Arkansas Department of Health

4815 West Markham Street • Little Rock, Arkansas 72205-3867 • Telephone (501) 661-2000
Governor Asa Hutchinson
Nathaniel Smith, MD, MPH, Director and State Health Officer

November 8, 2017

Lizette Roldán-Otero, Ph.D.
U.S. Nuclear Regulatory Commission
Region IV Office
Division of Materials Safety and State Agreements
1600 East Lamar Boulevard
Arlington, Texas 76011-4511

Dear Dr. Roldán-Otero:

Enclosed is the Arkansas IMPEP Questionnaire requested in the letter dated August 8, 2017. All information in the Questionnaire covers the evaluation time of November 2, 2017 through December 1, 2017. Additional information will be available as requested during the on-site visit.

The Department looks forward to the IMPEP team visit November 27 – December 1, 2017. We believe that the team will find that the Arkansas Radioactive Materials Program is adequate and compatible to protect public health.

If you should have any questions or if you need additional information, please contact this office at 501-661- 2173.

Sincerely,

Jared W. Thompson, Program Manager
Radioactive Materials Program

cc: Connie Melton, Branch Chief
Health System Licensing and Regulation Branch

Bernard Bevill, Section Chief
Radiation Control Section

Approved by OMB[1]
Control No. 3150-0183
Expires 01/31/2020

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM QUESTIONNAIRE

Reporting Period: November 2, 2013 thru December 1, 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.

SEE APPENDIX A.

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;

   (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.

SEE APPENDIX B.

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:

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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.

Name	Position	Area of Effort	FTE%

SEE APPENDIX C.

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.

a. **David B. Stephens. Ph.D.** **June 16, 2014**

Education: **Ph.D. – Biochemistry, University of Texas, 1996.**

Experience: **9 years' experience as an X-Ray Inspector with the Arkansas Department of Health.**

Certified Hazardous Material Technician

Certified Health Physics Exam Part 1---2010
Certified Health Physics Exam Part 2---2017

HP Training **Ionizing Radiation Safety Course for nuclear gauge users (Anderson Engineering)**
Introductory to Health Physics H-117 (NRC)
Licensing Procedures G-109 (NRC)
Inspection Procedures G-108 (NRC)
Transportation of RAM H-308 (NRC)
Radiological Emergency Response Operations (FEMA)
Diagnostic &Therapeutic Nuclear Medicine H-304 (NRC)
Brachytherapy and Gamma Knife H-313 (NRC)
Industrial Radiography H-305 (NRC)
Well Logging H-314 (NRC)
Fundamental HP I & II H-122 (NRC)
Fundamental HP III H-123 (NRC)
Advanced HP H-203 (NRC)
RESRAD Off-Site (H-411)
Characterization & Planning for Decommissioning (H-115)

b. **Susan G. Elliott** **January 4, 2015**

Education: **B.S. – General Studies – Louisiana Tech University -- 1993**

Community College of the Air Force
Applied Sciences/Bioenvironmental Engineering -- 1992

Experience: **20 year U.S. Air Force Veteran specializing in Environmental and Radiological Health & Safety.**
Identified as a Radiation Safety Expert.
Radiation Safety Officer on 3 NRC Master Material permits.

HP Training: **Ionizing Radiation Safety Course for nuclear gauge users (Anderson Engineering)**
Licensing Procedures G-109 (NRC)
Inspection Procedures G-108, (NRC)
Transportation of RAM H-308 (NRC)
Radiological Emergency Response Operations (FEMA)
Diagnostic & Therapeutic Nuclear Medicine H-304 (NRC)
Brachytherapy and Gamma Knife-- H-313 (NRC)
Industrial Radiography H-305 (NRC)
Well Logging H-314 (NRC)
NRC Materials Control & Security Systems & Principles S-201 (NRC)
Root Cause Workshop G-205 (NRC)
NMED and SA-300

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.

All staff is currently fully qualified as Radioactive Materials Inspectors.

