February 12, 2010

Paul Halverson, DrPH, MHSA Director of Health and State Public Health Officer Arkansas Department of Health 4815 West Markham, Slot 39 Little Rock, AR 72205

Dear Dr. Halverson:

On January 14, 2010, the Management Review Board (MRB) met to consider the proposed final Integrated Materials Performance Evaluation Program (IMPEP) report on the Arkansas Agreement State Program. The MRB found the Arkansas Program adequate to protect public health and safety, but needs improvement, and compatible with the U.S. Nuclear Regulatory Commission's (NRC's) program. Because of the significance of the findings, the MRB decided to extend the period of heightened oversight of the Arkansas Agreement State Program. Heightened oversight is an increased monitoring process that NRC uses to follow the progress of improvement needed in an Agreement State program. It involves implementation of a program improvement plan, participation on bimonthly conference calls with NRC managers and staff members, and submission of status reports prior to each call.

Section 5.0, page 14, of the enclosed final report contains a summary of the review team's findings and recommendations for the Arkansas Agreement State Program. I request that you revise your existing program improvement plan to address the review team's recommendations, as some recommendations have changed since your plan was first implemented. I encourage you to take a close look and revise your program improvement plan to ensure that the specific milestones listed in the plan meet the State's needs for a path toward improvement. The revised plan should be submitted to NRC within 30 days of receipt of this letter. Upon review and approval of your program improvement plan, NRC staff will schedule the first conference call. Based on the results of the current IMPEP review, a followup review will be scheduled approximately 18 months from the date of the October 2009 IMPEP review. The followup review will cover the State's implementation of the program improvement plan and the actions taken in response to the recommendations in the enclosed final report.

I appreciate the courtesy and cooperation extended to the IMPEP team during the review. I also wish to acknowledge your continued support for the Agreement State Program.

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I look forward to our agencies continuing to work cooperatively in the future.

Sincerely,

/RA/

Martin J. Virgilio
Deputy Executive Director for Materials, Waste,
Research, State, Tribal, and Compliance Programs
Office of the Executive Director for Operations

Enclosure:

Arkansas Final IMPEP Report

cc w/encl.: Renee Mallory, RN, Chief

Arkansas Health Systems Licensing

and Regulation Branch

Bernard Bevill, Chief

Arkansas Radiation Control Section

Mike Broderick, Oklahoma Organization of Agreement States Liaison to the MRB I look forward to our agencies continuing to work cooperatively in the future.

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INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM REVIEW OF THE ARKANSAS AGREEMENT STATE PROGRAM

OCTOBER 26-30, 2009

FINAL REPORT

1.0 INTRODUCTION

This report presents the results of the review of the Arkansas Agreement State Program. The review was conducted during the period of October 26-30, 2009, by a review team composed of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the State of North Dakota. Team members are identified in Appendix A. The review was conducted in accordance with the "Implementation of the Integrated Materials Performance Evaluation Program and Rescission of Final General Statement of Policy," published in the *Federal Register* on October 16, 1997, and NRC Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)," dated February 26, 2004. Preliminary results of the review, which covered the period of September 2, 2006, to October 30, 2009, were discussed with Arkansas managers on the last day of the review.

A draft of this report was issued to Arkansas for factual comment on November 23, 2009. The State responded by letter dated January 4, 2010, from Charles McGrew, Deputy Director and Chief Operating Officer, Department of Health (the Department). A copy of the State's response is included as the Attachment to this report. The Management Review Board (MRB) met on January 14, 2010, to consider the proposed final report. The MRB found the Arkansas Agreement State Program adequate to protect public health and safety, but needs improvement, and compatible with NRC's program.

The day-to-day operations of the Arkansas Agreement State Program are administered by the Radioactive Materials Program (the Program). The Program is one of three programs in the Radiation Control Section (the Section), which is part of the Health Systems Licensing and Regulation Branch (the Branch). The Branch is part of the Center for Health Protection within the Department. Organization charts for the State, the Department, and the Section are included as Appendix B.

At the time of the review, the Arkansas Agreement State Program regulated 226 specific licenses authorizing byproduct, source, and certain special nuclear materials. The review focused on the radioactive materials program as it is carried out under the Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between NRC and the State of Arkansas.

The Arkansas Agreement State Program was placed on heightened oversight based on the findings from an August 28, 2007 periodic meeting. During the periodic meeting, NRC staff determined that performance weaknesses identified during the 2006 IMPEP review had not been resolved; specifically, Arkansas's loss of experienced staff allowed the backlog of licensing actions to persist and created a backlog of inspections. Based on the results of this review, the MRB, at its January 14, 2010 meeting, extended the period of heightened oversight of the Arkansas Agreement State Program.

In preparation for this review, a questionnaire addressing the common and applicable non-common performance indicators was sent to the Section on April 14, 2009. The Program provided a response to the questionnaire on September 30, 2009. The questionnaire response can be found in NRC's Agencywide Documents Access and Management System (ADAMS) using the Accession Number ML092740748.

The review team's general approach for conduct of this review consisted of: (1) examination of the Program's response to the questionnaire, (2) review of applicable Arkansas statutes and regulations, (3) analysis of quantitative information from the Program's database, (4) technical review of selected regulatory actions, (5) field accompaniments of four inspectors, and (6) interviews with staff and managers. The review team evaluated the information gathered against the established criteria for each common and applicable non-common performance indicator and made a preliminary assessment of the Arkansas Agreement State Program's performance.

Section 2.0 of this report covers the State's actions in response to open recommendations from previous reviews. Results of the current review of the common performance indicators are presented in Section 3.0. Section 4.0 details the results of the review of the applicable non-common performance indicators, and Section 5.0 summarizes the review team's findings and recommendations. The review team's recommendations are comments that relate directly to program performance by the State. A response is requested from the State to all recommendations in the final report.

2.0 STATUS OF ITEMS IDENTIFIED IN PREVIOUS REVIEWS

During the previous IMPEP review, which concluded on September 1, 2006, the review team made four recommendations regarding program performance and left one recommendation open from a previous review. The status of these recommendations is as follows:

- 1. The review team recommends that the State evaluate current and future staffing needs and business processes to develop and implement a strategy that improves the effectiveness and efficiency of the Program to ensure its continued adequacy and compatibility. (Section 3.1 of the 2006 IMPEP Report)
 - Status: Subsequent to the 2006 IMPEP review, the Program evaluated its staffing needs based on current and projected workloads. The Program determined that, with a full complement of qualified staff, the Program has sufficient staff to perform its regulatory functions. The review team came to the same conclusion, as discussed in Section 3.1 of this report; however, the review team identified concerns with the high degree of staff turnover that the Program experienced during the review period. The review team believes that the Program has met the intent of this part of the recommendation and makes a new recommendation specifically targeted at addressing the staff turnover issue in Section 3.1. The review team did not see direct evidence of an evaluation of business processes to improve effectiveness and efficiency; however, the review team believes that a new recommendation in Section 3.1 regarding a knowledge management program will satisfy the intent of this part of this recommendation. This recommendation is closed.
- 2. The review team recommends that the State develop and implement a documented training plan consistent with the guidance in the NRC/Organization of Agreement States (OAS) Training Working Group Report and NRC's Inspection Manual Chapter (IMC) 1246, "Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area." (Section 3.1 of the 2006 IMPEP Report)

Status: Following the 2006 IMPEP review, the Program developed and implemented a documented training plan that is consistent with the guidance in the NRC/OAS Training Working Group Report and NRC's IMC 1246. The review team verified that the new training plan is being followed for new staff by reviewing each staff member's training progress chart maintained by the Program Manager. This recommendation is closed.

