



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BLVD  
ARLINGTON, TEXAS 76011-4511

November 30, 2012

Mr. Mike Broderick, Manager  
Radiation Management Section  
Oklahoma Dept. of Environmental Quality  
P.O. Box 1677  
Oklahoma City, OK 73101-1677

Dear Dr. Broderick:

A periodic meeting with your State was held on October 24, 2012. The purpose of this meeting was to review and discuss the status of the Oklahoma Agreement State Program. The NRC was represented by Mr. Stephen Poy from the Office of Federal and State Materials and Environmental Management Programs (FSME), and me. I have completed and enclosed a general meeting summary, including any specific actions resulting from the discussions.

If you feel that our conclusions do not accurately summarize the meeting discussion, or have any additional remarks about the meeting in general, please contact me at 817-200-1143 or email [Randy.Erickson@nrc.gov](mailto:Randy.Erickson@nrc.gov) to discuss your concerns.

Sincerely,

*/RA/*

Randy Erickson  
Regional State Agreements Officer

Enclosure:  
Periodic Meeting Summary for Oklahoma

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 Karen Meyer, FSME  
 Steven Poy, FSME

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AGREEMENT STATE PERIODIC MEETING SUMMARY FOR THE  
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE OF MEETING: OCTOBER 24, 2012

<b>NRC Attendees</b>	<b>Oklahoma Attendees</b>
Randy Erickson, RSAO	Mike Broderick, Manager
Stephen Poy, FSME	

**DISCUSSION:**

The Oklahoma Agreement State Program is administered by the Section, which is located within the Land Protection Division (the Division) of the Department of Environmental Quality (the Department).

The previous IMPEP review (ML103340085) was conducted the week of September 13-17, 2010. At the conclusion of the review, the team found Oklahoma's performance to be satisfactory, but needs improvement, for the indicator, Technical Quality of Licensing Actions, and satisfactory for the remaining performance indicators reviewed. The review team made two new recommendations regarding program performance by the State and kept two open recommendations from the previous review. The team recommended and the MRB agreed that the Oklahoma Program is adequate to protect public health and safety and compatible with NRC's program and that the next full IMPEP review should take place in four years.

The current status of the recommendations identified during the 2010 Oklahoma final IMPEP report is summarized below.

- "The review team recommends that the Section take appropriate measures to conduct their inspection program in a sustainable manner by continuing to implement their corrective action program. (Section 3.2)"

Current Status: The Section continues to implement the corrective action program they initiated after self identifying issues with their database, data entry, and work assignments early in the previous review period.

During the 2010 IMPEP review, the team calculated 17.9 percent of Priority 1, 2 and 3 inspections were conducted overdue. This was primarily caused because of an out-of-date database program in addition to the following:

- Initial inspection data that needed to be created by the license reviewer upon issuance of a new license was not always performed by the license reviewer.
- New inspection data that needed to be created by the inspectors following the completion of their assigned inspections was not always completed by the inspector.
- Inspection assignments had been the responsibility of a staff member prior to retirement in March, 2007. An incorrect assumption was made by management that inspection assignments for the remainder of 2007 had been completed by

Enclosure

the individual prior to the retirement. This incorrect assumption caused a delay in the assignment of inspection responsibilities to inspection staff.

The Section stated that accurate and timely data entry created some short term problems for them. The individual handling most database issues left the Section this year. After some short-term disruptions, a new person to handle database issues was trained and the State reports, is now working smoothly.

- “The review team recommends that the Section retrain its staff to gain increased familiarity with the regulations under 10 CFR Part 35 and the appropriate NRC guidance documents for medical use authorizations. (Section 3.4)”

During the 2010 IMPEP review, the team noted several areas within the licensing program where specific issues were noted. These included:

- Physicians were authorized for 10 CFR 35.300 uses when the documentation supported only 10 CFR 35.100 and 200 uses or the authorization should have been limited to the use of sodium iodide I-131, only,
- Reviewers accepted specialty board certifications that were dated previous to the specialty board certifications recognized by the Commission,
- Physicians were approved without the required specialty board attestations provided in the supporting documentation,
- A Delegation of Authority was not included with the supporting documentation for a new Radiation Safety Officer,
- A medical physicist and authorized user were authorized for 10 CFR 35.600 materials, but did not appear to meet the authorized requirements for high-dose rate brachytherapy.

