



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
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ARLINGTON, TEXAS 76011-4125

October 21, 2011

Jim Craig, Director  
Office of Health Protection  
Mississippi State Department of Health  
P.O. Box 1700  
Jackson, MS 39215-1700

SUBJECT: SUMMARY OF PERIODIC MEETING WITH MISSISSIPPI DEPARTMENT OF  
RADIOLOGICAL HEALTH HELD ON SEPTEMBER 20, 2011

Dear Mr. Craig,

A periodic meeting was held with Mr. B. J. Smith and members of his staff on September 20, 2011, at the radiological health office on Lawson Street. The purpose of this meeting was to review and discuss the status of the Mississippi Agreement State Program. The NRC was represented by Dr. Janine Katanic, FSME, and me from Region IV. I have completed and enclosed a general meeting summary, including any specific actions resulting from the discussions.

If you determine that our conclusions do not accurately summarize the meeting discussion, or if you have any additional remarks or questions about the meeting in general, please contact me at 817-860-8116 or by e-mail at [Rachel.Browder@nrc.gov](mailto:Rachel.Browder@nrc.gov) to discuss your concerns.

Sincerely,

*/RA/*

Rachel S. Browder, *CHP*  
Regional State Agreements Officer

Enclosure:  
Mississippi Periodic Meeting Summary

cc:  
Mr. B. J. Smith, Director  
Mississippi State Department of Health  
Division of Radiological Health  
3150 Lawson Street  
PO Box 1700  
Jackson, MS 39215-1700

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	<input checked="" type="checkbox"/> Publicly Available	<input checked="" type="checkbox"/> Nonsensitive
	<input type="checkbox"/> Nonpublicly Available	<input type="checkbox"/> Sensitive
RIV:RSAO:DNMS		
RSBrowder;dlf		
<b>/RA/</b>		
10/21/11		

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## MISSISSIPPI PERIODIC MEETING SUMMARY

Date of Meeting: September 20, 2011

## Attendees

NRC	MISSISSIPPI
Rachel Browder, RSAO	B. J. Smith, Division Director
Janine Katanic, FSME	Jayson Moak, Branch Director
	Julia Ralston, Health Physicist
	Leslie Faulkenbery, Health Physicist
	Loren Ross, Health Physicist

## DISCUSSION:

Mississippi Division of Radiological Health authorizes approximately 330 licenses. For this size of program, the Division has experienced a continuous number of staff turnovers. During the last IMPEP Review in April 20-24, 2009, Mississippi's performance was found satisfactory, but needs improvement, for the performance indicator Technical Staffing and Training, and satisfactory for all other performance indicators reviewed. While Mississippi has been challenged to maintain consistent staffing levels, they have implemented a program that is considered adequate to protect public health and safety and compatible with the NRC's program.

During the last IMPEP review period, four technical staff members had left the program. In addition, during the review period, the former Division Director had retired. For a period of the review cycle, there were only two individuals maintaining the program. As a result, there were four new recommendations opened to address program performance and one recommendation that was kept open from the 2005 IMPEP, which specifically addressed the staffing issue. The MRB recommended at the time to hold a Periodic Meeting at one year. The Periodic Meeting was held on March 30, 2010. At the time of that Periodic Meeting, there had not been any significant progress made to address the staffing issue. Since that time, the Division of Radiological Health program experienced another complete turnover in staff health physics positions, with the exception of management, which has remained constant.

This Periodic Meeting was held at 18 months from the last Periodic Meeting, which is also the midpoint of the remaining review period. The purpose of the periodic meeting was to discuss the staff turnover issue and review the progress that the program has made to address this issue. In addition, the effectiveness of the State's response to the review team's recommendations from the 2009 IMPEP was evaluated, as well as the overall implementation of the Agreement State program.

The status of the State's actions to address the open recommendations from the 2009 IMPEP Review follows:

1. The review team recommended that the State take additional actions, such as increasing salary and benefits, to stabilize staffing and ensure continued successful program implementation.

