Approved by OMB[1]

INTERGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

QUESTIONAIRE

State of Arkansas
Reporting Period: September 14, 2002 to September 1, 2006

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. Please note that previous IMPEP questionnaire responses can be found on the STP webpage.

A. COMMON PERFORMANCE INDICATORS

I. Technical Staffing and Training

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

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

   See Attachment 1, Attachment 2, and Attachment 3

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

   See Attachment 4

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

   Not applicable

[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.

2. Please provide a staffing plan, or complete a listing using the suggested format below, of the professional (technical) person-years of effort applied to the agreement or radioactive material 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, LLW, U-mills, other. If these regulatory responsibilities are divided between offices, the table should be consolidated to include all personnel contributing to the radioactive materials program. Include all vacancies and identify all senior personnel assigned to monitor work of junior personnel. 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%

See Appendix A

3. Please provide a listing of all new professional personnel hired since the last review, indicate the degree(s) they received, if applicable, and additional training and years of experience in health physics, or other disciplines, if appropriate.

Susan Dooley, B.S., Radiologic Technology (University of Arkansas for Medical Sciences), Certificate in Radiation Therapy (CARTI). Eighteen (18) years experience as Radiation Therapist. Ms. Dooley transferred to the X-ray Program after 9 months in the RAM Program.

Katia Gray, B.S., Biology and Environmental Health Science (University of Arkansas at Little Rock 1994-1998) Five (5) years experience as Radiation Safety Coordinator at University of Arkansas for Medical Sciences.

Robert (Layne) Pemberton, B.S., Chemistry (University of Central Arkansas 1996-2001) Five (5) years experience as Air Compliance Monitor with Arkansas Department of Environmental Quality.

Timothy Hammond, M.S., Instructional Technology (University of Southern Mississippi 1998-2000), B.A., Industrial/Vocational Education (University of Southern Mississippi 1988-1991) Eighteen (18) months experience as Domestic Preparedness Programs Instructor, Twenty-seven (27) years experience as active member of Army National Guard as a Nuclear, Biological, and Chemical Specialist.

4. Please list all professional staff who have not yet met the qualification requirements of license reviewer/materials inspection staff (for NRC, Inspection Manual Chapters 1246; for Agreement States, please enclose a copy of your qualification and training procedure. If you do not have a written procedure, please describe your qualifications requirements for materials license reviewers and inspectors). For each, list the courses or equivalent training/experience they need to attend and a tentative schedule for completion of these requirements.

Professional Staff

Mrs. Gray has attend G-108 Inspection Procedures. She must attend all other listed training in order to be a fully qualified inspector/license reviewer.

Mr. Pemberton and Mr. Hammond have not yet attended any courses listed under formal training requirements. They must attend all other listed training in order to be fully qualified inspectors/license reviewers.

These training courses will be completed within the training schedule of the Radiation Control Section. This should be accomplished within at least 24 months.

Note: Mrs. Gray, Mr. Pemberton and Mr. Hammond are scheduled to attend Licensing Practices and Procedures (G-109) on September 11-15, 2006. Mr. Pemberton and Mr. Hammond are scheduled to attend Inspection Procedures (G-108) on September 18-22, 2006.

Qualification Requirements for Arkansas

Materials License Inspectors

(1) Work Experience
- **(a) Previous job experience in regulatory compliance.**
- **(b) On-the-job training.**
- **(c) Peer accompaniments.**
- **(d) Supervisory accompaniments.**

(2) Formal Training Requirements
- (a) **H-109 Applied Health Physics**
- **(b) S-301 RERO**
- **(c) G-108 Inspection Practices & Procedures**
- **(d) H-304 Diagnostic & Therapeutic Medicine**
- **(e) H-305 Safety Aspects of Industrial Radiography**
- **(f) H-308 Transportation of Radioactive Materials**
- **(g) H-314 Safety Aspects of Well Logging**

Materials License Reviewers

(1) Work Experience
- **(a) Previous regulatory experience.**
- **(b) On-the-job training.**

(2) Formal Training Requirements

(a) H-109 Applied Health Physics
(b) S-301 RERO
(c) G-108 Inspection Practices & Procedures
(d) G-109 Licensing Practices & Procedures
(e) H-304 Diagnostic & Therapeutic Medicine
(f) H-305 Safety Aspects of Industrial Radiography
(g) H-308 Transportation of Radioactive Materials
(h) H-314 Safety Aspects of Well Logging

5. Please identify the technical staff who left the Agreement State/Regional DNMS program during this period.

Lynn Davis, Health Physicist, December 2004
Gary Bortz, Health Physicist, February 2005
Cathey Bradley, Agency Program Coordinator, July 2005

6. List the vacant positions in each program, the length of time each position has been vacant, and a brief summary of efforts to fill the vacancy.

