Encl 2

HEALTH ENVIRONMENT department

STATE OF NEW MEXICO
ENVIRONMENTAL IMPRCVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87503
(505) 827-5271
Thomas E. Baca, M.P.H., Director

Bruce King
GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

September 8, 1980

G. Wayne Kerr
Assistant Director for State Agreement
Programs
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Kerr:

We have reviewed your letters and enclosures of July 18 and 25, 1980, regarding draft criteria and New Mexico's assessment regarding minimum requirements needed by the state in order to maintain its authority to license uranium mills after November, 1981.

The attached written response to your assessment for New Mexico is provided as requested.

Sincerely,

Thomas E. Baca
Director

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Attachments

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HEALTH ENVIRONMENT department

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ENVIRONMENTAL IMPROVEMENT DIVISION
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DEPUTY SECRETARY

MEMORANDUM

TO: Ted Wolff, Environmental Manager, Radiation Protection Bureau

FROM: Radiation Protection Bureau and Legal Office Staff

SUBJECT: Comments In July 25, 1980 Letter From Wayne Kerr, NRC to Thomas E. Baca, EID

DATE: September 4, 1980

I. STATUTES

A. Compliance With the Atomic Energy Act of 1954 For Agreement States

1. Financial requirements for transfer of funds

The concern is set forth that we must have a state law which provides that the continued care fund be transferred to the Federal Government if the land containing the tailings is transferred to the Federal Goverment. Since, as a general principle, federal law preempts conflicting state requirements, it is not necessary to have such a state law. The federal law will apply and, to the extent that it is constitutional, the state will be required to comply with it. The second point made under this heading is the state's ability to require financial sureties in order to "ensure adequate reclamation." Under the Radiation Protection Act Section 74-3-5A(3) NMSA (1978), the Environmental Improvement Board has the authority to adopt regulations:

> "requiring the posting of a bond running only to the state for licensed activities, which bond shall be adequate to ensure, in the event of abandonment, default or other performance inabilities of the licensee, compliance with the requirements of the regulations or license conditions, including actions of the licensee required during or after the cessation of operations, which bond shall be released upon demonstration by the licensee that the conditions of the license have been satisfied". (emphasis added)

The regulations have not been adopted but they should be adopted prior to November, 1981.

2. Written Determination

It is the intention and practice of the State to issue written determinations in licensing matters. Additionally, a written analysis of the environmental aspects of a proposed licensing action which is consistent with the requirements of Section 274o(3)(C) of the Atomic Energy Act as amended by the UMTRCA of 1978 was prepared for the current licensing action involving the Gulf Uranium Mill at San Mateo, New Mexico. Additionally, the current state regulations in Section 3-312 provide for an opportunity for public participation and public hearings on uranium mill licensing actions.

Regarding the UMTRCA requirements that license determinations are subject to judicial review, the Environmental Improvement Division will propose to the state legislature an amendment to the Radiation Protection Act providing statutory judicial review of licensing determinations. This amendment should be considered at the next legislative session which commences in January of 1981.

3. Construction Ban

A pre-licensing uranium mill construction ban is found in the State Regulations, Section 3-300.G.

4. Conformance With Guidelines

An assurance by the licensee that "byproduct material is managed in conformance with NRC and EPA guidelines" is beyond the scope of the requirements of the Uranium Mill Tailings Act and the Federal Administrative Procedures Act. Only official regulations adopted pursuant to public notice and public participation requirements are valid, binding and enforceable.

5. Judicial Review of Rule Making

Judicial review of rule making is provided for in the Environmental Improvement Act, Section 74-1-9, NMSA (1978) as incorporated by Section 74-3-5 NMSA (1978) of the Radiation Protection Act.

B. Authority to the U.S. In UMTRCA

1. The state law need not mention any of NRC's authorities which are retained by federal law because of federal preemption.

2. Same comment as B 1.

3. Same comment as B 1.

4. Same comment as B 1.

C. Environmental Impact Analysis

The State Groundwater Protection Regulations, Part 3 of the New Mexico Water Quality Control Commission Regulations, and the Surface Water requirements under the Federal Clean Water Act NPDES Permit Program ensure a complete review by the state and federal environmental agencies of all groundwater and surface water impacts resulting from a uranium mill operation. The Groundwater Discharge Plan and information concerning surface water impacts, which are contained in state files, will be summarized in the Radiation Protection staff analysis and made available for public review prior to the public hearing. Consideration of long-term stabilization and reclamation for tailings impoundments is found in Section 12-300 A through J of the New Mexico Radiation Protection Regulations. Therefore, the State meets the requirements of Section 274o (3)(C).

D. General Comments

The exemption concerning mine safety and health administration, Section 74-3-10 NMSA 1978 of the Radiation Protection Act cannot properly be interpreted to mean that the state exempts from regulation all activities unless authority is ceded to the state by the Mine Safety and Health Administration (MSHA) or any other agency. Only specific activities which are specifically regulated by federal or state agencies such as MSHA are exempt. The state retains authority to regulate discharges of contaminants to the air and water originating at uranium mines, as well as all aspects of radiation safety in uranium milling operations.

II. No comment.

III. No comment.

IV. ORGANIZATIONAL RELATIONSHIP WITHIN THE STATE

A. Organization

Lines of supervision for the program functions in the Radiation Protection Bureau are shown in Figure 1. Dr. Theodore Brough has been transferred from the Surveillance and Field Operations Section to the Uranium Licensing Section. Dr. Brough is located in the Milan (Grants) field office, where he is primarily responsible for mill and other uranium facility inspections.

Two bureaus within the Environmental Improvement Division, the Water Pollution Control Bureau and the Air Quality Bureau, contribute to the environmental assessments for uranium milling activities. A state agency outside the EID, the State Engineer (in the New Mexico Natural Resources Division) also contributes to the assessment. The organizational relationship of these agencies to the Radiation Protection Bureau is shown in Figures 2 and 3.