3. The review team recommends that the State develop and implement an inspection prioritization and inspection frequency protocol that can be consistently applied and at least meets the minimum requirements of IMC 2800, "Materials Inspection Program." (Section 3.2 of the 2006 IMPEP Report)

Status: During the review period, the Program revised its policy for assigning inspection frequencies to be consistent with IMC 2800. The review team verified that new policy meets the minimum requirements of IMC 2800 and has been consistently applied to the Program's licensees. This recommendation is closed.

4. The review team recommends that Department management develop and implement an action plan to reduce the licensing renewal backlog. (Section 3.4 of the 2002 IMPEP Report)

Status: Following the 2007 periodic meeting, the Arkansas Agreement State Program was placed on heightened oversight due to staff turnover, the growing inspection backlog, and the historic backlog of license renewals. Heightened oversight is a form of increased oversight that NRC uses to monitor the progress of programmatic improvements necessary to restore an Agreement State program to fully satisfactory performance. As part of the heightened oversight process, the State developed a Program Improvement Plan, a corrective action plan specifically addressing the areas needing improvement. The Program Improvement Plan had a line item for the reduction and ultimate elimination of the license renewal backlog; however, the Program Improvement Plan did not have specific, measurable performance goals or a prioritization of the backlogged license renewals. The review team believes that a successful action plan to address the backlog needs specific, measurable performance goals and a prioritization of the backlogged renewals based on health and safety significance. This recommendation remains open.

5. The review team recommends that the State develop and implement a license termination procedure to ensure consistent and acceptable quality of information requests and documentation. (Section 3.4 of the 2006 IMPEP Report)

Status: The Program revised its procedure for license termination and decommissioning in response to this recommendation in an attempt to promote consistency in the license termination process. The review team reviewed the revised procedure and found that it provided sufficient guidance to the license reviewers; however, the review team noted several instances where material dispositions and license terminations were approved without receiving the proper supporting documentation, as required by the procedure. For example, several sealed source dispositions and/or license termination requests did not include the necessary documentation to demonstrate radioactive material disposition and/or performance of leak tests of the sources. The review team believes that the staff

needs additional training on the procedure and that there needs to be a period of performance before this procedure can be considered fully implemented. This recommendation remains open.

3.0 COMMON PERFORMANCE INDICATORS

Five common performance indicators are used to review NRC Regional and Agreement State radioactive materials programs. These indicators are: (1) Technical Staffing and Training, (2) Status of Materials Inspection Program, (3) Technical Quality of Inspections, (4) Technical Quality of Licensing Actions, and (5) Technical Quality of Incident and Allegation Activities.

3.1 <u>Technical Staffing and Training</u>

Issues central to the evaluation of this indicator include the Program's staffing level and staff turnover, as well as the technical qualifications and training histories of the staff. To evaluate these issues, the review team examined the Section's questionnaire response relative to this indicator, interviewed managers and staff, reviewed job descriptions and training records, and considered any workload backlogs.

The Program, when fully staffed, consists of the Program Manager, six Health Physicists, and one administrative staff member. The Health Physicists perform licensing, inspection, and incident response duties, as well as emergency response duties at the nuclear power plant in the State. The Program also has two part-time consultants for licensing actions and special projects. The review team determined that the number of staff in the Program is sufficient based on the Program's current and projected workloads; however, the review team identified concerns in the number of qualified staff resulting from a high staff turnover rate.

During the 3-year review period, six individuals were hired, and six left the program. At the time of the review, the Program had one Health Physicist vacancy. Three of the Health Physicists that were hired during the review period left during the review period; none of which stayed with the Program more than a year. Two of the other Health Physicists that left the program during the review period were fully qualified and had a considerable amount of experience and knowledge in radioactive materials regulation; one of the two has returned as a part-time consultant for secondary reviews of licensing actions. The remaining individual that left the Program during the review period had been with the Program a little over a year; however, the vast majority of that time was spent on military leave.

The staff departures during the review period constituted a high degree of staff turnover relative to the size of the Program. The Program's qualification process cannot keep up with the rate of attrition. Based on the number of facilities licensed by the Program, the Program needs at least three to four fully qualified Health Physicists to handle the Program's workload. At the time of the review, the Program had one Health Physicist that was fully qualified to conduct inspections and perform licensing actions of all types of licenses independently. Two Health Physicists had partial qualifications to conduct inspections of industrial or medical facilities independently. The remaining two Health Physicists each had less than 1 year's experience in the Program and were not qualified to independently conduct inspections or perform licensing actions. The review team noted that the Program Manager encouraged and supported training opportunities, based on availability of NRC-funded training courses.

The lack of qualified staff has hindered the Program's efforts to eliminate the license renewal backlog that was identified as early as the 1995 IMPEP review and is further discussed in Section 3.4 of this report. Given the limited number of qualified individuals, the Program has focused its resources on actions with the greatest health and safety significance: inspections, license amendments, response to incidents and allegations, and special projects. Before the Program can make appreciable progress on the license renewal backlog, the State must address the staff turnover issue to ensure that the Program retains an adequate complement of qualified staff to perform all of its regulatory duties. In the Program's response to the questionnaire, the Program indicated that the reasons for leaving for the majority of the individuals that left the program were low salaries and a lack of a career ladder within the Section. The review team noted that the State was able to boost the starting salary during the review period, albeit temporarily. The boost in salary helped the Program recruit several nuclear medicine technologists that brought with them some knowledge and experience of radioactive materials. Since then, the starting salaries have reverted back to the lesser amount, which could make recruiting for the vacant Health Physicist position difficult given the demand and competition for individuals with radiation safety experience in Arkansas. The review team also noted the lack of a career ladder within the Health Physicist position. The Section has proposed a modification to its Health Physicist Training/Salary Plan that is awaiting the Arkansas Legislative Personnel Committee's review and approval. Under this plan, staff would receive salary increases for the successful completion of training and qualifications.

The review team discussed the staff turnover issue with the staff and various levels of management of the Arkansas Agreement State Program. The review team communicated its concerns with the level of turnover relative to the size of the Program and with the Program's ability to stay current on its other regulatory duties while addressing the license renewal backlog with a limited number of qualified inspectors and license reviewers. The review team stressed the importance of addressing the staff turnover issue to ensure the long-term health of the Arkansas Agreement State Program. The review team recommends that the State take additional actions, such as increasing salary and/or benefits, to stabilize staffing and ensure successful program implementation.