Currently, Angie Hall and David Stephens have not met the qualification requirements for radioactive materials license reviewers. Both have NRC training courses for licensing and need more on-job-training and experience with different types of license reviews. Given the number of licenses that will be received in 2019-2020, it is safe to assume that they will become fully qualified no later than the end of 2020.

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.

Layne Pemberton	**January 30, 2014**
Tammy Kriesel	**April 25, 2014**
Kayla Avery	**October 3, 2014**
Susan Elliott	**July 21, 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.

Currently there is one (1) vacant HP position in the radioactive materials program. Position has been vacant since July 21, 2017. Paper work has been submitted for re-hire pending the release from the hiring freeze.

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 Medical Advisory Committee is appointed by the Arkansas Chapter, American College of Radiology. Member Radiologists are appointed by the Chapter President to serve on this Committee. RAM-01.5 describes the MAC Approval Process.

Conflict of interest is avoided by identifying any potential connection between a MAC member and the licensee in question. If a MAC member were associated with the licensee, they would not be included in the MAC Approval Process.

The MAC has not been used during the IMPEP evaluation period.

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.

Year	Core Inspections	Initial Inspections
2013 (from 11/2/2013)	4	0
2014	71	0
2015	77	4
2016	45	1
2017 (through 10/31/2017)	42	3

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.

SEE APPENDIX D.

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

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.

SEE APPENDIX D.

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.

Year	Approved Reciprocities	# Inspections	20% #
11/01-12/31/2013	15	1	3
2014	40	6	8
2015	46	12	9
2016	34	8	7
01/01-10/31/2017	28	10	6

III. Technical Quality of Inspections

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

RAM – 08.1	Inspection of GL	12/18/2013
RAM – 01.09	Out-of-State Inspections	10/15/2014
RAM – 01.13	Submission of Samples	12/19/2014

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

Inspector	Supervisor	License Category	Date

SEE APPENDIX E.

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?

Procedure ES-01.3, describes the procedures for the calibration of radiation detection instruments. Most instruments are sent to the manufacturer for calibration on an annual or semi-annual basis. The Canberra MRAD-113's (combination dosimeter and alarming ratemeters) are calibrated in-house annually.

In addition, it is the Health Physicists' responsibility to assure that instruments are in calibration and working properly at the time of use or to obtain an instrument that is in calibration and operating properly.

ADH has 102 various types of calibrated instruments available for routine use and emergency response activities.

IV. Technical Quality of Licensing Actions

18. How many specific radioactive material licenses does your program regulate at this time? **209 as of October 31, 2017**

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.

3D Imaging Drug Design Development, LLC	**ARK-1008**	**Decommissioning**
University of Arkansas	**ARK-064**	**Decommissioning**
Sterigenics US, LLC	**ARK-903**	**Amendment**
Mondi Pine Bluff Mill	**ARK-508**	**Renewal**
Scott County Animal Hospital	**ARK-1047**	**New**
SIG SAUER, Inc.	**ARK-1052**	**New**

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?

RAM - 06.0	**Security Risk Checklist**	**3/21/2014**
RAM - 01.8	**Signature Authority**	**11/03-2014**
RAM - 01.16	**Approval of RSO/Asst. RSO**	**3/21/2016**
RAM - 09.0	**Responding to Receipt of NRC LVR**	**9/6/2016**

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.

None

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

SEE APPENDIX F

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

Medical Incident Off Site Checklist 12/4/2014
Medical Incident On Site Checklist 12/4/2014

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.

Arkansas became an Agreement State on July 1, 1963. Legislative authority to create a radiation control agency and enter into an Agreement with NRC was granted in Arkansas Code Annotated § 20-21-201 et seq. The State Board of Health is designated as the State Radiation Control Agency, with the day-to-day administrative duties being carried out by the Director of the Department of Health's designee in accordance with A.C.A. § 20-21-206.