1. Water Pollution Control Bureau (EID)

The Ground Water Section of the Water Pollution Control Bureau requires that ground water discharge plans be submitted by uranium mill applicants. The plans undergo a process of technical review, public comment and opportunity for public hearing which is similar to the process for a Radio-

active Materials License application. Hearings for a Ground Water Discharge Plan and a Radioactive Materials License for a uranium mill will normally be held at the same time.

A ground water discharge plan must contain the following information:

> C. A proposed discharge plan shall set forth in detail the methods or techniques the discharger proposes to use or processes expected to naturally occur which will ensure compliance with these regulations. At least the following information shall be included in the plan:
>
> 1. quantity, quality and flow characteristics of the discharge;
>
> 2. location of the discharge and of any bodies of water, watercourses and ground water discharge sites within one mile of the outside perimeter of the discharge site, and existing or proposed wells to be used for monitoring;
>
> 3. depth to and TDS concentration of the ground water most likely to be affected by the discharge;
>
> 4. flooding potential of the site;
>
> 5. location and design of site(s) and method(s) to be available for sampling, and for measurement or calculation of flow;
>
> 6. depth to and lithological description of rock at base of alluvium below the discharge plan will not result in either concentrations in excess of the standards of Section 3-103 or the presence of toxic pollutants at any place of withdrawal of water for present or reasonably forseeable future use. Detailed information on site geologic and hydrologic conditions may be required for a technical evaluation of the applicant's proposed discharge plan.

2. Air Quality Bureau (EID)

The Air Quality Bureau contributes consultation on meteorological parameters for radiological air quality modeling. This consultation is helpful in the determination of data requirements for UDAD/MILDOS modeling.

3. State Engineer (Natural Resources Dept.)

The State has the responsibility for evaluating the structural stability of the uranium tailings impoundments in New Mexico. Two foundation engineers inspect the impoundments at least on an annual basis (much more frequently for the UNC Churchrock facility) and review the technical aspects of stability analyses.

An organization chart of the relationship between the Natural Resources Department and the Health and Environment Department is shown in Figure 2.

B. Lead Agency

The Radiation Protection Bureau is the lead agency in the preparation of an independent environmental assessment.

C. Arrangements With Other Agencies

This information is covered in part A of this section.

D. Use of Consultants

The Bureau has identified the need for outside consulting services in the following areas: 1) uranium extraction processes (Dr. Arpad Torma of the New Mexico Institute of Mining and Technology has been contacted; 2) longterm geomorphic stability of tailings sites (Dr. Steven Wells of the University of New Mexico is a consultant; 3) hydraulic engineering of tailings management alternatives (Dr. David Schreiber is a consultant); radionuclide analyses (Eberline Corporation is a consultant). Procedures for obtaining these services are in place and are routinely administered by the Program Support Bureau of the EID. Consultants used by the Water Pollution Control Bureau are described in the following section.

For emergency medical matters relating to the intake of radionuclides, the Bureau will rely on the following for consultation: 1) Radiation Emergency Assistance Center, Oak Ridge (Drs. C. C. Lushbaugh and K. F. Hubner); 2) Joint Nuclear Accident Coordinating Center, Albuquerque); 3) Los Alamos Medical Center. V. Personnel

A. Number

The Radiation Protection Bureau currently has 12 full-time positions in uranium mill regulation activities. The following table indicates that 11 of these positions are filled.

URANIUM LICENSING SECTION

GERALD W. STEWART
Environmental Program Manager

JAMES L. MACKIN
IPA Assignee

THEODORE G. BROUGH, Ph.D. - GRANTS
Environmental Scientist III

WILLIAM M. FLEMING, Ph.D.
Environmental Engineering Specialist I

KATHLEEN A COLEMAN
Environmental Scientist II

KENT W. BREESE
Environmental Engineering Specialist I

VACANT
Environmental Scientist III

SURVEILLANCE & FIELD OPERATIONS SECTION

THOMAS E. BUHL, Ph.D.
Environmental Program Manager

JERE B. MILLARD
Environmental Scientist III (Health Physics)

MALCOLM E. ENNIS
Environmental Scientist III (Health Physics)

M. SUE TREVATHAN - GRANTS
Environmental Scientist II

DAVID BAGGETT - GRANTS
Environmental Technician III

Two secretaries currently service the program at the Santa Fe office, half-time secretary assistance in the Grants field office.

In addition to the laboratory services provided by the State Laboratory Division, the program received an additional appropriation of $50,000 from the State Legislature for this fiscal year (July 1980 - June 1981). This money will be used for consulting services for radionuclide analyses, mainly from Eberline Corporation.

An appropriation of $100,000 was made to the program in 1978 to initiate a field radon sampling study in the Grants Uranium Belt. While the first phase of the study is nearing completion, long-term radon monitoring will continue.

It should be noted that the Water Surveillance and Standards Section of the Water Pollution Control Bureau has a substantial surface and ground water monitoring program in the Grants uranium belt. This monitoring includes uranium and radium.

B. Specialties (Hydrology, Geology, Air Quality, Foundation Engineering)

1. Radiation Protection Bureau

To increase the geohydrology and engineering strengths of the Uranium Licensing Section, an environmental engineer was hired in December, 1979. Dr. William Fleming holds an undergraduate degree in geology, a master of science in watershed management (speciality in ground water hydrology) and a doctorate in civil engineering (specialty in water quality management.) He has experience and publications in geohydrology, environmental impact assessment, water quality management, environmental economics, simulation modeling and international development. He coordinates closely with the State Engineer

in the examination of uranium tailings impoundment stability. Dr. Fleming's job description is enclosed as Attachment 1.

