested groups for comment.

4. The criteria require that the State authority consider the total accumulated occupational radiation exposure of individuals. To facilitate such an approach, it is the view of the NRC that an overall radiation protection program is desirable. The maximum scope of



each State's radiation protection program is not, however, a necessary or appropriate subject for coverage in the criteria. Consequently, the criteria are silent on the question of whether a State should have a total regulatory program covering all sources of radiation, including those not subject to control by the NRC under the Atomic Energy Act, such as x-rays, radium, accelerators, etc.

5. These revised criteria provide for entering into an agreement for a separate category of materials, namely, low-level waste material in permanent disposal facilities. They also provide new criteria for States wishing to continue regulating uranium and thorium processing and the wastes resulting therefrom under the provisions of the Uranium Mill Tailings Radiation Control Act of 1978 (Pub. L. 95-604) after November 8, 1981. The revised criteria also contain a number of editorial changes such as changing AEC to NRC where appropriate to conform to present practice and law.

6. Inquiries about details of the criteria or other aspects of the NRC Federal-State Relations Program should be addressed to the Office of State Programs, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

#### Criteria<sup>1</sup>

##### Objectives

1. *Protection.* A State regulatory program shall be designed to protect the health and safety of the people against radiation hazards.

##### Radiation Protection Standards<sup>2</sup>

2. *Standards.* The State regulatory program shall adopt a set of standards for protection against radiation, which shall apply to byproduct, source and special nuclear materials in quantities not sufficient to form a critical mass.

3. *Uniformity in Radiation Standards.* It is important to strive for uniformity in technical definitions and terminology, particularly as related to such things as units of measurement and radiation dose. There shall be uniformity on maximum permissible doses and levels of radiation and concentrations of radioactivity, as fixed by Part 20 of the NRC regulations based on officially approved radiation protection guides.

4. *Total Occupational Radiation Exposure.* The regulatory authority shall consider the total occupational radiation

exposure of individuals, including that from sources which are not regulated by it.

5. *Surveys, Monitoring.* Appropriate surveys and personnel monitoring under the close supervision of technically competent people are essential in achieving radiological protection and shall be made in determining compliance with safety regulations.

6. *Labels, Signs, Symbols.* It is desirable to achieve uniformity in labels, signs and symbols, and the posting thereof. However, it is essential that there be uniformity in labels, signs, and symbols affixed to radioactive products which are transferred from person to person.

7. *Instruction.* Persons working in or frequenting restricted areas<sup>3</sup> shall be instructed with respect to the health risks associated with exposure to radioactive materials and in precautions to minimize exposure. Workers shall have the right to request regulatory authority inspections as per 10 CFR 19, section 19.15 and to be represented during inspections as specified in section 19.14 of 10 CFR 19.

8. *Storage.* Licensed radioactive material in storage shall be secured against unauthorized removal.

9. *Waste Disposal.* The standards for the disposal of radioactive materials into the air, water, and sewers, and burial in the soil shall be in accordance with Part 20. Holders of radioactive material desiring to release or dispose of quantities in excess of the prescribed limits shall be required to obtain special permission from the appropriate regulatory authority.

10. *Regulations Governing Shipment of Radioactive Materials.* The State shall to the extent of its jurisdiction promulgate regulations applicable to the shipment of radioactive materials, such regulations to be compatible with those established by the U.S. Department of Transportation and other agencies of the United States whose jurisdiction over interstate shipment of such materials necessarily continues. State regulations regarding transportation of radioactive materials must be compatible with 10 CFR Part 71.

11. *Records and Reports.* The State regulatory program shall require that holders and users of radioactive materials (a) maintain records covering personnel radiation exposures, radiation

surveys, and disposals of materials; (b) keep records of the receipt and transfer of the materials; (c) report significant incidents involving the materials, as prescribed by the regulatory authority; (d) make available upon request of a former employee a report of the employee's exposure to radiation; (e) at request of an employee advise the employee of his or her annual radiation exposure; and (f) inform each employee in writing when the employee has received radiation exposure in excess of the prescribed limits.