One Health Physicist (HP) position has been vacant since October 2003. The vacancy was a result of the filling of the Agency Program Coordinator position for the General License Registration Program by existing staff. The position was advertised during FY04 but was not filled. The HP position was subsequently lost for FY05 due to budget short falls.

The position was reinstated in FY06 (July 2005) and has been advertised four (4) times. The Program is currently unable to fill the position due to the lack of qualified applicants. Last advertised July 24 – August 7, 2006.

7. Does the Agreement State program have an oversight board or committee, which provides direction to the program and is composed of licensees and other members of the public? If so, please describe the procedures used to avoid a 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.

During this review period, the Department has utilized the MAC once. In this case, one of the MAC members was listed as an authorized user for the licensee in question. This member of the MAC was not consulted regarding the issue in question. The Committee Chair and a second member provided guidance to the Department. In accordance with the MACs guidance, an updated On-Site Physician Training Program was approved for use by the Department.

II. Status of Materials Inspection Program

8. Please identify individual licensees or categories of licensees the State/Region is inspecting more or less frequently than called for in IMC 2800, and state the reason for the difference.

See Appendix B

Due to the license renewal backlog, the Program had been inspecting our licensees more frequently than the IMC 2800 intervals in order to ensure that our mission to protect public health and safety was being met. Since the loss of 60% of the experienced staff, inspection frequencies are now closer to but not identical to those listed in IMC 2800 for Priority 2-5.

9. Please provide for the review period, the number of Priority 1, 2, and 3 inspections as identified in IMC 2800 that were completed, and the number of initial inspections that were completed.

Priority*	Sept. 1-Dec. 31 2002	2003	2004	2005	Jan. 1-July 31 2006
I	16	95	87	57	28
II	12	50	39	22	11
III	12	40	48	23	4
Initial	7	16	12	6	4

*** Priority indicated is Arkansas assigned priority not NRC IMC 2800 priority.**

10. Please submit a table, or a computer printout, that identifies inspections of Priority 1, 2, and 3 licensees, and initial inspections that are presently overdue or which were conducted at intervals that exceed the IMC 2800 frequencies over the course of the entire review period. (See STP Procedure SA-101, *Reviewing the Common Performance Indicator, Status of Materials Inspection Program*, for detailed guidance in preparing this information).

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

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

See Attachment 5.

11. If you have any overdue inspections, do you have an action plan for completing them? If so, please describe the plan or provide a written copy with your response to this questionnaire.

At the current time there are no overdue inspections.

As noted on Attachment 5, during the IMPEP evaluation period one (1) inspection was conducted overdue in accordance with IMC 2800 frequencies. The Program was aware that the license was due for inspection. However, the inspection of the industrial radiography licensee was conducted latter so that the Increased Control inspection could be conducted at the same time.

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

See Attachment 6

III. Technical Quality of Inspections

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

The following RAM Inspection Procedures were revised in July 2006:

- **RAM 01.4 License Delivery Visits**
- **RAM 0.1.10 Inspection of Radioactive and Particle Accelerator Licensees**
- **RAM 01.11 Inspection Reports and Licensee Correspondence**
- **RAM 01.15 Guideline for Compliance Inspection Frequency of NRC/Agreement State Reciprocity Licensees**

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

Inspector	Supervisor	License Category	Date

See Appendix C

15. Describe internal procedures for conducting supervisory accompaniments of inspectors in the field.

Administrative Procedure; AD-06.010.0 (Attachment 7) is the internal procedure used for conducting supervisory accompaniments of inspectors in the field. Each inspector is to be accompanied by the Program Manager at least annually.

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

Attachment 8 contains an updated list of radiation detection instrumentation that is available for use by the Program.

