

**INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM**  
**QUESTIONNAIRE**

**Name of State:** South Carolina – Radioactive Waste Program  
**Reporting Period:** May 26, 2012 to June 23, 2017

Note: If there has been no change in the response to a specific question since the last IMPEP questionnaire, the State or Region may copy the previous answer, if appropriate.

**A. GENERAL**

1. Please prepare a summary of the status of the State's or Region's actions taken in response to each of the open recommendations from previous IMPEP reviews.

*There were no new recommendations from the last (2012) IMPEP review.*

**B. COMMON PERFORMANCE INDICATORS**

**I. Technical Staffing and Training**

2. Please provide the following organization charts, including names and positions:

- (a) A chart showing positions from the Governor down to the Radiation Control Program Director;

*Pursuant to South Carolina Code of Laws Section 44-1-20, DHEC is administered under the supervision of the DHEC Board. The DHEC Board consists of 8 members, one from each congressional district, and one at large. The Board members are appointed by the Governor with the advice and consent of the Senate. The at-large member serves as chairman of the Board. The Board members serve 4-year terms or until their successors are appointed. Pursuant to Section 44-1-40, the Board selects DHEC's executive director, after consultation and approval by the Governor, and upon advice and consent of the Senate. The director serves a 4-year term. The SCDHEC Board is appointed by the Governor.*

*Attachment 1.*

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<sup>1</sup> Estimated burden per response to comply with this voluntary collection request: 53 hours. Forward comments regarding burden estimate to the Records Management Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0183), Office of Management and Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

- (b) A chart showing positions of the radiation control program, including management; and

*Attachment 2 (Bureau of Land and Waste Management and the LLRW Management Program)*

- (c) Equivalent charts for sealed source and device evaluation, low-level radioactive waste and uranium recovery programs, if applicable.

N/A

3. Please provide a staffing plan, or complete a listing using the suggested format below, of the professional (technical) full-time equivalents (FTE) applied to the radioactive materials program by individual. Include the name, position, and, for Agreement States, the fraction of time spent in the following areas: administration, materials licensing & compliance, emergency response, low-level radioactive waste, uranium recovery, other. If these regulatory responsibilities are divided between offices, the table should be consolidated to include all personnel contributing to the radioactive materials program.

If consultants were used to carry out the program's radioactive materials responsibilities, include their efforts. The table headings should be:

<u>Name</u>	<u>Position</u>	<u>Area(s) of Effort</u>	<u>FTE%</u>
David Scaturo	RCPD	LLRW, Administration	20
Susan Jenkins	Section Mgr.	LLRW, Administration	75
Lynne Garner	ENGR III	LLRW	100
Crispulo Isiminger	EHM II	LLRW	35
Michael Plemmons	EHM III	LLRW	100
Kevin Strickland	EHM III	LLRW	100
Mark Yeager	EHM III	LLRW	100
Kim Clyburn	EHM II	LLRW, Administration	25

4. Please provide a listing of all new professional personnel hired into your radioactive materials program since the last review, indicate the date of hire; the degree(s) they received, if applicable; additional training; and years of experience in health physics or other disciplines, as appropriate.

Crispulo Isiminger

*Mr. Crispulo Isiminger became an Environmental Health Manager in the Infectious and Radioactive Waste Management Section within the Division of Waste Management on July 23, 2013. Prior to 2013 he received a B.S. in Chemistry from the University of Montclair in 2002. Mr. Isiminger worked as a high school teacher of physics and chemistry for nine years before becoming an Environmental Health Manager. Mr. Isiminger has completed the following training courses:*

*200 Hour Applied Health Physics Training Course (ORAU) - 2013  
NRC Inspection Procedures Course - 2014*

*NRC Licensing Procedures Course - 2014  
ICS-100 - 2014  
ICS-200 - 2014  
Characterization and Planning for Decommissioning Course - 2015  
Transportation of Radioactive Material - 2015  
Environmental Monitoring of Radioactivity Course - 2016  
RESRAD Training Workshop – 2016*

*David Scaturo, PE, PG*

*Mr. Scaturo became Director of the Division of Waste Management on December 2, 2013. Prior to that, Mr. Scaturo managed the Department of Defense Corrective Action Section since 1999. Prior to that, Mr. Scaturo managed the Mining and Reclamation Compliance and Enforcement Section since 1994. Mr. Scaturo received a Bachelor's Degree in Geology from Fairleigh Dickenson University; a Master's of Science Degree in Geological Sciences and a Master's of Science Degree in Civil Engineering, both from the University of South Carolina. Mr. Scaturo is a licensed Professional Engineer and a licensed Professional Geologist in the State of South Carolina.*