12. *Additional Requirements and Exemptions.* Consistent with the overall criteria here enumerated and to accommodate special cases or circumstances, the State regulatory authority shall be authorized in individual cases to impose additional requirements to protect health and safety, or to grant necessary exemptions which will not jeopardize health and safety.

##### 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.

14. *Evaluation Criteria.* In evaluating a proposal to use radioactive materials, the regulatory authority shall determine the adequacy of the applicant's facilities

<sup>1</sup> The criteria were first adopted in February 1961 (30 FR 5517, March 24, 1961, and amended in November 1961 (30 FR 15064, December 4, 1965). Minor editorial changes were made in June 1966 to reflect the authority of the U.S. Department of Transportation and Organization change in NRCR.

<sup>2</sup> Suggested State regulations and State legislation will give content to all criteria enumerated.

<sup>3</sup> "Restricted area" means any area access to which is controlled by the licensee for the purpose of radiation protection of individuals from exposure to radiation and radioactive materials. "Restricted area" shall not include any area used as residential quarters, although a separate room or rooms in a residential building may be set apart as a restricted area.



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.

**13. Human Use.** The use of radioactive materials and radiation on or in humans shall not be permitted except by properly qualified persons (normally licensed physicians) possessing prescribed minimum experience in the use of radioisotopes or radiation.

#### *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.

**17. Inspections Compulsory.** Licensees shall be under obligation by law to provide access to inspectors.

**18. Notification of Results of Inspection.** Licensees are entitled to be advised of the results of inspections and to notice as to whether or not they are in compliance.

#### *Enforcement*

**19. Enforcement.** Possession and use of radioactive materials should be amenable to enforcement through legal sanctions, and the regulatory authority shall be equipped or assisted by law with the necessary powers for prompt enforcement. This may include, as appropriate, administrative remedies looking toward issuance of orders requiring affirmative action or suspension or revocation of the right to possess and use materials, and the impounding of materials, the obtaining of injunctive relief, and the imposing of civil or criminal penalties.

#### *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-radiation protection.

It is recognized that there will also be persons in the program 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 the 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 at its command, not only for routine functions, but also for emergency cases.

#### *Special Nuclear Material, Source Material and Tritium*

**21. Conditions Applicable to Special Nuclear Material, Source Material and Tritium.** Nothing in the State's regulatory program shall interfere with the duties imposed on the holder of the materials by the NRC, for example, the duty to report to the NRC, on NRC prescribed forms (1) transfers of special nuclear material, source material and tritium, and (2) periodic inventory data.

**22. Special Nuclear Material Defined.** Special nuclear material, in quantities not sufficient to form a critical mass, for present purposes means uranium enriched in the isotope U-235 in quantities not exceeding 350 grams of contained U-235; uranium 233 in quantities not exceeding 200 grams; plutonium in quantities not exceeding 200 grams; or any combination of them in accordance with the following formula: For each kind of special nuclear material, determine the ratio between the quantity of that special nuclear material and the quantity specified above for the same kind of special nuclear material. The sum of

such ratios for all of the kinds of special nuclear material in combination should not exceed "1" (i.e., unity). For example,

$$\frac{175 \text{ (grams contained U-235)}}{350} + \frac{50 \text{ (grams U-233)}}{200} + \frac{50 \text{ (grams Pu)}}{200} = 1$$

(This definition is subject to change by future Commission rule or regulation.)

#### Administration

23. State practices for assuring the fair and impartial administration of regulatory law, including provision for public participation where appropriate, should be incorporated in procedures for:

- a. Formulation of rules of general applicability;
- b. Approving or denying applications for licenses or authorization to possess and use radioactive materials, and
- c. Taking disciplinary actions against licensees.