All instrumentation is calibrated at least annually or as specified by the manufacturer. The manufacturer or a consultant calibrates some instrumentation. The Health Physicists calibrate the majority of the radiation detection equipment on a quarterly basis using the following procedures:

ES-01.3. "Calibration of Gamma Instruments (Dose Rate)"
ES-02.4. "Performing Operational Check of the Ludlum Model 43-5 Probe"
ES-02.5. "Performing Operational Check of the Ludlum Model 44-2 Probe"
ES-02.6. "Performing Operational Check of the Ludlum Model 44-9 Probe"

A percentage of each type of instrumentation is properly calibrated at this time. Because the Health Physicists only calibrate instruments one day per quarter it is possible that some instrumentation may become out of calibration throughout the year. It is the Health Physicists' responsibility to assure that their equipment is in calibration at the time of an inspection or to obtain an instrument that is within calibration.

A sufficient number of calibrated instrumentation was available to support the inspection program during the reporting period.

IV. Technical Quality of Licensing Actions

17. How many specific radioactive materials licenses does the Program regulate at this time?

245 Licensees as of August 1, 2006

18. 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. Also identify any new or amended licenses that now require emergency plans.

See Appendix D.

No Arkansas Radioactive Material Licenses require emergency plans.

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

The following variances in licensing policies and procedures or exemptions from the regulations were granted during the review period:

1. **Exemption to RH-1306, "Storage of Sources of Radiation", to allow storage of radioactive material in a residential area. Granted on January 6, 2004 to AstenJohnson, ARK-969-BP-11-11**

2. **<u>One time exemption to RH-1214.a.</u>, "Release of Individuals Containing Radiopharmaceuticals or Permanent Implants", to allow patient to be released four-hours post administration of greater than 30 mCi of Iodine-131 as Sodium Iodide. Granted on September 7, 2004 to St. Bernard's Medical Center, ARK-365-BP-09-10.**

3. **<u>One time exemption to RH-1214.a.</u>, "Release of Individuals Containing Radiopharmaceuticals or Permanent Implants", to allow patient to be released post administration of greater than 30 mCi of Iodine-131 as Sodium Iodide. Granted verbally on January 27, 2005 to St. Bernard's Medical Center, ARK-365-BP-09-10.**

4. **Full exemption to RH-1214.a., "Release of Individuals Containing Radiopharmaceuticals or Permanent Implants", to allow patients to be released post administration of greater than 30 mCi of Iodine-131 as Sodium Iodide in accordance with established criteria. Exemptions granted as follows:**

    a. **February 2, 2005, St. Bernard's Medical Center, ARK-365-BP-09-10**
    b. **March 8, 2005, St. Vincent Infirmary Med. Center, ARK-394-BP-06-03**
    c. **April 14, 2005, Baptist Medical Center, ARK-058-AP-BP-06-03**
    d. **April 18, 2005, Univ. of Ark. for Medical Sciences, ARK-001-INC-11-09**
    e. **May 20, 2005, St. Edward Mercy Medical Center, ARK-335-BP-06-08**
    f. **June 23, 2005, Sparks Regional Medical Center, ARK-021-BP-11-05**

5. **Limited exemption for performance of dose calibrator linearity testing. Granted on November 28, 2005 to All Nuclear Pharmacy and Medical Radioactive Materials Licensees via Department information notice distributed by Cardinal Health. Limited extension terminated effective March 3, 2006, with Department information notice dated January 17, 2006, distributed by Cardinal Health.**

6. **Full exemption to standard licensing condition requiring six (6) month leak test of Troxler portable nuclear density gauging devices. Granted on July 24, 2006, via Information Notice 06-02. Extended leak test frequency to intervals not to exceed 12 months for gauge models listed in IN 06-02.**

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

The following RAM Licensing Procedures were revised in July 2006:

- **RAM 01.1 Amendment Request for Radioactive & Particle Accelerator Licenses**
- **RAM 01.2 Radioactive Material and Particle Accelerator New Licenses**
- **RAM 01.3 Radioactive Material and Particle Accelerator License Renewal**
- **RAM 01.8 Signature Authority for Radioactive Materials & Particle Accelerator Licenses & Amendments**

The following Policy Memoranda were issued during the reporting period:

- **Definition of RH-903 Groups – 10/3/03**
- **On-Site Physician Requirements for Mobile Nuclear Medicine – 5/4/04**
- **AU Recentness of Training – 7/8/04**
- **PET Authorized User Training Requirements – 6/13/06**

21. Identify by licensee name, license number and type, any renewal applications that have been pending for one year or more. Please indicate why these reviews have been delayed.