An additional environmental engineer was hired by the Section in June, 1980. Mr. Kent Breese holds an undergraduate degree in mechanical engineering, a master's in sanitary engineering, and is registered as a professional engineer by the State of New Mexico. Mr. Breese's strengths are in the areas of sanitary engineering, hydraulics and manufacturing processes. He coordinates with the State Engineer in the examination of tailings impoundment stability.

2. Water Pollution Control Bureau

The following table indicates personnel, qualifications and number of staff years spent annually on ground water discharge plans for uranium mills or in water quality surveillance of the Grants Mineral Belt area:

Name	Qualifications	Staff-Years Uranium Licensing
Bruce Gallaher	MS Hydrology (ground water surveillance)	1/2
David Boyer	MS Hydrology (ground water)	1/2
Ronald Conrad	Ph.D. Chemistry (geochemistry)	1/2
Richard Raymondi	MS Candidate Hydrology (ground water)	1/2
Douglas Jones	BS Geological Engineering (ground water)	1/2
Dennis McQuillan	BS Geology (ground water surveillance)	2/3
Maxine Goad	MS Physics (supervision/administration)	1/2
	TOTAL STAFF-YEARS	3 1/2

The Water Pollution Control Bureau regularly uses the following consultants in the evaluation of ground water discharge plans for uranium mills: 1) Prof. Donald Runnells (University of Colorado, geochemistry); 2) Prof. Peter Lagasse (U.S. Military Academy, hydraulic engineering); 3) Prof. Stephen Wells (University of New Mexico, geomorphology and long-term stability); 4) Prof. Jonathan Callender, University of New Mexico, structural geology); 5) Prof. Daniel Stephens, New Mexico Institute of Mining and Technology, ground water modeling and monitoring).

3. State Engineer of New Mexico

The State Engineer has assumed jurisdiction for evaluating the structural stability of the five uranium tailings impoundments in New Mexico. Two registered professional engineers qualified in soils and foundation engineering spend approximately one-third time each in the evaluation of uranium tailings impoundment stability. The State Engineer therefore contributes two-thirds staff-year annually in stability assessment, and will

probably increase this function in the future. The State Engineer stated in a letter dated January 21, 1977 that criteria used to evaluate stability are "essentially the same as those proposed by NRC" (Attachment 2).

C. Summary of Personnel and Licensing Activity

The preceeding description of personnel indicates that 12 staff-years from the Radiation Protection Bureau, 3 2/3 staff-years from the Water Pollution Control Bureau, and 2/3 staff-year from the State Engineer office are annually involved in uranium mill licensing and surveillance. Therefore, a total of 16 1/3 staff-years are involved, not including consultants (consulting time would add at least another 2/3 staff-year, making a total of 16 2/3).

Licensing activities during 1980 include two new mills (Bokum and Gulf), two renewals (Anaconda and Sohio), two in-situ pilot projects and one dismantling (Old Phillips mill). If the in-situ pilot projects and the dismantling are considered equivalent to approximately one major licensing activity in terms of workload, there are about five major licensing activities to be accomplished by 16 man-years, which is equivalent to more than three man-years per major licensing activity.

In addition to the major licensing functions, there is on-going surveillance, administration and emergency response (e.g. Churchrock) for five active mills, one new mill (not operating), two new mill applications under review, one active in-situ operation, two in-situ applications under review, and one backfill operation.

VI. FUNCTIONS TO BE COVERED

The Uranium Mill License Application Handbook has been revised to reflect NRC's suggestions regarding 1) minimum acceptable qualifications for the RSO; 2) procedures for periodic retraining and testing of employees; 3) geohydrology requirements; 4) tailings disposal requirements; 5) long-term impacts.

A. 40 CFR 190

With regard to determining licensee compliance with 40 CFR 190 by 1 December 1980, the Bureau is presently determining procedures for evaluation. Within one month, the Bureau plans to request information on equipment, sampling procedures, methodology and available data on external radiation from each mill licensee.

B. Post Operational Data Review

As part of the requirements for preparing the Environmental Report for renewal of active mills, the Section requires conformance to Regulatory Guide 4.14 (final form).

VII. INSTRUMENTATION

As described in Section V the Bureau has an appropriation of $50,000 for this fiscal year to use the consulting services of Eberline Corporation for radionuclide analyses.

