Mr. J. W. Luna, Commissioner  
Department of Environment and Conservation  
344 Cordell Hull Building  
Nashville, TN 37203

Dear Mr. Luna:

This letter is to confirm the discussion Mr. Richard L. Woodruff, Regional State Agreements Officer, and Mr. Richard L. Blanton, Office of State Programs held on December 12, 1991, with Messrs. Wayne K. Scharber, and Michael H. Mobley and subsequent conversations following our review and evaluation of the Tennessee radiation control program.

As a result of our review and the routine exchange of information between the Nuclear Regulatory Commission (NRC) and the Tennessee Division of Radiological Health (DRH), we are unable to find that the Tennessee program for regulating agreement materials is adequate to protect the public health or that it is compatible with the regulatory programs of the NRC. This is based upon significant problems that were found in two Category I indicators as discussed below and in Enclosure 2. An explanation of our policies and practices for reviewing Agreement State programs is included as Enclosure 1.

The status and compatibility of regulations is a Category I indicator. For those regulations adopted by NRC which are deemed to be a matter of strict compatibility, the State regulations should be amended to conform as soon as practicable, but no later than three years. Although DRH has made some progress in adopting regulations since our 1989 review, regulations equivalent to those in 10 CFR Part 39, "Licenses and Safety Requirements for Well Logging," have not been adopted. These and other regulations which will need to be adopted are further discussed in Enclosure 2, comment number 1.

The status of the inspection program is also a Category I indicator. DRH continues to experience an inspection backlog. At the time of the review, this backlog numbered 130 licenses, and the number of high priority licenses overdue increased from 2 to 39. Some of these are overdue by more than three years. This indicator is discussed further under Enclosure 2, comment number 2.

We believe that the above backlog developed in part because the DRH continues to lose trained personnel. We note in this regard that the "reclassification package" proposed by the DRH following our last review has not been acted upon at the Departmental level. We understand that a review of the package was favorable, and we are interested in having your projections on the further processing of the proposal.
Tennessee has one of the more experienced and capable Program Directors among the Agreement States. Mr. Mobley was elected by his peers as Chairman of the Conference of Radiation Control Program Directors, Inc. (CRCPD), and he is also Tennessee's representative to the Southeast Low-Level Waste Compact. We believe that given the appropriate resources (approval of the reclassification package referenced above), Mr. Mobley has the expertise to establish the State's Radiation Control Program commensurate with our criteria which could allow us to render a finding of adequacy and compatibility soon thereafter.

We are concerned because the problems identified are serious and appear to be growing worse. In the extreme, a continuation of this trend could force the NRC to initiate action to suspend or terminate the agreement and reassert the licensing and regulatory authority vested in it under the Atomic Energy Act of 1954, as amended.

Enclosure 2 is a summary of the review findings which were discussed with Mr. Bunting, and Mr. Mobley and his staff during our exit meeting on December 13, 1991. As was noted at the time, specific responses to the above findings and the Enclosure 2 comments and recommendations are requested.

As discussed, it is important for the DRH to continue to update your radiation control regulations, and to reduce the inspection backlogs. We also urge that every effort be made to reduce the loss of experienced staff and to provide adequate support for the agreement materials program.

As a separate matter, DRH has recently notified a number of NRC licensees, including federal government agencies, that they must have a Tennessee Radioactive Materials License in order to ship Low Level Radioactive Waste into Tennessee for processing. This matter is being reviewed by NRC staff as to whether it is compatible with the agreement between NRC and the State of Tennessee, and Section 274b. of the Atomic Energy Act of 1954, as amended. We plan to consult further with your staff on this issue and we will advise you of the results of the review.

In accordance with NRC practice, a copy of this letter and the enclosures are provided for placement in the State Public Document Room or otherwise to be made available for public examination.
We appreciate the courtesy and cooperation extended by your staff to Mr. Woodruff and Mr. Blanton during the review.

Sincerely,

Carlton Kammerer, Director
Office of State Programs

Enclosures:
As stated

cc w/encls:
Wayne K. Scharber, Assistant Commissioner
   Department of Environment and Conservation
   Bureau of Environment
Kenneth W. Bunting, Administrator
   Land and Radiation Programs Administration
   Bureau of Environment
Michael H. Mobley, Director
   Division of Radiological Health
   Bureau of Environment
J. Taylor, Executive Director for
   Operations, NRC
S. Ebneter, Regional Administrator,
   Region II, NRC
NRC Public Document Room
State Public Document Room
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NRC Public Document Room
State Public Document Room

bcc w/encls:
The Chairman
Commissioner Rogers
Commissioner Curtiss
Commissioner Remick
Commissioner de Planque

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Application of "Guidelines for NRC Review of Agreement State Radiation Control Programs"

The "Guidelines for NRC Review of Agreement State Radiation Control Programs," were published in the Federal Register on June 4, 1987, as an NRC Policy Statement. The Guidelines provide 29 indicators for evaluating Agreement State program areas. Guidance as to their relative importance to an Agreement State program is provided by categorizing the indicators into two categories.