Status: The Division worked with the Mississippi State Personnel Board (MSPB) to address this recommendation. The state reviewed salaries and benefits of other southern state Radiological Health Programs. A new salary structure was approved, which will increase salaries by approximately 17-31 percent. In addition, the structure developed a six-tier job classification that ranged from the HP Trainee level to HP Advanced level. The new job classification will create a new career ladder for the Radiological Health Organization. The legislature attached years of state service to each increasing job classification level. However, the new structure which has an advanced level of approximately \$50k, appears to be very viable within the state and is consistent with neighboring state programs, which should bring a competitive edge to the Mississippi program and help to retain staff.

This recommendation remains open and should be evaluated at the next IMPEP review.

2. The review team recommended that the State update its existing procedures and develop new procedures, if necessary, to memorialize the policies and practices of the Agreement State program and to serve as a knowledge management tool.

Status: The Division developed and implemented new procedures, which they have been operating under for approximately 2 years. Based on discussions with the staff, it appears they are integrally involved with the program by making suggestions, improvements, and modifications to some of the processes. In addition, the management and staff indicated they were modifying the procedures as appropriate; however, the procedures were not reviewed during this meeting.

This recommendation should be verified and closed at the next IMPEP review.

3. The review team recommended that the State implement a reliable and comprehensive licensing and inspection database that serves as an effective planning, tracking, and data management tool.

Status: The Division developed an Access database to track licensing and inspection status. The database also includes tracking candidates for reciprocity. The Division has assigned individuals certain responsibilities such as updating reciprocity actions and tracking events and violations to closure in the database. The Division emphasized there was more consistency in the database by assigning responsibilities to respective individuals.

This recommendation should be verified and closed at the next IMPEP review.

4. The review team recommended that the State implement a process to ensure that violations are adequately documented, licensee corrective actions are reviewed for adequacy and documented, and sufficient follow up of violations is performed and documented consistent with the safety or security significance.

Status: All inspection reports and letters are reviewed by the Branch Director and Division Director before issuance. In addition, all incoming inspection correspondence is also reviewed by both managers. The Branch regularly meets to discuss potential violations found during inspections to improve staff consistency.

This recommendation should be verified and closed at the next IMPEP review.

5. The review team recommended that the State develop and implement a procedure for the control of sensitive or security-related information that provides guidance to identify, mark, handle, and protect such information.

Status: The Division has approximately 30 licensees that implement increased control security requirements. The files associated with these licensees are maintained in a separate locked file cabinet. Following the IMPEP, the Division implemented a procedure for the control of sensitive and security-related information. Since that time, the Secretary of State's office issued new security policy that immediately affected the Division's office, access to equipment, handling of information, and control of files. The Division is reviewing their procedure to reflect the latest State policy. The Division explained that their intent is to withhold all licensing information from being publicly available.

This recommendation should be verified and closed at the next IMPEP review.

Other topics covered at the meeting included:

Program Strengths: It was observed during the Periodic Meeting that the Division management and staff worked as a team. They encouraged one another and learned and assisted each other as they developed their inspection and licensing qualification folders. This was reflected by the open door and open communication management style. The Division expressed that their strengths included an attitude of teamwork, candid discussions on process change improvements, and the implementation of peer review for all licensing actions.

Program Weaknesses: The turnover in staffing has been a weakness in the program. However, with the new salary structure and additional job classification levels, this may improve the future retention of staff. The Division also indicated that they consider their inability to issue civil penalties to be a weakness in their enforcement program. The Division can only pursue criminal issues which are considered willful.

