



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

SEP 23 1998

Mr. Gary R. Mitchell, Secretary  
Kansas Department of Health and Environment  
Landon State Office Building, Room 620  
900 S.W. Jackson Street  
Topeka, KS 66612-1290

Dear Mr. Mitchell:

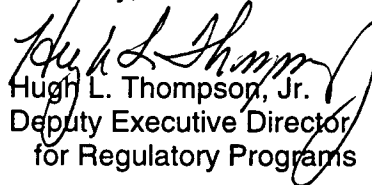
On September 9, 1998, the Management Review Board (MRB) met to consider the proposed final Integrated Materials Performance Evaluation Program (IMPEP) report on the Kansas Agreement State Program. The MRB found the Kansas program adequate, but needs improvement and compatible with NRC's program.

Section 5.0, page 17, of the enclosed final report presents the IMPEP team's recommendations and suggestions.

Based on the results of the current IMPEP review, a follow-up review focusing on the technical quality of licensing will be scheduled next year. The timing of the next full review will be coordinated with your staff.

I appreciate the courtesy and cooperation extended to the IMPEP team during the review and your support of the Radiation Control Program. I look forward to our agencies continuing to work cooperatively in the future.

Sincerely,

  
Hugh L. Thompson, Jr.  
Deputy Executive Director  
for Regulatory Programs

Enclosure:  
As stated

cc: Ronald Hammerschmidt, Director  
Division of Environment  
Kansas Department of Health and Environment

Vick L. Cooper, Chief  
Radiation Control Program  
Bureau of Air and Radiation  
Kansas Department of Health and Environment

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bcc: Chairman Jackson  
Commissioner Diaz  
Commissioner McGaffigan

Distribution: See next page.

**\*See previous concurrence.**

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INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

REVIEW OF KANSAS AGREEMENT STATE PROGRAM

June 15-19, 1998

FINAL REPORT

U.S. Nuclear Regulatory Commission

ATTACHMENT 1

## 1.0 INTRODUCTION

This report presents the results of the review of the Kansas radiation control program. The review was conducted during the period June 15-19, 1998, by a review team comprised of technical staff members from the Nuclear Regulatory Commission (NRC) and the Agreement State of Arkansas. 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 a Final General Statement of Policy," published in the Federal Register on October 16, 1997, and the November 25, 1997, revised NRC Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)." Preliminary results of the review, which covered the period May 19, 1995, to June 19, 1998, were discussed with Kansas management on June 19, 1998. The State detailed the preliminary steps taken to address the review findings in a letter dated July 9, 1998 (Attachment 1).

A draft of this report was issued to Kansas for factual comment on July 22, 1998. The State responded in a letter dated August 20, 1998 (Attachment 2). The State's factual comments were considered by the team and accommodated in the final report. The Management Review Board met on September 9, 1998 to consider the proposed final report. The MRB found the Kansas radiation control program was adequate, but needs improvement, and compatible with NRC's program. A progress report as of September 4, 1998 was also submitted to NRC by the State (Attachment 3).

The Kansas Agreement State program is administered by the Secretary, Department of Health and Environment (DHE), who reports directly to the Governor. The radiation control program is administered by the Radiation Control Program (RCP), under the direction of the Bureau of Air and Radiation, Division of Environment. DHE and RCP organization charts are included as Appendix B. The radioactive materials inspection program is administered by the supervisor of the X-Ray and Materials Unit, under the direction of the RCP radiation control program director (RCPD).

At the time of the review, the Kansas program regulated approximately 315 specific licenses, including manufacturers, broad academic programs, broad medical programs, brachytherapy, high dose afterloaders, nuclear pharmacies and industrial radiographers.

The review focused on the materials program as it is carried out under the Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of Kansas.

In preparation for the review, a questionnaire addressing the common and non-common performance indicators was sent to the State on February 25, 1998. The State provided a response to the questionnaire on May 18, 1998. During the review, discussions with the State staff resulted in the responses being further developed. A copy of the final response is included in Appendix F of this report.

The review team's general approach for conduct of this review consisted of: (1) examination of Kansas' response to the questionnaire; (2) review of applicable Kansas statutes and regulations; (3) analysis of quantitative information from the radiation control program licensing and inspection data base; (4) technical review of selected licensing and inspection actions; (5) field accompaniments of three Kansas inspectors; and (6) interviews with staff and management to answer questions or clarify issues. The team evaluated the information that it gathered against the IMPEP performance criteria for each common and non-common indicator and made a preliminary assessment of the radiation control program's performance.

Section 2 below discusses the State's actions in response to recommendations made following the previous review. Results of the current review for the IMPEP common performance indicators are presented in Section 3. Section 4 discusses results of the applicable non-common performance indicators, and Section 5 summarizes the review team's findings, recommendations, and suggestions. Recommendations made by the review team 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. Suggestions made by the review team are comments that the review team believes could enhance the State's program. The State is requested to consider suggestions, but no response is requested.

## 2.0 STATUS OF ITEMS IDENTIFIED IN PREVIOUS REVIEWS

During the previous routine review, which concluded on May 19, 1995, three comments and recommendations were made and the results transmitted to James O'Connell, Secretary, DHE, on October 31, 1995. The team's review of the current status of these recommendations is as follows:

- (1) The Kansas program had not adopted amendments equivalent to three NRC regulatory amendments: "Emergency Preparedness for Fuel Cycle and Other Radioactive Material Licensees," 10 CFR Parts 30, 40, and 70; "Safety Requirements for Industrial Radiographic Equipment," 10 CFR Part 34; and "Notification of Incidents," 10 CFR Parts 30, 40, and 70. In addition, the requirements of the State's regulation on financial assurance for decommissioning were not compatible since they differed significantly from the NRC 10 CFR Parts 30, 40, and 70 Decommissioning Rule which became effective July 27, 1988. It was noted in regard to the Emergency Preparedness Rule that at the time of the review, there were no major manufacturers or processors in Kansas and that perhaps no licensee was authorized to possess radioactive materials in excess of the criteria specified in 10 CFR 30.72, Schedule C, in which case the rule was not required. It was recommended that an audit of licenses be performed as soon as possible, to determine if adoption of the Emergency Preparedness Rule, as discussed above, is required. The other rules should be promulgated as soon as possible, and license conditions should not be used in substitution for the Industrial Radiography Equipment Rule.

Current Status: The Notification of Incidents Rule, the Emergency Preparedness Rule, and the revised Decommissioning Rule became effective November 1, 1996. The Industrial Radiography Equipment Rule was not formally adopted by the State. The State is currently enforcing this rule by license condition. The State advised that, immediately after the previous review, the former program director conducted a review of licensees and determined that none of the licensees met the possession limits specified in the Emergency Preparedness Rule. The “Safety Requirements for Industrial Radiographic Equipment” Rule was re-evaluated under the new Commission Policy Statement on Adequacy and Compatibility and will be addressed in Section 4.1.2. This recommendation is closed.

- (2) The Kansas program should modify the informal policy of waiting for the Suggested State Regulation (SSR) to be issued before starting the adoption of a rule or amendment which is required for compatibility. Consideration should be given to adding a policy provision which requires drafting a proposed rule based directly on the equivalent NRC rule if an SSR is not available in time to permit adoption of a Kansas rule which would become effective within 3 years after NRC adopts the rule.

Current Status: The State advised they are aware of the importance of adopting rules or amendments which are required for compatibility within the three-year time requirement. Therefore, if the SSR is not available, the State’s policy is to base equivalent Kansas regulations on the NRC rule, with every effort made to meet the three-year time limit. This recommendation is closed.

- (3) If the response to an actual incident is to be used as a basis to meet the NRC guideline for emergency drills, we recommend that there should be a formal evaluation of the response actions compared to the planned actions to provide a feedback of lessons learned, and to form the basis for modifications to the plan or to provide additional training of responders, as indicated. The plan itself should also be modified, if necessary, to provide guidance for such a critique.

Current Status: As a result of this recommendation, procedure RHS-47 “Emergency Response Documentation” was developed to provide guidance for an evaluation of the response actions compared to the planned actions. This recommendation is closed.

### 3.0 COMMON PERFORMANCE INDICATORS

IMPEP identifies five common performance indicators to be used in reviewing both NRC Regional and Agreement State programs. These indicators are: (1) Status of Materials Inspection Program; (2) Technical Quality of Inspections; (3) Technical Staffing and Training; (4) Technical Quality of Licensing Actions; and (5) Response to Incidents and Allegations.

### 3.1 Status of Materials Inspection Program

The team focused on four factors in reviewing this indicator: inspection frequency, overdue inspections, initial inspection of new licenses, and timely dispatch of inspection findings to licensees.

The team's review of the State's inspection priorities, as documented in procedure RHS-7, "Inspection Priority System Radioactive Materials" dated January 3, 1986, showed that the State's inspection frequencies for the various types or groups of licenses are at least as frequent as similar license types or groups listed in the frequency schedule in the NRC Inspection Manual Chapter (IMC) 2800. Some licensees, such as medical private practice and portable gauge licensees are inspected every 4 years while the NRC inspects them every 5 years.

The staff informed the team that the current tracking system projects the next inspection due date and is able to sort inspection data by type of license, name, priority, and inspection dates. All history for a particular license, such as types and number of violations or recommendations from previous inspections and dates of previous inspections must be extracted manually from the specific licensee's file. Program management explained that their old D-Base III program is outdated and that funding has been approved to acquire a new computer system that will provide the capabilities needed to track inspection and compliance data.

