



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION I  
2100 RENAISSANCE BLVD., SUITE 100  
KING OF PRUSSIA, PA 19406-2713

May 22, 2015

Aaron Gantt, Chief  
Bureau of Radiological Health  
Department of Health and  
Environmental Control  
2600 Bull Street  
Columbia, SC 29201

Dear Mr. Gantt:

A periodic meeting with you and your staff was held on March 19, 2015. The purpose of this meeting was to review and discuss the status of the South Carolina Agreement State Program. The U.S. Nuclear Regulatory Commission (NRC) was represented by Daniel Collins, Lisa Dimmick, and me.

I have completed and enclosed a general meeting summary, including any specific actions resulting from the discussions. A Management Review Board (MRB) meeting to discuss the outcome of the periodic meeting has been scheduled for June 23, 2015 at 1:00pm. Call in information for the MRB will be provided in a separate transmission.

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 (610) 337-5214 or via e-mail at [Monica.Ford@nrc.gov](mailto:Monica.Ford@nrc.gov) to discuss your concerns.

Sincerely,

*/RA/*

Monica Lynn Ford  
Regional State Agreements Officer  
Division of Nuclear Materials Safety  
U.S. NRC Region I

Enclosure:  
Periodic Meeting Summary for South Carolina

cc w/encl.: James Peterson, Director

May 22, 2015

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**SUNSI Review Complete: MLF (Reviewer's Initials)**

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DATE	05/22/15								

AGREEMENT STATE PERIODIC MEETING SUMMARY FOR  
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL'S  
BUREAU OF RADIOLOGICAL HEALTH AND  
BUREAU OF LAND AND WASTE MANAGEMENT

DATE OF MEETING: March 19, 2015

<b>U.S. Nuclear Regulatory Commission (NRC) Attendees</b>	<b>South Carolina Department of Health and Environmental Control Attendees</b>
Monica Ford, State Agreements Officer, Region I	Aaron Gantt, Bureau Chief, Bureau of Radiological Health (BRH)
Daniel Collins, Director, Division of Nuclear Materials Safety, Region I	Jim Peterson, Director, Division of Radioactive Materials
Lisa Dimmick, Senior Health Physicist, Agreement State Programs Branch, Office of Nuclear Material Safety and Safeguards	Leland Cave, Section Manager, Radioactive Materials Section
	David Scaturo, Director, Division of Waste Management, Bureau of Land and Waste Management (BLWM)
	Susan Jenkins, Manager, Radioactive and Infectious Waste Management Section

**DISCUSSION:**

During the 2012 Integrated Materials Performance Evaluation Program (IMPEP) review of the South Carolina Agreement State Program (Program), the review team found the State's performance satisfactory for all eight performance indicators reviewed. The review team did not make any recommendations regarding program performance. On August 16, 2012, the Management Review Board (MRB) met to consider the proposed final IMPEP report on the Program. The MRB found the Program adequate to protect public health and safety and compatible with the NRC's program.

On September 13 and October 5, 2010, the MRB reviewed and endorsed the recommendations of the IMPEP Self-Assessment Working Group report dated August 17, 2010. Recommendation 3 of the Working Group's report recommends that consistently high performing organizations that have two consecutive IMPEP reviews with findings of satisfactory on all performance indicators are recognized for its achievements. During the 2012 MRB, South Carolina was identified by the MRB as meeting the high standard for sustained performance. The MRB determined that the next IMPEP review should be held in approximately five years with a periodic meeting held during the midpoint of the review period.

As directed by the MRB a periodic meeting was held, approximately two and a half years after the IMPEP review, on March 19, 2015. This summary is a reflection of that periodic meeting.

Enclosure

TOPICS COVERED DURING THE MEETING INCLUDED:Program Strength(s)

BRH: Experienced staff

BLWM: 1) Experienced staff. 2) In the past succession planning due to staff longevity was a challenge for BLWM. BLWM struggled with how to hire staff, to train and transfer knowledge to, when no vacancy existed. BLWM was able to hire an individual in 2013 and allocate fifty percent of their time to infectious waste and fifty percent of their time to radioactive waste. This allows the more experienced staff to be able to transfer their knowledge to a new staff person before they retire.

Program Challenge(s)

BRH: Database weaknesses exist for tracking licensing and inspection actions. There is also very little information technology support for the current system. BRH would like to transition to NRC's web based licensing (WBL) however; BRH does not believe that the Department would allow them to use the system. If the Department approved BRH to use WBL, BRH believes that the Department would require them to maintain both databases (the current system and WBL).