Following the review, the Section Manager coordinated with Region IV to provide additional licensing training for his staff. A senior license reviewer from the region traveled to Oklahoma and spent a week working with their staff to help enhance their licensing capabilities. The Section reported that this additional training helped significantly. It helped to fill the knowledge gaps they had been experiencing. Based on that training, the Section made changes to how they handle licensing actions and believes they are now issuing improved licenses. While infrequent errors are made, they are being caught before they leave the Section. Internal audits of licensing actions have been performed and no significant errors in mailed documents were detected.

- “The review team recommends that the State take measures to ensure proper documentation and appropriate response, review, enforcement, and follow up of all radioactive materials incidents. (From the 2006 IMPEP report) (Section 3.5)”

During the 2006 IMPEP review, the team noted that while the Section responded appropriately to incidents, they sometimes failed to appropriately document the actions taken in response to the incident. The Section had a policy requiring them to maintain incident documentation in one file; however, the Section didn't always follow that policy.

The team noted that many incident files did not have documentation, or that investigation information was often maintained in draft form in inspector's personal files.

The Section reported that in response to these issues, they assigned one individual to manage the Incident and Allegation Program. A detailed flow chart was developed, training was provided, and staff is expected to follow the process. Documentation is now maintained in one file and a marker is placed in the license file to notify inspectors that an event has occurred in the facility so an additional follow up to the initial response can be performed. Information on investigations is maintained in the Section's database and it is audited for accuracy, completeness, that appropriate actions have been taken to close out the incident programmatically, and that NMED has been properly updated. The Section reported they now believe they have a solid incident investigation program.

- "The review team recommends that the State take measures to ensure proper documentation and appropriate tracking and closure of all allegations involving radioactive material. (From the 2006 IMPEP report) (Section 3.5)"

During the 2006 IMPEP review, the team noted that while the Section responded appropriately to allegations, the team noted that initial contact information and allegation investigation information was maintained in several locations. The team also found that in all but one case, that the Section properly closed each allegation. In this case, the case was not closed and the alleged was not notified of the results of the investigation.

During the 2010 IMPEP review, the review team noted that again in one allegation investigation, the Section did not notify the alleged of the results of the investigation.

The Section reported that while they believe in all cases they did notify alleged of the results of allegation investigations, they did not have documentation in the files to verify they did provide alleged with results.

As noted in the previous recommendation, to improve their documentation the Section assigned one individual to manage the Incident and Allegation Program. A detailed flow chart was developed, training was provided, and staff is expected to follow the process. Documentation is now maintained in one file. General information on allegation investigations is maintained in the Section's database and it is audited for accuracy, completeness, that appropriate actions have been taken to close out the allegation, and that alleged have been notified of the results. The Section reported they now believe they have a solid allegation investigation program.

Other topics covered at the meeting included.

Program Strengths: The Radioactive Materials Section is a busy program with a highly motivated staff that is responsible for the licensing and inspection of approximately 250 specific materials licensees. Management support to the Section is outstanding at all levels, and access to senior management is unencumbered. The Section noted that the dedication of their staff to making the program successful is a huge strength for them. The Section noted they have good support from their Radiation Management Advisory Council and have an effective enforcement program. They also noted they had a recent fee increase which should place the Section in a favorable position financially for the

near future. Their fee increases are tied to the Consumer Price Index and fixed so they are never reduced.

Program Weaknesses: While the Section has experienced significant turn over recently, they have experienced success in filling positions in the materials program. Salaries are low which makes it difficult to keep employees once they are trained. The Section Manager and two senior staff members have over 10 years of experience each, but beyond that the rest of the staff is relatively new. The Section Manager will be eligible to retire in two years and if he leaves, there will be a management gap to overcome. The Section Manager has no specific plans to retire at this time. Following the 2010 IMPEP review, the Section lost one FTE permanently which is now beginning to stress the Section. The Section also reported that they are challenged by how to enter into Web Based Licensing. They are concerned that there may be IT issues associated with their becoming fully engaged in WBL.

#### Feedback on NRC's Program:

The Section discussed several issues including the following:

- The Section stated that a pathway for the disposal of depleted uranium is needed.
- The Section expressed their appreciation for the support they receive in the form of training from NRC. They further stated that they are having difficulty getting into certain training courses such as the Brachytherapy course.
- The Section stated that for new courses like the Decommissioning course, that in the first year or two of its initial implementation, that they should offer additional classes to accommodate the initial increased interest and demand. The Section Manager praised the offering of the new Decommissioning course, saying that it filled an important need for states.
- The Section believes they are challenged by the implementation of Web Based Licensing. They would like to incorporate it into their program and would like a discussion between state IT staff and the WBL IT staff.