*Jason Roof*

*Mr. Jason Roof became an Engineer Associate II in the Infectious and Radioactive Waste Management Section within the Division of Waste Management on February 18, 2014. Prior to employment with SCDHEC, Mr. Roof had been employed as a structural designer for several consulting firms beginning in January of 2012. Mr. Roof graduated from the University of South Carolina with a Bachelor's Degree in Civil Engineering and a Master's Degree in Civil/Structural Engineering. Mr. Roof completed the following training courses:*

*NRC Inspection Procedures Course - 2014  
NRC Licensing Procedures Course - 2014*

*Lynne Garner*

*Ms. Lynne Garner became an Engineer Associate III in the Infectious and Radioactive Waste Management Section within the Division of Waste Management on March 2, 2015. Prior to 2015, Ms. Garner worked in the RCRA Hazardous Waste Section of SCDHEC since September 1, 2008. Ms. Garner received a Bachelor's Degree in Chemical Engineering from Louisiana State University and has been working in the nuclear industry since 1986 in areas including waste processing, regulatory compliance, EH&S management and decommissioning activities. Ms. Garner has completed the following training courses:*

*NRC Inspection Procedures Course - 2015  
NRC Licensing Procedures Course - 2015  
Fundamental Health Physics Course - 2016  
MARSSIM Course - 2017*

5. Please list all professional staff who have not yet met the qualification requirements for a radioactive materials license reviewer or inspector. For each, list the courses or equivalent training/experience they need and a tentative schedule for completion of these requirements.

*Procedures and requirements for professional staff are outlined in our SOPs. These requirements are compatible with NRC's expectations of staff serving in an Agreement State Program.*

6. Identify any changes to your qualification and training procedure that occurred during the review period.

*N/A*

7. Please identify the technical staff that left your radioactive materials program during the review period and indicate the date they left.

*Jessie Stephens, ENGR II (01/01/2014)  
Jason Roof, ENGR II (12/01/2014)  
Mark Yeager, EHM II (06/01/2017)*

8. List any vacant positions in your radioactive materials program, the length of time each position has been vacant, and a brief summary of efforts to fill the vacancy.

*There are currently no vacant positions. Mark Yeager left the program on June 1, 2017, however, Crispulo Isiminger was hired in July 2013 to train to fill the expected vacancy that would be left by Mark Yeager. Mr. Isiminger's FTE% has recently been increased to 80% which is sufficient to meet the needs of the program. Mr. Isiminger's level of effort towards the Radioactive Waste Program will be increased as needed.*

9. For Agreement States, does your program have an oversight board or committee which provides direction to the program and is composed of licensees and/or members of the public? If so, please describe the procedures used to avoid any potential conflict of interest.

*The Technical Advisory Radiation Control Council (TARCC) serves in this capacity. None of the current TARCC members are involved in any facility regulated by the Radioactive Waste Management Program.*

## II. Status of Materials Inspection Program

10. Please identify individual licensees or categories of licensees the State is inspecting less frequently than called for in NRC's Inspection Manual Chapter (IMC) 2800 and explain the reason for the difference. The list only needs to include the following information: license category or licensee name and license number, your inspection interval, and rationale for the difference.

*None*

11. Please provide the number of routine inspections of Priority 1, 2, and 3 licensees, as defined in IMC 2800 and the number of initial inspections that were completed during each year of the review period.

<i>Year</i>	<i>Number of Routine Inspections</i>	<i>Number of Initial Inspections</i>
2012	7	0
2013	7	0
2014	11	1
2015	6	0
2016	11	0
2017	2	0

12. Please submit a table, or a computer printout, that identifies inspections of Priority 1, 2, and 3 licensees and initial inspections that were conducted overdue.

At a minimum, the list should include the following information for each inspection that was conducted overdue during the review period:

- (1) Licensee Name
- (2) License Number
- (3) Priority (IMC 2800)
- (4) Last inspection date or license issuance date, if initial inspection
- (5) Date Due
- (6) Date Performed
- (7) Amount of Time Overdue
- (8) Date inspection findings issued

N/A

13. Please submit a table or computer printout that identifies any Priority 1, 2, and 3 licensees and initial inspections that are currently overdue, per IMC 2800. At a minimum, the list should include the same information for each overdue inspection provided for Question 12 plus your action plan for completing the inspection. Also include your plan for completing the overdue inspections.

N/A

14. Please provide the number of reciprocity licensees that were candidates for inspection per year as described in IMC 1220 and indicate the number of reciprocity inspections of candidate licensees that were completed each year during the review period.