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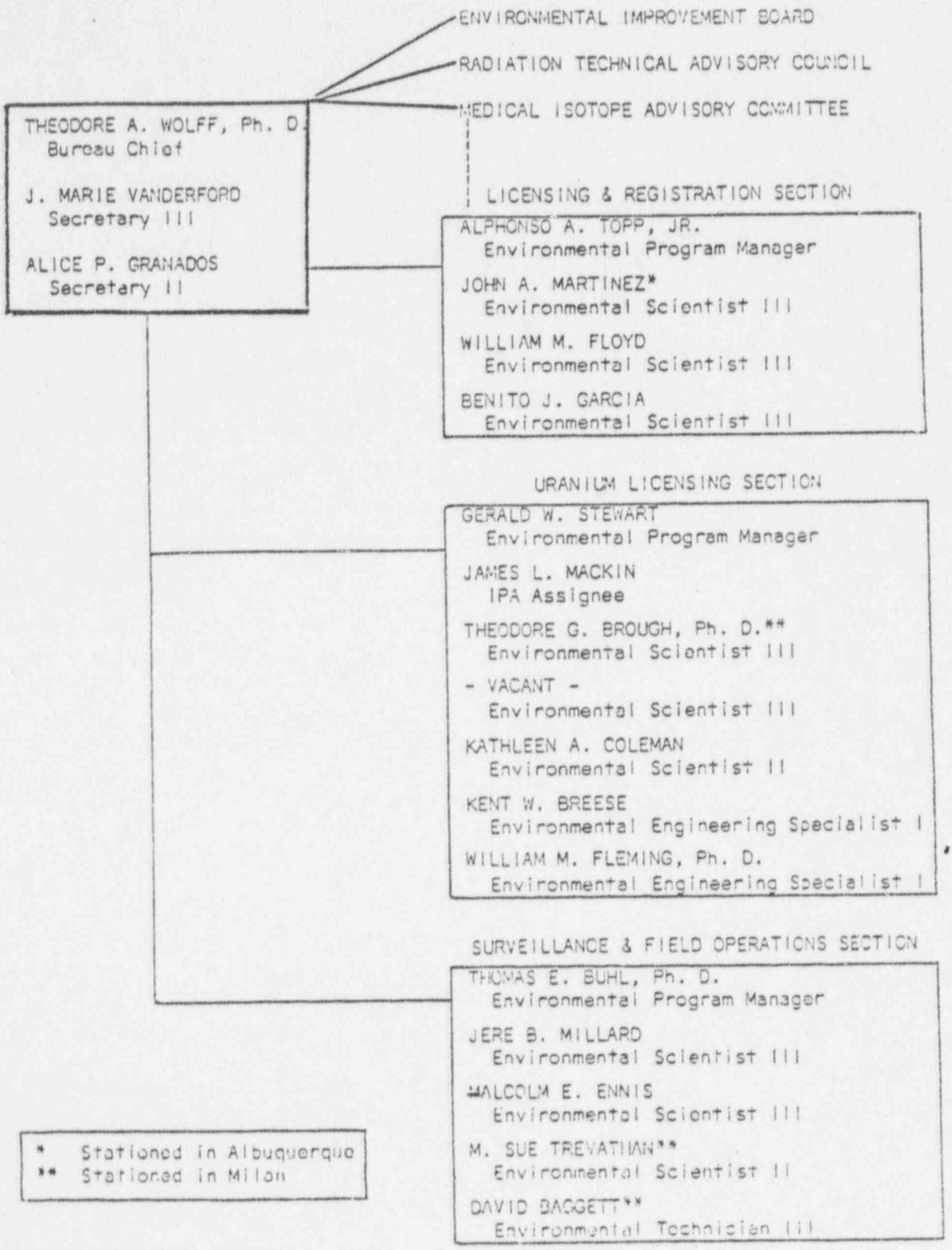
Attachments

FIGURE 1

RADIATION PROTECTION BUREAU



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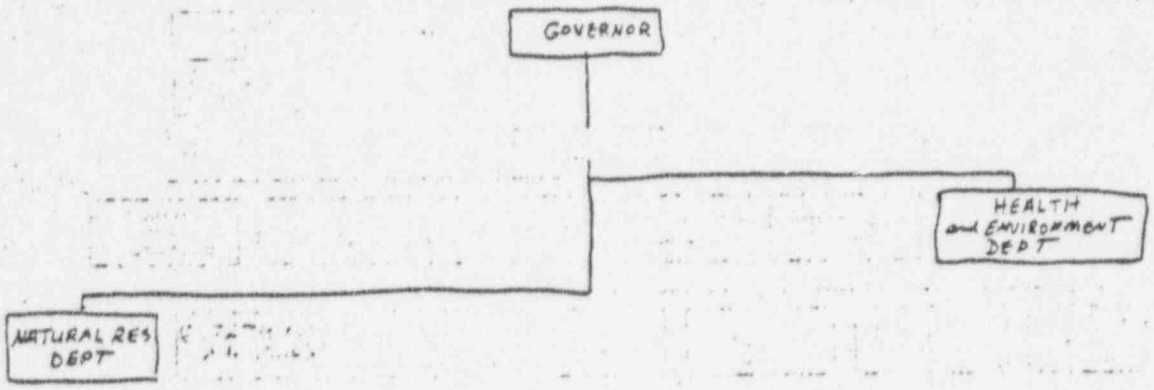

ENVIRONMENTAL IMPROVEMENT DIVISION

DIRECTOR
Thomas E. Baca, MPH

ENVIRONMENTAL EVALUATION GROUP
Robert Neill

OFFICE OF LEGAL SERVICES
Bruce Garber

PROGRAM SUPPORT BUREAU
Dale E. Patrick, MSPH

- Training Planning EIS Review Spec Studies
- Public Information
- Contracts
- Personnel

ASSISTANT DIRECTOR for STATEWIDE SERVICES
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  K. Hargis
  - Control Strategy Eval. Sect.
  - Monitoring & Surveillance Section
  - Meteorology Section
  - Enforcement Section
  - Engineering Section
- Water Pollution Control Bur.
  J. Pierce
  - Groundwater Section
  - Surface Water Section
  - Surveillance & Standards Section
  - Areawide Planning 208 Section
  - Wastewater Treatment Const Grants
  - Engineering Section
- Radiation Protection Bureau
  T. Wolff
  - Licensing & Regis. Section
  - Uranium Licensing Section
  - Environmental Surveil. Section
- OH & S Bureau
  M. Curtis
  - Compliance Section
  - Technical Services Section
  - Data Management Section

ASSISTANT DIRECTOR for COMMUNITY SERVICES
Russell Rhoades, MPH

- DISTRICT I
  Albuquerque
  W. Bennett
  - Bernalillo Field Office
  - Farmington Field Office
  - Grants Field Office
  - Gallup Field Office
  - Los Lunas Field Office
  - Socorro Field Office
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  - Deming Field Office
  - Silver City Field Office
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  - Clovis Field Office
  - Hobbs Field Office
  - Ruidoso Field Office
  - Tucumcari Field Office
- Community Support Services Bur.
  J. Thompson
  - PIH Section Insect,Rodent Haz. Waste Solid Waste
  - Noise Program
  - Food & Milk Quality Sect
  - Water Supply Section
  - Liquid Waste & Swimming Pool Sect.
  - Water Supply Const. Grant
  - Water Supply Engineering

[illegible]

[illegible]

Increased [illegible] is [illegible] to ensure that uranium mill [illegible], particularly tailings management, [illegible] engineering [illegible]. The tailings dam failure at [illegible] oversight by the Radiation [illegible] of all [illegible] of mill tailings disposal [illegible] with selection [illegible] construction and operation.