### Feedback on NRC's Program

The Division indicated that they appreciated the good support provided by NRC Region IV and the communications between the two agencies. In particular, the Division expressed appreciation to Mr. Nima Ashkeboussi for his efforts in coordinating the activities between the two agencies' computer technology staff to ensure the State's infrastructure is appropriate to support the LTS processing system. The Division has adopted the NRC License Tracking System/Web-Based Licensing system (LTS). The agreement between the two agencies for the software has been signed and LTS Lite has been installed; however, it has not yet been initiated. The Division is considering having NRC migrate the existing data from the State's Access database to the final LTS database.

In addition, the Division expressed their appreciation to NRC by letter dated November 5, 2010, and in particular to Mr. Martin J. Virgilio for providing the letter of support which helped the Division to achieve the goal for the new salary structure and job classifications.

### Staffing and Training

The Division is fully staffed with a total of four staff positions and two management positions. One staff member joined the Division from another Agreement State program, two staff members joined the Division from other areas of the State's Health Program, and one staff member was a new hire. Two staff members have been with the program for over a year and the remaining two staff members have been with the program for less than 6 months.

All four staff members are aggressively taking the NRC training courses to become qualified in all types of licensing and inspection activities. The Division has a formal qualification program which requires the final qualification for a specific activity or license category to be assessed by the Division Director. Therefore, the staff member may become qualified for a particular category as progression is made toward complete and full qualification for the broad range of categories.

During the periodic meeting, some of the qualification journals were reviewed. The Division agreed that documentation of the particular category of qualification of a staff member should be clearly indicated in the journal or captured on a review sheet. In that manner, the staff member and management could clearly acknowledge the level of progression and the qualifications which have been obtained and authorized for the respective staff member.

The Division anticipates that the new salary structure and job classifications will be implemented during the first quarter of 2012. The Division anticipates that this should provide further incentive to retain staff because of the 17-31 percent increase in salaries and an improved step progression for health physics positions in the state.

The Division requested NRC's assistance for inspection training accompaniments for the new staff members. This would provide additional oversight and consistency with the NRC program as the staff inspection qualifications are being developed. FSME and the RSAO will work with the Division to develop inspection accompaniments that will be beneficial to the new staff members.

### Program Reorganizations

There has not been any program reorganization during this review period.

### Changes in Program Budget/Funding

The Division is adequately funded as a self-generating State agency and does not receive general funds from the State. The Division has been authorized to submit fee increases across the board for all license types to ensure that adequate funds are maintained. The Division was able to purchase one new four-wheel drive state vehicle for emergency response in support of the nuclear reactor emergency response program.

The last salary increases that were issued to state employees occurred in 2005. The State has not experienced any budget cuts to the program or furloughs during this review period. As previously discussed, the State has approved a new salary structure and job classifications for the health physicists in the Division. The new salary structure will increase salaries by approximately 17-31 percent. The new job classification will also allow flexibility not previously provided by having six level positions from HP Trainee level to HP Advanced level. The Division anticipates that this new salary structure will enable the Division to retain its staff and be more competitive to surrounding state programs and businesses in the area.

### Materials Inspection Program

At the time of this periodic meeting, the Division reported that there were no overdue inspections. As a result of one individual entering inspection results into the Access database, the Division is able to project the inspections for the current month and ensure that the inspection frequencies are being met. The security inspections are being performed coincidentally on the same frequency as the health and safety inspections.

### Materials Licensing Program

The Division indicated that all new applications and license amendment requests were completed within 30 days of receiving the required supporting documentation for the action. The Division performed prelicensing visits and ensured that increased controls were in place prior to issuing new licenses for Category 2 facilities. The Division implemented the increased controls and fingerprinting orders by license conditions. Licenses were authorized for a 6-year renewal period.

### Regulations and Legislative Changes

The State is up to date on all regulation amendments currently required for compatibility. The Division has a process in place to address the comments for one proposed regulatory package (RATS ID 2007-3) and submit to NRC as final. In addition, the Division needs to provide the final regulation package for RATS ID 2009-1 and RATS ID 2003-1 for review by NRC. These final regulations have previously been submitted by the Division to the State Board of Health and approval by the Board of Health was pending.