Given the high rate of turnover in the Program, the review team discussed with the various levels of management in the Arkansas Agreement State Program the value of implementing a knowledge management program. The review team observed that many of the Program's policies and procedures did not reflect current practices and were in need of revision. Updated policies and procedures are a first-line method of training new staff on the Program's operations. As an example of where the Program could have benefited from updated or new procedures, the review team noted that the Program had general inspection guidance, but did not have inspection guidance for specific license types. Due to the lack of specific inspection guidance, new staff members are dependent on NRC courses and accompaniments of more senior inspectors to learn inspection techniques for specific license types. The review team discussed with the Program using NRC's or another Agreement State's already developed inspection guidance to minimize the resource burden on developing new procedures. The review team also communicated the value of reviewing the Program's practices during the revisions of the procedures to evaluate effectiveness and streamline processes where possible. The review team recommends that the State update its existing procedures and develop new procedures, if necessary, to memorialize the policies and practices of the Agreement State program and to serve as a knowledge management tool.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Arkansas's performance with respect to the indicator, Technical Staffing and Training, was unsatisfactory.

3.2 Status of Materials Inspection Program

The review team focused on five factors while reviewing this indicator: inspection frequency, overdue inspections, initial inspections of new licenses, timely dispatch of inspection findings to licensees, and performance of reciprocity inspections. The review team's evaluation was based on the Program's questionnaire response relative to this indicator, data gathered from the Program's database, examination of completed inspection casework, and interviews with the Program Manager and staff members.

As noted in Section 2.0 of this report, the Program revised its inspection frequencies during the review period. The review team verified that Arkansas's inspection frequencies for all types of radioactive material licenses are at least the same as the frequencies listed in IMC 2800.

During the review period, the Program conducted a total of 99 routine inspections of high priority (Priority 1, 2, and 3) licensees. Of these 99 inspections, the review team identified 13 inspections that were conducted overdue by more than 25 percent of the inspection frequency prescribed by IMC 2800. The review team did not identify any inspections that were overdue at the time of the review. The review team also evaluated the Program's timeliness for conducting initial inspections. The review team noted that the Program conducted 20 initial inspections during the review period, of which 1 was conducted greater than 12 months after license issuance. As required by IMC 2800, initial inspections should be conducted within 12 months of license issuance. The review team verified that there were no overdue initial inspections at the time of the review. Overall, the review team calculated that the Program performed 12 percent of all Priority 1, 2, and 3 and initial inspections overdue during the review period. Because the inspection backlog was eliminated by the time of the review, the review team did not make a recommendation to address the timeliness of inspections, although performance over the review period needed improvement.

The review team evaluated the Program's timeliness of issuance of inspection findings. The Program has a goal of completing inspection reports within 30 days of the final date of the inspection. The Program dispatches all inspection findings from the office via letter. Of the 26 inspection findings letters reviewed by the team, 9 were issued beyond the 30-day goal. The letters were issued anywhere between 5 and 153 days beyond the 30-day goal. The reasons for the late inspection findings were workload or extenuating circumstances. In all cases, the licensees were made aware of the inspectors' preliminary findings during the exit meetings. The review team found that the late inspection reports occurred throughout the review period and, therefore, could not deduce a performance trend. The review team initially considered a recommendation to address the number of late inspection findings, an area needing improvement; however, the review team believes that the knowledge management recommendation in Section 3.1 will require the Program to evaluate its process for dispatching inspection findings.

During the review period, the Program granted 61 reciprocity licenses that were candidates for inspection based upon the criteria in IMC 1220, "Processing of NRC Form 241 and Inspection of

Agreement State Licensees Operating under 10 CFR 150.20." IMC 1220 requires on-site inspection of 20 percent of candidate licensees operating under reciprocity. The review team determined that the Program inspected 19 (31 percent) of the candidate reciprocity licensees during the review period. The review team noted that the performance of reciprocity inspections was more frequent toward the beginning of the review period; however, the review team also noted that the Program used a risk-informed approach to performing the reciprocity inspections late in the review period. The Program is formally adopting a risk-informed approach via a procedural revision expected to be completed and implemented during Calendar Year 2010. The review team believes that the risk-informed approach puts the appropriate emphasis on the protection of public health and safety and meets the intent of the performance of reciprocity inspections; therefore, the review team did not make a recommendation in this specific area needing improvement.

The review team determined that the Program adequately planned for the initial set of Increased Controls inspections of affected licensees. The review team evaluated the Program's prioritization methodology and found it acceptable. The Program identified 19 licensees that were subject to the Increased Controls and performed the first round of inspections in a timely manner. Subsequent inspections of Increased Controls licensees evaluated the pertinent aspects of the security measures.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Arkansas's performance with respect to the indicator, Status of Materials Inspection Program, was satisfactory, but needs improvement.

3.3 <u>Technical Quality of Inspections</u>

The review team evaluated inspection reports, enforcement documentation, inspection field notes, and interviewed the responsible inspector for 26 radioactive materials inspections conducted during the review period. The casework examined included a cross-section of inspections conducted by eight current and former inspectors and covered a wide variety of inspection types involving both initial, and routine inspections. These included industrial radiography, self-shielded irradiator, service provider, positron emission tomography, high doserate remote after loader, nuclear pharmacy, diagnostic nuclear medicine, portable gauge, and reciprocity licensees. The review also included both initial and followup Increased Controls inspections. Appendix C lists the inspection casework files reviewed, with case-specific comments.

Based on the evaluation of casework, the review team determined that inspections covered all aspects of the licensees' radiation safety and security programs. The review team noted that inspection reports were generally thorough, complete, consistent, and of high quality with sufficient documentation to ensure that licensees' performances with respect to health, safety, and security were acceptable. The review team noted that inspectors were conducting confirmatory reviews of source inventories in the National Source Tracking System for affected licensees. Inspection report documentation supported violations, recommendations made to licensees, unresolved safety issues, and discussions held with licensees during exit interviews.

While on site, the review team evaluated the Program's handling and storing of sensitive documents. The review team determined that documents containing sensitive information were

maintained and secured in a locked file cabinet, segregated from publicly available information. The review team determined that these files were not subject to Freedom of Information Actequivalent State law and verified that staff handling the files was aware of the sensitive information and its special handling requirements. The review team found that outgoing correspondence specific to Increased Controls licensees was not always appropriately marked identifying them as containing sensitive information. The review team did not discover any evidence of an inadvertent release or unauthorized disclosure on the part of the Program or any licensees, but recognized the potential for a mistake due to the lack of policy of marking sensitive documents. After discussions between the review team, the Program Manager, and senior staff, the Program committed to clearly marking outgoing sensitive documents.

The Program has a policy of performing supervisor accompaniments of all staff at least annually. The review team verified that the Program Manager conducted supervisory accompaniments of the staff at least annually for each of the years covered by the review period.

The Program maintains a sufficient number and variety of calibrated survey instruments to support the inspection program and to respond to radioactive materials incidents. The Program sends survey instruments to the manufacturer for calibration. The Program receives laboratory support from the Arkansas Department of Health Radiochemistry Laboratory, which performs sample counting and assay services, as needed.