The supervisor stated that every 6 months, he prints a list of licenses with inspections due in the next 6 months. The inspectors are given the list and divide the inspections among themselves. Management does not assign inspections by priority and geographical location. Once an inspection is completed, the inspector updates the tracking system. The supervisor monitors the tracking system monthly to ensure that inspections have been performed and the dates in the tracking system have been changed by the inspector.

In their response to the questionnaire, Kansas indicated that as of May 20, 1998, only four licenses identified as requiring core inspections in IMC 2800 were overdue by more than 25 percent of the NRC frequency. These inspections were performed during the week of June 1-5, 1998, with the inspector accompanied by an IMPEP review team member. The team verified from the records that as of June 15, 1998, there were 315 active licenses and all inspections were current.

The team looked at the State's experience with overdue inspections during the entire review period and concluded that for much of the period, the State operated with a significant backlog of overdue inspections. This weakness was identified by the State prior to the review and was detailed in their questionnaire response. The actual extent and severity of the backlog throughout the period could not be accurately determined because of the tracking system's inability to extract the status of the inspection program at earlier dates. Therefore, the conclusions made by the team are based on the results of file reviews and interviews with the staff. From the casework reviewed, 6 of the 14 inspections for core licenses were conducted as overdue inspections,



exceeding the 25 percent window allowed in IMC 2800. In reviewing 7 Priority 1 licenses for routine inspections, it was found that 5 were overdue by 6 months to 2 3/4 years.

The team noted in reviewing RHS-7 that the procedure allows for modification of the frequency based on experience with individual licensees; however, no specific criteria comparable to that stated in IMC 2800 for extension or reduction of inspection frequencies is included in RHS-7. The State did not administratively extend the inspection frequency of any licensees during the review period.

With respect to initial inspections of new licensees, the State's policy is to inspect all new licensees within 6 months regardless of whether the licensee receives radioactive material. Four of the 22 files reviewed were initial inspections, and all were overdue at the time of the initial inspection. The team also reviewed casework involving nine additional new licenses to ensure an accurate determination of whether the initial inspections were completed within the Kansas standard of 6 months after the license is issued. In 3 of the 9 additional files reviewed, the team found that the license had not been inspected in accordance with the Kansas policy, for a total of 7 of 13 overdue initial inspections. The inspections were completed 1 to 7 months late. Of the 46 new licenses issued within the review period, the tracking system identified only two recently issued licenses that had not been inspected.

On examination of the factors contributing to the lack of timeliness in performing inspections at the stated frequency, the IMPEP team noted the program was not fully staffed during 6 months of the review period. The team also concluded that the lack of RCP management oversight during the period between the former section chief's retirement in mid-1996 until a new section chief was selected in January 1997 may also have contributed to the deficiencies found in the program during the review period.

Based on the record of overdue inspections during the review period, the review team recommends: (1) that Kansas heighten its management oversight of the inspection due dates of core licenses (Priority 1, 2, and 3 licensees) to ensure inspections are performed at the required frequencies; and (2) that the new inspection tracking system currently under development include provisions for flagging initial inspections at an early date to ensure they are inspected within 6 months of date of license issuance. In addition, Kansas should consider updating procedure RHS-7 to incorporate procedures on initial inspections as stated in IMC 2800, Section 04.03 a.

The State reported in its response to the questionnaire that 73 licensees were granted reciprocity permits during the review period. Seven of 45 Priority 1 licensees were inspected; 1 of 9 Priority 2 licensees was inspected; and no Priority 3 licensees were inspected. Further review of the records showed that 50 separate licensees were granted 214 reciprocity permits during the period. According to the State's records, 11 reciprocity inspections were performed during the review period, 10 of which were in 1997 and 1998. The State did not meet the inspection percentage goals for conducting inspections of reciprocity licensees as outlined in Appendix III of NRC Inspection Manual Chapter 1220 (IMC 1220). RHS-7 lists reciprocity as a Priority 5 inspection

frequency, as resources allow. The review team recommends that the State's "Inspection Priority System" be revised for reciprocity inspections to correspond to the inspection goals in IMC 1220. The review team recommends the State conduct reciprocity inspections at intervals equal to those stated in IMC 1220.

The timeliness of the issuance of inspection findings was also evaluated during the review of completed inspections. Of the casework examined, 19 of 22 inspections performed during the review period had inspection correspondence issued to the licensee within 30 days after completion of the inspection. Sixteen of the 19 were issued within 10 days of the inspection. In the three remaining instances, two inspection findings were issued within 35 days and one was issued 6 months after the inspection.

Based on the IMPEP evaluation criteria, the review team recommended that Kansas' performance with respect to the indicator, Status of Materials Inspection Program, be found unsatisfactory. Due to the State's actions in eliminating the inspection backlog and increasing management of the inspection program, the MRB found Kansas' performance with respect to this indicator to be satisfactory with recommendations for improvement.

### 3.2 Technical Quality of Inspections

The team reviewed the inspection reports, enforcement documentation, and inspection field notes and interviewed inspectors for 22 materials inspections conducted during the review period. The casework included all five of the State's materials inspectors, including the supervisors, and covered inspections of various types including medical (broad scope, institutions, research, private practice and mobile services), radiography, well logging, fixed and portable gauge, self-shielded irradiator, academic, service and other industrial licensees. A review team member performed accompaniments of three State inspectors on four separate inspections of licensed facilities. Appendix C lists the completed inspections reviewed in depth with case-specific comments as well as the results of the accompaniments.

Kansas Enforcement Procedures outlined in RHS-24 identify actions such as hearings, orders and civil penalties. In discussing the policy, the RCPD stated there had been only one escalated enforcement case during the review period. The 22 files reviewed by the team contained routine notifications to the licensees of clear inspections, except for one case in which violations resulted in a follow-up inspection.

Based on casework, the review team noted that the routine inspections covered all aspects of the licensee's radiation safety program. Some deficiencies were noted and are documented in Appendix C. The team also noted the inspectors observed licensed operations or had operations demonstrated whenever possible. According to program management, the State occasionally conducts team inspections of licenses depending on the type, size, and inspection history of the licensee. The unit supervisor estimated that there were 3-5 team inspections per year during the review period.

The team reviewed the inspection field notes and found them to be comparable with the types of information and data collected under NRC Inspection Procedure (IP) 87100. The inspection field notes provided documentation of inspection findings in a consistent manner. The State uses one standard form of inspection field notes applicable to all types of licensees, such as nuclear medicine, portable gauges, radiography, and industrial/academic with a supplemental sheet added to cover additional specific requirements at medical and industrial radiography licensees. The inspection field notes provide documentation of the scope of the licensee's program including, posting; storage and use of radioactive material; receipt, transfer, and disposal of radioactive material; inventory; leak tests; radiation protection program; personnel monitoring; training; independent measurements; and inspection findings.

The team noted that the inspection reports did not document the names of all individuals contacted and interviewed during the inspection other than those identified in the "Exit Summary" part of the form. The review team recommends that the inspection report form be strengthened by including names of individuals contacted and interviewed in greater detail. The inspection form also does not adequately document review of incidents and the licensee's corrective actions. This is addressed in Section 3.4 of this report.

The team noted that all Kansas inspectors used the inspection report form in procedure RHS-28 to ensure that all aspects of the program that could be reviewed were included in the scope of the inspection. Inspectors performed independent measurements whenever the licensee was using licensed material and also measured for radiation levels surrounding materials in storage. Inspectors' written comments in the field notes and the team member's observations during accompaniments indicate that safety issues were discussed with licensee personnel. The inspection reports indicate, and the team member's observations during accompaniments support, that inspectors routinely toured licensee's areas such as laboratories, other locations of use, and storage areas. Operations were observed when licensed operations were being conducted by the licensee. Interviews with the licensee's users and staff were conducted by the State inspectors. The inspectors emphasized the observation of licensed activities to determine the effectiveness of the licensee's radiation safety program and compliance to the requirements. The inspection reports indicated that the inspectors examined, and when appropriate, closed-out violations found in previous inspections.

A review team member accompanied three Kansas inspectors to four separate licensed facilities during the period of June 1–5, 1998. The accompaniments included an inspection of a radiography program (office only); an initial inspection of a portable gauge licensee (office only); an inspection at a hospital having diagnostic and outpatient radiotherapy authorization; and a hospital licensed for diagnostic, radiotherapy, brachytherapy, and teletherapy procedures, as well as nuclear pharmacy distribution. During the accompaniments, the Kansas inspectors demonstrated appropriate inspection techniques and knowledge of the regulations. The inspectors were well prepared and very thorough in their reviews of the licensee's radiation safety program. Each inspector emphasized, to the extent possible, observation of the licensee's activities and interviews with personnel to assess the effectiveness of the licensee's radiation

safety program. Three of these licensees were sent enforcement letters with recommendations and/or violations clearly documented. Overall, the technical performance of the inspectors was satisfactory, and their inspections were adequate to assess radiological health and safety at the licensed facility.

The IMPEP team noted that the State relies on the technical knowledge of the inspectors to evaluate licensees' assessments of root causes of noncompliance and poor licensee performance rather than having procedures in place which normally could be used to assist the inspectors in this evaluation. The review team recommends that Kansas provide direction to the inspection staff to help them identify poor licensee performance, identify when licensee root cause evaluations should be conducted, and to help them evaluate licensee root cause assessments. Staff members' skills could also be improved by attending a training course that teaches these techniques as part of the inspector qualification process.