See Attachment 9

Due to staffing issues, a renewal backlog has existed since 1995. In response to a recommendation made during the 2002 IMPEP, the Radioactive Materials staff developed a plan to achieve a balance between licensing and inspection activities and to reduce the renewal backlog.

The action plan was successfully utilized between January 2003 and January 2005 when the Program was fully staffed with 5 qualified Health Physicists. The loss of 60% of the RAM staff within a 8-month period between December 2004 and July 2005 forced the RAM Program to abandon the plan and shift priorities. While 71 renewal licenses were issued prior to the loss of staff, no additional renewals have been issued since June 2005.

Because of the current staffing situation (1 supervisor, 2 experienced colleagues, 1 colleague with 1 year experience, 2 colleagues with less than 6 months experience, and one vacant position) the RAM Program must place emphasis on higher priority functions. Function priority is determined based on our mission to protect public health and safety and an assessment of the degree of potential risk associated with the various job functions. The RAM Program determined issuance of new licenses, issuance of license amendments, and inspection of the highest priority licensees to be higher priority functions that the review of renewal license applications. However because of the potential health and safety risk, renewal licenses are reviewed as necessary for licensees with multiple compliance issues noted on inspection or for licensees making significant programmatic changes.

V. Responses to Incidents and Allegations

22. For Agreement States, please provide a list of any reportable incidents not previously submitted to NRC (See STP 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

All reportable incidents have been previously submitted to the NRC via NMED.

23. During this review period, did any incidents occur that involved equipment or source failure or approved operating procedures that were deficient? If so, how and when were other State/NRC licensees who might be affected notified? For States, was timely notification made to NRC? For Regions, was an appropriate and timely PN generated? For Agreement States, was information on the incident provided to the agency responsible for evaluation of the device for an assessment of possible generic design deficiency? Please provide details for each case.

None

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

There has been no change for handling allegations. Procedure AD-06.9 is still in effect.

VI. General

25. Please prepare a summary of the status of the State's or Region's actions taken in response to the comments and recommendations following the last review. Provide the results of any program audits (including self audits) completed during the review period.

See Appendix E.

26. Provide a brief description of your program's strengths and weaknesses. These strengths and weaknesses should be supported by examples of successes, new initiatives, problems or difficulties, which occurred during this review period.

STRENGTHS

- ♦ Staff has demonstrated ability to perform thorough, high quality compliance inspections.
- ♦ Licensing actions are issued in timely manner and are of high technical quality.
- ♦ Some measure of balance between inspection and licensing was achieved from September 2002 to January 2005.
- ♦ Customer service - good communication with licensees.
- ♦ RAM staff is conducting performance-based inspections.
- ♦ Depth of experience of senior staff.
- ♦ Senior RAM staff providing quality on-the-job training to new colleagues.
- ♦ Current staff is compatible, willing to work and have shown a desire to do a good job.

- ♦ Effectiveness of licensee management conferences to implement corrective action plans to improve radiation safety programs.
- ♦ Ability to manage response activities and incident investigations considering the limited number of experienced staff.
- ♦ Ability of the Program to make technical decisions in a team based environment.
- ♦ Ability to employ extra help consultant for 3 of the 4 years during the IMPEP review period.

WEAKNESSES

- ♦ Overall inexperience of current RAM staff.
- ♦ Loss of staff resulted in loss of balance between inspection and licensing activities.
- ♦ Professional staff salaries not in line with job classification experience requirements.
- ♦ Lack of technical career ladder for health physicists.
- ♦ Inadequate fee structure to support needed staffing and required professional training.
- ♦ 2005 merger of Arkansas Department of Health with Arkansas Department of Human Services creating Arkansas Department of Health and Human Services (DHHS) resulting in the former Department of Health becoming one of eleven divisions (Division of Health) within the newly formed DHHS. As a result of the merger, it appears that DHHS Senior and Division management has limited knowledge of the Radioactive Materials Program.
- ♦ A wide variety of responsibilities in addition to the regulatory programs, including radiological emergency response (both ANO and source-oriented), and non-radiological emergency response (hazardous materials, natural disasters, etc.) challenge existing resources and conflict with training courses.
- ♦ Inability to hire experienced, qualified technical personnel at above entry-level salary.
- ♦ Training opportunities for professional staff are limited because of training fund budget.
- ♦ Revisions of Rules and Regulations are too cumbersome and lengthy; the revision process is virtually continuous.