The review team accompanied four of the Program's inspectors in February, September, and October 2009. The inspectors conducted inspections at a diagnostic cardiology office, a non-destructive testing company using moisture density gauges, two hospitals (one performing both iodine-131 therapy and brachytherapy and the other performing only iodine-131 therapy), an industrial radiography facility, and a pool irradiator facility. Two of the inspections included a confirmatory review of source inventories under the National Source Tracking System, and one included a followup review of the Increased Controls. Appendix C lists the inspector accompaniments. The inspectors were prepared for the inspections and were thorough in their audits of the licensees' radiation safety and security programs. The inspectors conducted interviews with appropriate personnel, observed licensed operations, conducted confirmatory measurements, and utilized good health physics practices. The inspectors held entrance and exit meetings with the appropriate level of licensee management. The review team determined that the inspections were adequate to assess radiological health, safety, and security at the licensed facilities.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Arkansas's performance with respect to the indicator, Technical Quality of Inspections, was satisfactory.

3.4 Technical Quality of Licensing Actions

The review team examined the completed licensing casework and interviewed license reviewers for 35 specific licenses. Licensing actions were reviewed for completeness, consistency, proper radioisotopes and quantities, qualifications of authorized users, adequacy of facilities and equipment, adherence to good health physics practices, financial assurance, operating and emergency procedures, appropriateness of license conditions, and overall technical quality.

The casework was also reviewed for timeliness, use of appropriate correspondence, reference to appropriate regulations, supporting documentation, consideration of enforcement history, prelicensing visits, peer or supervisory review, and proper signatures.

The licensing casework was selected to provide a representative sample of licensing actions completed during the review period. Licensing actions selected for evaluation included 6 new licenses, 5 renewals, 9 amendments, and 15 license terminations. Files reviewed included a cross-section of license types, including: medical diagnostic and therapy, brachytherapy, gamma knife, industrial radiography, nuclear pharmacies, and industrial licensees. The casework sample represented work from each of the license reviewers. A listing of the licensing casework reviewed, with case-specific comments, can be found in Appendix D.

Licensing actions are all tracked via a database. The information is entered into a database by the clerical staff upon receipt, and then the action is assigned to a license reviewer. There was no backlog of amendments or new applications at the time of the review. The staff responds to new applications and amendment requests in a timely manner, generally within 3 weeks, and issues completed licenses within 30 to 45 days.

The review team found that the Program's considerable license renewal backlog continues to be an issue as identified during previous IMPEP reviews in the years. Of the 226 active licenses, 117 licenses are pending for renewal, which equates to over 50 percent of the Program's licenses. Eighty-six of the renewals have been pending for more than 1 year. The longest pending renewal dated back 10 years. As indicated in Section 2.0, the review team is keeping open the recommendation from the 2002 IMPEP review regarding the development of an action plan to address the license renewal backlog.

Due to the limited licensing experience of the newest staff members, all licensing actions receive a two-person review: one by the initial reviewer and a second by one of the Health Physicists with signature authority. Licenses are usually signed by the Program Manager; the fully qualified Health Physicist can sign a license, if the need arises. The review team noted that the dual review process, although it lengthens the amount of time it takes to complete a licensing action, is a good learning tool for the unqualified staff members.

In general, the review team found that licensing actions were complete with health, safety, and security issues properly addressed. The review team noted several inconsistencies in licensing practices among the staff due to a lack of adherence to or awareness of the Program's licensing guidance. For example, as described in Section 2.0, the review team noted several instances where material dispositions and license terminations were approved without receiving the proper supporting documentation. Additional inconsistencies are noted in case-specific comments on the licensing casework reviewed listed in Appendix D. The review team believes that the Program's licensing guidance will benefit from the knowledge management review of the procedures recommended in Section 3.1.

The review team evaluated the Program's application of the State's financial assurance requirements. At the time of the review, the Program only had one licensee that was authorized possession of radioactive material in excess of the quantities requiring financial assurance. The review team verified that the proper documentation was on file and that the information was appropriately protected.

The review team examined the Program's licensing practices in regard to the Increased Controls and Fingerprinting Orders. The review team noted that the Program added legally binding license conditions to the licenses that met the criteria for implementing the Increased Controls, including fingerprinting, as appropriate. The review team verified that the Program has a means to identify new and amended licenses that should be subject to additional security measures by incorporating the essential objectives of the revised pre-licensing guidance into its licensing program. To meet the other essential objectives of the revised pre-licensing guidance, the Program hand delivers new licenses to ensure that regulatory requirements and licensee commitments are met prior to issuance of the license and receipt of radioactive material.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Arkansas's performance with respect to the indicator, Technical Quality of Licensing Actions, was satisfactory, but needs improvement.

3.5 Technical Quality of Incident and Allegation Activities

In evaluating the effectiveness of the Program's actions in responding to incidents, the review team examined the Program's response to the questionnaire relative to this indicator, evaluated selected incidents reported for Arkansas in the Nuclear Material Events Database (NMED) against those contained in the Programs's files, and evaluated the casework for eight radioactive materials incidents that required reporting to NRC's Headquarters Operations Center. A listing of the casework examined can be found in Appendix E. The review team also looked at a sample of radioactive materials incidents that did not require reporting to ensure that the events were appropriately not reported. To evaluate the Program's response to allegations, the review team examined casework for four allegations involving radioactive materials, including the one allegation that NRC forwarded to the State during the review period and three that the Program received directly.

When notified of an incident or an allegation, the Program Manager and staff discuss the initial response and the need for an on-site investigation, based on the safety significance. When an incident is reported to the Program after office hours, the information is received by a 24-hour operator and forwarded to the Program for appropriate response. If the incident meets the reportability thresholds, as established in the NRC's Office of Federal and State Materials and Environmental Management Programs (FSME) Procedure SA-300 "Reporting Material Events," the Program promptly notifies NRC's Headquarters Operations Center and, often times, NRC Region IV. If the investigation is complex and extends over a period of time, the Headquarters Operations Center and NMED are appropriately notified of any updates. The Program does not use the NMED software to provide initial entries or updates to NMED. Instead, the Program relies on NRC's Headquarters Operations Center to provide initial reports and updates to NRC's contractor responsible for maintaining NMED. The Program responds directly to any requests for additional information from NRC's contractor responsible for maintaining NMED. Of the incidents evaluated by the review team, all had been reported to NRC within the required time frame and been properly completed in NMED.

The incidents selected for review included lost or stolen radioactive material, damaged equipment, and transportation events. The review team determined that the Program's responses to incidents were thorough, complete, and comprehensive. Initial responses were prompt and well coordinated, and the level of effort was commensurate with the health and

safety significance. The Program immediately dispatched inspectors to the site when the possibility of an immediate threat to public health and safety existed. When no immediate threat was present and the Program determined that the licensee had qualified, competent individuals investigating the incident, the Program responded telephonically or conducted an on-site followup inspection at the next inspection.

In evaluating the effectiveness of the Program's response to allegations, the review team evaluated the casework for four allegations. The review team concluded that the Program consistently took prompt and appropriate action in response to concerns raised. The review team noted that the Program thoroughly documented the investigations and retained all necessary documentation to appropriately close the allegations. The Program notified the allegers of the conclusion of the investigations. The review team noted that Arkansas law requires that all public documents be made available for inspection and copying unless specifically exempted from disclosure under the State's Freedom of Information statutes. The State makes every effort to protect an alleger's identity, but the Program cannot fully guarantee anonymity. During the initial telephone contact, the alleger is advised that their anonymity cannot be guaranteed.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Arkansas's performance with respect to the indicator, Technical Quality of Incident and Allegation Activities, was satisfactory.