N/A

III. Technical Quality of Inspections

15. What, if any, changes were made to your written inspection procedures during the reporting period?

*Changes were made to reflect revisions to the weblinks and references. Revised the Security Inspection Checklist. Added the use of a tracking document for action items resulting from weekly inspections of LLRW disposal facility site conditions and for inspecting enhanced cap areas at the LLRW disposal facility. Added requirement to include calibration due dates on inspection reports. Revised inspector accompaniment form. Added reference to performing performance based inspections. Added requirement to add inspection schedule to shared electronic calendar.*

16. Prepare a table showing the number and types of supervisory accompaniments made during the review period. Include:

<u>Inspector(s)</u>	<u>Supervisor</u>	<u>License Number/Category</u>	<u>Date</u>
Mike Plemmons	Susan Jenkins	097 5(a)	5/15-17/2017
Kevin Strickland Lynne Garner Mark Yeager Mike Plemmons	Susan Jenkins	097 5(a)	11/16-17/2016
Crispulo Isiminger Kevin Strickland	Susan Jenkins	097 5(a)	05/25-26/2016
Crispulo Isiminger	Mike Plemmons	287-03 5(r)	07/13/2016
Crispulo Isiminger Lynne Garner Kevin Strickland	Susan Jenkins	097 5(a)	11/18-19/2015
Crispulo Isiminger	Kevin Strickland	287-02 5(d)	10/21/2015
Mark Yeager Lynne Garner	Susan Jenkins	097 5(a)	04/29-30/2015
Mike Plemmons Kevin Strickland Crispulo Isiminger Jason Roof	Susan Jenkins	097 5(a)	11/19-20/2014
Mark Yeager Crispulo Isiminger Jason Roof Kevin Strickland	Susan Jenkins	097 5(a)	05/28-29/2014

Continued

<u>Inspector(s)</u>	<u>Supervisor</u>	<u>License Number/Category</u>	<u>Date</u>
Mark Yeager Mike Plemmons Kevin Strickland	Susan Jenkins	287-02 5(d)	12/17/2013
Mike Plemmons Jessie Stephens	Susan Jenkins	287-04 5(c)(ii)	04/30/2013
Mike Plemmons Jessie Stephens	Susan Jenkins	097 5(a)	5/21-23/2013
Mark Yeager Kevin Strickland	Susan Jenkins	287-02 5(d)	12/6/2012
Mike Plemmons Jessie Stephens	Susan Jenkins	097 5(a)	12/4-6/2012

17. Describe or provide an update on your instrumentation, methods of calibration, and laboratory capabilities. Are all instruments properly calibrated at the present time? Were there sufficient calibrated instruments available throughout the review period?

*The Infectious and Radioactive Waste Management Section (IRWMS) maintains adequate and properly calibrated instrumentation currently, and has throughout the current review period, to conduct compliance inspections of licensed activities from the Columbia Office and Barnwell Resident Inspector's Office at the EnergySolutions/Chem-Nuclear disposal facility. IRWMS portable radiological survey instrumentation consists of Multi-Function Survey Instruments interfaced with assorted GM detectors, Dual phosphor  $\alpha/\beta$  scintillation detectors, NaI detectors and REM Ball type neutron detectors. Portable Ion chambers and a tissue equivalent NaI detector are utilized for exposure rate verifications. All instrumentation, with the exception of the neutron detectors, is source checked prior to use. Operational and performance parameters are generated and verified with NIST traceable  $\alpha$ ,  $\beta$ , and  $\gamma$ , plated standards. Calibrations are conducted on an annual basis by a certified and accredited vendor, Thermo Scientific Calibration Laboratory. The IRWMS also maintains a fixed AREVA/Canberra Series 5E gas-proportional counter to measure removable contamination samples (primarily swipes). Operational and performance parameters are generated and verified with NIST traceable  $\alpha$  and  $\beta$  plated standards. Periodic maintenance is performed as needed by the manufacturer Areva/Canberra. All instruments are calibrated on an interval not to exceed twelve months, with a sufficient number maintained calibrated through the review period.*

#### IV. Technical Quality of Licensing Actions

18. How many specific radioactive material licenses does your program regulate at this time?

*19 including 8 radioactive material NORM licenses. There were 21 including 8 NORM licenses at the beginning of the review period but two have since been terminated.*

19. Please identify any major, unusual, or complex licenses which were issued, received a major amendment, were terminated, decommissioned, submitted a bankruptcy notification or renewed in this period.