B. NON-COMMON PERFORMANCE INDICATORS

I. Legislation and Program Elements Required for Compatibility

27. Please list all currently effective legislation that affects the radiation control program.

1. Radiation Control:

(1) Statutes:

(a) Arkansas Code 20, Chapter 21 (reference Arkansas Code 1987 Annotated, Volume 20A, Title 20, Chapter 21).

(2) Legislation:

(a) Act 19 of 1983. Revised original enabling Legislative Act 8 of 1961 and included procedures to implement a civil penalties process.

(b) Act 504 of 1987. Enabled fees.

(c) Act 796 of 1995. Changed fees.

(d) Act 1119 of 2003. Added General licensed device fees

(e) Act 929 of 2005. Changed X-ray fees.

2. Mammography Legislation:

(1) Act 292 of 1989. Mammography accreditation.
(2) Act 508 of 1995. MQSA compliance.

3. Nuclear Planning & Response Legislation:

(1) Act 101 of 1981. Amended original enabling legislative Act 67 of 1980 (placed program 100% within the Arkansas Department of Health).
(2) Act 536 of 1983. Established County Grant Program.
(3) Act 544 of 1983. Established Nuclear Planning & Response Program Advisory Committee.

4. Low Level Waste:

(1) Statutes:
(a) Arkansas Code 8, 201 et. Seq. (reference Arkansas Code 1987 Annotated, Volume 6A, Title 8, chapter 8).

(2) Legislation:
(a) Act 9 of 1983. Arkansas a member of the Central Interstate Compact.
(b) Act 929 of 1985. Established member and alternate.
(c) Act 562 of 1987. Defined LLW and required above-ground disposal facility.
(d) Act 847 of 1991. "Nebraska Amendments."

5. Radiologic Technologist Licensure Program

(1) Act 1071 of 1999. Radiologic Technologist Licensure Requirements for Healing Arts Professionals.

6. Appropriation Legislation:

(1) Act 33 of 2003. Arkansas Department of Health's Appropriations Bill.
(2) Act 2306 of 2005. Arkansas Department of Health's Appropriations Bill.

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

Arkansas Radiation Control Program Rules and Regulations are not subject to a "sunset" or equivalent law.

29. Please review and verify that the information in the enclosed State Regulation Status 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.

See Appendix F for State Regulation Status.

See response to Question 30 regarding delay in adoption.

If legally binding requirements were used in lieu of regulations, please describe their use.

Increased Controls for Risk-Significant Radioactive Sources (NRC Order EA-05-090) was implemented via a legally binding license condition. The license condition was reviewed by NRC and approval granted in the September 9, 2005 letter signed by Dennis K. Rathbun, Deputy Director. All licensees meeting IC criteria were amended to include the legally binding license condition with an effective date of September 12, 2005.

30. 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.

The revision of the Arkansas State Board of Health Rules and Regulations for Control of Sources of Ionizing Radiation began in the summer of 2004. The revision included changes to and addition of radioactive material regulations for compatibility with NRC regulations as well as changes and additions for x-ray regulations to protect public health and safety.

The following actions were taken in compliance with the Arkansas Administrative Review Process:

- **April 28, 2005 – Present to Arkansas State Board of Health to proceed under the administrative review process.**
- **Copies of proposed rules provided to the public, licensees and registrants for review and comment.**
- **June 7, 2005 – Submitted radioactive materials proposed regulations to NRC State and Tribal Program for review and comment.**
- **July 7, 2005 – Public hearing.**
- **July 18, 2005 – NRC comment letter dated July 12, 2005 received. Proposed regulations, if incorporating NRC comments, would meet compatibility and health and safety categories.**
- **July 28, 2005 – Because of substantive changes on proposed x-ray regulations, present second edition of proposed regulations to Board of Health to continue under the administrative review process. NRC comments were incorporated into this second edition.**
- **October 6, 2005 – Public hearing for changes in the proposed x-ray regulations.**

- **October 27, 2005 -- Because of additional substantive changes on proposed x-ray regulations, present third edition of proposed regulations to Board of Health to continue under the administrative review process.**
- **January 5, 2006 -- Public hearing for changes in the proposed x-ray regulations.**
- **January 26, 2006 – Board of Health approved the entire proposed regulation package.**
- **Since February 2006, there has been an extensive word processing effort to revise the regulations.**
- **Regulations were certified and signed by the Director of the Division of Health and the Governor the week of August 28, 2006.**
- **Projected effective date is September 2006.**

II. Sealed Source and Device Program **NOT APPLICABLE**

The State of Arkansas relinquished regulatory authority of the sealed source and device evaluation program to the NRC effective October 1, 1998.