#### Arrangements For Discontinuing NRC Jurisdiction

24. *State Agency Designation.* The State should indicate which agency or agencies will have authority for carrying on the program and should provide the NRC with a summary of that legal authority. There should be assurances against duplicate regulation and licensing by State and local authorities, and it may be desirable that there be a single or central regulatory authority.

25. *Existing NRC Licenses and Pending Applications.* In effecting the discontinuance of jurisdiction, appropriate arrangements will be made by NRC and the State to ensure that there will be no interference with or interruption of licensed activities or the processing of license applications, by reason of the transfer. For example, one approach might be that the State, in assuming jurisdiction, could recognize and continue in effect, for an appropriate period of time under State law, existing NRC licenses, including licenses for which timely applications for renewal have been filed, except where good cause warrants the earlier reexamination or termination of the license.

26. *Relations With Federal Government and Other States.* There should be an interchange of Federal and State information and assistance in connection with the issuance of regulations and licenses or authorizations, inspection of licensees, reporting of incidents and violations, and training and education problems.

27. *Coverage, Amendments, Reciprocity.* An agreement providing for

the following quantities in combination would not exceed the limitation and are within the formula, as follows:

discontinuance of NRC regulatory authority and the assumption of regulatory authority by the State may relate to any one or more of the following categories of materials within the State, as contemplated by Public Law 86-373 and Public Law 95-604:

- a. Byproduct materials as defined in section 11e(1) of the Act.
- b. Byproduct materials as defined in section 11e(2) of the Act.
- c. Source materials.
- d. Special nuclear materials in quantities not sufficient to form a critical mass.
- e. Low-level wastes in permanent disposal facilities, as defined by statute or Commission rules or regulations containing one or more of the materials stated in a, c, and d above but not including byproduct material as defined in Section 11e(2) of the Act but must relate to the whole of such category or categories and not to a part of any category. If less than the five categories are included in any discontinuance of jurisdiction, discontinuance of NRC regulatory authority and the assumption of regulatory authority by the State of the others may be accomplished subsequently by an amendment or by a later agreement.

The agreement may incorporate by reference provisions of other documents, including these criteria, and the agreement shall be deemed to incorporate without specific reference the provisions of Pub. L. 86-373 and Pub. L. 95-604 and the related provisions of the Atomic Energy Act.

Arrangements should be made for the reciprocal recognition of State licenses and Federal licenses in connection with out-of-the-jurisdiction operations by a State or Federal licensee.

28. *NRC and Department of Energy Contractors.* The State should provide exemptions for NRC and DOE contractors which are substantially equivalent to the following exemptions:

- a. Prime contractors performing work

\*A State which does not wish to continue regulation of uranium and thorium processors and byproduct material as defined in Section 11e(2) of the Atomic Energy Act as amended, after November 8, 1961 pursuant to Pub. L. 95-604 may obtain authority over all source material licenses within the State except for uranium or thorium processors.

for the DOE at U.S. Government-owned or controlled sites;

- b. Prime contractors performing research in, or development, manufacture, storage, testing, or transportation of, atomic weapons or components thereof;

- c. Prime contractors using or operating nuclear reactors or other nuclear devices in a U.S. Government-owned vehicle or vessel; and

- d. Any other prime contractor or subcontractor of DOE or NRC when the State and the NRC jointly determine (i) that, under the terms of the contract or subcontract, there is adequate assurance that the work thereunder can be accomplished without undue risk to the public health and safety and (ii) that the exemption of such contractor or subcontractor is authorized by law.

Additional Criteria for States Regulating Uranium or Thorium Processors and Wastes Resulting Therefrom After November 8, 1961

#### Statutes

29. State statutes or duly promulgated regulations should be enacted, if not already in place, to make clear State authority to carry out the requirements of 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.

- 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.

- 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.

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

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.

f. A ban on major construction prior to completion of the aforementioned stipulations.

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

30. 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).