In response to the questionnaire, the State reported only the number and type of supervisory accompaniments performed during 1997 and 1998. In discussing accompaniments during the May 1995 to November 1997 time frame, which is not covered in the questionnaire, three staff members recalled being accompanied by the previous program director. However, no records could be found documenting the earlier accompaniments. The new program management explained to the review team that Kansas is now committed to conducting annual accompaniments and that a new form has been developed to document the accompaniments. According to the questionnaire, two of the three inspectors, as well as both supervisors, were accompanied within the past 12 months. The third inspector was accompanied just prior to the review. The review team suggests that the State continue to adhere to their policy of annual supervisory inspector accompaniments.

As noted in the questionnaire, the State has available a variety of portable instruments for routine confirmatory surveys and use during incidents and emergency conditions. The instruments are a mix of low and high range Geiger-Mueller (GM) detectors and a variety of probes, micro R meters, neutron and alpha detectors, ion chambers, rate meters, and a multi-channel analyzer. The portable instruments used during the inspector accompaniments completed by the review team were observed to be operational and calibrated. The reviewer noted that the instruments are calibrated on an annual basis against radiation standards which are traceable to the National Institute of Standards and Technology.

The IMPEP reviewer inquired as to the Kansas policy on unannounced versus announced inspections. Program management indicated that the policy was to conduct unannounced inspections whenever possible. Announced inspections usually involved initial inspections or inspections at licensees in geographically-distant locations from Topeka. The IMPEP reviewer noted that 14 of the 22 files reviewed were unannounced inspections. To ensure the presence of knowledgeable licensee staff, all of the inspections performed with a review team member accompaniment were announced.

Inspectors have been delegated the authority to sign all routine enforcement correspondence. Inspection findings generally lead to appropriate and prompt regulatory action. However, the supervisor apparently did not review and sign the field notes documenting the findings of the inspection prior to the issuance of the inspection findings letter for 13 out of 22 of the inspections reviewed by the team. It was noted that for the five cases reviewed for inspections performed in 1998, all had management review as indicated by the materials supervisor's signature. This is a marked improvement from the lack of review in the May 1995 to December 1997 time frame. The review team recommends that the State continue to maintain management oversight of the inspection program.

Based on the IMPEP evaluation criteria, the review team recommends that Kansas' performance with respect to the indicator, Technical Quality of Inspections, be found satisfactory.

### 3.3 Technical Staffing and Training

Issues central to the evaluation of this indicator include the radioactive materials program 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 State's questionnaire responses relative to this indicator, interviewed program management and staff, and considered any possible workload backlogs.

The RCPD identified 3 FTEs of technical effort in the materials program. At the time of the review, 2 of the staff members were devoted exclusively to the radioactive materials program, and 1 staff member was devoted exclusively to mammography inspections. The RCPD stated that the technical staff member currently completing mammography inspections would soon be working in the radioactive materials program except for approximately 12 x-ray inspections per year (80% RAM and 20% mammography). These technical staff members perform both inspection and licensing functions. The RCPD also identified 0.5 FTE devoted to the materials program from the X-Ray and Materials Unit Chief, who provides both management and technical effort.

The RCPD directs all areas of the RCP including radioactive materials, x-ray, radon, emergency response, environmental monitoring, and emergency preparedness. There are two units in RCP: the Environmental Monitoring and Emergency Preparedness Unit and the X-Ray and Materials Unit, each headed by a supervisor.

Based on the response to the IMPEP questionnaire and discussions with program management, the review team noted that during the review period, the RCPD position was vacant from June 1996 to January 1997 when an RCP staff member was promoted to fill the position. The position of X-Ray and Materials Unit Chief was created during a reorganization and filled in October 1997. One new radiation materials inspector/reviewer was hired during the review period. The deficiencies in the Kansas program, including the inspection backlog over the review period and the concerns associated with the technical quality of licenses, may be related to the current

staffing level. Kansas staffing levels are below those of NRC Regional programs and may be below some Agreement State programs of similar size.

Although no vacancies exist in the radioactive materials program, one environmental technician position and one x-ray inspector position within the section were vacant at the time of the review. Also, one of the radioactive materials inspectors was working almost exclusively in the mammography inspection program. During interviews, staff commented that the use of radioactive materials staff for other radiation-related tasks could affect the ability of the staff to complete assigned duties. The review team suggests that the State assess whether the radioactive materials program staffing level was a contributing factor to the program deficiencies during the review period and evaluate the impact of the open positions in the RCP on radioactive materials staff to determine if added staffing or reassignment of duties is necessary.

The review team determined that successful candidates for technical positions are required to have a Bachelor's degree in science or comparable education and experience. From the review of technical qualifications of current staff, the review team concluded that Kansas has been able to hire qualified individuals.

The State does not have a documented training program; however, the State has a formal "Training Qualification Form" modeled after the recommendations made by the joint NRC/OAS Training Working Group Recommendations for Agreement State Training Programs. Thus, if an employee has not taken a required class, it may not be apparent that they are still expected to take it.

The Kansas staff is lacking formal course work in a number of different areas. Although formal course work on the transportation of radioactive materials was designated as being required for radioactive materials inspectors, none of the current radioactive materials inspectors in the State have attended this class. Also, none of the current inspectors have had formal training in teletherapy/brachytherapy even though two inspectors who have been with the program for 6 and 12 years, respectively, complete such inspections routinely. In interviews, staff members expressed the need for training in several areas, including teletherapy/brachytherapy and refresher training in a variety of subjects. Also, the unit supervisor has not received formal training in licensing work, although one of his primary tasks is a supervisory review of all licensing actions. Staff members expressed concern about completing some assigned tasks without the proper training. The review team recommends that the State document a training and qualifications program equivalent to that contained in the "NRC/OAS Training Working Group Recommendations for Agreement State Training Programs," assess the current training needs of all radioactive materials staff, and provide the necessary training to ensure that all staff are properly trained to complete assigned tasks.

Based on the team's finding and the IMPEP evaluation criteria, the review team recommends that Kansas' performance with respect to the indicator, Technical Staffing and Training, be found satisfactory with recommendations for improvement.

### 3.4 Technical Quality of Licensing Actions

The review team examined completed licensing casework and interviewed the reviewers for 18 specific licenses. Licensing actions were evaluated for completeness, consistency, proper isotopes and quantities used, qualifications of authorized users, adequate facilities and equipment, and operating and emergency procedures sufficient to establish the basis for licensing actions. Licenses were reviewed for accuracy, appropriateness of the license and its conditions, tie-down conditions, and overall technical quality. Casework was evaluated for timeliness, adherence to good health physics practices, reference to appropriate regulations, documentation of safety evaluation reports, product certifications or other supporting documents, consideration of enforcement history on renewals, pre-licensing visits, peer or supervisory review as indicated, and proper signature authorities. The files were checked for retention of necessary documents and supporting data.

The licensing casework was selected to provide a representative sample of licensing actions, which had been completed in the review period, and to include work by all reviewers. The cross-section sampling included all of the State's major licenses as defined by the State in the questionnaire and included the following types of licenses: broad academic; broad medical; academic; industrial radiography; medical - private practice and high dose remote afterloader; nuclear pharmacy; well logging; portable gauges; manufacturing and distribution. Licensing actions included three new licenses, five renewals, nine amendments, and three terminations. Licensing actions during the review period included 46 new licenses and 474 amendments (including 65 terminations), for 520 licensing actions. A list of the licenses reviewed with case-specific comments can be found in Appendix D.

Overall, the IMPEP review indicated chronic problems with respect to thoroughness, completeness, consistency, and clarity of licensing actions. Of the 18 licensing files reviewed, 16 had documentation missing. In evaluating the thoroughness and completeness of the licenses, the following deficiencies were found: tie-down documentation missing from the license file; amendment issued without a management signature; letter for amendment request with supportive documentation not referenced as tie-down condition; and evaluation for financial surety and required emergency planning for licensee with a significant increase in their possession limit of H-3 and C-14. One file was missing four separate tie-down documents. In another license, the applicant did not designate a Radiation Safety Officer (RSO), yet the authorized user was named RSO when the license was issued even though there was no documentation indicating that the matter was addressed with the licensee. It was also noted in the terminated file reviews that there was lack of documentation of a licensee's close-out survey and determination of transfer of a radiography camera.

Inconsistencies between similar licenses were noted, including in the use of the Kansas Standard License Condition for transportation of radioactive material, application of the Quality Management Plan, and requirements for a radiation protection program. Another inconsistency found was the application of a standard license condition involving radiographic exposure devices

and associated equipment requirements for radiographers. This topic is discussed further in Section 4.1.2.

Clarity of licensing actions was also a problem in the licensing casework reviewed. In one of the Academic, Broad A licenses, the frequency of audits was not addressed during the reviews, and it was unclear who would conduct these reviews. In a similar license, the frequency of the annual audits was listed as “periodic.”

The lack of documentation throughout the entire licensing review process affects the technical quality of licenses, and could lead to potential health and safety problems. For example, two separate licenses reviewed did not adequately address proper radiation protection procedures, even though they were licensed to use plutonium-238 in any form, and uranium-233 and 235 in research and development procedures, respectively. The pharmacy incorrectly licensed to use plutonium was also licensed to transfer the plutonium as well as nickel-63 to an authorized recipient “to possess and use the radiopharmaceuticals.” As discussed previously, a Quality Management Plan was not requested or reviewed for a medical licensee. These items are discussed in greater detail in Appendix D. The number of the potential health and safety issues due to licensing inadequacies cannot be accurately assessed because of the lack of file documentation.