Category I indicators address program functions which directly relate to the State's ability to protect the public health and safety. If significant problems exist in several Category I indicator areas, then the need for improvements may be critical.

Category II indicators address program functions which provide essential technical and administrative support for the primary program functions. Good performance in meeting the guidelines for these indicators is essential in order to avoid the development of problems in one or more of the principal program areas, i.e., those that fall under Category I indicators. Category II indicators frequently can be used to identify underlying problems that are causing, or contributing to, difficulties in Category I indicators.

It is the NRC's intention to use these categories in the following manner. In reporting findings to State management, the NRC will indicate the category of each comment made. If no significant Category I comments are provided, this will indicate that the program is adequate to protect the public health and safety and is compatible with the NRC's program. If one or more significant Category I comments are provided, the State will be notified that the program deficiencies may seriously affect the State's ability to protect the public health and safety and that the need of improvement in particular program areas is critical. If, following receipt and evaluation, the State's response appears satisfactory in addressing the significant Category I comments, the staff may offer findings of adequacy and compatibility as appropriate or defer such offering until the State's actions are examined and their effectiveness confirmed in a subsequent review. If additional information is needed to evaluate the State's actions, the staff may request the information through follow-up correspondence or perform a follow-up or special, limited review. NRC staff may hold a special meeting with appropriate State representatives. No significant items will be left unresolved over a prolonged period. The Commission will be informed of the results of the reviews of the individual Agreement State programs and copies of the review correspondence to the States will be placed in the NRC Public Document Room. If the State program does not improve or if additional significant Category I deficiencies have developed, a staff finding that the program is not adequate will be considered and the NRC may institute proceedings to suspend or revoke all or part of the Agreement in accordance with Section 274j of the Act, as amended.

ENCLOSURE 1
SUMMARY OF ASSESSMENTS AND COMMENTS
TENNESSEE DIVISION OF RADIATION HEALTH
DECEMBER 15, 1989 TO DECEMBER 13, 1991

SCOPE OF REVIEW

This program review was conducted in accordance with the Commission's Policy Statement for reviewing Agreement State Programs published in the Federal Register on June 4, 1987, and the Internal Procedures established by the Office of State Programs, State Agreements Program. The Tennessee Division of Radiological Health (DRH) was reviewed against the 29 program indicators provided in the Guidelines. The review included inspector accompaniments, discussions with DRH management and staff, technical evaluation of selected license and compliance files and the evaluation of the responses to an NRC questionnaire that was sent to the DRH in preparation for the review.

The 25th program review meeting with Tennessee representatives was held during the period of December 9-13, 1991 in Nashville, Tennessee. The State was represented by Mr. Michael H. Mobley, Director, Division of Radiological Health, and his staff. Selected license and compliance files were reviewed by Mr. Richard L. Woodruff, Regional State Agreements Officer, and Mr. Richard L. Blanton, Office of State Programs. Field accompaniments of three inspectors were made by Mr. Woodruff on December 3-5, 1991. A summary meeting regarding the results of the review was held with Mr. Scharber and Mr. Mobley on Thursday evening, December 12, 1991.

CONCLUSION

A finding of adequacy and compatibility is being postponed until the State's radiation control regulations have been brought up to date, and the overdue inspections have been adequately addressed.

STATUS OF PROGRAM RELATED TO PREVIOUS NRC FINDINGS

The results of the previous regular review were reported to the State in a letter to Commissioner Luna dated March 20, 1990. A follow-up review was conducted during the periods of November 6-8 and 13-16, 1990, and the results were reported to Commissioner Luna in a letter dated January 24, 1991. A mid-review visit meeting was held with the State during the period July 10-12, 1991. The comments and recommendations from these reviews were satisfactorily resolved and closed out during the meetings except for the following.
1. Status and Compatibility of Regulations is a Category I indicator.

Under NRC policy, a state normally has three years to adopt rules that the Commission determines are a matter of strict compatibility. Several sections of 10 CFR Part 39 are subject to this policy.