The engineering functions are not limited to evaluations of tailings impoundments, but [illegible] directed to the [illegible] alternative sites, [illegible] design and [illegible] of tailings slurry lines, mill safety, [illegible] and [illegible]. The [illegible] engineering [illegible] the State Engineer who [illegible] stability of [illegible] impoundments. The Bureau engineer coordinates closely with the State [illegible] as well as other agencies in carrying out uranium mill [illegible] and inspection responsibilities.

The environmental engineer in the Uranium Licensing Section of the Radiation Protection Bureau performs the following technical and regulatory functions relating to the licensing of uranium mills:

1. <u>Review and Analysis of Applications for New Mills and Renewal of Operating Mills</u>. The engineer reviews preliminary and final plans for technical feasibility, engineering specifications and [illegible]

ity for the protection of public health and safety. Engineering [illegible] of in-situ and ion exchange facilities are analyzed and evaluated in addition to conventional mills. Evaluation of tailings disposal options is accomplished to ensure adequate technical analysis and assessment of the radiological impacts to surface and groundwater, consideration of alternative sites and disposal options, engineering cost analysis and feasibility of long-term reclamation plans. Evaluation of slurry line systems including design and construction specifications, assessment of alarm systems and the capability of backup systems in the event of line failure is accomplished. The engineer has a fundamental knowledge of earth sciences, particularly geology and hydrology, for the evaluation of potential and flood hazards of disposal sites. An understanding of the principles of resource management, environmental impact assessment and regulatory constraints is necessary for a complete technical assessment of [illegible] reports accompanying uranium mill applications.

2. Determine Compliance with State and Federal Guidelines and Regulations. The environmental engineer applies engineering knowledge to technical and policy aspects of existing and proposed uranium mill licensing regulations (Uranium Mill Tailings Radiation Control Act of 1978, New Mexico Mining and Minerals Act, Title 10 CFR 40 [illegible] and EPA 40 CFR 190).

3. Conduct Supplementary Research and Surveys as Needed. The engineer researches technical questions regarding the feasibility of new milling methods and tailings disposal alternatives. Field evaluation of proposed disposal sites are necessary to determine geological, hydrological and structural feasibility. The engineer analyzes [illegible] to pro-

[illegible] to determine [illegible] characteristics and monitor-ing requirements.

4. <u>Announce and Conduct Public Hearings</u>. The engineer has an under-standing of the public involvement requirement in regulatory procedures to arrange the timing and format of public hearings for uranium mill ap-plications is needed.

5. <u>Inspect Uranium Mills and Tailings Disposal Facilities</u>. The en-gineer performs on-site inspections of operating mills to determine compli-ance with technical specifications and regulations, particularly with res-pect to the safety systems for tailings impoundments. Monitoring programs for radioactive emissions to air and water are reviewed and interpreted to ensure compliance with regulations.

6. <u>Review Periodic Progress Reports and Design Change Requests</u>. Re-ports from uranium mills on radionuclide monitoring, safety and stability of milling and tailings disposal operations, as well as requests for design changes are evaluated for technical feasibility and regulatory compliance.

7. <u>Inform Applicant and Public on Regulatory Requirements</u>. The engin-eer meets with officials from uranium companies and representatives from public interest groups to inform them of regulatory requirements for envir-onmental protection.

8. <u>Prepare Written Evaluations of Uranium Mill Applications</u>. The engineer analyzes applications and prepares environmental evaluations sum-marizing technical and environmental information impacting safety and health. The reports provide a determination of the adequacy of the application in protecting the safety and health of the public and specifies technical con-ditions necessary for license approval.

9. <u>Computer Programming</u>. The engineer has a basic understanding of

can be interpreted and evaluated.

10. Development and Publication of Survey Guidelines and Regulations. The Agency provides technical input in the development and publication of guidelines and regulations for uranium mining and milling operations.

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

BATAAN MEMORIAL BUILDING
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

January 21, 1977

Mr. Thomas E. Baca, Director
Environmental Improvement Agency
Post Office Box 2348
Santa Fe, New Mexico 87503

Dear Mr. Baca:

Your January 6, 1977 letter refers to the New Mexico Environmental Improvement Agency's obligation to license and regulate uranium mills and requests assistance from this office in evaluating the design and performance of uranium tailings dams. Responses to the specific areas identified in your letter follow:

1. License Application Evaluation

   a. Structural stability evaluation in accordance with NRC criteria for tailings dams located off of a water course.

Upon request, we will evaluate the structural stability of tailings dams located off of a water course. Our criteria are essentially the same as those proposed by NRC. In the event NRC criteria depart substantially from our criteria this matter should be reconsidered.

   b. A written statement of acceptability.

We will provide the Radiation Protection Section a letter on acceptability. With respect to the United Nuclear Churchrock tailings dam, there is enclosed a copy of my April 2, 1976 letter to Mr. Alphonso Topp advising that the plans and specifications were accepted for filing by the State Engineer.

2. Dam Construction and Maintenance Monitoring

   a. Review of tailings dam performance data.

We will review data submitted by the New Mexico Environmental Improvement Agency for individual tailings dams and furnish a statement of performance based on the data provided.

b. Training session for on-site inspection of tailings dams.

Mr. J. L. Whiteman of this office will advise your staff of his plans for an on-site inspection of a tailings dam. Members of your staff would be welcome to accompany him to become more familiar with safety inspections.

Your letter advises that the NMEIA staff periodically inspect uranium mills. It would be appreciated if you would advise me of any conditions found that might affect the integrity of tailings dams.

Please let me know if further discussion would be helpful.