4.0 NON-COMMON PERFORMANCE INDICATORS

Four non-common performance indicators are used to review Agreement State Programs: (1) Compatibility Requirements, (2) Sealed Source and Device Evaluation Program, (3) Low-level Radioactive Waste Disposal Program, and (4) Uranium Recovery Program. NRC's Agreement with the State of Arkansas does not relinquish authority to regulate a sealed source and device evaluation program or a uranium recovery program, so only the first and the third non-common performance indicators were applicable to this review.

4.1 Compatibility Requirements

4.1.1 <u>Legislation</u>

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 the "Arkansas Code of 1987 Annotated, Volume 20A, Title 20, Chapter 21." The Department is designated as the State's radiation control agency. The review team noted that no significant legislation affecting the radiation control agency's authority was passed since the previous review.

4.1.2 Program Elements Required for Compatibility

Arkansas's regulation for the control or radiation is found in the Rules and Regulations for Control of Sources of Ionizing Radiation of the Arkansas State Board of Health and apply to all ionizing radiation, whether emitted from radionuclides or devices. Arkansas requires a license for possession and use of all radioactive materials. Arkansas also requires registration of all machines specifically designed to produce x-rays or other ionizing radiation.

The review team examined the procedures used in the State's rulemaking process and found that, through the use of public comment periods, the public and other interested parties are offered an opportunity to comment on proposed regulation changes. Draft regulations are sent to NRC for review and comment and those comments are incorporated, as necessary, prior to final adoption. Rule packages prepared by the Program require a review by the Arkansas Administrative Rules and Regulations Subcommittee of the Arkansas Legislative Council. A second administrative review is conducted by the House and Senate Interim Committees on Public Health, Welfare & Labor of the Arkansas General Assembly. Subsequent to those reviews, final approval must be obtained from the Arkansas State Board of Health. The review team noted that the State has emergency rule capability for situations where public health and safety are at risk. Arkansas's rules and regulations are not subject to "sunset" laws, and the Program has the authority to issue legally binding requirements (e.g., license conditions) in lieu of regulations until compatible regulations become effective.

The review team evaluated the Program's response to the questionnaire relative to this indicator, reviewed the status of regulations required to be adopted by the Program under the Commission's adequacy and compatibility policy, and verified the adoption of regulations with data obtained from the State Regulation Status Data Sheet that FSME maintains.

NRC policy requires Agreement States to adopt certain equivalent regulations or legally binding requirements no later than 3 years after NRC's amended regulations become effective, unless otherwise mandated by the Commission. The following five amendments are overdue for adoption:

- "Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material," 10 CFR Parts 30, 31, and 32 amendment (65 FR 79162), that was due for Agreement State implementation on February 16, 2004.
- "Compatibility with IAEA Transportation Safety Standards and Other Transportation Safety Amendments," 10 CFR Part 71 amendment (69 FR 3697), that was due for Agreement State implementation on October 1, 2007.
- "Medical Use of Byproduct Materials Recognition of Specialty Boards Part 35," 10
 CFR Part 35 amendment (70 FR 16336 and 71 FR 1926), that was due for Agreement State implementation on April 29, 2008.
- "National Source Tracking System," 10 CFR Part 20 amendment (71 FR 65865, 72 FR 59162), that was due for Agreement State implementation on January 31, 2009.
- "Minor Amendments," 10 CFR Parts 20, 30, 32, 35, 40, and 70 amendment (71 FR 15005), that was due for Agreement State implementation on March 27, 2009.

The review team also identified future regulation changes that, while not yet due for adoption, have been included in a rulemaking package that also includes the overdue regulations listed above. The Program anticipated that this rulemaking package would be finalized at the

Arkansas Board of Health's January 2010 meeting. The future regulation changes identified by the review team included:

- "Medical Use of Byproduct Material Minor Corrections and Clarification," 10 CFR Parts 32 and 35 amendment (72 FR 45147, 54207), that is due for Agreement State implementation by October 29, 2010.
- "Exemption From Licensing, General Licenses, and Distribution of Byproduct Material: Licensing and Reporting Requirements," 10 CFR Parts 30, 31, 32, 150 amendment (72 FR 58473), that is due for Agreement States implementation by December 17, 2010.
- "Occupational Dose Records, Labeling Containers, and Total Effective Dose Equivalent,"
 10 CFR Parts 19 and 20 amendment (72 FR 68043), that is due for Agreement State implementation by February 15, 2011.

The review team identified the following future regulation change that needs to be addressed by the Program in a future rulemaking or by adopting alternate legally binding requirements:

• "Requirements for Expanded Definition of Byproduct Material," 10 CFR Parts 20, 30, 31, 32, 33, 35, 61, and 150 amendment (72 FR 55864), that is due for Agreement State implementation by November 30, 2010.

The review team also identified eight regulations that were sent to NRC for final review and were returned with comments; however, NRC did not receive notification that comments had been resolved prior to being incorporated into State regulations. Subsequent to review, the Program was locating the regulation packages to resubmit to NRC for a final compatibility review. At the time of publication of this report, NRC had not received documentation to resolve the outstanding comments on Arkansas's final regulations.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Arkansas's performance with respect to the indicator, Compatibility Requirements, was satisfactory.

4.2 Low-level Radioactive Waste Disposal Program

In 1981, NRC amended its Policy Statement, "Criteria for Guidance of States and NRC in Discontinuance of NRC Authority and Assumption Thereof by states Through Agreement" to allow a State to seek an amendment for the regulation of low-level radioactive waste (LLRW) as a separate category. Those States with existing Agreements prior to 1981 were determined to have continued LLRW disposal authority without the need of an amendment. Although the Arkansas Agreement State Program has authority to regulate a LLRW disposal facility, NRC has not required States to have a program for licensing a disposal facility until such time as the State has been designated as a host State for a LLRW disposal facility. When an Agreement State has been notified or becomes aware of the need to regulate a LLRW disposal facility, it is expected to put in place a regulatory program that will meet the criteria for an adequate and compatibility LLRW program. There are no plans for a LLRW disposal facility in Arkansas. Accordingly, the review team did not review this indicator.

5.0 SUMMARY

As noted in Sections 3.0 and 4.0 above, Arkansas's performance was found satisfactory for three performance indicators reviewed; satisfactory, but needs improvement for the performance indicators Status of Materials Inspection Program and Technical Quality of Licensing Actions; and unsatisfactory for the performance indicator Technical Staffing and Training. The review team made two recommendations regarding program performance and kept two recommendations open from previous reviews. Overall, the review team recommended, and the MRB agreed, that the Arkansas Agreement State Program is adequate to protect public health and safety, but needs improvement, and compatible with NRC's program.

Due to the longstanding license renewal backlog, the review team considered recommending to the MRB that the State be placed on probation. The review team weighed this option against recommending extension of the period of heightened oversight. The review team ultimately concluded that, although there are areas of program performance needing improvement, the Program is adequately protecting public health and safety and places the appropriate emphasis on the protection of public health and safety. The review team also took commitments made by the Program into consideration when deciding on a recommendation for the appropriate course of action. In consultation with NRC managers, the review team reached the following recommendation: the review team recommended that the Arkansas Agreement State Program remain on heightened oversight. The MRB agreed with the review team's recommendation. Based on the results of the current IMPEP review, the review team recommends that a followup review take place in approximately 1 year.

