Approved by OMB1
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INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM QUESTIONNAIRE

SC Department of Health & Environmental Control
Reporting Period: June 24, 2017 through October 28, 2022

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.

   From the previous IMPEP review, one recommendation was made. The team recommends that the Bureau update its training and qualification manual to incorporate the essential elements of IMC 1248 and implement it for all staff to ensure continued effective and consistent training and development of its staff (Section 3.1).

   Response:

   The program has updated its training and qualification manual to incorporate the essential elements of IMC 1248.

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 attached Organization Chart.

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[1]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
Response:

Please see attached Organization Chart.

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

Response:

SS&D Charts

Qualified Individual	Title
Andrew Roxburgh	Division Director

The Sealed Source & Device Evaluation program currently has one individual qualified to review SS&D requests.

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 heading should be:

Name	Position	Area of Effort	FTE%
Susan Jenkins	RCPD	Rad Mat, Administration	50
Andrew Roxburgh	Div. Director	Rad Mat, Administration	
		Emergency Response	100
Leland Cave	Section Mgr.	Rad Mat Licensing, Inspection	
		Emergency Response	100
Adam Gause	Section Mgr.	Rad Mat Licensing, Inspection	
		Emergency Response	100
Korina Koci	EHM III	Rad Mat licensing, Inspection	100
Jacob Price	EHM II	Rad Mat licensing, Inspection	100
Brandon Johnson	EHM I	Rad Mat licensing, Inspection	100
Jared Bostic	EHM I	Rad Mat 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:

Please see attached list in Attachment A.

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:

Please see attached list in Attachment A.

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

Response:

Since the last review, the Division has completely revised and updated its qualification and training procedure that is consistent with IMC 1248.

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

Response:

Individual	**Date Left/Retired**
Mark L. Windham	January 1, 2018,
James K. Peterson	October 16, 2020
Tawny Morgan	May 14, 2021
Kenneth Farmer	April 8, 2022

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:

An inspector/license reviewer position was vacated on April 8, 2022. The position was posted on August 8, 2022. Applications are currently under review.

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:

TARCC (Technical Advisory Radiation Control Council).

Yes, there are two. The SC Atomic Energy and Radiation Control Act (SC Code of Laws Title 13 Chapter 7) establishes the Technical Advisory Radiation Control Council (TARCC) which advises the department on matters pertaining to ionizing and nonionizing radiation and standards and regulations to be adopted, modified, promulgated, or repealed by the department. Also, the Department is administered under the supervision of the South Carolina Board of Health and Environmental Control. The State Ethics Act (SC Code of Laws Title 8, Chapter 13) addresses conflicts of interest that affect members of state boards and commissions. It imposes a duty upon members of state boards and commissions to disclose a personal conflict of interest and abstain from voting if necessary.

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:

Inspections are conducted at the frequency specified in IMC 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.

Response:

Routine Inspection Completed
June 24, 2017 to October 28, 2022 Review Period

	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Priority 1	3	5	6	7	3	6
Priority 2	14	12	17	7	20	10
Priority 3	10	12	10	5	20	9
Priority 8 (Initial)	1	3	3	9	7	5
Total	28	32	36	28	50	30

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:

Licensee Name	Lic. No.	Priority	License Issue Date	Inspection Due Date	Inspection Completed	Amount of Time Overdue (days)	Date Inspection Findings Issued
Tidelands Health Market Commons, LLC	981	8	9/12/19	9/12/20	12/16/20 Covid Related	95	12/16/20
Roper St. Francis Hospital – Berkeley	982	8	9/16/19	9/16/20	12/3/20 Covid Related	78	12/17/20
RS&H, Inc.	978	8	7/2/19	7/2/20	7/16/20 Covid Related	14	7/29/20
Beaufort County Memorial Hospital	237	3	11/2/20	11/2/21	11/16/21 Covid Related	14	11/16/21

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:

Currently there are no Priority 1, 2, and 3 licensees and initial inspections that are overdue, per IMC 2800.

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:

Fiscal Year	Inspections Completed	# of Candidates	Percentage Completed
2017-2018	6	17	35%
2018-2019	4	13	30%
2019-2020	4	17	23%
2020-2021	5	16	31%
2021-2022	7	18	38%

Note: Please note each FY begins on July 1st of calendar year.

III. Technical Quality of Inspections

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

Response:

We have updated our inspection procedures to describe the inspection program more clearly. This include defining roles and responsibilities, types of inspections, frequencies of inspection and what to look for during inspections. Also, the Division implemented Covid-19 procedures during the pandemic. Inspections forms have updated since the last review period that is more in line with the procedure.