31. It is preferable that State statutes contain the provisions of Section 8 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:

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).

#### Regulations

32. 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 274c (see 10 CFR 40 and 10 CFR 150.31(b)).

#### Organizational Relationships Within the States

33. 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.

b. Those States that will utilize personnel from other State Departments

\* It is strongly recommended that a 30-day period be provided for public review.

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.

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.

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.

#### Personnel

34. 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 1/2 staff years for legal services for each noncontested 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 specialties, 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.

#### Functions To Be Covered

35. 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.

##### 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

(i) 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.

##### 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.

#### 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.

#### Instrumentation

36. 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-232, 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 analytical laboratories.

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.

Dated at Washington, D.C. this 16th day of January, 1981.

For the Nuclear Regulatory Commission,

John C. Hoyla,

Assistant Secretary of the Commission.

(FR Doc. 81-4428 Filed 1-22-81; 404 aml)

BILLING CODE 7590-01-01

#### Advisory Committee on Reactor Safeguards Proposed Meetings

In order to provide advance information regarding proposed meetings of the ACRS Subcommittee and Working Groups, and of the full Committee, the following preliminary schedule reflects the current situation, taking into account additional meetings which have been scheduled and meetings which have been postponed or cancelled since the last list of proposed meetings published Dec. 22, 1980 (45 FR 84182). Those meetings which are definitely scheduled have had, or will have, an individual notice published in the Federal Register approximately 15 days (or more) prior to the meeting. Those Subcommittee and Working Group meetings for which it is anticipated that there will be a portion or all of the meeting open to the public are indicated by an asterisk (\*). It is expected that the sessions of the full Committee meeting designated by an asterisk (\*) will be open in whole or in part to the public. ACRS full Committee meetings begin at 8:30 a.m. and Subcommittee and Working Group meetings usually begin at 8:30 a.m. The time when items listed on the agenda will be discussed during full Committee meetings and when Subcommittee and Working Group meetings will start will be published prior to each meeting. Information as to whether a meeting has been firmly scheduled, cancelled, or rescheduled, or whether changes have been made in the agenda for the February 1981 ACRS full Committee meeting can be obtained by a prepaid telephone call to the Office of the Executive Director of the Committee (telephone 202/634-3267, ATTN: Mary E. Vanderholt) between 8:15 a.m. and 5:00 p.m., Eastern Time.

#### ACRS Subcommittee Meetings

\*Fort St. Vrain, January 27, 1981, at site, near Longmont, CO. The

Subcommittee will review operating experience, degree of success in eliminating the core power fluctuations, core performance (fuel and structural), plans for testing and operation at levels above 70% of rated power and plans for future operations, modifications, refueling, and shift manning requirements. Notice of this meeting was published Jan. 12.

\*Safety Philosophy, Technology and Criteria, January 28, 1981, Los Angeles, CA. The Subcommittee will discuss requirements for new (beyond Near-Term Construction Permit) reactor plants. Notice of this meeting was published Jan. 14.

\*Extreme External Phenomena, January 29-30, 1981, Los Angeles, CA. The Subcommittee will discuss the status of the Seismic Safety Margins Program. Notice of this meeting was published Jan. 14.

\*San Onofre 2 and 3, January 31, 1981, Los Angeles, CA. The Subcommittee will meet to review the seismology and geology related items for San Onofre Units 2 and 3 for an Operating License. Notice of this meeting was published Jan. 15.

\*Regulatory Activities, February 3, 1981, Washington, DC. The Subcommittee will discuss proposed Regulatory Guides and Regulations. Notice of this meeting was published Jan. 19.

\*Plant Features Important to Safety, February 3, 1981, Washington, DC. The Subcommittee will discuss the NRC definitions of the terms "safety grade", "safety related" and "important to safety" as developed for testimony related to the Three Mile Island Unit 1 restart, as well as review the generic implications of the use of these definitions in the licensing process. Notice of this meeting was published Jan. 19.