Below are the recommendations, as mentioned earlier in the report, for evaluation and implementation by the State:

- 1. The review team recommends that the State take additional actions, such as increasing salary and/or benefits, to stabilize staffing and ensure successful program implementation. (Section 3.1)
- 2. The review team recommends that the State update its existing procedures and develop new procedures, if necessary, to institutionalize the policies and practices of the Agreement State program and to serve as a knowledge management tool. (Section 3.1)
- 3. The review team recommends that the State develop and implement an action plan to reduce the licensing renewal backlog. (Section 3.4 of the 2002 IMPEP Report)
- 4. The review team recommends that the State develop and implement a license termination procedure to ensure consistent and acceptable quality of information requests and documentation. (Section 3.4 of the 2006 IMPEP Report)

LIST OF APPENDIXES AND ATTACHMENT

Appendix A **IMPEP Review Team Members**

Appendix B Arkansas Organization Charts

Appendix C Inspection Casework Reviews

Appendix D License Casework Reviews

Appendix E **Incident Casework Reviews**

January 4, 2010 Letter from Charles McGrew Arkansas's Response to Draft IMPEP Report Attachment

APPENDIX A

IMPEP REVIEW TEAM MEMBERS

Technical Quality of Licensing Actions

Name	Area of Responsibility
Aaron McCraw, FSME	Team Leader Technical Staffing and Training Technical Quality of Incident and Allegation Activities
Louise Roehrich, ND	Status of Materials Inspection Program
Randy Erickson, Region IV	Technical Quality of Inspections Compatibility Requirements Inspector Accompaniments

Shirley Xu, FSME

APPENDIX B

ARKANSAS ORGANIZATION CHARTS

ADAMS Accession No.: ML093220088

APPENDIX C

INSPECTION CASEWORK REVIEWS

NOTE: CASEWORK LISTED WITHOUT COMMENT IS INCLUDED FOR COMPLETENESS ONLY.

File No.: 1

Licensee: Arkansas Cardiac Care, P.C.

Inspection Type: Routine, Unannounced
Inspection Date: 2/25/09

License No.: ARK-996-BP-01-13
Priority: 5
Inspector: TK

File No.: 2

Licensee: Grubs, Hoskyn, Barton & Wyatt, Inc.

Inspection Type: Routine, Announced
Inspection Date: 2/26/09

License No.: ARK-0456-03121

Priority: 5

Inspector: LP

Comment:

The Program issued the letter conveying inspection findings to the licensee 5 days beyond 30-day issuance goal.

File No.: 3

Licensee: St. Mary's Regional Medical Center
Inspection Type: Routine, Unannounced
Inspection Date: 9/14/09
License No.: ARK-0390-02120
Priority: 3
Inspector: TK

File No.: 4

Licensee: St. Joseph's Mercy Health Center
Inspection Type: Routine, Unannounced
Inspection Date: 9/15/09
License No.: ARK-0346-02120
Priority: 3
Inspector: KG

File No.: 5

Licensee: Sterigenics US, LLC
Inspection Type: Routine, Unannounced
Inspection Date: 9/17/09
License No.: ARK-903-03521
Priority: 1
Inspector: SM

File No.: 6

Licensee: Desert Industrial X-ray
Inspection Type: Special, Announced
Inspection Date: 10/26/09
License No.: ARK-1010-03320
Priority: 1
Inspector: LP

Arkansas Final Report Page C.2
Inspection Casework Reviews

File No.: 7

Licensee: Varian Medical Systems, Inc. License No.: REC-247

Inspection Type: Reciprocity, Unannounced Priority: 1

Inspection Date: 4/1/09 Inspectors: SM, KA, AM

Comment:

The Program issued the letter conveying inspection findings to the licensee 22 days beyond 30-day issuance goal.

File No.: 8

Licensee: CARTI Mountain Home License No.: ARK-0645-02230

Inspection Type: Routine Unannounced Priority: 2

Inspection Date: 12/3/08 Inspectors: TK, SM

Comment:

The Program issued the letter conveying inspection findings to the licensee 18 days beyond 30-day issuance goal.

File No.: 9

Licensee: Baptist Medical Center License No.: ARK-0058-02120

Inspection Type: Routine, Announced Priority: 3

Inspection Date: 2/6/08 Inspectors: KG

File No.: 10

Licensee: J. Christy Construction, Inc. License No.: ARK-1013-03121

Inspection Type: Routine, Announced Priority: 2

Inspection Date: 2/27/09 Inspectors: KG, AM

File No.: 11

Licensee: National Park Medical Center License No.: ARK-0431-02120

Inspection Type: Routine, Unannounced Priority: 3

Inspection Date: 4/30/09 Inspectors: SM, AM

Comment:

The Program issued the letter conveying inspection findings to the licensee 16 days beyond 30-day issuance goal.

File No.: 12

Licensee: B&F Engineering, Inc. License No.: ARK-0703-03121

Inspection Type: Routine, Unannounced Priority: 3

Inspection Date: 7/10/09 Inspectors: JT, TK

File No.: 13

Licensee: Midwest Inspection Services License No.: REC-366

Inspection Type: Reciprocity, Unannounced Priority: 1

Inspection Date: 4/9/09 Inspectors: LP, AM

Arkansas Final Report Page C.3 **Inspection Casework Reviews**

File No.: 14

License No.: ARK-642-AP-BP-12-09 Licensee: Cardinal Health

Inspection Type: Routine, Unannounced Priority: 2

Inspection Date: 8/25/09 Inspectors: SM, TK

File No.: 15

License No.: ARK-0784-03121 Licensee: Rogers Group, Inc. Inspection Type: Routine, Unannounced Priority: 2 Inspection Date: 12/28/08

Inspector: LP

Comment:

The Program issued the letter conveying inspection findings to the licensee 153 days

beyond 30-day issuance goal.

File No.: 16

License No.: ARK-0515-03120 Licensee: Great Lakes Chemical Corp. Inspection Type: Routine, Unannounced Priority: 4 Inspection Dates: 3/29-4/5/07 Inspector: SM

Comment:

The Program issued the letter conveying inspection findings to the licensee 36 days beyond 30-day issuance goal.

File No.: 17

Licensee: Clean Harbors El Dorado. LLC. License No.: ARK-0557-03120 Inspection Type: Routine, Unannounced Priority: 5 Inspection Date: 2/27/09 Inspectors: KG, AM

File No.: 18

Licensee: 3D Imaging Drug Design License No.: ARK-1008-03214 Inspection Type: Initial, Announced Priority: 1 Inspection Date: 1/29/09 Inspectors: SM, TK

Comment:

The Program issued the letter conveying inspection findings to the licensee 38 days beyond 30-day issuance goal.