Tennessee has moved to adopt compatible rules, but the rules have not become effective. "Well Logging Safety Requirements," compatible with 10 CFR Part 39, were adopted by Tennessee as rule 1200-2-12, and were scheduled to become effective on September 28, 1991. However, just prior to the effective date, a public hearing was requested under the State's Administrative Procedures Act. The hearing was held and comments received by the State are being considered. The State projects that this rule will become effective during the first quarter of 1992.

It is also noted that the State adopted the "Financial Assurance" rules, 1200-2-10-.12, in 1982 and amended them effective December 6, 1987. These rules are being reviewed for compatibility by the Office of State Programs.

2. Staff Continuity is a Category II indicator.

Staff retention continues to be a serious problem. The DRH proposed a reclassification package that would upgrade the technical staff positions and provide salary adjustments. The actions needed at the Department level to implement the proposal have not been taken.

3. Status of the Inspection Program is a Category I indicator.

The DRH developed a plan for the inspection of "overdue" licenses, however, the plan has not been effective in eliminating the inspection backlog. In particular, the number of licenses that are overdue for inspection by more than 50% of their normal inspection interval has increased as has the number of licenses that have never been inspected.

CURRENT REVIEW COMMENTS AND RECOMMENDATIONS

All 29 indicators were reviewed and the State fully satisfies 24 of these indicators. Specific comments on the remaining five indicators are as follows:

1. The Status and Compatibility of Regulations is a Category I Indicator. We consider the following comment to be significant.

COMMENT

For those regulations adopted by NRC which are deemed to be a matter of strict compatibility, the State regulations should be amended to conform as soon as practicable but normally no later than three years. Normally, this time interval begins when the rule becomes effective. Several sections of 10 CFR Part 39 are subject to this policy.
The DRH has moved to adopt compatible rules, but the rules have not become effective. "Well Logging Safety Requirements," compatible with 10 CFR Part 39, were adopted by DRH as rule 1200-2-12, and were scheduled to become effective on September 28, 1991. However, just prior to the effective date, a public hearing was requested under the State Administrative Procedures Act. The hearing was held and comments received by the DRH are being considered. The DRH projects that this rule will become effective during the first quarter of 1992.

The state will additionally need to adopt the following regulations by the dates shown in order to maintain compatibility:

"Emergency Preparedness for Fuel Cycle and Other Radioactive Material Licensees" (10 CFR Parts 30, 40, and 70); April 7, 1993. State rules have been drafted, and a public hearing was held on January 30, 1992.

"Standards for Protection Against Radiation", (10 CFR Part 20); January 1, 1994. Compatible rules are being drafted by the DRH and there are tentative plans for a hearing on them during the summer of 1992.

"Safety Requirements for Radiographic Equipment" (10 CFR Part 34); January 10, 1994. State rules are under development by the DRH.

RECOMMENDATION

It is recommended that the DRH continue working to adopt the regulations that are needed for compatibility as soon as possible. We also request that the State notify our Region II Office when the various rules become effective.

2. The Status of the Inspection Program is a Category I indicator. We consider the following comment to be significant.

COMMENT

Data provided by the DRH shows that the program has 130 licenses that are overdue for inspection. Of these, 15 are priority I licenses that are overdue by more than 50 percent of their normal inspection intervals. They range from 12 to 38 months overdue. The DRH also has 24 priority IV licenses that are overdue for their initial inspection.

The DRH has a plan for inspection of certain "priority classes" of licenses and X-ray facilities as staff resources become available. This plan calls for the integration of the X-ray inspections into the inspection schedule for material licenses. The first "priority class"
includes all of the material licenses that are inspected on a six month frequency. The second "priority class" includes essentially all of the medical X-ray facilities. The third "priority class" includes all of the materials licenses with inspection intervals of one to three years that are overdue by more than 50% of their inspection interval. The remaining priority I through III materials licenses that are overdue, and priority IV and V materials licenses that are overdue by more than 50% of their inspection interval comprise "priority class" four. The fifth "priority class" includes veterinary X-ray facilities and the remaining priority IV and V material licenses that are overdue. The sixth "priority class" includes all priority VII material licenses.

It was noted that the area office supervisors are the only persons that are fully trained to perform material license inspections. When combined with other supervisory duties, major X-ray facility inspections, and training new personnel, the lack of qualified inspectors reduces the effectiveness of the above inspection plan. In some instances, the area offices inspection schedules have not progressed beyond the second "priority class" facilities, which allows the overdue materials licenses to become more overdue.