#### Staffing and training:

The Radiation Management Section is a busy program which is divided into different program areas. Most of the staff is relatively new to the Section with one still working on full qualification. Because of low salaries, the Section has had difficulty in hiring Health Physicists and has resorted to developing a "grow your own" type program. They hire individuals with science backgrounds and train them in health physics. Since the 2010 IMPEP review, the Section has lost three technical and one clerical staff member. A second clerical staff member left the Section approximately one week after the meeting. They report that they are able to fill vacancies promptly.

The status of Agreement State staff members who fail NRC training courses was discussed. The Section Manager indicated it is their policy to either resend the individual to the class or provide other forms of training whenever this might occur. Since the last

IMPEP review, one staff member failed the Fundamental Health Physics I and II course. In this instance, the individual will restudy course materials and retake the test. If unsuccessful, they plan to resend the individual back through the course.

#### Program reorganizations:

The Section has not been subject to reorganization since the 2010 IMPEP review.

#### Changes in Program budget/funding:

The Section reported their fee increases are tied to the Consumer Price Index (CPI). When the CPI goes up, the Section receives an equivalent percentage fee increase. If the CPI falls, fees remain the same. This has helped to stabilize funding for the Section.

#### Materials Inspection Program:

The Section reported that they currently have no overdue inspections. During the 2010 review it was noted that 13 of 42 initial inspections had been performed overdue. The Section Manager reported that this is no longer a problem and initial inspections are now typically performed within 12 months of issuance. They continue to inspect reciprocity licensees and have not had difficulty performing inspections on at least 20 percent of candidate reciprocity licensees. The Section performs Increased Controls (IC) inspections concurrent with health and safety inspections. The Section Manager conducts about two-thirds of the supervisory accompaniments and one of the senior inspectors performs the remaining one-third of the supervisory accompaniments. The Section reports that accompaniments are up to date.

The Section reported they had completed 172 Priority 1, 2 and 3 inspections since the 2010 review, with only five being performed late. That results in 2.9 percent of inspections being performed overdue.

The Section also reported that they had completed and mailed a total of 156 letters transmitting inspections findings to licensees. Of those a total of 66 were sent out more than 30 days from completion of the inspection. That results in 42.3 percent of all inspection findings being sent to licensees greater than 30 days. The Section Manager believes this continues to be a weakness for the Section, in part, because inspectors are not allowed to leave 591 forms in the field following an inspection. The Section is creating a Standard Operating Procedure (SOP) to allow inspectors to issue 591s in the field which will help this situation appreciably.

#### Licensing Program:

The Section reported that the licensing program is very active. As noted by the 2010 review team, the Section had experienced problems with consistency with adoption of the most recent changes to medical rules in their licensing program. Following additional training provided by the regional NRC office, the Section Manager reported that consistency has improved and many of the knowledge gaps they were experiencing have been corrected.

The 2010 review team also noted that the Section had initiated the process to address maximum possession limits on radioactive materials licenses as requested by RCPD letter 10-007, dated June 21, 2010. The Section reported that they have completed this action. The Section is also following the current pre-licensing guidance appropriately.

#### Regulations and Legislative changes:

The Section reported that one legislative package was finalized following the 2010 IMPEP review that affected their program.

- Legislation exempting all law enforcement agencies from complying with regulations involving sources of radiation,” which would unintentionally include radioactive materials. In the most recent legislative session, this language was amended to limit the exemption to radiation machines so that radioactive materials would still be under the Section’s jurisdiction.

The Section also identified one legislative package that is being proposed for the next legislative session that might affect their program.

- Legislation requiring the Section to exempt certain IC-related information on radioactive materials licenses from the state’s Open Records Act.

Current NRC policy requires that Agreement States adopt certain equivalent regulations or legally-binding requirements no later than 3 years after they become effective. The State incorporates regulations by reference to the NRC regulations.

The following amendments are currently overdue and have not been submitted for review at the time of the meeting:

- “Occupational Dose Records, Labeling Containers, and Total Effective Dose Equivalent Parts 19, 20” (72 FR 68043), that was due for Agreement State implementation by February 15, 2011.
- “Medical Use of Byproduct Material – Authorized User Clarification Part 35” (74 FR 33901), that was due for Agreement State implementation by September 29, 2012.