Since the 2013 IMPEP review, Act 1258 of 2015, as codified in A.C.A. § 25-15-204, provides that each rule adopted by the Department is effective ten days (previously 30 days) after filing of the final rule with the Secretary of State unless a later date is specified. Pursuant to Amendment 92 to the Constitution of Arkansas of 1874 and Act 1258 of 2015, proposed rules now have to be reviewed *and* approved by the Administrative Rules and Regulations Subcommittee of the Arkansas Legislative Council. Proposed rules still just require a *review* by the Senate and House Joint Committee on Public Health, Welfare, and Labor. Also, the Governor's Office now requires their review of proposed rules pursuant to Executive Order 15-02

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

The Arkansas State Board of Health Rules and Regulations for Control of Sources of Ionizing Radiation is 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.

The most current State Regulation Status (SRS) sheet is dated February 3, 2017, and is correct. The SRS sheet enclosed in NRC letter dated August 8, 2017, is *not* correct. With the adoption of the most recent regulation package effective October 1, 2017, the Arkansas Program has adopted all existing RATS amendments.

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.

During the review period, the Arkansas Program was 16 days late in the promulgation of one amendment (RATS ID 2011-2). The rule package containing this amendment became effective November 30, 2014; the amendment was due on November 14, 2014. Revisions addressing RATS ID

2011-2 were in a rule package comprised mostly of accelerator and therapeutic radiation machine regulations that had received public comments necessitating the restarting of the rulemaking process, thereby lengthening the time required for adoption.

The process for amending regulations includes the following: development of the proposed rule, including approval by our Center Director and Agency Attorney; an appearance before the Executive Staff of the Arkansas Department of Health to seek approval to proceed to the Arkansas State Board of Health; an appearance before the Arkansas State Board of Health for approval to proceed with rulemaking; approval of the rule package by the Governor's Office; filing and distribution of the proposed rule; a 30-day Public Review period to receive comments on the proposed revisions; an appearance before the Senate and House Joint Committee on Public Health, Welfare, and Labor; an appearance before the Administrative Rules and Regulations Subcommittee of the Arkansas Legislative Council; an appearance before the Arkansas State Board of Health for approval of the final rule; signature of the final rule by the Director of the Arkansas Department of Health, who serves as the Secretary of the Arkansas State Board of Health; and filing and distribution of the final rule.

The rulemaking process generally takes one year to complete. The length of time required to complete each step varies depending on many factors.

II. Sealed Source and Device (SS&D) Evaluation Program **NOT APPLICIABLE**

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

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

III. Low-level Radioactive Waste Disposal Program **NOT APPLICIABLE**

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

IV. Uranium Recovery Program **NOT APPLICIABLE**

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

APPENDIX A

Actions Taken in Response to the Recommendations Following the Last Review

Appendix A

Actions Taken in Response to the Recommendations Following the Last Review

1. *"The review team recommends that the State provide refresher training to the inspection staff on the inspection procedures and incorporate the inspection procedures into the training and qualification program for inspectors to ensure consistent implementation during inspections. (Section 3.1)"*

The Radioactive Materials Program conducted inspector refresher training for all inspection staff beginning in November 2013 through March 2014. The training consisted of a review of the NRC inspection procedures identified in Manual Chapter 2800 related to the type of specific licenses issued by the Department. Refresher training was completed for 15 license types.

RAM staff received refresher training on ADH Procedure RAM-01.10 entitled *Inspection of Radioactive Materials and Particle Accelerator Licenses,* which states in part that NRC inspection procedures identified in Manual Chapter 2800 are the guide and reference for conducting materials inspections in the State of Arkansas.

The RAM Program continues to discuss inspections and inspection protocols during bi-weekly staff meetings. This ensures that staff is adequately maintaining inspection knowledge and develops overall consistency in the inspection program.

2. *"The review team recommends that the State revise its licensing procedures to include current guidance to determine and document the basis of confidence for all new applications and transfers of control that radioactive materials will be used as intended, prior to authorizing the material on the license: and provide staff with training on the process and changes to the Program's licensing procedures. (Section 3.4)"*

RAM Procedure RAM-06.0 has been revised to include the usage of the NRC RCPD-08-20 document entitled *Requesting Implementation of the Checklist to Provide a Basis for Confidence that Radioactive Material will be used as Specified on a License and the Checklist for Risk-Significant Radioactive Material (RSRM).* Checklists were revised and updated. Staff received training on the use of these Checklists on December 20, 2013.