RECOMMENDATION

It is recommended that the DRH reevaluate the inspection plan and assign the material licenses in priorities I through III that are overdue by more than 50% of their inspection frequencies, and the material licenses that have never been inspected, to a higher "priority class."

3. Staff Continuity is a Category II Indicator.

COMMENT

The program has lost 23 technical staff members within the past four years, 12 within this review period. Data maintained by the DRH indicates that 18 of the 23 listed "salary" as a reason for leaving the program. The 23 staff lost also represent over 45 years of technical experience lost, and 97 weeks of technical training lost from the program.

During the 1989 review, we recommended that the job classifications and respective salary ranges be reviewed and upgraded as needed to provide better staff continuity. This recommendation was revisited again during the 1990 follow-up review, and Mr. Scharber related that a reclassification package was being actively pursued.

During the visit in July of 1991, we learned that the reclassification package had been submitted in final form to the Bureau of Environment Office on January 24, 1991, and that the package had received a
favorable review by the personnel office staff. However, during this review we learned that the reclassification package is still in the Commissioner's Office and that no action has been taken.

The average of the mid-range salaries for entry level positions in the other seven southeastern Agreement States is 27,015 dollars, annually. The current salary ranges provided by the DRH reveals that the mid-range salary for the entry level position Environmental Specialist I is 19,050 dollars, or 7,965 dollars below the comparable salary in the other southeastern States.

**RECOMMENDATION**

We recommend that the State expedite to the maximum extent practicable the reclassification of the DRH technical staff positions, and to upgrade the salaries accordingly.

4. **Staffing Level is a Category II Indicator.**

**COMMENT**

An analysis of the current organizational chart and the reviewer's discussions with program managers, revealed that the State Personnel Office has established sixteen new positions for the program. The organizational chart also shows eight vacant positions. During the review, the program received authorization to fill nine of the positions.

**RECOMMENDATION**

It is recommended that the State continue their efforts to recruit and fill the vacant positions.

5. **Administrative Procedures is a Category II Indicator.**

**COMMENT**

The DRH should establish written internal procedures sufficient to assure that the staff performs its duties as required, and to provide a high degree of uniformity and continuity in regulatory practices. Since the last review, the DRH has revised several administrative procedures, including procedures for handling "Incidents" and "Abnormal Occurrences," and for responding to "Complaints and Allegations." However, these procedures do not provide full details on how the "incidents," "allegations," and "complaints" are to be tracked and managed. During the review of the incident files, the program staff had difficulty in locating the 1991 incident files that were being maintained by the Assistant Director (the Assistant Director was out of the office). The reviewer was unable to determine the completeness of
the files, and the status (open or closed) of the "incidents" and "allegations" that were received or documented during 1991.

In addition, NRC requested by letter dated December 10, 1990, a summary of all incidents for the calendar year of 1990. The DRH was unable to honor this request because the incident file summaries were not on the computer system, and because DRH management considered it to be an unnecessary duplication of staff effort to manually develop a list of incident summaries. Annual summaries of incidents are requested from all Agreement States and are analyzed by NRC to identify problems or trends in radiation safety needing regulatory attention.

RECOMMENDATION

It is recommended that the DRH revise and upgrade the procedure to provide for full tracking of "incidents" and "allegations" even in the absence of particular staff members. If practicable, this should include computerization of the database. These procedures should include provisions for providing summaries to NRC for inclusion in the national database and should be incorporated into the program's administrative procedures.

SUMMARY DISCUSSION WITH STATE REPRESENTATIVES

A summary meeting to present the results of the regulatory program review meeting was held on Thursday, December 12, 1991, with Messrs. Wayne K. Scharber and Michael H. Mobley. The timing of the exit meeting was revised to accommodate the schedule of Mr. Scharber, after we learned that Mr. Luna would not be available for an exit meeting during the week.

In general, the reviewers discussed the scope of the review and the NRC staff comments and recommendations. In reply, Mr. Scharber related that he would pass our comments and recommendations along to Commissioner Luna. Also, Mr. Scharber discussed in detail the State's efforts under the new organization to obtain additional personnel and resources for the Division of Radiological Health. State representatives were informed that we appreciated the Department's support of the Radioactive Materials Program and we appreciated the State's cooperation and support to NRC. Mr. Scharber was informed that the details of the review would also be discussed with Mr. Mobley and his staff following our completion of the review on Friday, December 13, 1991, and a letter from NRC would be sent to Mr. Luna with the results of the review.