File No.: 19

License No.: ARK-668-BP-04-00 Licensee: Baker Atlas Inspection Type: Routine, Unannounced Priority: 3

Inspectors: SM, VW Inspection Date: 2/1/08

File No.: 20

Licensee: Health Park Hospital License No.: ARK-0933-02120

Inspection Type: Routine, Unannounced Priority: 3 Inspection Date: 5/29/08 Inspectors: KG, TK Arkansas Final Report Page C.4
Inspection Casework Reviews

File No.: 21

Licensee: Baptist Health Medical Center - NLR License No.: ARK-0409-02120

Inspection Type: Routine, Unannounced Priority: 3

Inspection Date: 3/21/08 Inspectors: JT, VW

Comment:

The Program issued the letter conveying inspection findings to the licensee 12 days beyond 30-day issuance goal.

File No.: 22

Licensee: Cat Clinic of Conway License No.: ARK-945-02400

Inspection Type: Routine, Unannounced Priority: 4

Inspection Dates: 1/23/08 Inspectors: SM, VW

File No.: 23

Licensee: PETNET Solutions, Inc. License No.: ARK-1007-02201

Inspection Type: Initial, Announced Priority: 4

Inspection Date: 1/14/08 Inspectors: JT, VW

File No.: 24

Licensee: Michael A. Frais, MD License No.: ARK-932-BP-08-08

Inspection Type: Routine, Unannounced Priority: 3

Inspection Date: 3/14/08 Inspector: VW

File No.: 25

Licensee: Jet Asphalt & Rock Company, Inc. License No.: ARK-754-BP-03-00

Inspection Type: Routine, Unannounced Priority: 4

Inspection Date: 9/15/06 Inspector: SM

Comment:

The Program issued the letter conveying inspection findings to the licensee 32 days beyond 30-day issuance goal.

File No.: 26

Licensee: Materials Testing of Arkansas License No.: ARK-00-11-0616-01

Inspection Type: Routine, Unannounced Priority: 5

Inspection Date: 3/13/09 Inspectors: SM, KG

INSPECTOR ACCOMPANIMENTS

The following inspector accompaniments were performed prior to the on-site IMPEP review:

Accompaniment No.: 1

Licensee: Arkansas Cardiac Care, P.C. License No.: ARK-996-BP-01-13

Inspection Type: Routine, Unannounced Priority: 5
Inspection Date: 2/25/09 Inspector: TK

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Accompaniment No.: 2

Licensee: Grubs, Hoskyn, Barton & Wyatt, Inc. License No.: ARK-0456-03121

Inspection Type: Routine, Announced Priority: 5

Inspection Date: 2/26/09 Inspector: LP

Accompaniment No.: 3

Licensee: St. Mary's Regional Medical Center License No.: ARK-0390-02120

Inspection Type: Routine, Unannounced Priority: 3

Inspection Date: 9/14/09 Inspector: TK

Accompaniment No.: 4

Licensee: St. Joseph's Mercy Health Center License No.: ARK-0346-02120

Inspection Type: Routine, Unannounced Priority: 3

Inspection Date: 9/15/09 Inspector: KG

Accompaniment No.: 5

Licensee: Sterigenics US, LLC License No.: ARK-903-03521

Inspection Type: Routine, Unannounced
Inspection Date: 9/17/09
Inspector: SM

Accompaniment No.: 6

Licensee: Desert Industrial X-ray License No.: ARK-1010-03320

Inspection Type: Special, Announced Priority: 1

Inspection Date: 10/26/09 Inspector: LP

APPENDIX D

LICENSE CASEWORK REVIEWS

NOTE: CASEWORK LISTED WITHOUT COMMENT IS INCLUDED FOR COMPLETENESS ONLY.

File No.: 1

Licensee: Mena Regional Health System License No.: ARK-0915-02121

Type of Action: Renewal Amendment No.: 7

Date Issued: 8/18/09 License Reviewers: TK, KW

Comment:

The Program issued the renewed license 5 years after the licensee submitted its

renewal application.

Type of Action: Renewal

File No.: 2

Licensee: Arkansas Tech University License No.: ARK-0016-01120

Amendment No.: 23

Date Issued: 1/30/09 License Reviewers: KG, DS

Comment:

The Program issued the renewed license 3 years after the licensee submitted its

renewal application.

File No.: 3

Licensee: Cardiology and Medicine Clinic, P.A.

License No.: ARK-0806-02201

Type of Action: Renewal Amendment No.: 12

Date Issued: 5/27/08 License Reviewers: NS, KG

Comments:

a) The Program issued the renewed license 7 years after the licensee submitted its renewal application.

b) The renewed license was give a 5-year expiration date instead of a 7-year expiration

date in accordance with internal Program policy for renewed licenses.

File No.: 4

Licensee: J. Christy Construction, Inc. License No.: AKR-1013-03121

Type of Action: New Amendment No.: 0

Date Issued: 8/11/08 License Reviewers: NS, JT

File No.: 5

Licensee: Subsurface Xplorations, LLC. License No.: ARK-1018-03212

Type of Action: New Amendment No.: 0

Date Issued: 10/22/09 License Reviewers: LP, DS

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File No.: 6

Licensee: Delta Memorial Hospital

Type of Action: Amendment

Date Issued: 11/25/08

License No.: ARK-0828-02120

Amendment No.: 11

License Reviewer: KA

Comments:

a) The file did not contain documentation of the verification of the Assistant Radiation Safety Officer's (ARSO) training and experience.

b) The ARSO was added to the license with a cover letter. Other ARSOs were added directly to other licenses.

File No.: 7

Licensee: Southwest Regional Medical Center

Type of Action: Termination

Date Issued: 7/7/08

License No.: ARK-726-BP-10-10

Amendment No.: 32

License Reviewer: VW

File No.: 8

Licensee: Central Arkansas Cardiology
Type of Action: Termination
Date Issued: 6/4/08

License No.: ARK-0842-BP-05-01
Amendment No.: 12
License Reviewers: NS, SM

File No.: 9

Licensee: Corporate Testing, Inc.

Type of Action: Termination

Date Issued: 3/4/06

License No.: ARK-0913-BP-07-04

Amendment No.: 7

License Reviewer: KW

File No.: 10

Licensee: Heart Clinic Arkansas

Type of Action: Amendment

Date Issued: 9/18/09

License No.: ARK-0829-02121

Amendment No.: 18

License Reviewer: LP

File No.: 11

Licensee: Richard Baughn Construction, Inc.

Type of Action: Termination

Date Issued: 4/25/08

License No.: ARK-0863-BP-03-02

Amendment No.: 6

License Reviewer: LP

Comment:

Documentation in the file had conflicting information regarding source disposition.

File No.: 12

Licensee: Nucor-Yamato Steel Company
Type of Action: Renewal
Date Issued: 1/30/08
License No.: ARK-0722-03120
Amendment No.: None
License Reviewers: NS, DS

Comments:

a) The Program issued the renewed license 11 years after the licensee submitted its renewal application.

b) No amendment number was assigned to this licensing action. Previous amendment number was 12.

File No.: 13

Licensee: Arkansas Methodist Medical Center

Type of Action: Amendment

Date Issued: 9/18/09

License No.: ARK-0355-02120

Amendment No.: 55

License Reviewer: TK

File No.: 14

Licensee: Washington Group International, Inc.