The Division also reported that their regulations will be recodified pursuant to a change made by the Mississippi Secretary of State to make all Health Department regulations consistent. When the regulations are recodified, NRC will need to perform another review of the regulations to assure that all references have been properly addressed.

### Event Reporting, Including Follow-up and Closure Information in NMED

The Division reported nine events to the Nuclear Material Events Database (NMED) since the last periodic meeting on March 30, 2010. Based on the review of events in the NMED database and discussion of the events during the periodic meeting, it was determined that the events were appropriately reported to the NRC and were properly updated in NMED. The Division may want to consider whether to use the "Event Closed" field in NMED. This is not a required field as the "Record Complete" field is required for NMED and the Division was appropriately completing the event records.

The Division dispatched inspectors for on-site investigations as appropriate and commensurate with the health and safety significance of the incident. The Division had assigned the responsibility for maintaining the NMED database to one of the new staff members. The individual was familiar with the database and during the periodic meeting she discussed her responsibilities for updating and tracking the events in the NMED database.

### Response to Incidents and Allegations

The Division continues to be responsive to notifications of incidents and allegations. Incidents are quickly reviewed for their affect on public health and safety.

### Status of Allegations and Concerns Referred by the NRC for Action

NRC did not refer any allegations to Mississippi during the review period.

### Emerging Technologies

During the periodic meeting, the Division described that they had communicated licensing expectations and requirements to a potential licensee who was interested in developing a method to chemically separate Caldasite ore for its zirconium, rare earth material. The process was expected to create a liquid and silica waste stream of

uranium and thorium, which would be transferred to a mill as alternate feed material. In addition, the Division has spoken with FSME experts on this potential production process and any regulatory requirements involved.

#### Large, Complicated, or Unusual Authorizations for use of Radioactive Materials

The Division did not have any large or unusual authorizations during the review period.

#### Current State Initiatives

For many years, the Division has been monitoring the Salmon site where two underground detonations took place on October 22, 1964, and December 3, 1966. These detonations were a part of DOE's project to develop seismic methods for detecting underground nuclear tests. The Salmon Site is a 1,470-acre tract of land located about 21 miles southwest of Hattiesburg, Mississippi. The tract is located over a geological formation known as the Tatum Salt Dome and is the location of the only nuclear weapons test detonations known to have been performed in the Eastern United States.

The Division completed radiological and chemical deposition analyses on trees above the Tatum Salt Dome area and determined that the trees did not contain any measurable tritium or radioactive materials above normal release levels. The state intends to sell the trees for resources in order to develop the land for a state park.

#### State's Mechanisms to Evaluate Performance

The Division uses peer reviews of inspection reports and licensing actions to develop performance and consistency and obtain a final quality check for each regulatory product. The final report or licensing action is issued by the Division Director. Inspectors are accompanied by the Branch Director on an annual basis. In addition, the Division meets as needed to assess the program or to recommend any changes or improvements to the processes in the program. The Division is relatively small and it appears that they work closely together to ensure that the program is successful.

#### Current NRC Initiatives

Dr. Janine Katanic discussed ongoing Office of Federal and State Materials and Environmental Management Programs (FSME) initiatives with the State of Mississippi representatives. This included a brief review of the latest FSME letters and RCPD letters that requested a review and response from the Agreement States. In addition, Dr. Katanic discussed the national source tracking system, web-based licensing, security rulemaking, and safety culture initiative.

CONCLUSION:

The Division has spent a significant amount of time and effort on the five recommendations from the last IMPEP review. Even with the significant number of staff turnovers, the Division has continued to maintain public health and safety and implement an effective radiation safety program.

The efforts made by the Division and the Department of Health to address the staffing issues are noteworthy. The new salary structure and job classifications should enable the Division to retain its staff and be a competitive organization in the State.

Schedule for the Next IMPEP Review

NRC staff recommends that the next IMPEP review be held, as currently scheduled, in April 2013.