



September 15, 2022

Mr. Stephen Poy, Program Manager
State Agreement and Liaison Programs Branch
Division of Materials Safety, Security, State, and Tribal Programs
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission

Dear Mr. Poy:

Thank you for the opportunity to complete the IMPEP Questionnaire in advancement of your inspection of the Radioactive Waste Management Program. We look forward to meeting and working with you and your team during the week of October 24-28, 2022. Enclosed is the completed IMPEP Questionnaire and associated attachments.

If you need additional information, please feel free to contact Ms. Lynne Garner at 803-898-0493 or myself at 803-898-0238.

Sincerely,

Stacey French, P.E. Director
Division of Waste Management
Bureau of Land & Waste Management

Cc: Lynne Garner, Manager
Infectious And Radioactive Waste Management Section
Division of Waste Management

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM
QUESTIONNAIRE

Reporting Period: 6/24/17-10/28/22

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 (2017) 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.

¹Estimated 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
- (c) Equivalent charts for sealed source and device evaluation, low-level radioactive waste and uranium recovery programs, if 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, 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:

<u>Name</u>	<u>Position</u>	<u>Area of Effort</u>	<u>FTE%</u>
<i>Stacey French</i>	<i>RCPD</i>	<i>LLRW, Administration</i>	<i>20</i>
<i>Lynne Garner</i>	<i>Section Mgr.</i>	<i>LLRW, Administration</i>	<i>75</i>
<i>Crispulo Isiminger</i>	<i>EHM III</i>	<i>LLRW</i>	<i>100</i>
<i>Kevin Strickland</i>	<i>EHM III</i>	<i>LLRW</i>	<i>100</i>
<i>Kimberley Noonan</i>	<i>EHM III</i>	<i>LLRW</i>	<i>50</i>
<i>Kim Clyburn</i>	<i>EHM III</i>	<i>LLRW, Administration</i>	<i>25</i>

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.

Amanda Webb

Ms. Amanda Webb became an Environmental Health Manager III in the Radioactive Waste Management Section within the Division of Waste Management on May 2, 2019. She started with the Department in January 2015 in the Infectious Waste section. She received a B.S and M.S in Forensic Chemistry and Biology in 2007, and her previous experience was in Law Enforcement.

Katy Ringbloom

Ms. Katy Ringbloom became an Environmental Health Manager III in the Radioactive Waste Management Section within the Division of Waste Management on August 17, 2019. She started with the Department in 2018 with the Bureau of Air Quality. She received her B.S degree in Wildlife in 2009, and her previous experience was with Westinghouse Electric Company as a Health Physics technician for five years.

Kimberley Noonan

Ms. Kimberley Noonan became an Environmental Health Manager III in the Infectious and Radioactive Waste Management Section within the Division of Waste Management on April 14, 2022. She has been with the Department since September 2017 working in the Infectious Waste program and received a B.S. in Marine Science and a M.S. in Earth & Environmental Resources Management from the University of South Carolina in 2017.

Stacey French , PE

The Infectious and Radioactive Waste Management Section is within the Division of Waste Management. Ms. Stacey French became the Director of the Division of Waste Management in May 2019. She has been with the Department since August 1997 and worked in the Resource Conservation and Recovery Act Program at Federal Facilities prior to May 2019. She received her B.S. in Civil and Environmental Engineering in 1997 and M.S. in Earth & Environmental Resources Management in 2002 both from the University of South Carolina. Ms. French is also a registered Professional Engineer in the state of SC.

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.

Kimberley Noonan is currently attending or has completed the following NRC courses:

*NRC Introductory Health Physics Self-Study (H-117S) – 2022
NRC Fundamental Health Physics Self-Study (H-122S) -2022
NRC Inspection Procedures (G-108) – September 2022
NRC Fundamental Health Physics Lab (H-122L-October 2022*

She will be attending the NRC Licensing Practices & Procedures (G-109) when available in the Spring 2023

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.

None.

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

*Mike Plemmons, EHM III (06/30/2018)
Susan Jenkins, Section Manager (03/01/2018)
Amanda Webb (06/05/2019)
David Scaturo, Director (04/01/2020)
Katy Ringbloom (02/16/2021)*

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. Kimberley Noonan was hired in April 2022 to train to fill the expected vacancy that would be left by Katy Ringbloom. Ms. Noonan's FTE% is currently 50% which is sufficient to meet the needs of the program. Ms. Noonan'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>
<i>2017</i>	<i>3</i>	<i>0</i>
<i>2018</i>	<i>10</i>	<i>0</i>
<i>2019</i>	<i>5</i>	<i>0</i>
<i>2020</i>	<i>8</i>	<i>0</i>
<i>2021</i>	<i>6</i>	<i>0</i>
<i>2022</i>	<i>7</i>	<i>0</i>

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

None.

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.

None.

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.

None.

III. Technical Quality of Inspections

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

As a result of the COVID-19 pandemic, inspection procedures were revised to adhere with CDC guidelines to minimize exposure by wearing masks and social distancing. Inspection procedures were revised to schedule announced inspections, limited attendance for entrance and exit meetings, and social distancing when performing the physical inspection.

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 Category</u>	<u>Date</u>
Katy Ringbloom	Crispulo Isiminger	097 5(a)	09/04/2019
Katy Ringbloom	Crispulo Isiminger	097 5(a)	11/13/2019
Katy Ringbloom	Crispulo Isiminger	097 5(a)	11/25/2019
Katy Ringbloom Crispulo Isiminger Kevin Strickland	Lynne Garner	287-04 5(c)	08/04/2020
Katy Ringbloom Crispulo Isiminger	Lynne Garner	287-02 5(d)	10/21/2020

Kevin Strickland				
Katy Ringbloom	Crispulo Isiminger	843-00 5(e)		11/18/2020
Kimberley Noonan	Crispulo Isiminger	930-00 NORM		03/15/2022
Kimberley Noonan	Lynne Garner	097 5(a)		05/18/2022
Kimberley Noonan Crispulo Isiminger Kevin Strickland	Lynne Garner	287-01 5(r)		06/22/2022
Kimberley Noonan	Crispulo Isiminger	517-00 5(e)		06/29/2022
Kimberley Noonan	Crispulo Isiminger	097 5(a)		07/13/2022
Kimberley Noonan Crispulo Isiminger Kevin Strickland	Lynne Garner	287-03 5(r)		08/17/2022
Kimberley Noonan	Lynne Garner	287-04 5(c)		09/07/2022

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?

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 α/β 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 α , β , and γ , 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 α and β 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?

20 including 10 radioactive material NORM licenses. There were 18 including 8 NORM licenses at the beginning of the review period but two NORM licenses have since been issued.

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.

None.

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

None.

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

None.

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.

On March 27, 2019, the South Carolina Supreme Court (SCSC) issued Opinion No. 27871, which ultimately brought the 15-year legal appeal of the 2004 issuance of Radioactive Material License No. 097 for the Chem-Nuclear Systems, LLC Barnwell Disposal Facility, an EnergySolutions company, to a close. Chem-Nuclear submitted a license renewal on September 30, 2019, in addition to a document addressing compliance with SCSC conclusions. The license was deemed in timely renewal on October 15, 2019.

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.

None.

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
- D. Section 48-48-140 of the 1976 Code of Laws, Atlantic Interstate Low-Level Radioactive Waste Compact Implementation Act

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&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