Type of Action: Amendment

Date Issued: 4/3/09

License No.: ARK-0837-03320

Amendment No.: 12

License Reviewer: JT

File No.: 15

Licensee: Calfrac Well Services Corporation

Type of Action: New

Date Issued: 4/16/08

License No.: ARK-1005-03121

Amendment No.: 0

License Reviewers: NS, DS

File No.: 16

Licensee: Schlumberger Technology Corporation

Type of Action: Renewal

Date Issued: 12/20/08

License No.: ARK-0657-03110

Amendment No.: 29

License Reviewers: CB

Comment:

The Program issued the renewed license 9 years after the licensee submitted its renewal application.

File No.: 17

Licensee: Central Arkansas Hospital

Type of Action: Termination

Date Issued: 8/22/06

License No.: ARK-680-BP-09-10

Amendment No.: 34

License Reviewer: KW

File No.: 18

Licensee: Shaw Mid-States Pipe Fabricating, Inc.

Type of Action: Amendment

Date Issued: 7/8/09

License No.: ARK-0749-03310

Amendment No.: 3

License Reviewers: NS, DS

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File No.: 19

Licensee: Desert Industrial X-Ray L.P. License No.: ARK-1010-03320

File No.: 20

Licensee: Eureka Construction, LLC License No.: ARK-1015-03121

Type of Action: New Amendment No.: 0

Date Issued: 7/30/08 License Reviewers: NS, DS

File No.: 21

Licensee: West Memphis PET Imaging Center, LLC License No.: ARK-1007-02201

Type of Action: New Amendment No.: 0
Date Issued: 8/17/07 License Reviewer: KG

File No.: 22

Licensee: Proscan Imaging of Arkansas License No.: ARK-1002-BP-08-13

Type of Action: New Amendment No.: 0

Date Issued: 8/17/06 License Reviewers: KG, KW

Comment:

This new license was given a 7-year expiration date instead of a 5-year expiration date in accordance with internal Program internal policy for new licenses.

File No.: 23

Licensee: St. Bernards Medical Center License No.: ARK-0365-02230

Type of Action: Amendment No.: 106
Date Issued: 10/15/09

Amendment No.: 106
License Reviewer: TK

File No.: 24

Licensee: InSight Health Corp. License No.: ARK-0994-02220

Type of Action: Amendment Amendment No.: 1
Date Issued: 2/14/07 License Reviewer: KW

File No.: 25

Licensee: City of Jonesboro License No.: ARK-0810-BP-01-11

Type of Action: Termination Amendment No.: 8
Date Issued: 6/27/08 License Reviewer: LP

File No.: 26

Licensee: Georgia-Pacific LLC License No.: ARK-0321-03120

Type of Action: Amendment No.: 71

Date Issued: 9/21/09 License Reviewers: KA,KG

Comment:

The file did not contain documentation of the verification of the Radiation Safety Officer's (RSO) experience. The RSO's training record was verified.

File No.: 27

Licensee: Newpark Resources, Inc.

Type of Action: Termination

Dates/Issued: 12/6/06

License No.: ARK-833-NORM-02-08

Amendment No.: 5

License Reviewer: KW

Comment:

The file did not contain documentation for the decommissioning plan and radioactive material disposal.

File No.: 28

Licensee: Cenark Project Management Services, Inc.

Type of Action: Termination

Date Issued: 10/12/06

License No.: ARK-1001-BP-05-13

Amendment No.: 1

License Reviewer: KW

Comments:

a) Decommissioning survey documentation was not submitted with the licensee's termination request.

b) The file did not contain documentation for source dispositions.

File No.: 29

Licensee: Shannon & Wilson, Inc.

Type of Action: Termination

Date Issued: 12/18/06

License No.: ARK-977-BP-06-10

Amendment No.: 2

License Reviewer: KW

File No.: 30

Licensee: Professional Service Industries, Inc.

Type of Action: Termination

Date Issued: 12/14/06

License No.: ARK-732-BP-12-09

Amendment No.: None

License Reviewer: SM

Comment:

An amendment number was not listed on the license.

File No.: 31

Licensee: Granite Construction Company
Type of Action: Termination
Date Issued: 12/8/06

License No.: ARK-993-BP-08-10
Amendment No.: 4
License Reviewer: KW

Comment:

Source disposition paperwork was not submitted with the licensee's termination request.

File No.: 32

Licensee: Forsgren, Inc.

Type of Action: Termination

Date Issued: 2/9/07

License No.: ARK-946-BP-06-09

Amendment No.: 1

License Reviewer: SM

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File No.: 33

Licensee: Environment Management Services, Inc. License No.: ARK-0921-03121

Type of Action: Termination Amendment No.: 9
Date Issued: 11/21/08 License Reviewer: KA

File No.: 34

Licensee: Baptist Health Nuclear Imaging West License No.: ARK-967-BP-12-10

Type of Action: Termination Amendment No.: 2

Date Issued: 6/14/07 License Reviewers: KG, SM

File No.: 35

Licensee: Richard Foods, Inc. License No.: ARK-706-BP-07-09

Type of Action: Termination Amendment No.: 2
Dates Issued: 8/10/07 License Reviewer: SM

APPENDIX E

INCIDENT CASEWORK REVIEWS

NOTE: CASEWORK LISTED WITHOUT COMMENT IS INCLUDED FOR COMPLETENESS ONLY.

File No.: 1

Licensee: Material Testing of Arkansas, Inc.

Date of Incident: 2/19/07

Investigation Date: 2/20/07

License No.: AR-859

NMED Log No.: 070098

Type of Incident: Lost/Stolen Material

Type of Investigation: Site

File No.: 2

Licensee: APAC Arkansas, Inc.

Date of Incident: 9/27/07

Investigation Date: 9/27/07

License No.: AR-0686-03120

NMED Log No.: 070603

Type of Incident: Damaged Equipment

Type of Investigation: Site

File No.: 3

Licensee: Tigue Construction

Date of Incident: 3/31/08

Investigation Date: N/A

Type of Incident: Lost/Stolen Material
Type of Investigation: None

File No.: 4

Licensee: Building & Earth Sciences

Date of Incident: 7/14/08

Investigation Date: N/A

License No.: AR-918

NMED Log No.: 080469

Type of Incident: Transportation

Type of Investigation: None

File No.: 5

Licensee: Nucor Steel Company

Date of Incident: 2/11/09

Investigation Date: N/A

License No.: AR-0786-03120

NMED Log No.: 090222

Type of Incident: Damaged Equipment

Type of Investigation: None

File No.: 6

Licensee: Albemarle Corp.

Date of Incident: 5/19/09

Investigation Date: 6/11/09

License No.: AR-0717-03120

NMED Log No.: 090507

Type of Incident: Damaged Equipment

Type of Investigation: Site

File No.: 7

Licensee: Shaw Mid-States Pipe Fabricating
Date of Incident: 6/2/09

License No.: ARK-0749-03310
NMED Log No.: 090529

Investigation Date: 6/2/09 Type of Incident: Damaged Equipment Type of Investigation: Site

File No.: 8

Licensee: Baker Atlas Date of Incident: 8/13/09 Investigation Date: 8/17/09 License No.: AR-0668-03110 NMED Log No.: 090666 Type of Incident: Transportation Type of Investigation: Site

ATTACHMENT

January 4, 2010 Letter from Charles McGrew Arkansas's Response to Draft IMPEP Report

ADAMS Accession No.: ML100050195