\*NRC Safety Research Program, February 4, 1981, Washington, DC. The Subcommittee will discuss NRC's long-range safety research plan and ACRS comments on the Office of Nuclear Regulatory Research response to ACRS recommendations in NUREG-0699. Notice of this meeting was published Jan. 21.

\*Safety Philosophy, Technology and Criteria, February 4, 1981, Washington, DC. The Subcommittee will discuss the proposed Near-Term Construction Permit. Notice of this meeting was published Jan. 21.

\*Reactor Radiological Effects, February 5, 1981, (1:00 p.m.), Washington, DC. The Subcommittee is to review and comment on the NRC Staff's paper to the NRC Commissioners on the current status of thinking and



## Enclosure 2

### TEXAS

#### Progress of Legislation Development

The State does not have legislation in place. There is very little time remaining before it must be in place and the Texas legislative agenda is also limited. Prompt action must be taken. (Criterion 29)\*

#### Long Term Surveillance and Monitoring\*\*

The draft law provides for the establishment of a "Radiation and Perpetual Care Fund" (new section 17 of Texas Act) to cover costs of "maintenance, surveillance or other care on a continuing or perpetual basis after termination of the licensed facility."

1. The draft law nowhere requires the minimization or elimination of the need for active ongoing maintenance of sites over the long term. This is a fundamental requirement of 10 CFR 40, App. A, Criteria 1 and 12 and consistent with Sec. 161.x(2)(A) of the Atomic Energy Act (AEA), as amended, which requires eliminating long term maintenance and monitoring to the extent practicable. While there may be some uncertainty over the degree of ongoing surveillance that will be needed over the long term, the clear thrust of legislation and regulations must be to require the minimization or elimination of active maintenance (See also 12.3.11 and 14.3 of NUREG-0706.) This concept should be stated explicitly in the legislation and implementing regulations. It is suggested the term "Perpetual Care" be dropped from the title of this fund. Experience in other states has indicated that presence of such phraseology has been used by potential mill operators as reasons for not developing programs which eliminate need for ongoing, active care. (Sec. 161.x(2)(A) of AEA).
2. The relationship between financial surety and long-term funding concepts should be clearly established in the statutes or in the regulations. Proposed revisions to the Texas Act (Sections 3(m) 6 (f), 16 (a)(4) and 17)) are not entirely clear on this matter.

\* Where a reference is made to the Criteria, unless otherwise specified, this refers to the criteria contained in "SECY 80-472," (Enclosure 1).

\*\* Comments on legislation are based on review of draft legislation (marked 2nd draft) of November 18, 1980. Wherever used, "Texas Act" refers to the existing legislation being amended (Chapter 72, Acts of the 57th Legislature, as amended).

The regulations and legislation must assure that adequate financial arrangements are available at all times during mill operation and thereafter to protect the public health and safety. (Criteria 29(b) and 30(a)).

3. Section 17(g) of the proposed legislation should be revised to authorize the agency to transfer funds to the United States for long-term surveillance and control in the event the State chooses not to become owner of a tailings disposal site. The amount of such transfer should be determined at the time of transfer by mutual agreement of the State.

#### Financial Surety Mechanisms

The legislation as drafted provides adequate authorities for requiring financial sureties. However, it is not clear from the legislation that the State will follow those sections of regulations of the Commission prescribing the acceptability of financial surety mechanisms. (See new Sec. 6(g) of Texas Act.) Texas apparently intends to permit self-insurance which would not meet NRC regulations based on conversations with Texas Department of Health staff. (Criterion 9 in Appendix A to 10 CFR 40).