*Amendment 49, License 097 was issued to Chem-Nuclear Systems (CNS) in March 2004. The decision was appealed by the Sierra Club and Environmentalists, Inc. to the Administrative Law Court (ALC). The ALC dismissed the Environmentalists, Inc. appeal based on lack of standing. The ALC issued an order affirming the License 097 appeal in October 2005. This order was appealed by the Sierra Club to the South Carolina Supreme Court. The SC Supreme Court ruled that the case should be transferred to the South Carolina Court of Appeals. In March 2010, the SC Court of Appeals issued an order affirming in part and remanding in part back to the ALC with instructions to make specific findings and conclusions on whether CNS is in compliance with Sections 7.10.5 through 10; 7.11; and 7.23.6 of the Radioactive Materials (Title A) Regulation 61-63. CNS filed a Petition for Rehearing to the SC Court of Appeals, which was denied in May 2010. CNS filed a Petition for Writ of Certiorari to the SC Supreme Court, which was denied in July 2011.*

*In July 2012, the ALC issued an order on remand affirming that CNS was in compliance with the remanded portions of the regulations, Sections 7.10.5 through 10; 7.11; and 7.23.6. The Sierra Club again appealed the ALC order to the SC Court of Appeals in August 2012. The SC Court of Appeals heard the case in February 2014. The SC Court of Appeals issued a ruling on July 30, 2014, finding that DHEC failed to require CNS to comply with all of the technical requirements of R.61-63 Subsection 7.11.11. The Court ordered DHEC and CNS to submit a written plan for compliance to the ALC within 90-days of the opinion. The SC Court of Appeals required the ALC to promptly determine if CNS will come into compliance with the regulations under the plan. DHEC and CNS filed Petitions for Rehearing and CNS filed a Motion for a Stay. The Motion for a Stay was granted on August 28, 2014; the Petitions for Rehearing are still pending.*

*The SC Court of Appeals withdrew, substituted, and re-filed their opinion on August 12, 2015. The opinion still found that CNS was not in compliance with R.61-63 Subsection 7.11.11, but DHEC and CNS argued that the record did not contain evidence that demonstrated compliance. To address this concern, the SC Court of Appeals included the following remedy: "On remand, DHEC shall consider all available information as to whether Chem-Nuclear has complied with the regulations. On appeal to the ALC, it may conduct its proceedings with no limitations from this court on the evidence it may consider."*



*CNS filed a Petition for Writ of Certiorari with the SC Supreme Court on September 11, 2015. DHEC filed a Return to the Petition on October 13, 2015, as did the Sierra Club. The Petition is still pending before the Supreme Court. The site is currently operating under timely renewal until the appeal is settled.*

*Since the license renewal was deemed timely filed, the expired license remains in effect until a final decision is reached. Since then, Amendments 50 through 63 were issued to incorporate NRC regulatory requirements and NRC orders implementing additional security controls. Department approval was provided to the disposal facility Phase 1 closure work plan completion on March 31, 2015.*

20. Discuss any variances in licensing policies and procedures or exemptions from the regulations granted during the review period.

*The Infectious and Radioactive Waste Management Section (IRWMS) has issued one exemption to a license condition during the current review period as follows:*

*Unitech Services Group (April 2015)*

*Approval was granted to ship dried filter cake contaminated with SNM waste packaged in 16-gallon drums to the disposal site. This provided exemption to SC Radioactive Material License 097, Condition 54 which requires 55-gallon or larger containers. Low-level waste containing SNM can be disposed under the following conditions: waste containers consisting of 55-gallon drums or larger container with quantities of U-235, U-233 and Pu-239 with a sum of the ratios less than unity, can be used to fill the disposal vaults.*

21. What, if any, changes were made in your written licensing procedures (new procedures, updates, policy memoranda, etc.) during the reporting period?

*Changes were made to reflect revisions to the weblinks and references. Revised appeal procedure. Added information regarding financial assurance and decommissioning. Added requirement to create a routine reporting document for each license, if applicable.*

22. Identify by licensee name and license number any renewal applications that have been pending for one year or more. Please indicate why these reviews have been delayed and describe your action plan to reduce the backlog.

*N/A*

V. Technical Quality of Incident and Allegation Activities

23. For Agreement States, please provide a list of any reportable incidents not previously submitted to NRC (See Procedure SA-300, *Reporting Material Events*, for additional guidance, OMB clearance number 3150-0178). The list should be in the following format:

<u>Licensee Name</u>	<u>License #</u>	<u>Date of Incident/Report</u>	<u>Type of Incident</u>
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*There have been no reportable incidents during the current review period.*

24. Identify any changes to your procedures for responding to incidents and allegations that occurred during the period of this review.

*Revised the timeframe for acknowledgement and response to a complaint.*

C. **NON-COMMON PERFORMANCE INDICATORS**

I. Compatibility Requirements

25. Please list all currently effective legislation that affects the radiation control program. Denote any legislation that was enacted or amended during the review period.