31. Prepare a table listing new and amended (including transfers to inactive status) SS&D registrations of sealed 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

32. What guides, standards and procedures are used to evaluate registry applications?

33. Please include information on the following questions in Section A, as they apply to the Sealed Source and Device Program:

Technical Staffing and Training - Questions 1-7
Technical Quality of Licensing Actions - Questions 17-21
Responses to Incidents and Allegations - Questions 22-24

III. Low-Level Radioactive Waste Disposal Program **NOT APPLICABLE**

34. 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 1-7
Status of Materials Inspection Program - Questions 8-11
Technical Quality of Inspections - Questions 13-16
Technical Quality of Licensing Actions - Questions 17-21
Responses to Incidents and Allegations - Questions 22-24

IV. Uranium Recovery Program **NOT APPLICABLE**

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

Technical Staffing and Training - Questions 1-7
Status of Materials Inspection Program - Questions 8-11
Technical Quality of Inspections - Questions 13-16
Technical Quality of Licensing Actions - Questions 17-21
Responses to Incidents and Allegations - Questions 22-24

APPENDIX A

RADIOACTIVE MATERIALS PROGRAM COLLEAGUES

NAME	POSITION	AREA OF EFFORT	FTE%
Katia Gray	Health Physicist	Inspections (In Training)	40%
		Licensing (In Training)	40%
		Emergency Response	10%
		Administrative	10%
Tim Hammond	Health Physicist	Inspections (In Training)	40%
		Licensing (In Training)	40%
		Emergency Response	10%
		Administrative	10%
Layne Pemberton	Health Physicist	Inspections (In Training)	40%
		Licensing (In Training)	40%
		Emergency Response	10%
		Administrative	10%
Steve Mack	Senior Health Physicist	Inspections	60%
		Licensing	20%
		Emergency Response	10%
		Administrative	10%
Kim Wiebeck	Program Coordinator	Inspections	55%
		Licensing	25%
		Emergency Response	10%
		Administrative	20%
Jared Thompson	Program Manager	Inspections	15%
		Licensing	15%
		Emergency Response	10%
		Administrative	60%
Bernard Bevill	Section Chief	Emergency Response	10%
		Administrative	10%

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

Consultant

David D. Snellings, CHP(emeritus), former Director for the Division of Radiation Control and Emergency Management, was hired as a contract consultant beginning in January 2002. During this IMPEP period Mr. Snellings was employed from September 2002 through July 2004 and September 2005 to present. He is contracted to work 20 hours per week. Mr. Snellings program responsibilities are in the area of licensing review and consultation of unusual requests. He is also revising licensing guidance and checklists. Mr. Snellings has no responsibilities in the inspection program.

APPENDIX B

INSPECTION PRIORITY – AR/NRC Comparison

Note: Due to loss of 60% of the RAM Licensing/Inspection staff from Dec. 2004 through July 2005 the RAM Program has extended inspection frequencies closer to IMC2800 frequencies effective Fall 2005. The below noted frequencies are used when the RAM Program is fully staffed with fully trained individuals.

Lic. Code	AR Priority	NRC Priority	Category Title
RAD01	1 & 2	3	Medical Private Practice–WD Required
	2 & 3	5	Medical Private Practice–WD Not Required
	1	5	Veterinary
RAD02	1	2	Industrial Radiography Fixed Location
RAD03	1	1	Industrial Radiography Temp Job Sites
RAD05	1	3	Academic Type A Broad
	1	2	Medical Institution Broad
RAD06	2	5	Academic Type C Broad
RAD07	4	T	Industrial GC (None)
RAD10	4	5	*In-Vitro* Testing Laboratories (None)
RAD11	1	2	Irradiators – Panoramic (MCi)
	1 & 2	5	Irradiators Self Shielded ≤ 10,000 Ci (Blood Irradiators located at Medical Facilities)
RAD12	1	2	Nuclear Pharmacies
RAD13	1	3	Mobile Medical Service–WD Not Required
	1	2	Mobile Medical Service–WD Required (None)
RAD14	4	5	Consultant (Other Services)
	1	5	Instrument Calibration Services
RAD15	1	5	Teletherapy (None)
	1	2	Gamma Knife