#### Immediate Action at Existing Sites

During the interim period (before November 1981) Section 204 (h)(1) of the Uranium Mill Tailings Radiation Control Act of 1978, as amended, (UMTRCA) requires Agreement States to implement NRC regulations to the maximum extent practicable as stated in the FR Notice issuing the regulations (see 45 FR 65530). The Commission considers it practicable and necessary for Agreement States' mill operators:

- (a) to begin now (as opposed to after November 1981) to develop programs meeting the regulations;
- (b) to submit such programs to the Agreement States on the same schedule as non-Agreement State operations;
- (c) and to immediately implement steps to deal with presently occurring impacts such as blowing of tailings and uncontrolled seepage.

Regarding this matter, the Texas Department of Health (TDH) was notified in letters from G. W. Kerr dated March 25, 1980, and May 9, 1980, that UMTRCA required that agreement states take immediate steps to acquire a commitment by existing uranium mill operators to specific tailings reclamation programs. Based on our recent review of the Texas radiation control program, we note that we found no documentation that any steps have yet been taken in this matter. (10 CFR 150.31(a)).

Regulations Development

No regulations have been issued (nor even drafted) by the State as required by Section 274.o, Atomic Energy Act (AEA). Prompt action must be taken to develop these regulations. Under any circumstance, the regulations must be in place by November 1981. In connection with regulations development, it is noted that UMRCA requires that Agreement States have, as of November 1981, regulations which are equivalent to the extent practicable, or more stringent than Commission regulations on uranium milling. The Commission considers that such regulations recently promulgated are practicable to implement in Agreement States as they are based upon the analysis in the final GEIS\* which addressed operations in both Agreement and Non-Agreement States. Therefore, the Commission regulations constitute minimum national standards. This appears to be recognized in proposed new Sec. 6A(a)(1) of Texas Act; the regulations developed should likewise reflect this. (Criterion 32 and 10 CFR 150.31).

Also, in connection with developing regulations, the State should also recognize the UMRCA states that duplication of proceedings conducted by the Commission is not necessary (last sentence of 274.o of AEA). Therefore, because the Commission developed the substantive regulations (45 FR 65521) on uranium mills through a full and public rulemaking proceeding (NUREG-0706), no substantive proceedings need be conducted by the State in developing its regulations. These NRC regulations include the minimum national standards concerning technical, financial and institutional control aspects of uranium mill tailings disposal. The State could incorporate the record developed by the NRC and include it as a part of the rulemaking to help expedite any rulemaking that may be necessary under State law. (Criterion 32).

Also, with regard to regulation development, the State must develop a program for implementation of U. S. EPA fuel cycle radiation protection standards (40 CFR 190) at mills in addition to regulations to be developed under Section 274.o(2).

Related to item 35(a) of the NRC evaluation criteria, the Texas reply of September 29, 1980, to the initial NRC status report lists applicable regulatory guides, standards and other sources that are used in the Texas program. The list seems to be adequate except that the guide, "Information Required and Criteria Used to Evaluate Embankment Retention Systems," (undated) should be deleted because it has been superseded by Regulatory Guide 3.11, which is included in the list. (Criterion 35(a)).

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\*GEIS - Final Generic Environmental Impact Statement on Uranium Milling (NUREG-0706).

Staff Resources

Texas personnel resources need to be significantly upgraded if these resources are to be adequate for processing license applications and carrying out other regulatory responsibilities.

Current indications are that 2 to 2.7 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  $\frac{1}{2}$  staff years for legal services for each noncontested mill case. The impact on environmental monitoring laboratory 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.

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. (Criterion 34).

Preparation of Written Assessments

Several recent assessments performed by the State of Texas (Caithness and Trevino projects) in connection with the licensing of new in-situ uranium extraction projects do not meet the requirements of UMTRCA. (Sec. 274.o(3)(C) of AEA). The assessments did not document detailed evaluation of the most significant environmental impacts that will occur with, and associated controls which will be provided for, the project--those related to groundwater. For example, the following should also be included:

- (a) determination of adequate geologic confinement of the ore zone and associated leach field,
- (b) monitoring requirements,



- (c) groundwater restoration criteria,
- (d) operating limits (including specifications of upper control limits),
- (e) plugging of exploration wells and well abandonment procedures, and
- (f) well construction and testing. (Criterion 35(b)).