BLWM: New staff retention

Feedback on the NRC's Program

Both BRH and BLWM commented on the positive working relationship and good communications with the NRC. The Program was also appreciative of NRC funded training courses.

Organization

The Division of Radioactive Material is located in the BRH. BRH is located in Health Regulation, which is a part of Public Health in the Department of Health and Environmental Control. The Division of Waste Management is located in the BLWM, which is a part of Environmental Affairs, in the Department of Health and Environmental Control.

Program Budget/Funding

BRH: This portion of the Program is supported by fees and by money received from the general fund.

BLWM: This portion of the Program is completely fee funded and does not receive support from the general fund. Fees received are enough to support this portion of the program.

Technical Staffing and Training (2012 IMPEP: Satisfactory)

BRH is composed of four technical staff, one section manager, one division director, and a bureau chief. At the time of the periodic meeting there was one vacancy at the technical staff level. An individual left the program in February 2015. BRH is in the process of hiring to fill the vacant position. BRH has three employees who are very close to being retirement eligible.

BRH management is working to be able to back-fill those positions in advance of retirements to ensure knowledge transfer. BRH management stated that upper management is open minded to this idea and BRH will discuss the subject when an individual announces their intent to retire.

Changes to Inspection Manual Chapter (IMC) 1248 were discussed. BRH committed to reviewing its training procedure to ensure that the procedure contains the essential elements of the NRC's IMC 1248.

#### Status of Materials Inspection Program (2012 IMPEP: Satisfactory); Technical Quality of Inspections (2012 IMPEP: Satisfactory)

BRH has conducted one inspection overdue since the May 2012 IMPEP review. This inspection was completed 17 days overdue due to an employee input error. The employee keeps track of their assigned inspections on their own personal spreadsheet and when importing the inspection data, transcribed the due date incorrectly. BRH has completed 29 initial inspections within one year of license issuance and one initial inspection one day past the one year since license issuance date due to a scheduling conflict with the licensee.

BRH uses inspection procedures that are consistent with the inspection guidance outlined in IMC 2800. The majority of routine inspections are documented with the issuance of a BRH-Form 591, "Field Compliance Form," and left with the licensee at the completion of the on-site inspection. These are issued for inspections with no findings or minor violations. Other inspection findings are routinely sent to licensees on a Form BRH-592, "Notice of Non-Compliance" within 30 days of completing an inspection.

BRH issued 10 reciprocity permits in calendar year (CY) 2013, four reciprocity permits in CY 2014, and 10 reciprocity permits (to date) in CY 2015. Of the permits issued BRH inspected four licensees in CY 2013, one in CY 2014, and two (to date) in CY 2015.

BRH has a policy to accompany all staff performing radioactive materials inspections on an annual basis. All inspector accompaniments were performed in CY 2013 (4), 2014 (4), and 2015 (3).

#### Technical Quality of Licensing Actions (2012 IMPEP: Satisfactory)

BRH has approximately 378 specific licensees. All licensing actions are worked on in a timely manner. BRH receives approximately 30 licensing actions per month. BRH has a work load of 30 actions in house. Twenty nine actions have been in process less than six months. One licensing action (a renewal) has been in process for approximately one year. BRH's licenses are on a 10 year renewal cycle.

- Complicated/ Unusual use of radioactive material: BRH received a presentation from a potential licensee on a mobile cyclotron. The device would be on an 18 wheeler making it transportable from place to place. The potential licensee has not yet come back to BRH with an application for licensing, however if BRH does receive an application they may request the NRC's assistance on licensing and guidance document creation for this type of device.

Technical Quality of Incidents and Allegations (2012 IMPEP: Satisfactory)

The Program is aware of the need to maintain an effective response to incidents and allegations. The Program has reported nine events since the last IMPEP review. BRH reported seven events and BLWM reported two events. All reportable events were conveyed to the NRC in the correct manner and appropriate follow-up through NMED has occurred. The Program uses the NRC's allegation procedures for processing allegations. BRH has received one allegation and BLWM has not received any allegations since the last IMPEP review.

Regulations and Legislative Changes (2012 IMPEP: Satisfactory)

The current effective statutory authority is contained in the 1969 Code of Laws of South Carolina, the Atomic Energy and Radiation Control Act, the Radioactive Waste and Transportation Act, and Environmental Fees. No legislative changes affecting the Program have occurred since the last IMPEP review. The Program has no regulations overdue for adoption. The Program implemented regulations equivalent to the NRC's Part 37 regulations in October 2014. Regulations impacting the Program are not subject to sunset requirements. BRH and BLWM split the work associated with adoption of equivalent NRC regulations. Typically the regulation adoption process takes six months from development stage to final regulation adoption.