Using the guidance and checklists, the Program has reviewed 40 new or change of ownership license applications to validate and provide a basis of confidence that radioactive materials will be used as intended. These 40 licenses were issued from 2006-2013. No suspicious activities were identified.

Following the training on December 20, 2013, the RAM procedure RAM-06.0 has been used for all new license applications and change of ownership amendments.

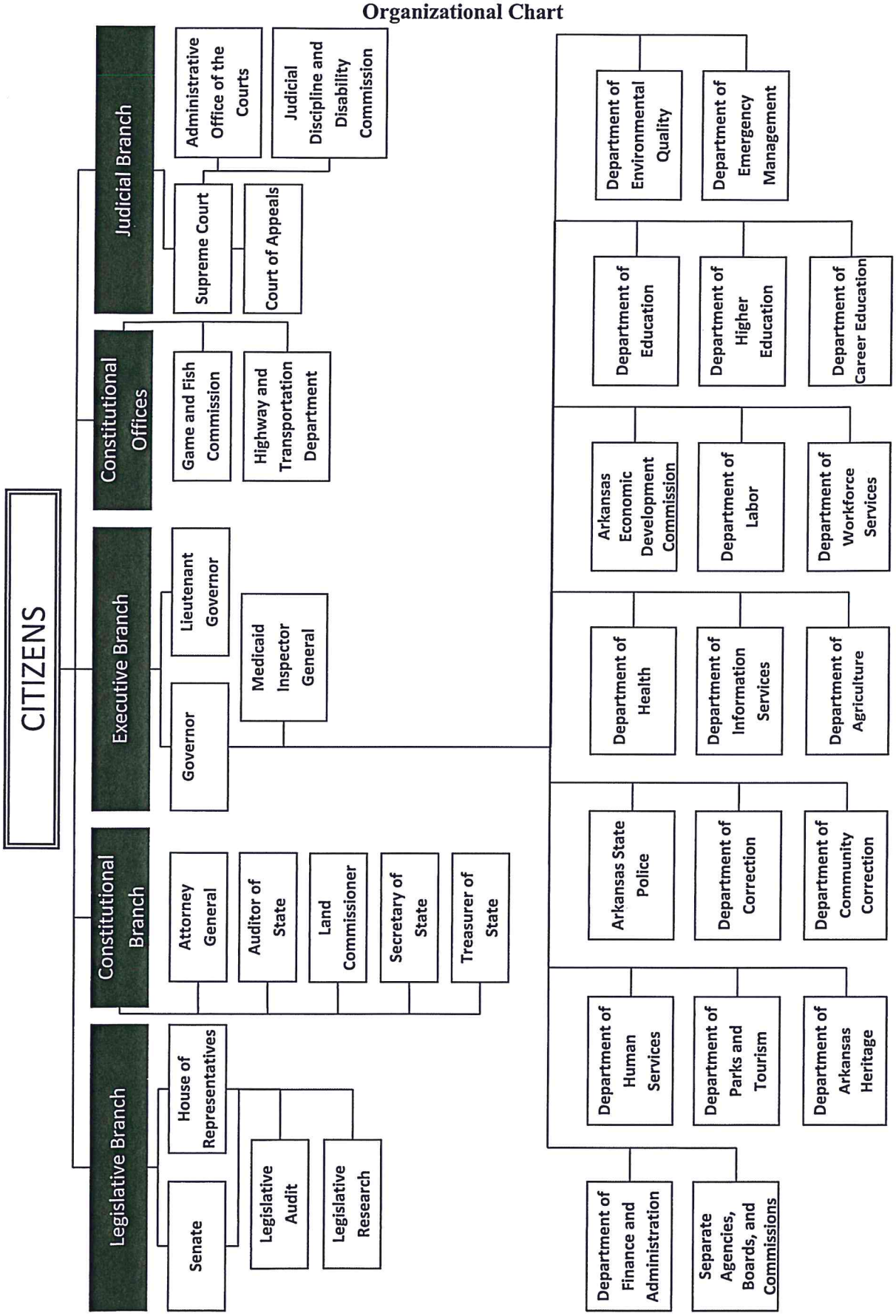
3. *"The review team recommends that the State strengthen its incident response program by developing guidance and providing training to the staff on evaluating and responding to reported medical events. (Section 3.5)"*