Sincerely,

S. E. Reynolds
State Engineer

SER*pat
Enclosure

STATE OF NEW MEXICO
ENVIRONMENT

MEMORANDUM

DATE: May 28, 1980

TO: ALL RADIOACTIVE MATERIAL LICENSEES, X-RAY MACHINE REGISTRANTS AND OTHER INTERESTED PERSONS

FROM: THEODORE A. WOLFF, Ph.D., ENVIRONMENTAL MANAGER

SUBJECT: AMENDED RADIATION PROTECTION REGULATIONS

Enclosed are the amended Radiation Protection Regulations, which supersede The Regulations For Governing The Health And Environmental Aspects Of Radiation, filed July 9, 1973, and the amendment thereto filed April 17, 1978; and Form EID-045. Also enclosed are the Radiation Protection Act, upon which the Regulations are based, and a pamphlet which describes the activities of the Radiation Protection Bureau.

Your attention is invited to the new Part 10 which establishes certain important requirements with respect to workers. All licensees should consider that the license condition requiring compliance with Part 4 of the old regulations now requires compliance with Parts 4 and 10 of the amended regulations.

Medical licensees may apply for the simplified group uses contained in Part 3, Schedule C. Without application, the Bureau will so amend medical licenses the next time such licenses are amended.

Radiographers should consider reference to Part 8 in their licenses to now read Part 5. Paragraphing and text of Part 5 are identical with the old Part 8.

If any questions should arise concerning the enclosed material or on any aspects of your radioactive material license or x-ray program, please contact the Radiation Protection Bureau at P.O. Box 968 Santa Fe, New Mexico, 87503; telephone 505-827-5271 ext. 278.

STATE OF NEW MEXICO
ENVIRONMENT

NOTICE TO EMPLOYEES

STANDARDS FOR PROTECTION AGAINST RADIATION
NOTICES, INSTRUCTIONS AND REPORTS TO WORKERS: INSPECTIONS

Part 4 of the New Mexico Radiation Protection Regulations establishes standards for your protection against radiation hazards. Part 10 establishes options for radiation workers and related matters.

YOUR EMPLOYER'S RESPONSIBILITY

Your employer is required to

1. Apply these regulations to work involving sources of radiation.
2. Post or otherwise make available to you a copy of the Radiation Protection Regulations, licenses and operating procedures that apply to work you are engaged in, and explain their provisions to you; post Notices of Violation involving radiological working conditions and orders.

YOUR RESPONSIBILITY AS A WORKER

You should familiarize yourself with those provisions of the Radiation Protection Regulations and the operating procedures that apply to the work you are engaged in. You should observe their provisions for your own protection and protection of your co-workers.

WHAT IS COVERED BY THESE REGULATIONS

1. Limits on exposure to radiation and radioactive material in restricted and unrestricted areas.
2. Measures to be taken after accidental exposure.
3. Personnel monitoring, surveys and equipment.
4. Caution signs, labels and safety interlock equipment.
5. Exposure records and reports.
6. Options for workers regarding division inspection.
7. Related matters.

REPORTS ON YOUR RADIATION EXPOSURE HISTORY

1. The Radiation Protection Regulations require that your employer give you a written report if you receive an exposure in excess of any applicable limit as set forth in the regulations or in the license. The basic limits for exposure to employees are set forth in Part 4 of the Radiation Protection Regulations. These sections specify limits on exposure to radiation and exposure to concentrations of radioactive material in air and water.

2. If you work where personnel monitoring is required, and if you request information on your radiation exposures:
   (a) your employer must give you a written report, upon termination of your employment, of your radiation exposures, and
   (b) your employer must advise you annually of your exposure to radiation.

INSPECTIONS

All licensed or registered activities are subject to inspection by representatives of the Environmental Improvement Division. In addition, any worker or representative of workers who believes a violation of the Act, Radiation Protection Regulations or license condition exists or has occurred in work under a license or registration with regard to radiological working conditions on which the worker is engaged may request an inspection by sending a notice of the alleged violation to the address below. The request must set forth the specific grounds for the notice and must be signed by the worker or the representative of workers. During inspections, division inspectors may confer privately with workers, and any worker may bring to the attention of the inspectors any past or present condition which he believes contributed to or caused any violation.

INQUIRIES

Inquiries dealing with the matters outlined above can be sent to:

RADIATION PROTECTION BUREAU
ENVIRONMENTAL IMPROVEMENT DIVISION
P. O. BOX 968
SANTA FE, NEW MEXICO 87501

POSTING REQUIREMENT

Copies of this notice must be posted in a sufficient number of places in every establishment where employees are employed in activities licensed or registered, pursuant to Parts 2 and 3 of the Radiation Protection Regulations, to permit employees working in or frequenting any portion of a restricted area to observe a copy on the way to or from their places of employment.

RADIATION PROTECTION ACT

Chapter 185 Laws of 1959
(As Amended by Chapter 284 Laws of 1971
and by Chapter 343 Laws of 1977)
Sections 74-3-1 through 74-3-16 NMSA 1978

74-3-1. SHORT TITLE — Sections 74-3-1 through 74-3-16 NMSA 1978 may be cited as the "Radiation Protection Act."

74-3-2. RADIATION TECHNICAL ADVISORY COUNCIL; CREATION AND ORGANIZATION.

A. There is established a "radiation technical advisory council" consisting of seven members. The members shall be appointed by the Governor, after consultation with the director of the agency, for five-year, staggered terms. The Governor shall fill any vacancy occurring on the council. The replacement appointee shall serve the remainder of the original member's unexpired term.

B. The members of the council shall be individuals with scientific training in one or more of the following fields: diagnostic radiology, radiation therapy, nuclear medicine, radiation or health physics or related sciences with specialization in radiation.

74-3-3. COUNCIL DUTIES; PER DIEM — It is the duty of the council to advise the agency [environmental improvement division] and the board on technical matters relating to radiation. Members of the council shall receive per diem and mileage as provided in the Per Diem and Mileage Act [10-8-1 to 10-8-8 NMSA 1978], and shall receive no other compensation, perquisite or allowance. Money expended for these purposes shall be paid from agency funds.