Current Legislation

- A. *Section 13-7-10 thru 100 of the 1976 Code of Laws, The Atomic Energy and Radiation Control Act*
- B. *Section 13-7-110 thru 200 of the 1976 Code of Laws, Radioactive Waste Transportation and Disposal Act*
- C. *Section 48-2-10 of the 1976 Code of Laws, Environmental Protection Fund Act<sup>1</sup>*
- D. *Section 48-48-140 of the 1976 Code of Laws, Atlantic Interstate Low-Level Radioactive Waste Compact Implementation Act<sup>2</sup>*

<sup>1</sup>*This Act was amended during the review period but revisions does not affect the Radioactive Waste Management Program.*

<sup>2</sup>*This Act was amended effective July 2015 to reflect a restructuring in state government whereby many of the responsibilities of the former SC Budget and Control Board became the responsibilities of the Office of Regulatory Staff as a result of Act Number 121 listed below.*

Legislation Enacted during the Review Period

- A. *Act Number 121 – SC Restructuring Act of 2014*

26. Are your regulations subject to a "Sunset" or equivalent law? If so, explain and include the next expiration date for your regulations.

*No*

27. Please review and verify that the information in the enclosed State Regulation Status (SRS) sheet is correct. For those regulations that have not been adopted by the State, explain why they were not adopted, and discuss actions being taken to

adopt them. If legally binding requirements were used in lieu of regulations and they have not been reviewed by NRC for compatibility, please describe their use.

*Information in the SRS sheet is correct.*

28. If you have not adopted all amendments within three years from the date of NRC rule promulgation, briefly describe your State's procedures for amending regulations in order to maintain compatibility with the NRC, showing the normal length of time anticipated to complete each step.

*N/A*

II. Sealed Source and Device (SS&D) Evaluation Program

29. Prepare a table listing new and amended (including transfers to inactive status) SS&D registrations of sources and devices issued during the review period. The table heading should be:

<u>SS&amp;D Registry Number</u>	<u>Manufacturer, Distributor or Custom User</u>	<u>Product Type or Use</u>	<u>Date Issued</u>	<u>Type of Action</u>
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*N/A*

30. Please include information on the following questions in Section A, as they apply to the SS&D Program:

Technical Staffing and Training - Questions 2-9  
Technical Quality of Licensing Actions - Questions 18-22  
Technical Quality of Incident and Allegation Activities - Questions 23-24

*N/A*

III. Low-level Radioactive Waste Disposal Program

31. Please include information on the following questions in Section A, as they apply to the Low-Level Radioactive Waste Disposal Program:

Technical Staffing and Training - Questions 2-9  
Status of Materials Inspection Program - Questions 10-14  
Technical Quality of Inspections - Questions 15-17  
Technical Quality of Licensing Actions - Questions 18-22  
Technical Quality of Incident and Allegation Activities - Questions 23-24

*See responses above.*

IV. Uranium Recovery Program

32. Please include information on the following questions in Section A, as they apply to the Uranium Recovery Program:

Technical Staffing and Training - Questions 2-9  
Status of Materials Inspection Program - Questions 10-14  
Technical Quality of Inspections - Questions 15-17  
Technical Quality of Licensing Actions - Questions 18-22  
Technical Quality of Incident and Allegation Activities - Questions 23-24

N/A

**INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM**  
**QUESTIONNAIRE**

**SC Department of Health & Environmental Control**  
**May 26, 2012 through June 23, 2017**

Note: If there has been no change in the response to a specific question since the last IMPEP questionnaire, the State or Region may copy the previous answer, if appropriate.

**A. GENERAL**

1. Please prepare a summary of the status of the State's or Region's actions taken in response to each of the open recommendations from previous IMPEP reviews.

**Response:** No recommendations from previous IMPEP.

**B. COMMON PERFORMANCE INDICATORS**

**I. Technical Staffing and Training**

2. Please provide the following organization charts, including names and positions:

(a) A chart showing positions from the Governor down to the Radiation Control Program Director;

**Response:** Please see attachment.

(b) A chart showing positions of the radiation control program, including management; and

**Response:** Please see attachment.

(c) Equivalent charts for sealed source and device evaluation, low-level radioactive waste and uranium recovery programs, if applicable.

**Response:** Not applicable.

3. Please provide a staffing plan, or complete a listing using the suggested format below, of the professional (technical) full-time equivalents (FTE) applied to the radioactive materials program by individual. Include the name, position, and, for Agreement States, the fraction of time spent in the following areas: administration, materials licensing & compliance, emergency response, lowlevel radioactive waste, uranium recovery, other. If these regulatory responsibilities are divided between offices, the table should be consolidated to include all personnel contributing to the radioactive materials program.

If consultants were used to carry out the program's radioactive materials responsibilities, include their efforts. The table headings should be:

<u>Name</u>	<u>Position</u>	<u>Area of Effort</u>	<u>FTE%</u>
Aaron Gantt	Bureau Chief	Radioactive Materials/X-Ray	30
James Peterson	Division Director	Radioactive Materials	100
Leland Cave	Section Manager	Licensing/Inspection/Regulations	100
Andrew Roxburgh	Section Manager	Licensing/Inspection/Regulations	100
Mark Windham	EHM III	Licensing/Inspection	100
Adam Gause	EHM II	Licensing/Inspection	100
Kenneth Farmer	EHM I	Licensing/Inspection	100

4. Please provide a listing of all new professional personnel hired into your radioactive materials program since the last review, indicate the date of hire; the degree(s) they received, if applicable; additional training; and years of experience in health physics or other disciplines, as appropriate.