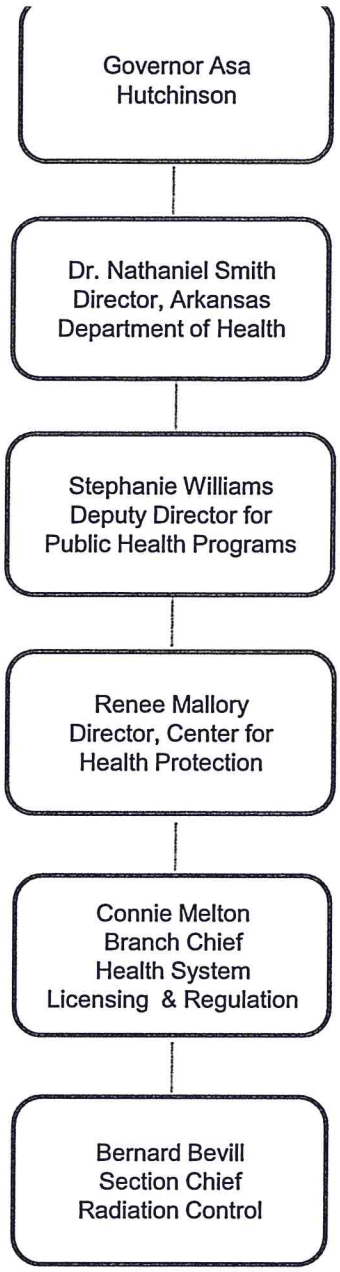
The Radioactive Materials Program developed and issued an incident response guidance document entitled *Ram Licensee Medical Incidents.* This was approved on December 4, 2014.