74-3-4. DEFINITIONS — As used in the Radiation Protection Act [74-3-1 to 74-3-16 NMSA 1978]:

A. "board" means the environmental improvement board;

B. "agency" means the environmental improvement agency [environmental improvement division];

C. "council" means the radiation technical advisory council;

D. "radiation" includes particulate and electromagnetic radiation and ultrasound, but does not include audible sound;

E. "radioactive material" includes any materials or sources, regardless of chemical or physical state, which emit radiation;

F. "radiation equipment" means any device which is capable of producing radiation;

G. "agreement state" means any state with which the nuclear regulatory commission, or its successor, has entered into an agreement under Section 274(b) of the Atomic Energy Act of 1954, as amended;

H. "person" means any individual, partnership, firm, public or private corporation, association, trust, estate, political subdivision or agency, or any other legal entity or their legal representatives, agents or assigns;

I. "continued care fund" means the radiation protection continued care fund;

J. "director" means the director of the environmental improvement agency [environmental improvement division]; and

K. "nuclear regulatory commission" means the United States atomic energy commission, the United States nuclear regulatory commission or its successor.

74-3-5. RADIATION PROTECTION CONSULTANT; RADIATION REGULATIONS; INSPECTION.

A. The board shall be the radiation protection consultant for all agencies and institutions of the state and shall, with the advice and consent of the council, have the authority, after considering the facts and circumstances and following the procedures set forth in Section 74-1-9 NMSA 1978, to promulgate rules and regulations:

(1) concerning the health and environmental aspects of radioactive material and radiation equipment;

(2) prescribing license fees, all of which shall be deposited in the general fund;

(3) requiring the posting of a bond running only to the state for licensed activities, which bond shall be adequate to insure, in the event of abandonment, default or other performance inabilities of the licensee, compliance with the requirements of the regulations or license conditions, including actions of the licensee required during or after the cessation of operations, which bond shall be released upon demonstration by the licensee that the conditions of the license have been satisfied; and

(4) establishing continued care fund deposit requirements and other continued care requirements as provided in Section 74-3-6 NMSA 1978.

B. Upon adoption, regulations shall be furnished to interested parties upon request.

C. In order to carry out the purposes of the Radiation Protection Act [74-3-1 to 74-3-16 NMSA 1978], the director of the agency [environmental improvement division] or his authorized representatives may, as a condition of license or registration, enter at all reasonable times in or upon any private or public property where the director has reasonable cause to believe there is radioactive material or radiation equipment.

74-3-6. CONTINUED CARE FUND REGULATIONS; REQUIREMENTS; EXEMPTIONS; MODIFICATION.

A. In the adoption of regulations governing continued care fund requirements, the board shall consider the desirability of prorated payments by the licensee in relation to the expected life of the licensed operation.

B. Licensees whose licensed activities consist only of uses of radioactive material which do not create a situation requiring continued care of radioactive materials after the expiration of the license, including but not limited to X-ray generating devices, laboratories, medical facilities, pharmacies, industrial radiography, well logging and gauges shall not be required to make deposits to the continued care fund.

C. Until the nuclear regulatory commission adopts regulations governing continued care activities, continued care fund deposits required from a uranium mill license holder shall be ten cents ($.10) per pound of U_3O_8 in uranium concentrate (yellow cake) produced from such mill, unless the board determines that a lesser amount is appropriate and the requirement of a mill license holder to make deposits to the continued care fund will terminate for each mill after the cumulative continued care fund deposit for that mill reaches one million dollars ($1,000,000).

D. After the nuclear regulatory commission adopts regulations governing continued care activities:

(1) the board may alter the amount or character of a licensee's obligation by regulation if such regulations are no more stringent than the regulations of the nuclear regulatory commission governing continued care activities;

(2) The board may adopt continued care requirements more stringent than those of the nuclear regulatory commission upon the finding that such regulations are necessitated by unique or special circumstances in New Mexico; and

(3) deposits by a licensee to the continued care fund shall be considered in adopting regulations altering the amount or character of a licensee's continued care obligation.

74-3-7. CONTINUED CARE FUND CREATED; APPROPRIATION; APPROVAL; REGULATION.

A. The "radiation protection continued care fund" is created in the state treasury. Cash balances in the fund shall be invested by the state treasurer as other state funds under his jurisdiction are invested. Income earned on the investment shall be credited to the continued care fund for use as provided in the Radiation Protection Act [74-3-1 to 74-3-16 NMSA 1978].

B. Money in the continued care fund is appropriated to the agency [environmental improvement division] 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.

C. Emergency expenditures up to the amount of one hundred thousand dollars ($1,000,000) for any single emergency incident may be made from the continued care fund by the director subject to approval of the chairman of the board. Expenditures involving more than one hundred thousand dollars ($1,000,000) shall be made only after prior approval of the state board of finance.

D. Subject to the provisions of this section, the board shall adopt regulations governing the administration of the continued care fund.

74-3-6. REGISTRATION OF RADIATION EQUIPMENT.

A. It is unlawful for any person to possess, use, store, dispose of, manufacture, repair, alter or inspect radiation equipment specified by regulation of the board unless he registers with the agency [environmental improvement division].

B. The agency [division] shall issue registration certificates in accordance with procedures prescribed by regulation of the board. Registration applications shall be made on forms provided by the agency [division]. The registration statement shall be limited to information which the board determines to be necessary for the protection of the health of the people of the state.

C. The requirement of registration shall not be interpreted to imply approval by the agency [division] of the manner in which the activities requiring registration are carried out.

74-3-8. LICENSING OF RADIOACTIVE MATERIAL.