It appears that the Texas Department of Health is relying upon the Department of Water Resources to handle these aspects of project review and permitting. This appears to be acceptable, but the written assessment must document the evaluation that Water Resources performs. / See Sec. 274.0(3)(C) which requires that the environmental impacts of "any activities conducted pursuant" to the license being granted be included in the assessment. / Other comments on these assessments are:

- o Most technical aspects of license applications did not appear to receive a rigorous independent review. The State often accepted the data and information submitted by the licensee and did not attempt a separate confirmatory analysis.
- o In our recent review of the Texas mill licensing program, it appears that the Radiation Control Branch (RCB) only considers radiological aspects of mill tailings. This is not consistent with UMTRCA. The State should assure that both radiological and non-radiological aspects of environmental impacts are independently assessed and incorporated into licensing actions and enforced.

The above highlights the need for clarification of organizational relationships between various state agencies involved in the regulatory program for uranium mills and tailings. (Criteria 33(b)).

While the draft of proposed legislation specifically requires a written environmental analysis, it varies from NRC suggested State legislation in not having a separately stated requirement for including long-term impacts, including decommissioning, etc., but rather appears to attempt to subsume long-term impacts under other requirements. The Texas approach (Section 12A(a) is not as clear cut as the suggested approach and should be revised. (Criterion 35(b); Section 274.0(3)(C) of the AEA, as amended.)





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

*R. Scaram*, NRC

OFFICE OF THE  
CHAIRMAN

March 13, 1981

The Honorable Victor Atiyeh  
Governor of Oregon  
Salem, Oregon 97310

Dear Governor Atiyeh:

On July 1, 1965, Oregon became an Agreement State under Section 274 of the Atomic Energy Act of 1954, as amended. Under the provisions of this Act, Oregon assumed, under agreement with the AEC (now NRC), certain regulatory authority over the use of reactor produced isotopes, the source materials uranium and thorium, and small quantities of special nuclear materials.

Under Section 274 of the Atomic Energy Act as amended by the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), Agreement States can continue to regulate uranium mills and mill tailings after November 8, 1981, by entering into an amended agreement with the NRC. In UMTRCA, the Congress also provided, for the first time, funds for grants to States to assist them in preparing their revised regulatory program. Oregon applied for and received a grant of \$47,000 under that program, thereby indicating the State's interest in pursuing this additional regulatory authority.

For some time, the NRC staff has been working with Mr. Lynn Frank, Director, Oregon Department of Energy, and his staff so that the amended agreement process may proceed smoothly. The purpose of this letter is to acknowledge the efforts of Mr. Frank and his staff and to identify remaining actions which Oregon must accomplish for a timely amended agreement.

To execute the amendment, the Commission must find not only that the State uranium milling regulatory program provides adequate protection of the public health and safety and is generally compatible with the Commission's program of regulation, but also that the State has adopted standards for the protection of the public health, safety and the environment from radiation hazards associated with uranium mill byproduct material, which are equivalent to, or more stringent than, those of the Commission.

As a result of information exchanged between the NRC and Oregon, in April, 1980, we provided Mr. Frank with our initial assessment of the readiness of Oregon for an amended agreement to regulate uranium mills and tailings. Criteria for this purpose have been developed with Agreement State input and State comments were factored in when consistent with NRC rules and policies (Enclosure 1).

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

*R. Scarsone, NMSS*  
*LTH rec'd, 3/20*

March 17, 1981

OFFICE OF THE  
CHAIRMAN

The Honorable Edmund G. Brown, Jr.  
Governor of California  
Sacramento, California 95814

Dear Governor Brown:

California became an Agreement State under Section 274 of the Atomic Energy Act of 1954, as amended, when an agreement between the Atomic Energy Commission (now the NRC) and the State became effective on September 1, 1962. Under the provisions of this Act, California assumed certain regulatory authority over the use of reactor produced isotopes, the source materials uranium and thorium, and small quantities of special nuclear materials.