The review team recommends that program management consider increasing supervisory oversight to ensure that all pertinent items are adequately and properly addressed during the review process to provide quality assurance and to improve the technical quality of licenses.

The review team also recommends that the State begin a self-evaluation of all existing licenses to determine the technical quality and to identify potential health and safety issues. This evaluation should be accomplished as soon as possible to identify and correct other possible license deficiencies. In addition, the State should ask licensees to supply copies of any missing documents that should be included with the application.

The review process was discussed with the primary reviewers and staff. Application packages containing guidance are sent to each license applicant. Reviewers use this guidance as the main reference to verify that all appropriate items are adequately addressed in the licensing actions. Other applicable guidance from the NRC is available for additional reference. Inspection compliance history is evaluated to determine license adequacy and to identify potential health and safety issues. During interviews with the staff, it was indicated that the latest Kansas regulations, issued in 1996, are not reflected in the license guidance. The review team recommends that RCP update the license guidance to address and parallel the current Kansas Radiation Protection Regulations to assist in the consistency and accuracy of the license review process.

License applications are reviewed following standard procedures, which are similar to those used by the NRC. Reminder notices are sent to the licensees 30-60 days prior to the expiration date. Timely renewal letters were found in the license files. Staff typically uses Standard Licensing



Conditions similar to those used by the NRC. Licenses are issued for 2 years and can be easily renewed if there are no significant changes in the radiation protection program. Licenses are amended in entirety after 10 years or if five major amendments are requested. Renewals are processed, reviewed and often completed within 30 days of receipt. Currently, there is no licensing backlog. License files have all current inspection data, providing license reviewers with incident reports and inspection reports during the renewal period. Incidents are, for the most part, cross-referenced in the licensing files.

Generally, licensing actions receive supervisory review and are signed by management. These reviews are conducted by the unit supervisor or RCPD. Requests for additional information or clarifications are returned to the primary reviewer as needed. The RCPD conducts a final review prior to signature and issuance of the license. There is no documented checklist or verification of secondary reviews, and only the signature of the RCPD indicates that the licensing actions are complete.

Primary and secondary reviewers do not use check lists or document verification of the thoroughness and completeness of the licensing actions. Staff members indicated that, based on their technical experience and familiarity with the licensees, the license reviews are assumed to be thorough and complete, and there is no unique documentation of the reviewer's assessment. Interviews with the staff indicated that unless additional information was requested, it is assumed that all items are satisfactory. Deficiencies are addressed in letters to the licensee using appropriate language. License reviewers frequently use telephone conversations to communicate with the licensee requesting additional information. Documentation of telephone conversations was not available in many files during the IMPEP evaluation. The review team recommends that licensing check lists be developed, used, and retained in the file to ensure that all elements of the application have been submitted and that the license is complete.

RCP staff may perform pre-licensing visits on a case-by-case basis for unusual licensing requests. However, the RCPD stated that it is not Kansas policy to complete pre-licensing visits. During interviews with staff members, one member indicated that he conducted pre-licensing visits approximately 10-15 percent of the time and that he hand-delivered licenses occasionally if there were inspections due in that part of the State. No documentation of pre-licensing visits or hand-delivered licenses was observed or reviewed during the IMPEP evaluation. The review team recommends that the State place documentation of any pre-licensing visits in the appropriate licensing file.

Of the 18 licensing files reviewed, only four deficiency letters were found, and the deficiencies identified in the letters were minor. Though it is not impossible for so few problems to be present in this size sample of licenses, the review team is concerned about the small number of deficiencies identified by the State in this casework, the quick turn around time for license reviews, and the technical quality of the licenses reviewed.

Based on the IMPEP evaluation criteria, the review team recommended that the Kansas' performance with respect to the indicator, Technical Quality of Licensing Actions, be found unsatisfactory. Due to the State's actions in responding to the review team's findings, the MRB found Kansas' performance with respect to this indicator to be satisfactory with recommendations for improvement.

### 3.5 Response to Incidents and Allegations

In evaluating the effectiveness of the State's actions in responding to incidents and allegations, the review team examined the State's response to the questionnaire relative to this indicator, reviewed the incidents reported for Kansas in the "Nuclear Material Events Database (NMED)" against the Kansas records, interviewed the incident respondents, and reviewed in depth the four reportable incidents that occurred during the review period. The team also reviewed the State's response to two allegations including the one allegation referred to the State by the NRC during the review period. A list of the incident casework with comments is included in Appendix E.

The records showed that 41 incidents and two allegations were reported to the State during the review period. The team reviewed the incident log and performed a cursory review of the incident files and found that only four of the incidents involving AEA material required a report by the licensee.

The Kansas Department of Emergency Management (DEM) has the lead for all hazardous materials accidents within the State. Except for reports from licensees during office hours, all events are reported to DEM, which sends first responders equipped with survey meters to isolate and barricade the area until the RCP can respond and assume responsibility for handling the event. Allegations and incidents involving Kansas licensees are traditionally handled by the RCP X-Ray and Materials Unit, while all other incidents are assigned to the Environmental Monitoring and Emergency Preparedness Unit. However, staffs of both units are cross-trained and respond as needed.

The team found that incident response procedures are in place except for misadministrations. The incident response procedures were last revised in 1983 and have not been revised to incorporate NMED per OSP procedure "Reporting Material Events - SA-300," dated February 25, 1998. The team recommends that the State revise their incident response procedure to conform with OSP procedure, SA-300, including medical events.

The team found the procedures for handling allegations were adequate (note, the State refers to allegations as "complaints").

In the incident and allegation cases reviewed in depth, the State responded promptly with on-site investigations; however, the quality of the investigation and documentation was inconsistent. In four of the six, the investigations were thorough and well documented; necessary follow-through and close-out actions were taken; violations were cited or other corrective actions were taken to

ensure prompt licensee compliance; proper notifications were made; and there was good coordination with other agencies. However, in the case of one incident and one allegation, there was no management closure, no indication of management input or review, and no record of the incident in the licensee's file. The casework for this incident had apparently been lost for months, and thus there was no information that the investigation was complete. In response to the allegation in question, the State did respond by sending an inspector to interview the Radiation Safety Officer at the facility where the alleged exposure occurred, but from the documentation it appeared that the investigative actions were incomplete. There was no evidence of interviews with the former employee allegedly involved, no re-enactment, and no indication the alleged was notified of the State's actions or the results of the investigation. The State contacted the out-of-state company involved and they responded that they had no knowledge of any potential exposure.

The RCP procedures call for management involvement and evaluation of incident responses. In reviewing the incident log and non-reportable incident records, the team found several instances where a copy of the incident investigation report was missing from either the incident file or the licensee's file. Only about half were signed off with management review and evaluation and/or closure information. The review team recommends that a system be established to track the progress of incident investigations and to verify that each investigation is evaluated by management, that all reporting requirements are met, that follow-up actions and close-out information are documented.

The inspection reports indicated that nearly all incidents were reviewed at the next inspection. However, the inspection report form uses only a check mark to indicate the review, and the results of the review or corrective actions taken by the licensee are not fully documented. The review team recommends that the inspection procedure be revised to include narrative documentation of the inspector's review of incidents and description of the licensee's corrective actions.

Records showed that the four reportable events reviewed by the team were initially promptly reported to the NRC operations center and to Region IV, and all appeared in the NMED listing. However, no follow-up or close-out information was provided to the NRC unless the State was specifically asked. The review team recommends the State send copies of final close-out reports to the NRC in accordance with the OSP procedure, "Reporting Material Events - SA-300." The State responded to this recommendation by sending final close-out reports to the NRC in an August 20, 1998 letter from the RCPD.

Based on the IMPEP evaluation criteria, the review team recommends that Kansas' performance with respect to the indicator, Response to Incidents and Allegations, be found satisfactory.

#### 4.0 NON-COMMON PERFORMANCE INDICATORS

IMPEP identifies four non-common performance indicators to be used in reviewing Agreement State programs: (1) Legislation and Program Elements Required for Compatibility; (2) Sealed Source and Device Evaluation Program; (3) Low-Level Radioactive Waste Disposal Program; and (4) Uranium Recovery Program. Kansas' Agreement does not include a uranium recovery program, so only the first three non-common performance indicators were applicable to this review.

##### 4.1 Legislation and Program Elements Required for Compatibility

###### 4.1.1 Legislation

Along with their response to the questionnaire, the State provided the review team with the opportunity to review copies of legislation that affect the radiation control program. Legislative authority to create an agency and enter into an agreement with the NRC is granted in Article 16 - Nuclear Energy Development and Radiation Control Act, Kansas Statutes, K.S.A. 48-1601 to 48-1619. The Bureau of Air and Radiation, RCP, is designated as the State's radiation control agency. The review team noted that the legislation had not changed since being found adequate during the previous review.

###### 4.1.2 Program Elements Required for Compatibility

The Kansas Regulations for Control of Radiation, found in KAR 28-35-133 through KAR 28-35-363 of the State of Kansas Radiation Protection Regulations apply to all ionizing radiation, whether emitted from radionuclides or devices. Kansas requires a license for possession, and use, of all radioactive material including naturally occurring materials, such as radium, and accelerator-produced radionuclides. Kansas also requires registration of all equipment designed to produce x-rays or other ionizing radiations.