APPENDIX B

Organizational Charts

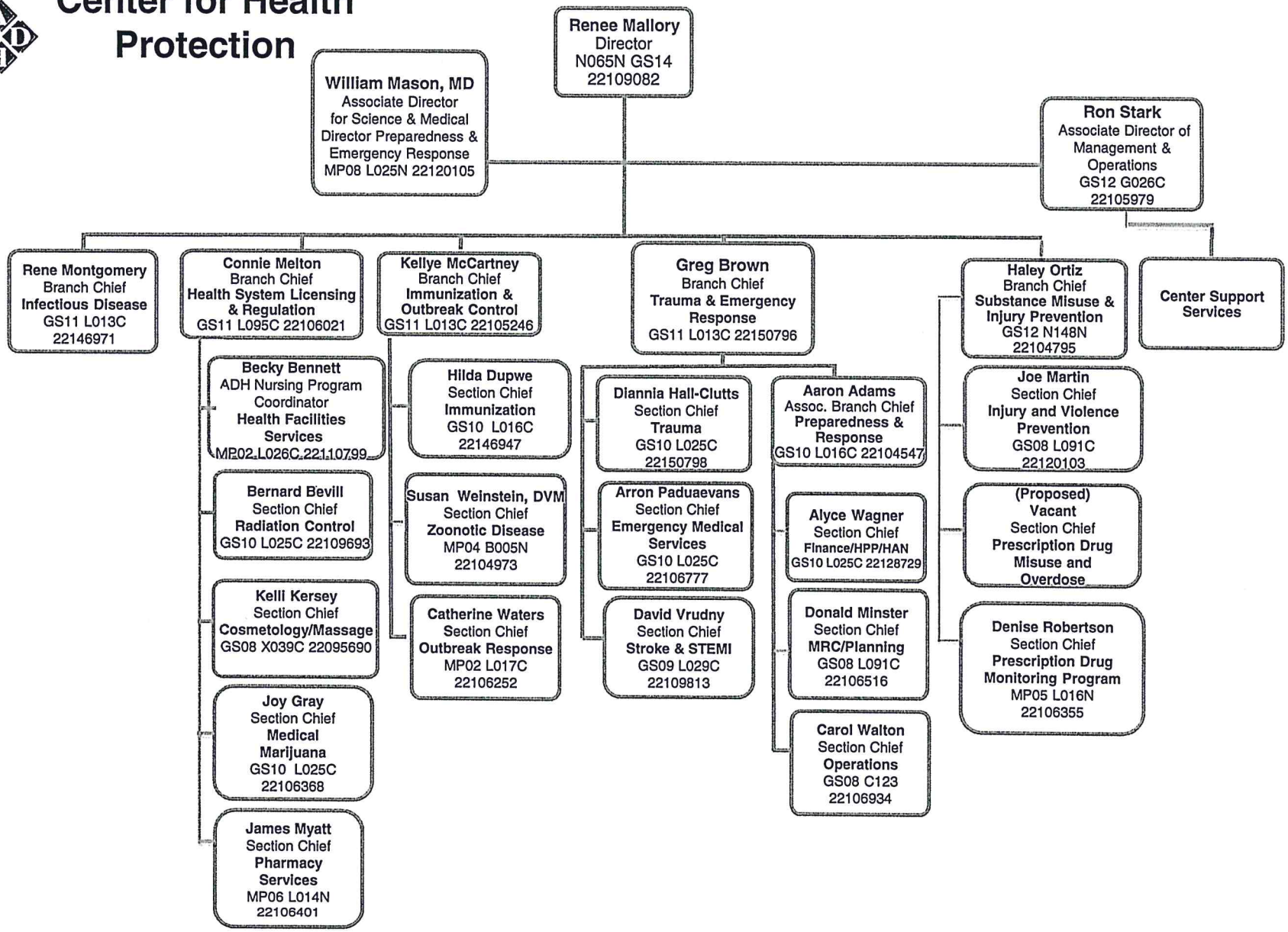
Organizational Chart



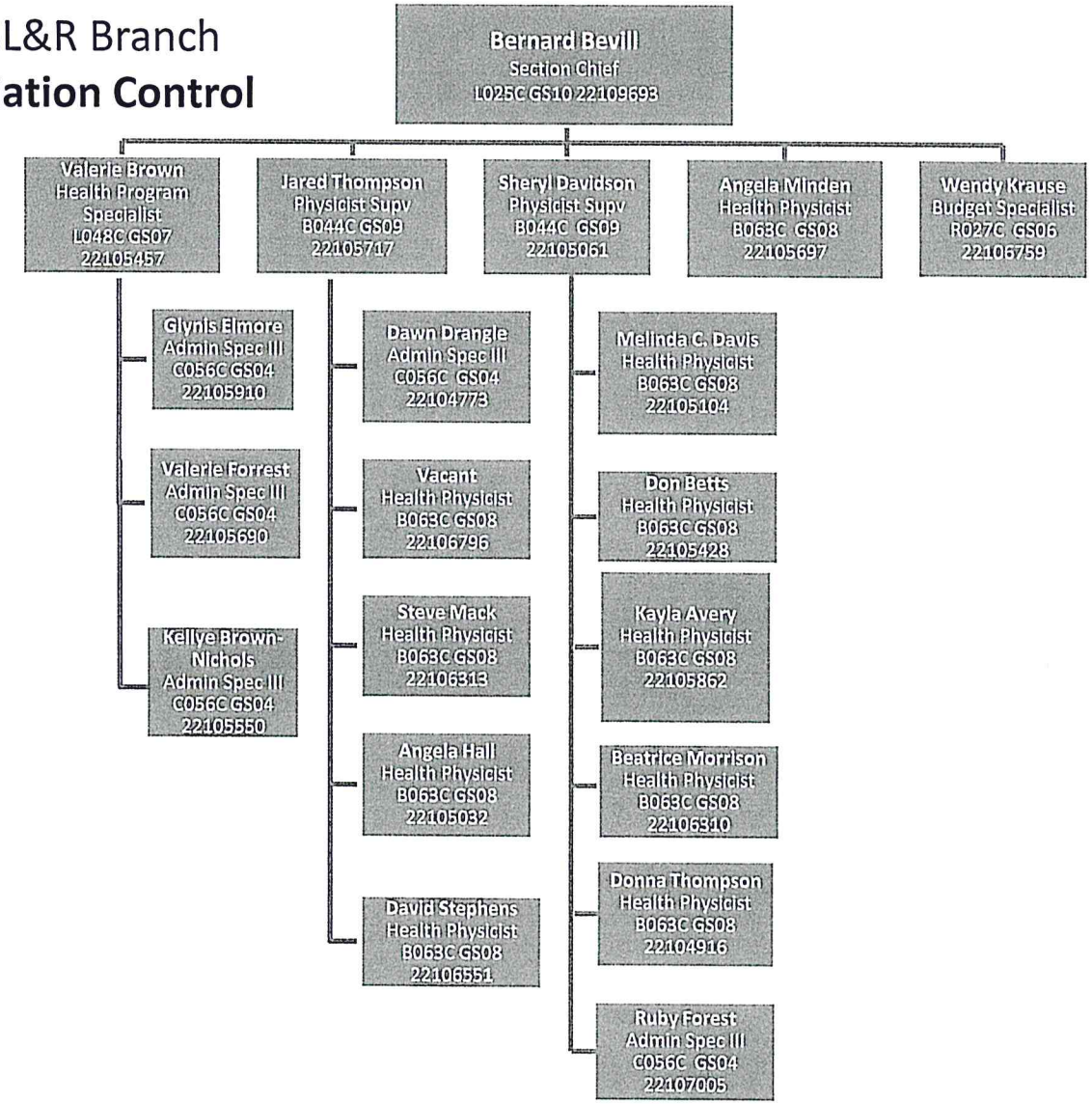

Governor Asa Hutchinson
Dr. Nathaniel Smith Director, Arkansas Department of Health
Stephanie Williams Deputy Director for Public Health Programs
Renee Mallory Director, Center for Health Protection
Connie Melton Branch Chief Health System Licensing & Regulation
Bernard Bevill Section Chief Radiation Control

August 2017

Center for Health Protection



HSL&R Branch
Radiation Control



APPENDIX C

FTE Breakdown (B.1.3)

Appendix C

Radioactive Materials Program Colleagues

NAME	POSITION	AREA OF EFFORT	FTE%
Angela Hall	Health Physicist	Inspections	40%
		Licensing	40%
		Emergency Response	5%
		Administrative	15%
Steve Mack	Health Physicist	Inspections	35%
		Licensing	35%
		Emergency Response	5%
		Administrative	15%
		GL Program	10%
David Stephens	Health Physicist	Inspections	40%
		Licensing	40%
		Emergency Response	5%
		Administrative	15%
Jared Thompson	Program Manager	Inspections	20%
		Licensing	30%
		Emergency Response	5%
		Administrative	45%
Bernard Bevill	Section Chief	Emergency Response	10%
		Administrative	10%

Mr. Bevill is the Radiation Control Section Chief and provides administrative support to the Radioactive Materials Program. He is involved with Radioactive Materials Program Activities approximately 20% of FTE functions.