The following regulation was submitted for review and had comments that need to be addressed by the Section as referenced in an October 31, 2005 letter to the Oklahoma Department of Environmental Quality. (ML053050275):

- Transfer for Disposal and Manifests: Minor Technical Conforming Amendment Part 20 (63 FR 50127) that was due for Agreement State implementation on October 20, 2001.

The following regulations were submitted for review and had comments that need to be addressed by the Section as referenced in an October 29, 2010 letter to the Oklahoma Department of Environmental Quality. (ML102810155)



- “Financial Assurance for Materials Licensees,” 10 CFR Parts 30, 40 and 70 amendments (68 FR 57327), that was due for Agreement State implementation on December 3, 2006.
- “Compatibility with IAEA Transportation Safety Standards and Other Transportation Safety Amendments,” 10 CFR Part 71 amendment (69 FR 3697), that was due for Agreement State implementation on October 1, 2007.
- “Medical Use of Byproduct Materials - Recognition of Specialty Boards - Part 35,” 10 CFR Part 35 amendment (70 FR 16336 and 71 FR 1926), that was due for Agreement State implementation on April 29, 2008.
- “Minor Amendments,” 10 CFR Parts 20, 30, 32, 35, 40 and 70 amendments (71 FR 15005), that was due for Agreement State implementation on March 27, 2009.
- “Exemptions from Licensing, General Licenses, and Distribution of Byproduct Material: Licensing and Reporting Requirements,” 10 CFR Parts 30, 31, 32 and 150 amendments (72 FR 58473), that was due for Agreement State implementation on December 17, 2010.
- “Requirements for Expanded Definition of Byproduct Material,” 10 CFR 20, 30, 31, 32, 33, 35, 61 and 150 amendments (72 FR 55864), that was due for Agreement State implementation on November 30, 2010.

#### Event reporting, including follow-up and closure information in NMED.

Since the 2010 IMPEP review, the Section reported eight events to NMED, with only one remaining open. The Section will close the open event when they are able to obtain the necessary information.

#### Response to incidents and allegations.

The Section continues to be sensitive to notifications of incidents and allegations. Incidents are quickly reviewed for their affect on public health and safety. Incidents are evaluated for safety significance and staff is dispatched to perform onsite investigations whenever possible.

The 2010 IMPEP review team identified issues in both the Section’s incident and allegation programs involving in large part, the proper maintenance of documentation. As noted earlier, the Section assigned one individual to manage the Incident and Allegation program. A detailed flow chart was developed, training was provided, and staff now follows the process. Documentation is maintained in one file and markers are placed in the license file to notify inspectors that an event has occurred in the facility so an additional follow up to the initial response can be performed. Information on investigations is maintained in the Section’s database and it is audited for accuracy, completeness, that appropriate actions have been taken to close out the incident programmatically, and that NMED has been properly updated.

Status of allegations and concerns referred by the NRC for action.

The Section continues to process allegations as they are received. They have not received any allegation referrals from NRC since the 2010 IMPEP review, but have received allegations directly. They investigated and closed them using their established process. The Section continues to be sensitive to issues of identity protection regarding alleged.

Significant events and generic implications.

The Section reported they have not experienced any significant events with potential generic implications since the 2010 IMPEP review.

Current State Initiatives.

The Section reported that current initiatives they are involved with include:

- Dealing with the recent boom in industrial radiography activities.
- Developing a Standard Operating Procedure for issuing 591 Forms in the field.

Emerging Technologies.

The Section reported the following as an emerging technology:

- Oklahoma State University's Multispectral Laboratory's field testing of testing equipment including radiation survey meters.

Large, complicated, or unusual authorizations for use of radioactive materials.

None Identified.

State's mechanisms to evaluate performance.

The Section reported the following as examples of how they evaluate program performance:

- Inspector accompaniments are performed to ensure they are performing at the expected level.
- Experienced individual staff members have been selected to audit selected issues such as reviewing recently-issued medical licenses to confirm compliance with the medical rules changes that were identified as an issue in the last IMPEP.

Current NRC initiatives:

Various NRC initiatives were discussed including senior NRC management changes, web based licensing program, and General License program updates.

Schedule for the next IMPEP review:

It is recommended that the next IMPEP review to be held on schedule in September 2014.