Kansas has a nine-step process to adopt regulations including 61-day minimum period for public comment and holding a public hearing. The process normally takes 16 to 25 weeks from the regulations being submitted to their taking effect. The RCPD has responsibility for maintaining the State's regulations.

The team evaluated Kansas' responses to the questionnaire and reviewed the regulations adopted by the State since the May 19, 1995, review to determine the status of the Kansas regulations under the new Commission Policy Statement on Adequacy and Compatibility. The team also verified that the compatibility table in the questionnaire was accurate.

All regulations adopted by the State during the review period (adopted November 1, 1996) were sent to the NRC as both draft and final regulations for approval. The NRC reviewed these regulations, and the State's final rules reflected the NRC's comments.

The team found that the State had adopted all regulations required for compatibility as of the time of this review except for the "Safety Requirements for Industrial Radiographic Equipment" rule which is currently being enforced by license condition. The team checked a sampling of 14 industrial radiography licenses and found that nine had been amended to include the equipment requirement. The review team recommends that the State review and amend all remaining industrial radiography licenses with license conditions necessary to meet the "Safety Requirements for Industrial Radiographic Equipment" requirement, and expedite adoption of the rule which was due January 10, 1994.

Also, two regulations adopted by the State, prior to the review period, were adopted before the NRC rules were published as final in the Federal Register:

- "Low-Level Waste Shipment Manifest Information and Reporting," 10 CFR Parts 20 and 61 amendments (60 FR 15649) that became effective March 1, 1998. This amendment was published in final form March 27, 1998.
- "Radiation Protection Requirements: Amended Definitions and Criteria," 10 CFR 19 and 20 amendments (60 FR 36038) that became effective August 14, 1998. This amendment was published in final form July 13, 1995.

Both of these rules were adopted by Kansas on October 17, 1994. Because the drafts of these NRC rules were revised prior to being published in their final form, the Kansas regulations may contain incompatibilities. The review team recommends that the State compare the Kansas regulations involved with the "Low-Level Waste Shipment Manifest Information and Reporting" and "Radiation Protection Requirements: Amended Definitions and Criteria" amendments against the final NRC rules and make any necessary changes to ensure compatibility.

The State has not adopted the following regulations, but intends to address them by rulemaking or by adopting generic legally binding requirements:

- "Clarification of Decommissioning Funding Requirements," 10 CFR Parts 30, 40, and 70 amendments (60 FR 38235) that became effective November 24, 1995.
- "Compatibility with the International Atomic Energy Agency," 10 CFR Part 71 amendment (60 FR 50248) that became effective April 1, 1996.
- "Medical Administration of Radiation and Radioactive Materials," 10 CFR Parts 20 and 35 amendments (60 FR 48623) that became effective October 20, 1995.
- "Termination or Transfer of Licensed Activities: Record Keeping Requirements," 10 CFR Parts 20, 30, 40, 61, 70 amendments (61 FR 24669) that became effective June 17, 1996.

- “Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act,” 10 CFR Part 20 amendment (61 FR 65119) that became effective January 9, 1997.
- “Recognition of Agreement State Licenses in Areas Under Exclusive Federal Jurisdiction Within an Agreement State,” 10 CFR Part 150 amendment (62 FR 1662) that became effective February 27, 1997.
- “Criteria for the Release of Individuals Administered Radioactive Material,” 10 CFR Parts 20 and 35 amendments (62 FR 4120) that became effective May 29, 1997.
- “Fissile Material Shipments and Exemptions,” 10 CFR Part 71 amendment (62 FR 5907) that became effective February 10, 1997.
- “Licenses for Industrial Radiography and Radiation Safety - Requirements for Industrial Radiography Operations,” 10 CFR Parts 30, 34, 71, 150 amendments (62 FR 28947) that became effective June 27, 1997.
- “Radiological Criteria for License Termination,” 10 CFR Parts 20, 30, 40, 70 amendments (62 FR 39057) that became effective August 20, 1997.

It is noted that Management Directive 5.9, Handbook, Part V, paragraph (1)(c)(iii), provides that the above regulations should be adopted by the State as expeditiously as possible, but not later than 3 years after the effective date of the new Commission Policy Statement on Adequacy and Compatibility, i.e., September 3, 2000.

Based on the IMPEP evaluation criteria, the review team recommends that Kansas’ performance with respect to the indicator, Legislation and Program Elements Required for Compatibility, be found satisfactory.

#### 4.2 Sealed Source and Device (SS&D) Evaluation Program

At the time of the review, Kansas had no sealed source or device manufacturers nor were any applicants anticipated in the near future. The State, however, does not wish to relinquish the authority to regulate SS&D manufacturers in the future. The State has committed in writing in a memorandum to their files to have a program in place prior to performing evaluations. Accordingly, the review team did not review this indicator.

#### 4.3 Low-Level Radioactive Waste (LLRW) Disposal Program

In 1981, the 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 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 Kansas has LLRW disposal authority, NRC has not required States to have a program for licensing a LLRW 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, they are expected to put in place a regulatory program which will meet the criteria for an adequate and compatible LLRW disposal program. There are no plans for a LLRW disposal facility in Kansas. Accordingly, the review team did not review this indicator.

## 5.0 SUMMARY

As noted in Sections 3 and 4 above, the MRB found that Kansas' performance with respect to the performance indicators, Technical Quality of Inspections, Response to Incidents and Allegations, and Legislation and Program Elements Required for Compatibility, were satisfactory. The State's performance with respect to the performance indicators, Status of Materials Inspection Program, Technical Staffing and Training, and Technical Quality of Licensing Actions, were found satisfactory with recommendations for improvement.

The team recommended and the MRB concurred, in finding the Kansas Agreement State Program adequate, but needs improvement and compatible with NRC's program. The team also recommended placing the Kansas program on heightened oversight, a process that would involve monthly teleconferences with the State and bimonthly written progress reports from the State. A follow-up review was recommended for FY 1999. The MRB directed that a follow-up review focusing on Kansas' licensing program be completed in 1 year, and did not place the State into heightened oversight status.

Below is a summary list of suggestions and recommendations, as mentioned in earlier sections of the report, for evaluation and implementation, as appropriate, by the State.

### RECOMMENDATIONS:

1. Based on the record of overdue inspections during the review period, the review team recommends: (1) that Kansas heighten its management oversight of the inspection due dates of core licenses (Priority 1, 2, and 3 licensees) to ensure inspections are performed at the required frequencies; and (2) that the new inspection tracking system currently under development include provisions for flagging initial inspections at an early date to ensure they are inspected within 6 months of date of license issuance. In addition, Kansas should consider updating procedure RHS-7 to incorporate procedures on initial inspections as stated in IMC 2800, Section 04.03 a. (Section 3.1)
2. The review team recommends that the State's "Inspection Priority System" be revised for reciprocity inspections to correspond to the inspection goals in IMC 1220. (Section 3.1)

3. The review team recommends the State conduct reciprocity inspections at intervals equal to those stated in IMC 1220. (Section 3.1)
4. The review team recommends that the inspection report form be strengthened by including names of individuals contacted and interviewed in greater detail. (Section 3.2)
5. The review team recommends that Kansas provide direction to the inspection staff to help them identify poor licensee performance, identify when licensee root cause evaluations should be conducted, and to help them assess licensee root cause evaluations. Staff members' skills could also be improved by attending a training course that teaches these techniques as part of the inspector qualification process. (Section 3.2)
6. The review team recommends that the State continue to maintain management oversight of the inspection program. (Section 3.2)
7. The review team recommends that the State document a training and qualifications program equivalent to that contained in the "NRC/OAS Training Working Group Recommendations for Agreement State Training Programs," as appropriate, assess the current training needs of all radioactive materials staff, and provide the necessary training to ensure that all staff are properly trained to complete assigned tasks. (Section 3.3)
8. The review team recommends that program management consider increasing supervisory oversight to ensure that all pertinent items are adequately and properly addressed during the review process to provide quality assurance and to improve the technical quality of licenses. (Section 3.4)
9. The review team also recommends that the State begin a self-evaluation of all existing licenses to determine the technical quality and to identify potential health and safety issues. This evaluation should be accomplished as soon as possible to identify and correct other possible license deficiencies. In addition, the State should ask the licensee to supply copies of any missing documents that should be included with the application. (Section 3.4)
10. The review team recommends that RCP update the license guidance to address and parallel the current Kansas Radiation Protection Regulations to assist in the consistency and accuracy of the license review process. (Section 3.4)
11. The review team recommends that licensing check lists be developed, used, and retained in the file to ensure that all elements of the application have been submitted and that the license is complete. (Section 3.4)
12. The review team recommends that the State place documentation of any pre-licensing visits in the appropriate licensing file. (Section 3.4)



13. The team recommends that the State revise their incident response procedure to conform with OSP procedure, SA-300, including medical events. (Section 3.5)
14. The review team recommends that a system be established to track the progress of incident investigations and to verify that each investigation is evaluated by management, that all reporting requirements are met, that follow-up actions and close-out information are documented. (Section 3.5)
15. The review team recommends that the inspection procedure be revised to include narrative documentation of the inspector's review of incidents and description of the licensee's corrective actions. (Section 3.5)
16. The review team recommends the State send copies of final close-out reports to the NRC in accordance with the OSP procedure, "Reporting Material Events - SA-300." (Section 3.5)
17. The review team recommends that the State review and amend all remaining industrial radiography licenses with license conditions necessary to meet the "Safety Requirements for Industrial Radiographic Equipment" requirement, and expedite adoption of the rule which was due January 10, 1994. (Section 4.1.2)
18. The review team recommends that the State compare the Kansas regulations involved with the "Low-Level Waste Shipment Manifest Information and Reporting" and "Radiation Protection Requirements: Amended Definitions and Criteria" amendments against the final NRC rules and make any necessary changes to ensure compatibility. (Section 4.1.2)