**Response:** Adam Gause was hired in July 2014. Mr. Gause has a bachelor of science in biology from Wingate University and a master's in public health from the University of South Carolina. Kenneth Farmer was hired in May 2015. Mr. Farmer has a bachelor of science in biology from Wingate University.

5. Please list all professional staff who have not yet met the qualification requirements for a radioactive materials license reviewer or inspector. For each, list the courses or equivalent training/experience they need and a tentative schedule for completion of these requirements.

**Response:** Adam Gause needs to complete the Irradiator Technology course. Kenneth Farmer continues to attend required NRC sponsored training courses.

6. Identify any changes to your qualification and training procedure that occurred during the review period.

**Response:** There have been no changes to the qualification and training procedure during the review period.

7. Please identify the technical staff that left your radioactive materials program during the review period and indicate the date they left.

**Response:** Ben Sease left the radioactive materials program in February 2015.

8. List any vacant positions in your radioactive materials program, the length of time each position has been vacant, and a brief summary of efforts to fill the vacancy.

**Response:** There are currently no vacant positions in the radioactive materials program.

9. For Agreement States, does your program have an oversight board or committee which provides direction to the program and is composed of licensees and/or members of the public? If so, please describe the procedures used to avoid any

potential conflict of interest.

**Response:** The Technical Advisory Radiation Control Council (TARCC) is used by BRH for professional and technical advice. The TARCC has only been used to provide comments or advice on regulations adopted by the State as a matter of compatibility with U.S. Nuclear Regulatory Commission.

## II. Status of Materials Inspection Program

10. Please identify individual licensees or categories of licensees the State is inspecting less frequently than called for in NRC's Inspection Manual Chapter (IMC) 2800 and explain the reason for the difference. The list only needs to include the following information: license category or licensee name and license number, your inspection interval, and rationale for the difference.

**Response:** There are no individual licensees or categories of licensees BRH is inspecting less frequently than called for in NRC's Manual Chapter 2800.

11. Please provide the number of routine inspections of Priority 1, 2, and 3 licensees, as defined in IMC 2800 and the number of initial inspections that were completed during each year of the review period.

<b>Response:</b>	<u># of Priority 1, 2, and 3 licensees inspected</u>	<u># of initial inspections</u>
5/26/12 – 12/31/12	17	8
2013	35	10
2014	44	9
2015	42	4
2016	48	7
YTD 2017	14	2

12. Please submit a table, or a computer printout, that identifies inspections of Priority 1, 2, and 3 licensees and initial inspections that were conducted overdue.

At a minimum, the list should include the following information for each inspection that was conducted overdue during the review period:

- (1) Licensee Name
- (2) License Number
- (3) Priority (IMC 2800)
- (4) Last inspection date or license issuance date, if initial inspection
- (5) Date Due
- (6) Date Performed
- (7) Amount of Time Overdue
- (8) Date inspection findings issued

**Response:** There were 4 inspections of Priority 1, 2, and 3 licensees conducted overdue and one initial inspection conducted overdue.

Southern Equine Service License No. 911 was a new license issued on October 3, 2011. The initial inspection was due on October 3, 2012 but was performed on October 4, 2012, one day

overdue, because of a scheduling conflict with the licensee. Inspection findings were issued on October 4, 2012.

Aiken Regional Medical Center License 233 (priority 3) was last inspected on November 4, 2011. The next inspection due date should have been August 4, 2015. The inspection was conducted on September 17, 2015, one month and thirteen days overdue. This was due to an inspection due date transcription error by the inspector. Inspection findings were issued on September 17, 2015.

Roper St. Francis Mount Pleasant Hospital License No. 903 (priority 3) was initially inspected on April 12, 2011. The next inspection due date should have been January 12, 2015. The inspection was performed on July 28, 2016, approximately one year and six months overdue. This was due to the fact that the inspection priority (5 instead of 3) was incorrectly entered into the computer after the initial inspection. Inspection findings were issued on July 28, 2016.

Georgetown Cancer Center License No. 786 (priority 2) was last inspected on September 15, 2011. The next inspection due date should have been March 15, 2014. The inspection was conducted on March 17, 2014, two days overdue. Inspection findings were issued on March 17, 2014.

Digirad Imaging Solutions License No. 929 (priority 3) was initially inspected on April 3, 2013. The next inspection due date should have been January 3, 2017. The inspection was conducted on February 21, 2017, one month and 18 days overdue. This was due to the fact that the inspection priority (5 instead of 3) was incorrectly entered into the computer after the initial inspection. Inspection findings were issued on March 6, 2017.