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

Response:

Inspector	**Supervisor**	**License Category**	**Date**
Adam Gause	Leland Cave	Part 37	April 19, 2017
Kenneth Farmer	Andrew Roxburgh	Medical Non-W/D	August 17, 2017
Kenneth Farmer	Andrew Roxburgh	Radiography	March 6, 2018
Adam Gause	Leland Cave	Medical	May 24, 2018
Andrew Roxburgh	James Peterson	Medical	November 8, 2018
Adam Gause	Andrew Roxburgh	Gamma Sterilization	January 10, 2019
Adam Gause	Leland Cave	Gamma Sterilization	June 6, 2019
Andrew Roxburgh	James Peterson	Fixed Gauge	October 8, 2019
Tawny Morgan	Andrew Roxburgh	Portable Gauge	October 31, 2019
Korina Koci	Leland Cave	Medical Non-W/D	December 4, 2019

Adam Gause	Leland Cave	Gamma Knife (GK)	December 18, 2019
Tawny Morgan	Andrew Roxburgh	Fixed Gauge	August 13, 2020
Kenneth Farmer	Andrew Roxburgh	Radiography	August 21, 2020
Korina Koci	Andrew Roxburgh	Portable Gauge	November 10, 2020
Korina Koci	Leland Cave	Nuclear Pharmacy	December 21, 2020
Korina Koci	Adam Gause	Portable Gauge	March 9, 2021
Jacob Price	Leland Cave	Medical	March 24, 2021
Tawny Morgan	Adam Gause	Radiography	April 13, 2021
Kenneth Farmer	Adam Gause	Medical W/D	May 12, 2021
Korina Koci	Adam Gause	Medical W/D	May 19, 2021
Adam Gause	Andrew Roxburgh	Fixed Gauge	June 9, 2021
Adam Gause	Leland Cave	Broad Scope (GK)	August 3, 2021
Leland Cave	Andrew Roxburgh	Medical	September 14, 2021
Jacob Price	Leland Cave	Portable Gauge	October 14, 2021
Korina Koci	Adam Gause	Medical HDR/Manual	October 20, 2021
Korina Koci	Adam Gause	Academic	November 3, 2021
Brandon Johnson	Adam Gause	Medical Non-W/D	December 21, 2021
Korina Koci	Adam Gause	Fixed Gauge	June 2, 2022
Jacob Price	Adam Gause	Fixed Gauge	June 8, 2022
Jacob Price	Adam Gause	Medical W/D	August 24, 2022
Adam Gause	Andrew Roxburgh	M/D	September 19, 2022

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:

The Program has enough calibrated instruments to support Division goals. These instruments include GM, Ion Chambers, Micro-R and REM Ball Neutron instruments. Portable Ion chambers are utilized for exposure rate verifications. All instrumentation, except for the neutron detector, is response checked prior to use. Calibrations are conducted on an annual basis by a licensed vendor, Thermo Scientific.

IV. Technical Quality of Licensing Actions

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

Response: 300

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:

There has not been any major, unusual, or complex licenses that have been issued, received, amended, terminated, decommissioned, renewed, or submitted bankruptcy notification during this review period.

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

Response:

We have not issued any variances or exemptions from the regulations during this 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:

The Program has developed and implemented new licensing procedures. This include defining roles and responsibilities, types of licensing actions, frequencies at which licensing action should be completed, and staff training. In 2021, the Division began tracking licensing actions in a spreadsheet to ensure licensing actions are managed properly. Prior to that all licensing actions were tracked in a logbook. The Division has also updated its preceptor attestation forms.

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:

The Division has one renewal/termination that is three years old as on September 19, 2019 (License No. 028). The licensee submitted its renewal application timely but after requests for additional information in support of the renewal, the licensee requested to terminate the license instead. The licensee has had a difficult time obtaining the funding to properly terminate the license (i.e. disposal cost and final close out surveys). As of September 29, 2022, the licensee has initiated the final step for terminating its license (close out survey). Once we receive confirmation of the close out survey the license will be terminated. The Division also has one license renewal that is one year old as of October 4th. License No. 405 (University of South Carolina) would have been issued prior to the one- year mark, however, when it came time to write the license it was determined that the licensee needed to re-evaluate its possession limits to ensure that it was below the quantities that would require financial assurance.