#### SUGGESTIONS:

1. The review team suggests that the State continue to adhere to their policy of annual supervisory inspector accompaniments. (Section 3.2)
2. The review team suggests that the State assess whether the radioactive materials program staffing level was a contributing factor to the program deficiencies during the review period and evaluate the impact of the open positions in the RCP on radioactive materials staff to determine if added staffing or reassignment of duties is necessary. (Section 3.3)

## **LIST OF APPENDICES AND ATTACHMENTS**

Appendix A	IMPEP Review Team Members
Appendix B	Kansas Organization Charts
Appendix C	Inspection Casework Reviews
Appendix D	Licensing Casework Reviews
Appendix E	Incident Casework Reviews
Attachment 1	July 9, 1998 Letter to Richard L. Bangart from Vick L. Cooper
Attachment 2	Kansas' Response to Review Findings
Attachment 3	Kansas' Progress Report as of September 4, 1998

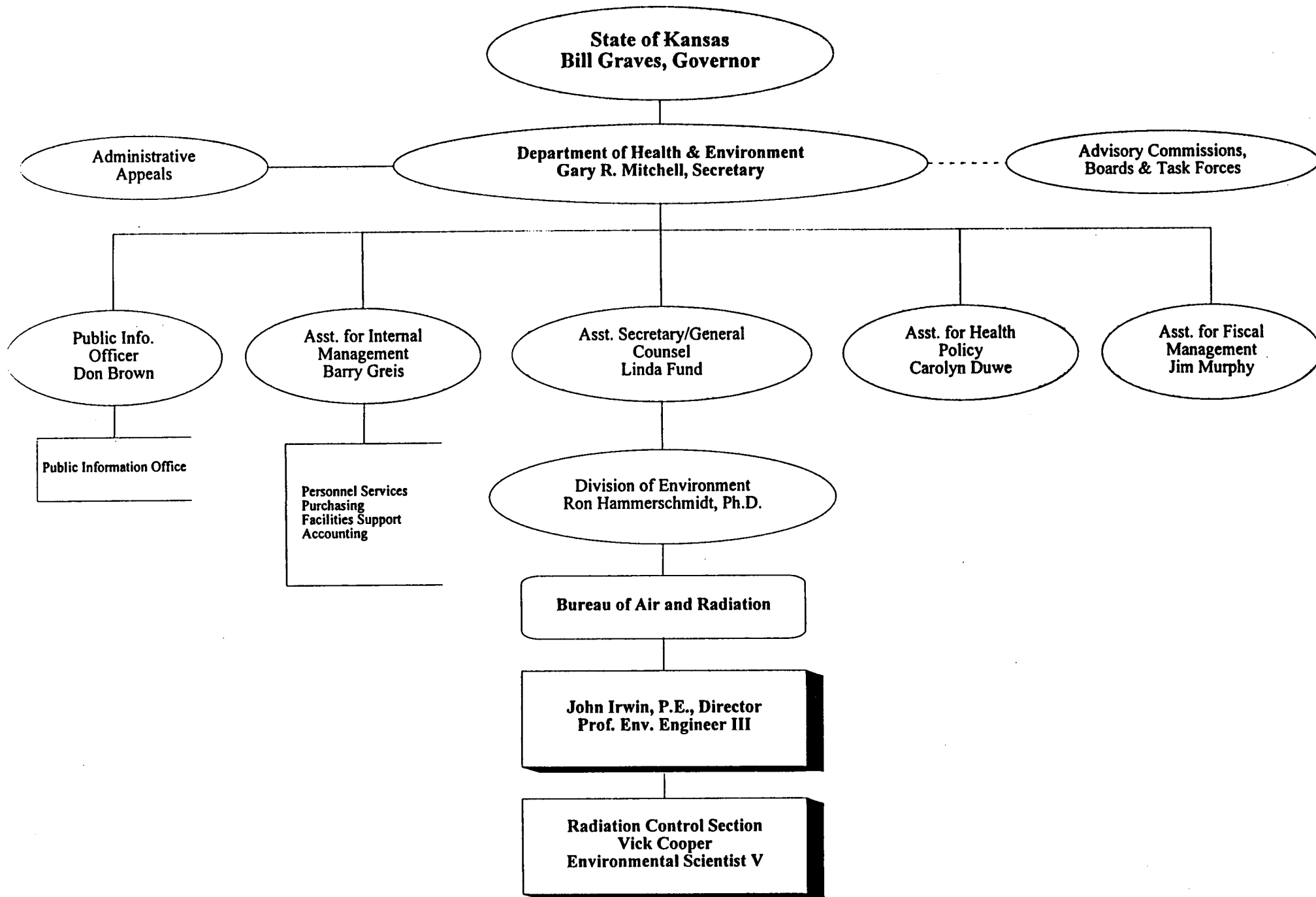
## APPENDIX A

### IMPEP REVIEW TEAM MEMBERS

<b>Name</b>	<b>Area of Responsibility</b>
Jack Hornor, RIV, SAO	Team Leader Response to Incidents and Allegations
Jenny Johansen, RI	Status of Materials Inspection Program Technical Quality of Inspections
Lance Rakovan, OSP	Technical Staffing and Training Legislation and Program Elements Required for Compatibility
Jared Thompson, Arkansas	Technical Quality of Licensing Actions

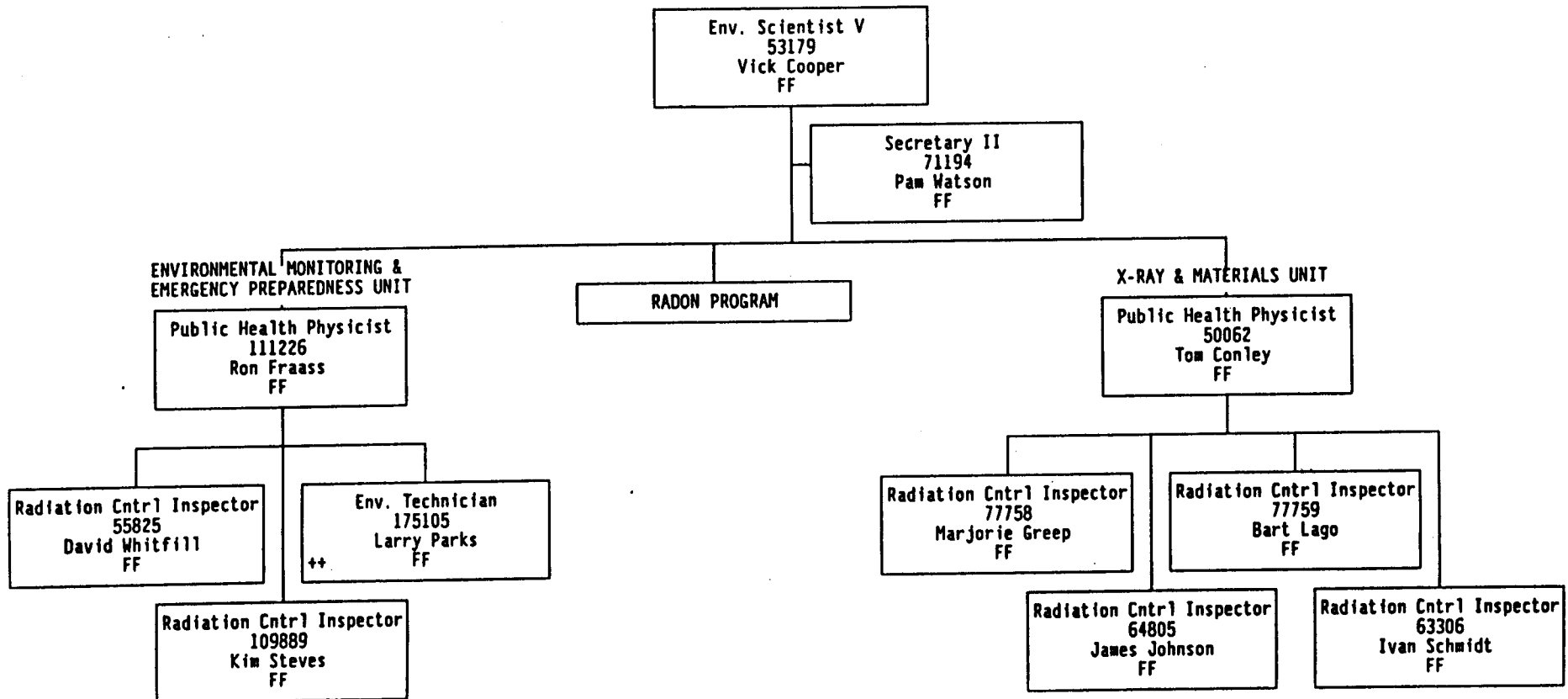
## APPENDIX B

### KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT ORGANIZATION CHARTS



DIVISION OF ENVIRONMENT  
Bureau of Air and Radiation (Page 6 of 6)  
Radiation Control Section

December 11, 1997



++ Unclassified Special Project Position



# KANSAS

DEPARTMENT OF HEALTH & ENVIRONMENT

BILL GRAVES, GOVERNOR

Gary R. Mitchell, Secretary

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July 9, 1998

RICHARD L BANGART DIRECTOR  
NUCLEAR REGULATORY COMMISSION  
ONE WHITE FLINTNORTH  
11555 ROCKVILLE PIKE 3<sup>RD</sup> FLOOR  
ROCKVILLE MD 20852

Dear Mr. Bangart:

Per our conversation on June 29<sup>TH</sup>, these are some of the steps we have initiated. We have begun a comprehensive review of the licensing process and those identified by the IMPEP team were corrected. We have initiated a bi-monthly conference call system with Jack Hornor and Linda Mclean, State Agreement Officers, to update them on our progress. Listed below are some of the actions that have taken place. We continue to be pro-active in our endeavor to correct our shortcomings.