APPENDIX D

Questions 12 & 13

Appendix D – Questions 12 & 13

Question 12

Licensee Name/Number	Priority	Last insp / Lic Issue date	Date Due	Date performed	Amt/time over	Date letter
Mercy Hosp. NW Ark (0426)	3	12/18/13	12/1/16	Due 4Q2017	10 months currently	
Hembree Cancer (0824)	2	7/9/14	7/1/16	9/20/17	14 months	10/4/17
Highlands Oncology (0920)	2	11/13/10	11/1/2012	12/19/13	13 months	3/6/14
Acuren (1016)	1	4/15/15	4/1/16	8/25/16	4 months	8/9/16

Question 13

Licensee Name/Number	Priority	Last insp / Lic Issue date	Date Due	Date performed	Amt/time over	Date letter
Baptist – Conway (1046)	5	Issue 9/8/16	9/8/17	Due 4Q2017	1 month currently	

APPENDIX E

Supervisory Accompaniment Table

SUPERVISORY ACCOMPANIMENT TABLE
(IMPEP 2017)

DATE	FACILITY	License Category	HP
12/27/2013	Anderson Engineering Consultants, Inc.	Portable Gauge	LP
1/10/2014	Mid State Pipe Fabricating	Radiography	LP
1/16/2014	Clean Harbors El Dorado, LLC	Fixed Gauge	LP
1/16/2014	Del-Tin Fiber, LLC	Fixed Gauge	LP
1/24/2014	Grubbs, Hoskyn, Barton and Wyatt, Inc.	Portable Gauge	LP
6/18/2014	NEA Baptist Memorial Hospital	Medical – Written Directive	KA
6/20/2014	Conway Heart Clinic	Private Practice	AH
1/21-22/2015	St. Vincent	Medical – Written Directive	SM
1/23/2015	National Inspection Services, LLC	Radiography	SE
4/20-22/2015	University of Arkansas	Academic Broad Scope	SE
5/28/2015	Applied Inspection Systems, Inc.	Radiography	SE
6/3/2015	Construction Materials Testing Services, Inc.	Portable Gauge	DS
6/24/2015	Sparks Regional Medical Center	Medical – Written Directive	SE
7/27/2015	Huber Specialty Hydrates, LLC	Fixed Gauge	DS
8/11/2015	Clearwater Paper Corporation	Fixed Gauge	SE
9/18/2015	Halliburton Energy Services, LLC	Well Logging	AH
5/15/2016	Ash Grove Cement Company	Fixed Gauge	AH
5/25/2016	Baptist PET Clinic – North Little rock	Private Practice	SE
6/6-8/2016	Arkansas Children's Hospital	Medical – Broad Scope	SE
9/13/2016	Conway Regional Medical Center	Medical – Written Directive	DS
9/22/2016	Cardinal Health Nuclear Pharmacy	Nuclear Pharmacy	SM
6/26/2017	Cardiac and Cancer Institute	Private Practice	DS
6/28/2017	Green Bay Packaging	Fixed Gauge	AH
7/27/2017	Desert NDT, LLC	Radiography	DS
9/20/2017	Hembree Cancer Center	Medical Therapy – Written Directive	SM
10/18/2017	Sterigenics, US	Panoramic Irradiatior	DS

Accompanied by Jared Thompson, RAM Program Manager

APPENDIX F

Question 23

Appendix F

Question 23

Licensee Name	License #	Date of Incident/Report	Type of Incident
2017			
Great Lakes Chemical	ARK-0515	10/10/2017	Fixed gauge mounting broke
2016			
Cardinal Health	ARK-0642	11/28/2016	Vehicle accident – from Memphis
Red River Pharmacy	ARK-1033	10/11/2016	Vehicle accident
Red River Pharmacy	ARK-1033	8/26/2016	Vehicle accident
Cardinal Health	ARK-0642	5/4/2016	Vehicle accident – from Memphis
Ernie's Wrecker	N/A	6/11/2016	DU in impounded vehicle
Citizen	N/A	3/6/2016	Unsubstantiated medical mistreatment
2015			
AMFUEL	GL	11/23/2015	Sealed source in storage
Citizen	N/A	6/6/2015	Altimeter w/ radium dial
3DI	ARK-1008	4/14/2015	Zr-89 in trash
2014			
CARTI	ARK-0954	6/19/2014	Diagnostic dosing error – NaF vs FDG
2013			
None			