APPENDIX B Continued

Lic. Code	AR Priority	NRC Priority	Category Title
RAD16	1 & 2	3	Medical Institution–WD Required
	1 & 2	5	Medical Institution–WD Not Required
	1 & 2	3	Eye Applicators Sr-90 Institution or Private Practice. (No PP)
	1	2	HDR
	1 & 2	2	Medical Therapy–Other (Currently None) Emerging Technology
RAD18	4	5	Civil Defense (None)
RAD19	1	1 (20%)	Reciprocity, Radiography (50% of Licensees)
RAD20	1	3 (20%)	Reciprocity, Wireline (50% of Licensees)
RAD21	1	5 (If Resources Available)	Reciprocity, Nuc. Gauge (50% of Licensees)
RAD22	4	5 (If Resources Available)	Reciprocity, Consultant (25% of Licensees)
RAD23	1		NORM Remediation
RAD24	1		Reciprocity, NORM (50% of Licensees)
RAD29	1	2 (20%)	Reciprocity, Nuc. Pharmacy (50% of Licensees)
RAD30	4	T (If Resources Available)	Reciprocity, GC (25% of Licensees)
RAD31	1	5 (If Resources Available)	Reciprocity, Teletherapy (50% of Licensees)
RAD32	1	2 (20%)	Reciprocity, Co-60 Source Install (100% of Licensees)
RAD33	1	1 (20%)	Reciprocity, Industrial X-ray (50% of Licensees)
RADN1 (1-5 Gauges)	3	5	Fixed Gauges
	3	5	Portable Gauges
	3	T1	Measuring Systems Analytical Instruments i.e., x-ray fluorescence analyzers
RADN2 (≥ 6 Gauges)	3	5	Fixed Gauges
	3	5	Portable Gauges
RADW1 (1-3 Sources)	3	3	Well Logging
RADW2 (≥ 4 Sources)	2	3	Well Logging

APPENDIX C

Supervisory Accompaniments

LICENSEE	LICENSE TYPE	INSPECTOR	DATE
Life Scan Arkansas, LLC	Mobile Medical	Kim Wiebeck	08/14/2003
Heart Associates of South Arkansas	Private Practice-Medical	Cathey Bradley	08/14/2003
University of Arkansas	Academic Broad	Steve Mack/ Gary Bortz	10/21/2003
University of Arkansas	Instrument Calibration Services	Steve Mack/ Gary Bortz	10/22/2003
R.D. Plant Contracting Co.	Portable Gauge	Gary Bortz	12/10/2003
Arkansas Highway and Transportation Department	Portable Gauge	Gary Bortz	12/10/2003
Howard Memorial Hospital	Nuclear Medicine	Gary Bortz	12/10/2003
White River Medical Center	Nuclear Medicine	Lynn Davis	12/18/2003
White County Medical Center	Nuclear Medicine	Steve Mack	12/23/2003
Sterigenics	Irradiator	Lynn Davis/ Gary Bortz	06/24/2004
Mobile Health Services	Mobile Medical	Kim Wiebeck	12/14/2004
Tim Tyler Surveying and Mapping	Portable Gauge	Kim Wiebeck	12/14/2004
Cat Clinic of Conway	Veterinary	Steve Mack	01/12/2005
DMS Imaging	Mobile Medical	Kim Wiebeck	02/28/2005
Arkansas Cardiology Clinic	Private Practice-Medical	Susan Dooley	10/13/2005
Rebsamen Regional Medical Center	Nuclear Medicine	Susan Dooley	01/27/2006

APPENDIX C Continued

LICENSEE	LICENSE TYPE	INSPECTOR	DATE
H & H X-Ray Inspection Services	Radiography	Steve Mack	05/05/2006
White County Medical Center	Nuclear Medicine	Katia Gray	05/10/2006
H & H X-Ray Inspection Services	Radiography	Steve Mack	05/11/2006
HealthPark Hospital	Nuclear Medicine	Katia Gray	06/08/2006
Applied Inspection Services	Radiography	Kim Wiebeck	06/15/2006
University of Arkansas for Medical Sciences	Medical Broad (Security)	Steve Mack	06/15/2006
H & H X-Ray Inspection Services	Radiography	Steve Mack	06/20/2006
H & H X-Ray Inspection Services	Radiography	Kim Wiebeck	06/28/2006
JAY-PAC Incorporated	Portable Gauge	Kim Wiebeck	06/28/2006
St. Edwards Mercy Medical Center	Nuclear Medicine	Kim Wiebeck	06/29/2006
Harris Hospital	Nuclear Medicine	Katia Gray	07/28/2006