## Licensing:

1. Develop a comprehensive checklist to be used by license reviewers to ensure consistency and completeness of licenses. This checklist is to be used when reviewing a new license or a license amendment in its entirety and requires signatures of the primary reviewer, secondary reviewer and management.  
Status: Non-medical license reviewer checklist complete. Checklists for medical applications are under development. Another checklist has been developed to be used by management to ensure all items of a license are included as well as all inspection information is current.  
Completion: Concurrent with item 3.
2. Review and revision of licensing guides to be used by licensees and license review,  
Status: Radiographer and portable gauge license guides complete. Revisions to the medical guides are under development.  
Completion: Concurrent with item 3.

3. A comprehensive review (utilizing the above checklist) will be performed of the core licensees (priority one excluding radium dial shops).  
Status: Have begun review of radiography licenses. Note: these licenses will be reviewed as groups (i.e. radiography, medical, etc.) to ensure consistency.  
Completion: This review will be completed by October 31, 1998.
4. All other licenses will be reviewed back to the last amendment in its entirety as they are up for renewal.  
status: on-going  
Completion: All licenses are renewed for two years, therefore this review will be completed within two years.
5. Review the license action log on a biweekly basis to ensure all license actions are acted upon in a timely manner.  
Status: Established and on-going.
6. Correct specific license problems pointed out by the IMPEP team.  
Status: Completed
7. Ensure radioactive material properly disposed or transferred upon termination of a license.  
Status: Discussed the proper use of RHS-38 with all inspectors.  
Completion: Completed

#### Inspection:

1. Ensure inspections are completed on a timely basis per the inspection priority with no inspections exceeding the due date by more than 25%.  
Status: The RAM/X-ray Supervisor meets with inspectors on a quarterly basis to discuss and assign inspections. The inspector is then responsible for scheduling and completing the inspections during the quarter. Status is tracked on a monthly basis through each inspectors' monthly report and review of the inspection tracking database.
2. Modify the inspection tracking database to allow tracking the assignment of inspections.  
Status: A field has been added to the database to indicate which inspector is assigned to perform each inspection.  
Completion: Complete
3. Evaluate modification of the inspection tracking database to improve tracking and trending of inspection data.  
Status: Have contacted Texas and California to obtain information about their software systems. In addition, the information services group is currently working on writing visual basic software for licensing and inspection tracking.  
Completion: Dependent on information services support.
4. Review inspection priorities for appropriateness.  
Status: This is evaluated as part of the license reviews.  
Completion: Core licensees - October 31, 1998, Others - Two years.



Other:

1. Revise procedures to ensure consistency and closure of investigations.  
Status: RHS-47 was revised to provide-guidelines for documenting investigations.  
Guidelines are also provided to ensure NRC notification is performed as appropriate and ensure reports are filed in the investigation file and if appropriate the license/registration file.  
Completion: Completed
2. Review training needs for all inspectors and schedule training as appropriate.  
status:
  - a. Three facilities have been contacted for proposals to provide teletherapy training for inspectors. Awaiting responses.
  - b. Applied for admittance to the NRC licensing and teletherapy courses.
  - c. Contacted a licensee to inquire about attending a transportation course they provide in-house.
  - d. Conducted in-house refreshers of licensing guides and checklists.Completion: This will be an on-going effort to ensure inspectors and reviewers maintain qualifications and are kept abreast of the latest developments in licensing and inspection procedures.
3. Ensure Kansas regulations meet compatibility requirements with NRC regulations.  
Status: Work has begun on drafting a revision to the Kansas radiography regulations to -incorporate the latest changes to 10 CFR Part 34.  
Completion: Based on the legislative process

Richard, we appreciate the support you have given us. If further information is needed regarding this letter, please do not hesitate to contact me.

Sincerely,



rick L. Cooper, Chief  
Radiation Control Program  
Bureau of Air and Radiation

VLC/psw



# KANSAS

## DEPARTMENT OF HEALTH & ENVIRONMENT

BILL GRAVES, GOVERNOR

Gary R. Mitchell, Secretary

August 20, 1998

98 AUG 21 PM 12:35

NSP

MR RICHARD BANGART DIRECTOR  
OFFICE OF STATE PROGRAMS (03H20)  
NUCLEAR REGULATORY COMMISSION  
ONE WHITE FLINT NORTH  
11555 ROCKVILLE PIKE 3<sup>RD</sup> FLOOR  
ROCKVILLE MD 20852

Dear Mr. Bangart:

This is to acknowledge the receipt of the draft Integrated Materials Performance Evaluation Program (IMPEP) report dated July 22, 1998, to the findings of the IMPEP team during the review of our program conducted the week of June 15-19, 1998.

The recommendations outlined in the draft report have been reviewed and corrective measures and procedures are being put in place and are ongoing. In accordance with the draft report, we are providing you with our responses to the recommendations made by the IMPEP team.

We would also like to respond to several points outlined in the body of the draft report as follows:

### 3.1 Status of Materials Inspection Program

Page 5 Paragraph 2 the sentence, "further review of the records showed that some licensees were granted permits (reciprocity) for more than 1 year," we feel that this statement is inaccurate. After further review of our records, this did not hold true. Since we only grant permission for 180 days, like all other agreements states as well as the NRC, we feel that this statement should be removed.

Page 4 Paragraph 2 the sentence “the team verified from records that as of June 15, 1998, there were 3 15 active licenses and all inspections were current.” As pointed out in our . responses to the IMPEP Questionnaire, this was the result of self identification of overdue inspections and corrective action taken to eliminate the backlog of inspections. The IMPEP Handbook “Evaluation Criteria” states “In some cases, there may be additional considerations not listed here that are indicative of a program’s performance in a particular area.” We feel self identification and correction of this problem warrants such consideration. Therefore, consideration should be given, in lue of the above statement made by the team and that our inspections continue to be up to date, to the overall performance rating of this section and a satisfactory rating with recommendations should be given.

### 3.3 Technical Staffing and Training

Page 8 Paragraph 2 the sentence, “1 FTE was devoted exclusively to mammography inspections.” This is inaccurate, this FTE was moved from a mammography inspection position to a RAM inspection position. During the time of this review, we were finishing an MQSA contract, this FTE is 80 % RAM 20 % mammography for fiscal year 1999.

Paragraph 4, the statement, based on review results, this staffing level is adequate for a program of this size. This statement will hinder our efforts to add staff to our program, we feel that it should be removed from the report for the following reasons:

1. This statement is inconsistent with one in paragraph 5, the review team suggests that the state evaluate the impact of open positions in the RCS and the effect of these vacancies on radioactive materials staff to determine if added staffing or reassignment of duties is necessary. On one hand you state that we are adequately staffed and on the other we need staff sends mixed messages to management.
2. This was a self identified problem and steps had been made to correct it.
3. In discussions with your staff, it has been indicated using the old formula the NRC used to calculate the FTE status for a program , # inspectors / # licensees \* 100, using that formula  $2.8 \text{ FTE} / 3.15 * 100 = .89 \text{ FTEs per } 100 \text{ licenses}$  we feel that this is inadequate for a program of our size.
4. The NRC regions have a ratio of 1.5 to 2.5 FTEs per 100 licenses. We would like to be compatible and equal in this area.

Page 9 Paragraph 2 the sentence, “thus if an employee has not taken a required class, it may not be apparent that they are still expected to take it.” It has been and continues to be a supervisory responsibility to ensure that staff receive required training. However, getting into NRC required courses has been difficult in the past due to the availability of space for Agreement State personnel. This also was a self identified problem and steps have been put into place to correct the void in training through other means such as:

Examples:

Local Nuclear Facility -Training in root cause effect,  
Transportation , DOT regulation

Local Medical Oncology Facilities-Brachytherapy and Teletherapy workshop

### 3.4 Technical Quality of Licensing Actions

Page 10 Paragraph 5 the sentence, “**the magnitude of the potential health and safety issues** due to licensing inadequacies cannot be accurately assessed because of the lack of file documentation.” We feel that this statement is very strong and harsh because the team **only** found **2 potential health and safety issues**. We have completed a comprehensive self-evaluation of 48 priority 1 licenses beginning with the medical and have not found any other **potential health and safety issues** . We feel replacing the word **magnitude** with number or equivalent would be more accurate. We are in the process of reviewing the remaining licensees.

In addition, with respect to the rating for this section The IMPEP Handbook states in part that a Satisfactory with Recommendations should be given when the “Review indicates that some licensing actions do not fully address health and safety concerns or indicates repeated examples of problems with respect to thoroughness, completeness, consistency, clarity, technical quality, and adherence to existing guidance in licensing actions.” This is contrasted with the criteria which states in part that an Unsatisfactory should be given if the “Review indicates that licensing actions frequently fail to address important health and safety concerns.....” We feel two potential health and safety issues do not constitute a frequent failure to address important health and safety issues. Therefore, we request the wording be changed and that a satisfactory with recommendations rating be given in this area.