A. It is unlawful for any person to possess, use, store, dispose of, manufacture, process, repair or alter any radioactive material unless he holds:

(1) a license issued by the nuclear regulatory commission, and notification by the licensee to the agency [environmental improvement division] of license identification;

(2) a license issued by an agreement state and notification by the licensee to the agency [division] of license identification; or

(3) a license issued by the agency [division].

B. The agency [division] shall issue licenses and shall approve requests for reciprocity in accordance with procedures prescribed by regulation of the board. License applications shall be made on forms provided by the agency [division]. The agency [division] shall not issue a license unless the applicant has demonstrated the capability of complying with all applicable regulations of the board.

C. The board may, by regulation, exempt for the requirements of licensure specific quantities of any radioactive material determined by the board not to constitute a health or environmental hazard.

D. The holding of a license issued by the agency [division], the nuclear regulatory commission or an agreement state does not relieve the licensee from the responsibility of complying with all applicable regulations of the board.

74-3-10. EXEMPTIONS.

A. Nothing contained in the Radiation Protection Act [74-3-1 to 74-3-16 NMSA 1978] shall be construed as authorizing the agency [environmental improvement division] or the board to limit the kind and amount of radiation that may be applied to a person for diagnostic or therapeutic purposes by or under the direction of a licensed physician.

B. The Radiation Protection Act shall not apply to the transportation of any radioactive material in conformity with regulations of the department of transportation or other agency of the federal government having jurisdiction, or to any material or equipment owned by the United States and being used, stored or transported by or for the United States or any department, agency or instrumentality thereof, except to the extent required or permitted by the authority in control of such materials or equipment.

C. The Radiation Protection Act shall not apply to the mining, extraction, processing, storage or transportation of radioactive ores or uranium concentrates that are regulated by the United States bureau of mines or any other federal or state agency having authority unless the authority is ceded by such agency to the board.

74-3-11. CIVIL PENALTY; INJUNCTION.

A. If the director has good cause to believe that any person is violating a condition of a license issued by the agency [environmental improvement division], or administered by the agency [division] pursuant to an agreement with the nuclear regulatory commission, or any regulation of the board, the person shall be given an opportunity to be heard at a hearing before the director. The director shall notify the person by certified mail of the date, time, place and subject of the hearing. If the director finds that the person is violating or threatens to violate a condition of the license or a regulation of the board, the director shall issue an order to cease and desist or revoke the license held by the person, whichever is appropriate.

B. The director may issue a cease and desist order, on an emergency basis pending the hearing provided in Subsection A of this section, if he determines that immediate action is required to protect human health or safety. If a cease and desist order is issued on an emergency basis, the hearing before the director shall be held as soon as possible. The person who is the subject of a cease and desist order issued on an emergency basis may waive in writing the requirement of written notice of the hearing before the director in the interest of expediting that hearing.

C. The agency [division] may seek injunctive relief against any violation or threatened violation of regulations, rules or orders adopted pursuant to the provisions of the Radiation Protection Act [74-3-1 to 74-3-16 NMSA 1978], and such relief shall be subject to the continuing jurisdiction and supervision of the district court and the court's powers of contempt. The action shall be filed in the district court for the county in which the violation occurred or will occur. The attorney general shall represent the agency [division].

D. In addition to the remedy provided above, the trial court may impose a civil penalty not to exceed five thousand dollars ($5,000) for each day or portion of a day during which violation occurs.

E. Any person aggrieved by a final judgment of the district court under this section may appeal to the supreme court as in other civil actions.

74-3-12. CRIMINAL PENALTY — Any person who willfully violates any provision of the Radiation Protection Act [74-3-1 to 74-3-16 NMSA 1978] or any rule, order or regulation promulgated thereunder is guilty of a misdemeanor.

74-3-13. EMERGENCIES — In the event of an emergency, the director may order the impounding of sources of radiation in the possession of any person who is not equipped to comply with or fails to comply with the provisions of the Radiation Protection Act [74-3-1 to 74-3-16 NMSA 1978] or any rule or regulation promulgated thereunder.

74-3-14. FLUOROSCOPIC OR X-RAY MACHINES FOR SHOE FITTING; HAND-HELD FLUOROSCOPES; OPERATION OR MAINTENANCE PROHIBITED.

A. No shoe-fitting device or shoe-fitting machine which uses fluoroscopic, X-ray or radiation principles shall be operated or maintained within the state.

B. No hand-held fluoroscope shall be operated or maintained within the state.

74-3-15. AGREEMENT STATUS AUTHORIZED — The board and the agency [environmental improvement division], through the governor, may enter into an agreement with the nuclear regulatory commission, as provided in the Atomic Energy Act of 1954, as amended, providing for discontinuance of the regulatory authority of the nuclear regulatory commission and acceptance of that authority by the board and agency [division]. For the duration of such an agreement, the board shall have authority to regulate the radioactive materials covered by the agreement for the protection of the public health and safety and the environment from radiation hazards.

74-3-16. DISCRIMINATION — No person or employer shall discharge or in any manner discriminate against any employee [employee] except for good cause shown because the employee has filed a complaint or instituted or caused to be instituted a proceeding under or related to the Radiation Protection Act [74-3-1 to 74-3-16 NMSA 1978] or has testified or is about to testify in any such proceeding or because of the exercise by the employee on behalf of himself or others of any right afforded by that act or any rule, regulation or order adopted thereunder.

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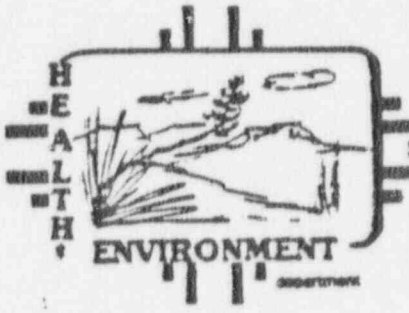

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ENVIRONMENTAL IMPROVEMENT DIVISION

RADIATION PROTECTION REGULATIONS

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R A D I A T I O N P R O T E C T I O N B U R E A U

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