13. Please submit a table or computer printout that identifies any Priority 1, 2, and 3 licensees and initial inspections that are currently overdue, per IMC 2800. At a minimum, the list should include the same information for each overdue inspection provided for Question 12 plus your action plan for completing the inspection. Also include your plan for completing the overdue inspections.

**Response:** There are no Priority 1, 2, and 3 licensees or initial inspections that are currently overdue.

14. Please provide the number of reciprocity licensees that were candidates for inspection per year as described in IMC 1220 and indicate the number of reciprocity inspections of candidate licensees that were completed each year during the review period.

**Response:**

	<u># of candidate licensees</u>	<u># Inspected</u>
FY 2012 – 2013	13	3
FY 2013 – 2014	9	1
FY 2014 – 2015	16	3
FY 2015 – 2016	11	3
FY 2016 – 2017 (still in progress)	13	4

### III. Technical Quality of Inspections

15. What, if any, changes were made to your written inspection procedures during



the reporting period?

**Response:** No changes have been made to the written inspection procedures except ministerial changes to current inspection forms; and the addition of an inspection form for Part XII (Physical Protection of Category 1 and Category 2 Quantities of Radioactive Materials). BRH essentially utilizes inspection procedures outlined in NRC Manual Chapter 2800.

16. Prepare a table showing the number and types of supervisory accompaniments made during the review period. Include:

<u>Inspector</u>	<u>Supervisor</u>	<u>License</u>	<u>Category</u>	<u>Date</u>
Mark Windham	Leland Cave	447	Industrial Radiography	3/7/13
Ben Sease	Leland Cave	688	Portable Gauge	5/14/13
Andrew Roxburgh	James Peterson	934	Portable Gauge	6/25/13
Leland Cave	James Peterson	834	Medical Private Practice	6/27/13
Leland Cave	James Peterson	421	Portable Gauge	10/4/13
Mark Windham	James Peterson	421	Portable Gauge	11/5/13
Andrew Roxburgh	James Peterson	447	Industrial Radiography	6/4/14
Ben Sease	Leland Cave	383	Industrial Radiography	6/20/14
Mark Windham	Leland CAve	081	Broad Scope	8/5/14
Adam Gause	Leland Cave	436	Portable Gauge	9/19/14
Ben Sease	Leland Cave	325	Industrial Radiography	9/25/14
Leland Cave	James Peterson	078	Calibration Facility	6/22/15
Andrew Roxburgh	James Peterson	689	Medical Private Practice	6/30/15
Kenneth Farmer	Leland Cave	463	Portable Gauge	8/5/15
Leland Cave	James Peterson	447	Industrial Radiography	9/28/15
Adam Gause	Leland Cave	693	Industrial Radiography	2/24/16
Andrew Roxburgh	James Peterson	689	Medical Private Practice	6/6/16
Mark Windham	Leland Cave	155	Instrument Calibration	6/14/16
Andrew Roxburgh	James Peterson	142	GL Distribution	7/12/16
Adam Gause	Leland Cave	905	Medical Private Practice	8/4/16
Mark Windham	Leland Cave	948	Medical Private Practice	8/5/16
Kenneth Farmer	Andrew Roxburgh	693	Industrial Radiography	5/11/17

Note: Supervisory accompaniments are completed on a fiscal year cycle.

17. Describe or provide an update on your instrumentation, methods of calibration, and laboratory capabilities. Are all instruments properly calibrated at the present time? Were there sufficient calibrated instruments available throughout the review period?

**Response:** Geiger-Mueller and ion chamber instruments are calibrated at the South Carolina Regional Calibration facility at 12 month intervals. Alpha detection instruments are calibrated annually by Ludlum Measurements, Inc. All instruments routinely used by program staff are currently in calibration.

#### IV. Technical Quality of Licensing Actions

18. How many specific radioactive material licenses does your program regulate at this time?

**Response:** BRH currently regulates 355 specific licenses.

19. Please identify any major, unusual, or complex licenses which were issued, received a major amendment, were terminated, decommissioned, submitted a bankruptcy notification or renewed in this period.

**Response:** Shertech Laboratories - 816 (renewed), Steris Isomedix - 267 (renewed), Team Industrial Services - 693 (renewed), CB & I - 074 (renewed), and Mitsubishi - 036 (renewed). Forty six licenses were terminated during the review period, however, none required a complex decommissioning

20. Discuss any variances in licensing policies and procedures or exemptions from the regulations granted during the review period.

**Response:** There were no variances in licensing policies and procedures or exemptions from the regulations granted during the review period.

21. What, if any, changes were made in your written licensing procedures (new procedures, updates, policy memoranda, etc.) during the reporting period?