Sealed Source and Device (SS&D) Evaluation Program (2012 IMPEP: Satisfactory)

- Technical Staffing and Training

BRH has two qualified SS&D reviewers, each with full signature authority. Each of the reviewers has over 20 years of experience, a Bachelor's degree, and each has attended NRC's SS&D workshop. BRH has one staff member working towards full SS&D qualification. BRH has documented qualification criteria for SS&D Reviewers which is a part of the BRH training manual. BRH is hoping to have this individual attend the next offering of the NRC's SS&D training workshop.

- Technical Quality of the Product Evaluation Program

Since the last IMPEP review, BRH has processed one SS&D action. This action was an amendment to an existing registry.

Low Level Radioactive Waste (LLRW) Program (2012 IMPEP: Satisfactory)

- Technical Staffing and Training

BLWM has a division director, a section manager, and five technical staff (four full time and one part time equaling 4.5 full time equivalents for the technical staff). The technical staff person assigned to the Program part time was tactically placed there by management for succession planning purposes. One of the technical staff is assigned to the Barnwell LLRW disposal facility as the resident inspector. Since the last IMPEP, BLWM had a technical staff person retire in December 2013 creating a vacancy. BLWM filled that vacancy in February 2014. Then, that newly hired person left the position in December 2014 leaving the position vacant again. BLWM was able to fill the vacancy in March 2015. As of the periodic meeting BLWM is fully staffed.

- Status of Low-level Radioactive Waste Disposal Inspection Program

BLWM's inspection frequencies are more frequent than the NRC's inspection frequencies. If the NRC inspects a licensee at one year, two years, or three years; BLWM will inspect the same licensee at six months, one year, and two years respectively. BLWM has performed 28 inspections since the last IMPEP review. None of these inspections were performed overdue. BLWM communicates inspection findings at the inspection's closeout meeting and their goal is to provide these inspection findings in writing to the licensee within 30 days. Of the 28 inspections completed, four inspection findings were issued beyond 30 days (issue dates: 32 days, 32 days, 55 days, and 58 days after the completion of the inspection). Most of the inspections performed by BLWM are team inspections consisting of at least two technical staff. Inspectors receive supervisory accompaniments annually.

- Technical Quality of Licensing Actions

All licensing actions processed by BLWM are done so in a timely manner. The section manager reviews all licensing actions and then the Division director signs the action before distribution.

- Barnwell

The LLRW disposal program is administered by the Department under regulatory authority derived from the South Carolina Atomic Energy and Radiation Control Act, Section 13-7-40, 1976, S.C. Code of Laws (as amended).

The Barnwell LLRW disposal facility is regulated by BLWM under a license which was last approved for renewal in 2004. In 2008, the Barnwell LLRW disposal facility closed to generators outside the Atlantic Compact. The license authorizes the receipt, storage, and disposal of Class A, B, and C LLRW to States within the compact (CT, NJ, and SC).

The 2004 renewal amendment was challenged by environmental stakeholders. In 2005, the South Carolina Administrative Law Court ruled in favor of the approval of the renewal. Stakeholders appealed the ruling and the South Carolina Supreme Court ruled that the case should be transferred to the South Carolina Court of Appeals. The Court of Appeals affirmed the Administrative Law Court's ruling, but remanded the case back to the Administrative Law Court for a ruling on whether the licensee is in compliance with Sections 7.11, 7.23.6, and 7.10.5 through 7.10.10 of South Carolina Regulation 61-63. Specifically the appeal was looking at the migration of rainfall in and out of the trenches. In August 2014 the Court of Appeals granted a stay that was filed by Energy Solutions. As of the periodic meeting the stay had not been lifted. Once the stay is lifted Energy Solutions/ BLWM will have 90 days to provide the court with a compliance plan that shows how the site is in compliance with the regulations. Since BLWM is a co-defendant in this case they are seeking a third party or possibly the NRC to review the plan before it is provided to the court. A discussion was had regarding the NRC's technical assistance request program. A copy of management directive 5.7 "Technical Assistance to Agreement States" was provided to BLWM after the periodic meeting.

CONCLUSIONS:

The Program continues to be an effective well maintained Agreement State program with an experienced and well-trained staff in both the BRH and BLWM. There is one vacancy in the BRH and no vacancies in the BLWM at this time. The Program is effectively managing its licensing and inspection activities. The Program is responding to incidents and allegations as appropriate and has no regulations overdue for adoption.

NRC staff recommends that the next IMPEP review be conducted as scheduled in May 2017.