Under Section 274 of the Atomic Energy Act as amended by the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), Agreement States can continue to regulate uranium mills and mill tailings after November 1981, by entering into an amended agreement with the NRC.

In UMTRCA, the Congress provided for the first time, funds for grants to States to assist them in preparing their revised regulatory program. California applied for and received a grant of \$50,000 under that program, thereby indicating the State's interest in pursuing this additional regulatory authority. Thus, on the continuing presumption that California does wish to have authority for the regulation of mills and mill tailings whenever they are established within the State, it is necessary that the present agreement between AEC (now NRC) and the State be amended. (See Enclosure 1 for proposed amendment). Before it can be amended, we must review California's regulatory program as it relates to mills and mill tailings.

In the summer of 1980, we began an early review of current and potential uranium mill Agreement State programs to provide an early indication of where each State stands in preparing to enter into amended agreements. On July 31, 1980, we wrote to Ms. Beverlee Myers, Director, Health Services, and reported our initial assessment of the California program for regulating uranium mills and mill tailings with respect to the NRC criteria. On September 19, 1980, Mr. Ward, Chief, Radiologic Health Section, furnished us additional information in response to our assessment. Included in this response is reference to State comments on statutes to be transmitted to us at a later date. At this time we have not received such comments, although with the information provided, we have reassessed the California program. Our findings include an analysis (Enclosure 2) of the California Health and Safety Code as it applies to uranium milling regulation which identifies specific issues needing resolution.

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OFFICE OF THE  
CHAIRMAN

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

NM33- Rec'd 2/26/81  
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February 20, 1981

The Honorable Richard D. Lamm  
Governor of Colorado  
Denver, Colorado 80203

Dear Governor Lamm:

On February 1, 1968, Colorado became an Agreement State under Section 274 of the Atomic Energy Act of 1954. Under the provisions of this Act, Colorado assumed, under agreement with the AEC (now NRC), certain regulatory authority over the use of reactor produced isotopes, the source materials uranium and thorium, and small quantities of special nuclear materials.

Under Section 274 of the Atomic Energy Act as amended by the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), Agreement States can continue to regulate uranium mills and mill tailings after November 8, 1981, by entering into an amended agreement with the NRC. In UMTRCA, the Congress also provided for the first time, funds for grants to States to assist them in preparing their revised regulatory program. Colorado applied for and received a grant of \$95,000 under that program, thereby indicating the State's interest in pursuing this additional regulatory authority.

For some time, the NRC staff has been working with Dr. Frank Traylor, Executive Director, Colorado Department of Health, and his staff so that the amended agreement process may proceed smoothly. The purpose of this letter is to acknowledge the efforts of Dr. Traylor and his staff and to identify remaining actions which Colorado must accomplish for a timely amended agreement.

In the summer of 1980, we began an early review of current and potential uranium mill Agreement State programs to provide an early indication of where each State stands in preparing to enter into amended agreements. On July 25, 1980, we wrote to Dr. Traylor and reported our initial assessment of the Colorado program for regulating uranium mills and tailings with respect to the criteria. We have received letters from Mr. Albert J. Hazle, Director, Radiation and Hazardous Wastes Control Division, Department of Health, commenting on the NRC's criteria, but we have received no specific response to our July 25, 1980 letter. With these letters and with information obtained during our regular review of the Colorado radiation control program, we have reassessed the readiness of Colorado for an amended agreement to regulate uranium mills. Criteria for this purpose have been developed with Agreement State input and State comments were factored in when consistent with NRC rules and policies (Enclosure 1). The results of our evaluation are discussed in Enclosure 2 to this letter. I would like to highlight two of the actions still needed:

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