**Response:** No substantial changes were made to written licensing procedures. BRH essentially utilizes licensing procedures and guidance outlined in the NUREG-1556 series.

22. Identify by licensee name and license number any renewal applications that have been pending for one year or more. Please indicate why these reviews have been delayed and describe your action plan to reduce the backlog.

**Response:** There are currently no renewal applications that have been pending for one year or more.

#### V. Technical Quality of Incident and Allegation Activities

23. For Agreement States, please provide a list of any reportable incidents not previously submitted to NRC (See Procedure SA-300, *Reporting Material Events*, for additional guidance, OMB clearance number 3150-0178). The list should be in the following format:

<u>Licensee</u>	<u>Name License #</u>	<u>Date of Incident/Report</u>	<u>Type of Incident</u>
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**Response:** All reportable incidents have been submitted to NRC.

24. Identify any changes to your procedures for responding to incidents and allegations that occurred during the period of this review.

**Response:** During the period of this review, no changes have occurred to procedures for responding to incidents and allegations.

### C. NON-COMMON PERFORMANCE INDICATORS

#### I. Compatibility Requirements

25. Please list all currently effective legislation that affects the radiation control program. Denote any legislation that was enacted or amended during the review period.

**Response:** Department Regulation 61-63, Radioactive Materials; Department 61-30, Environmental Protection Fees; and the Atomic Energy and Radiation Control Act enacted by the 1967 session of the South Carolina legislature.

26. Are your regulations subject to a "Sunset" or equivalent law? If so, explain and include the next expiration date for your regulations.

**Response:** Regulations affecting the radiation control program are not subject to a "Sunset" or equivalent law.

27. Please review and verify that the information in the enclosed State Regulation Status (SRS) sheet is correct. For those regulations that have not been adopted by the State, explain why they were not adopted, and discuss actions being taken to adopt them. If legally binding requirements were used in lieu of regulations and they have not been reviewed by NRC for compatibility, please describe their use.

**Response:** The enclosed SRS sheet appears to be correct. All regulations required for compatibility have been adopted.

28. If you have not adopted all amendments within three years from the date of NRC rule promulgation, briefly describe your State's procedures for amending regulations in order to maintain compatibility with the NRC, showing the normal length of time anticipated to complete each step.

**Response:** All required amendments have been adopted.

## II. Sealed Source and Device (SS&D) Evaluation Program

29. Prepare a table listing new and amended (including transfers to inactive status) SS&D registrations of sources and devices issued during the review period. The table heading should be:

SS&D Registry of Number	Manufacturer, Distributor or Custom User	Product Type or Use	Date Issued	Type Action
SC-1276-D101-G	Mahlo America, Inc.	Beta Gauge	12/9/2014	Amendment

30. Please include information on the following questions in Section A, as they apply to the SS&D Program:

Technical Staffing and Training - Questions 2-9

Technical Quality of Licensing Actions - Questions 18-22

Technical Quality of Incident and Allegation Activities - Questions 23-24

**Response:** The BRH does not have a specific SS&D program separate from the radioactive materials licensing and inspection duties, therefore, the information requested in question 30 has already been provided under the Common Performance Indicators.

### III. Low-level Radioactive Waste Disposal Program

31. Please include information on the following questions in Section A, as they apply to the Low-Level Radioactive Waste Disposal Program:

Technical Staffing and Training - Questions 2-9  
Status of Materials Inspection Program - Questions 10-14  
Technical Quality of Inspections - Questions 15-17  
Technical Quality of Licensing Actions - Questions 18-22  
Technical Quality of Incident and Allegation Activities - Questions 23-24

**Response:** Information specific to the Low-Level Waste Program is being provided under separate cover.

### IV. Uranium Recovery Program

32. Please include information on the following questions in Section A, as they apply to the Uranium Recovery Program:

Technical Staffing and Training - Questions 2-9  
Status of Materials Inspection Program - Questions 10-14  
Technical Quality of Inspections - Questions 15-17  
Technical Quality of Licensing Actions - Questions 18-22  
Technical Quality of Incident and Allegation Activities - Questions 23-24

**Response:** Not applicable.

### MATERIALS REQUESTED TO BE AVAILABLE FOR THE ON-SITE PORTION OF AN IMPEP REVIEW

Please have the following information available for use by the IMPEP review team when they arrive at your office:

- List of open license cases, with date of original request, and dates of follow-up actions.
- List of licenses terminated during review period.
- Copy of current log or other document used to track licensing actions.
- List of all licensing actions completed during the review period (sorted by license reviewer, if possible).
- Copy of current log or other document used to track inspections.
- List of all inspections completed during the review period (sorted by inspector, if possible).
- List of inspection frequencies by license type.
- List of all allegations occurring during the review period. Show whether the allegation is open or closed and whether it was referred by NRC.
- List of all licenses that your agency has imposed additional security requirements upon.