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: Licensee Name License # Date of Incident/Report Type of Incident

Response:

Licensee Name	License #	Date of Incident/Report	Type of Incident
Self-Regional	073	4/18/17 / 11/18/19	Lost/Abandon/Stolen
McLeod Regional	139	3/9/21 / 3/10/21	Lost/Abandon/Stolen
Lowcountry Medical	648	8/12/22 / 8/25/22	Rad Material Release

During the review period, the Division did not report two incidents within the specified timeframe as described by 10 CFR 20.2201. The Division reported the incidents directly to INL as specified in SA-300. The Division has since reported the incidents to the NRC Operations Center (HOO.HOC). These two incidents were NMED item numbers 210164 and 200018. These two incidents have now been assigned EN numbers. The Division also didn't report an additional incident within the specified timeframe. This incident is EN 56068 and NMED Item Number 220384.

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

Response:

The Division has updated its Incident and Allegation Procedure since the last IMPEP review. This include defining roles and responsibilities, how we receive incidents/allegations, the timeliness of on-site investigations, how we document incidents/allegations, and how we review and close out incidents/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:

During the review period the Program has made three revisions to the Regulations. The first revision included the NRC comments in letter Dated March 6, 2015, RATSID 2015-1, 2015-2, 2015-4, 2015-5 and became final and published in the State Register on February 23, 2018. The second regulation revision included RATSID 2015-3 which was extended to August 15, 2020, and was adopted on September 25, 2020, with NRC final comments in letter dated November 4, 2020. The November 4, 2020 comments by the

NRC were not able to be added the next regulation revision as the Notice of Drafting was published on October 23, 2020, for the third regulatory revision. The October 23, 2020, Notice of Drafting was published on the State Register requesting a revision to R61.63 to included RATSIDs 2018-1, 2018-2, 2018-3, 2019-1, 2019-2, 2020-1, and 2020-2. These changes became final and published in the State Register on May 28, 2021. RATSID 2020-3, 2021-1 and 2021-2 will begin the promulgation process by the end of 2022 in order to adopt the changes listed in RATSID 2020-3 by November 16, 2023.

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

Response: 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.

Response:

The enclosed State Regulation Status (SRS) sheet has been reviewed and found to be 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.

Response:

When regulations are required to be adopted for compatibility, the Agreement States begins the process by getting approval from the DHEC Board to publish a Notice of Drafting in the State Register. The next step is to go through the Notice of Proposed regulation changes which needs DHEC Board approval to publish in the State Register, along with a 30-comment period. At the same time, NRC is provided a copy of the proposed changes for review and comment. Any public comments are considered, and NRC comments are added to the proposed changes. Stakeholder meetings are conducted for the proposed regulation changes. Finally, the Notice of Final regulation is presented to the DHEC Board for consideration and a public hearing is held. Once the DHEC Board has approved the final regulation changes, the regulations are published in the State Register and NRC is provided a copy and provides its final comments. This process usually takes a year.

The Agreement State has adopted all requirement compatibility changes by the required date.

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 Number	Manufacturer, Distributor or Custom User	Product Type or Use	Date Issued	Type of Action

Response:

The Division has not issued any new SS&D certificates or amended any current SS&D certificates during the review period.

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

Response:

The Division currently has one qualified individual to review SS&D requests. The only other qualified individual retired from the Division in the fall of 2020. We also have one individual that has taken part in the Sealed Source & Device workshop but is still qualifying. Due to the limited number of SS&D request, staff undergoing qualification will be given previously submitted SS&D request for review (Mock requests) as part of their qualifications.

Technical Quality of Licensing Actions - Questions 18-22

Response:

The Division has received on October 4, 2022, a request for an amendment of Mahlo America, Inc. (Manufacturer/Distributor) SS&D certificates SC-0438-D-101-B and SC-0438-D-102-B. Mahlo has requested that SC-0438-D-101-B be inactivated as this holder is no longer being distributed. Also, Mahlo requested that SC-0438-D-102-B be amended to add a model number. This request is currently under review.

The Division has received a request to review an SS&D for Custom Use. The applicant is Arclin Surfaces, LLC. This request was received on July 19, 2022 and is currently being reviewed. This review will of course require that the Division submit a TAR to the NRC for assistance in this review due to lack of qualified staff. **Update**: As of September 30, 2022, the Arclin Surfaces, LLC has requested that the Department suspend its review of the application until further notice. The applicant is pursuing other options.

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

Response:

A search of the National NMED Database indicated that 3 incidents were reported involving Mahlo America devices. Two of the incidents involved indicator malfunctions and the other was a recovered gauge at a scrap metal facility. One of the two incidents involving the indicator lights occurred at a general licensee's facility in South Carolina. This incident was investigated in accordance with the Division's Incident and Allegation Procedure. The Department does not believe that there are any generic defects that affect the safety of these devices.

Incidents involving sealed sources and devices will be handle in accordance with the Division's Incident and Allegation Procedure.

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:

Not Applicable to the Division of Radioactive Material Licensing and Compliance

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 to the Division of Radioactive Material Licensing and Compliance