APPENDIX D

Major, Unusual, Complex Licensing Actions

New Licenses or License Renewals

University of Arkansas, ARK-064-INC-10-09 – Renewal

University of Arkansas Calibration Lab, ARK-711-BP-10-09 - Renewal

University of Arkansas for Medical Sciences, ARK-001-INC-11-09 – Renewal of Broad Scope

Cardinal Health, ARK-642-AP-BP-12-09 – Renewal issued as Master License

CARTI, ARK-654-BP-12-08 – Renewal issued as Master License

PETNET, ARK-953-AP-BP-04-08 – New PET Radiopharmacy License at SVI

PETNET, ARK-043-ACC-04-08 – New PET Cyclotron License at SVI

PETNET, ARK-045-ACC-AP-BP-02-12 – NEW PET Cyclotron License at UAMS

Amendments
None

Terminations
None

Decommissioning

University of Arkansas, ARK-064-INC-10-09 – Legacy I-IV and Harmon Road Cleanups
Legacy IV and Harmon Road are ongoing projects. The completion dates are unknown at this time.

University of Arkansas, ARK-064-INC-10-09 – SEFOR Decommissioning
The University is currently working with DOE regarding funding for this decommissioning project. Questions remain as to which entity, University of Arkansas or DOE, will be legally responsible for this project.

Bankruptcy Notifications
None

APPENDIX E

Actions Taken in Response to the Recommendations from the 2002 IMPEP

Recommendation 1

The review team recommends that Department management review the current staffing plan to achieve a more effective balance between licensing and inspection activities. (Section 3.3)

After the 2002 IMPEP, the Radioactive Materials staff developed a plan to achieve a balance between licensing and inspection activities and to reduce the renewal backlog. Three staff members were designated to function primarily as inspectors. Two staff members were assigned primary duties as license reviewers. In addition, the retired former Radiation Control Director was employed as a consultant and assisted in license reviews.

The action plan was successfully utilized until January 2005 when loss of staff forced the RAM Program to abandon the plan. In January and February 2005, two health physicists left the RAM Program. In July 2005, the Agency Program Coordinator position was vacated.

The loss of 60% of the RAM staff within a 6-month period caused the Program to shift priorities. While 71 renewal licenses were issued prior to the loss of staff, no additional renewals have been issued since June 2005. Emphasis is now placed on high priority functions such as issuance of new licenses, issuance of license amendments, and inspection of the highest priority licensees. The Program, which previously inspected licensees at a more aggressive frequency than the NRC because of the renewal backlog, has deferred to the NRC inspection frequency in an attempt to prevent an inspection backlog. In addition to carrying the primary responsibility for the licensing and inspection functions, the two remaining qualified RAM staff are also responsible for providing on-the-job training to the three health physicists in training.

The use of the consultant was lost for fiscal year 2005 (July 2004-June 2005). The consultant was rehired in September 2005 and has provided assistance with the development of license guidance documents and special projects.

APPENDIX E Continued

Recommendation 2

The review team recommends that Department management develop and implement an action plan to reduce the licensing renewal backlog. (Section 3.4)

As noted above, after the 2002 IMPEP a plan to achieve a balance between licensing and inspection activities and to reduce the renewal backlog was developed and implemented. From September 2002 through June 2005, the RAM licensing staff and consultant issued 71 renewed licenses. However, due to the loss of the staff no renewed licenses have been issued since June 2005. As previously noted, lack of fully qualified Health Physicists limits the staff activities to those deemed to pose a greater potential risk to public health and safety. After assessing various Program functions based upon the potential risk, performance of inspections and issuance of new licensing actions were deemed to have a greater priority than renewal license reviews.

Recommendation 3

The review team recommends completion of revisions to update licensing guidance documents and checklists (This item was identified in the 1998 IMPEP review.)

The consultant has been instrumental in the completion of two updated licensing guides and the drafting of an additional two guidance documents. These licensing guides are based upon the NRC's NUREG-1556 series.

The Portable Gauge guide was finalized in April 2004 and the Fixed Gauge guide was finalized in July 2005. These guides are currently used for all new licenses.

The Industrial Radiography and Medical guides are currently in draft form. Finalization and implementation of these guides has been delayed due to the staff's inability to review the guidance documents prepared by the consultant.