Richard, thank you for giving us the opportunity to share our voice in this draft report. If you have any questions regarding the enclosed responses, please do not hesitate to contact me.

Sincerely,



Vick L. Cooper , Chief  
Radiation Control Program  
Bureau Of Air and Radiation

VLC/psw

Enclosure

## **Responses to Integrated Materials Performance Evaluation Program (IMPEP) Recommendations**

### **Recommendation 1:**

Based on the record of overdue inspections during the review period, the review team recommends: (1) that Kansas heighten its management oversight of the inspection due dates of core licenses (Priority 1, 2, and 3 licensees) to ensure inspections are performed at the required frequencies; and (2) that the new inspection tracking system currently under development include provisions for flagging initial inspections at an early date to ensure they are inspected within 6 months of the date of license issuance. In addition, Kansas should consider updating procedure Inspection Priority System Radioactive Materials ( RHS-7) to incorporate procedures on initial inspections as stated in IMC 2800, Section 04.03a.

### **Response:**

1. In our response to the IMPEP Questionnaire Item “A VI 26” regarding program strengths and weaknesses we stated in part:

“... difficulties in tracking inspection and license actions resulting in overdue inspections or license actions which have “fallen through the cracks.” This was recognized by management and the backlog of inspections and license actions has been brought under control through increased management attention.”

As a result of this increased management oversight the backlog of overdue inspections was eliminated prior to the IMPEP team’s visit.

To ensure there is no recurrence of a backlog, this oversight will continue, specifically:

- a. Quarterly the Radioactive Materials and X-ray Section Supervisor will prepare a list of inspections due in the upcoming quarter and meet with the inspectors to discuss assignments.
- a. At this meeting the inspections due in the upcoming quarter will be assigned to specific inspectors.
- b. The inspectors will be responsible for scheduling their assigned inspections to be completed within that quarter.
- c. The Supervisor will monitor the progress of these inspections on at least a monthly basis to ensure the inspections stay on track.

Scheduled completion:

Complete - Increased management oversight is ongoing.

2. The new inspection tracking system currently under development will include the ability to flag initial inspections at an early date to ensure they are inspected within 6 months of the date of license issuance. This will be accomplished by having the ability to assign priorities which will automatically set inspection due dates at six month intervals. For example, the priorities will be real numbers from 0 to 5 which the software will use to calculate the

inspection due date. For a new license, a priority of 0.5 can be assigned which will result in an inspection due date six months from the license issuance date. This will also allow more flexibility in setting inspection due dates for other licensees, for example, if it is felt a licensee should have a follow up inspection in three months then the priority can be set to 0.25 which will then flag an inspection due at the appropriate time.

In addition, Procedure (RHS-7) "Inspection Priority System Radioactive Materials" will be revised to reflect these changes and incorporate procedures for initial inspections consistent with IMC 2800.

Scheduled Completion:

In progress by June 1999

Until the new system is fully implemented, we will continue using the current database system with increased management oversight to ensure inspections are completed appropriately.

**Recommendation 2:**

The review team recommends that the State's "Inspection Priority System" be revised for reciprocity inspections to correspond to the inspection goals in IMC 1220.

**Response:**

The RHS-7 procedures dealing with inspection priority and reciprocity will be revised to ensure reciprocity inspections are conducted at intervals comparable to the inspection goals in IMC 1220.

Scheduled completion:

Completed Prior to the MRB

**Recommendation 3:**

The review team recommends that the State conduct reciprocity inspections at intervals equal to those stated in IMC 1220.

**Response:**

The corrective action for recommendation number 2 encompasses this recommendation. The new computerized inspection tracking system will also allow the tracking of reciprocity inspections and priorities in a similar manner as Kansas licensees.

The program enhancements and improvements in the responses to recommendations 1 and 2, will also ensure reciprocity inspections are conducted at comparable intervals to IMC 1220.

Scheduled Completion:

In conjunction with recommendation 2.

Until completion, reciprocity inspections will be tracked by management to ensure completion at the appropriate intervals.

**Recommendation 4:**

The review team recommends that the inspection report form be strengthened by including names of individuals contacted and interviewed in greater detail.

**Response:**

The implementation of the computerized inspection tracking system is planned to include the electronic generation of inspection reports and storage of inspection data. A new inspection form has been developed which includes a listing of the persons interviewed and those present at the exit meeting. This will be implemented as the new computerized system is completed.

Scheduled Completion:

In conjunction with recommendation 1, this is an ongoing process.

**Recommendation 5:**

The team recommended Kansas develop a procedure to help identify poor licensee performance, when licensee root cause evaluations should be performed and to assist in assessing licensee root cause evaluations. Also a training course that teaches these techniques was recommended as part of the inspector qualification process.

**Response:**

The computerized inspection tracking system also incorporates features to track and trend specific items of noncompliance. This will allow staff to readily identify poor licensee performance and assist in determining when root cause evaluations should be performed.

Training will be provided to staff as availability and funds allow. A procedure will be developed after staff has had an opportunity to attend training. The methods used to provide training is a combination of courses provided by the NRC (as they are available) and workshops/courses arranged using other resources such as ORNL, Universities, Medical Facilities, Utilities or Industrial facilities.

Scheduled Completion:

Determined by training availability, continuous ongoing

**Recommendation 6:**

The review team recommends that the State continue to increase management oversight of the inspection program.

**Response:**

The State of Kansas is committed to improving the inspection process and to continue the efforts already taken to ensure inspections are performed in a timely and accurate manner. The specific actions taken or being taken in the responses to recommendations 1 through 5 demonstrate a strong commitment to increased and continued management oversight.

**Scheduled Completion:**

Increased management oversight is a continuous and ongoing effort. Refer to recommendations 1 through 5 for details.

**Recommendation 7:**

The review team recommends the State document a training and qualifications program equivalent to that contained in IMC 1246, assess the current training needs of the staff and provide the necessary training identified by this assessment.

**Response:**

Using IMC 1246 as a **guide**, a matrix has been created to determine which individuals require training and identify which training is needed. The methods used to provide training are a combination of courses provided by the NRC (as they are available) and workshops/courses arranged using other resources such as local schools, hospitals or industrial facilities.

Specifically, the following have been performed to address training needs:

- a. A teletherapy/brachytherapy course has been jointly developed by three Kansas licensees and will be presented to all the RAM & X-ray section staff the week of August 24, 1998. This course is designed to be equivalent to the NRC teletherapy/brachytherapy course.
- b. Application has been made for admission to the NRC licensing course in September 1998, as well as the NRC brachytherapy course in March 1999.
- c. A local nuclear power plant has been contacted to determine availability of courses for transportation of radioactive material and root cause analysis.

Staff will attend these as available.

**Scheduled Completion:**

Assessment of training needs: Complete

Completion of training: As training courses and funding are available.

**Recommendation 8:**

The review team recommends that program management consider increasing supervisory oversight to ensure that all pertinent items are adequately and properly addressed during the review process to provide quality assurance and to improve the technical quality of licenses.

**Response:**

The State of Kansas recognizes the need for increased management oversight in all areas of the Radiation Control Program and is committed to ensuring the technical quality of our licenses. The responses to recommendations 9 through 12 are offered as examples of this commitment.

**Scheduled Completion:**

Continuous and ongoing



**Recommendation 9:**

The review team also recommends that the State begin a self-evaluation of all existing licenses to determine the technical quality and to identify potential health and safety issues. This evaluation should be accomplished as soon as possible to identify and correct other possible license deficiencies. In addition, the State should ask the licensee to supply copies of any missing documents that should be included with the application.

**Response:**

We are currently performing a comprehensive review of all licenses to ensure the technical quality and verify there are no health and safety issues present. All priority 1 licensees have been reviewed. This review has served to verify the teams' findings that there are inconsistencies in the way licenses have been written, however none of the inconsistencies created health and safety issues to the citizens of Kansas. The responses to recommendations 10 and 11 are designed to reduce inconsistencies. Other licensees are being reviewed in their entirety whenever there are any license actions, inspections or renewals of those licenses processed. This will ensure that, at a minimum, all the licenses will be reviewed within one renewal cycle (2 years). Reviews of licenses for which no actions are current will be reviewed as resources are available based upon priority.

Scheduled Completion:

Priority one licenses: Complete

All others: Complete by June 2000

**Recommendation 10:**

The review team recommends that Radiation Control Staff update the license guidance to address and parallel the current Kansas Radiation Protection Regulations to assist in the consistency and accuracy of the license review process.

**Response:**

The Radioactive Materials and X-ray Section collectively revised the non-medical licensing guides using the "Consolidate Guidance About Materials Licenses" as well as other Agreement State guides appropriate for the particular Kansas guide. The Kansas Medical Guides are currently being revised. It should be noted that since Kansas does not have any large irradiators, these guides have not been developed and guidance from NRC and other Agreement States will be used should a large irradiator be located in Kansas

Scheduled Completion:

Non-medical guides: Complete and in use

Medical guides: Complete and in use

**Recommendation 11:**

The review team recommends that licensing check lists be developed, used, and retained in the file to ensure that all elements of the application have been submitted and that the license is complete.

**Response:**

Using NRC Licensing Guides and other Agreement State Guides as reference, licensing checklists have been developed for licenses. These are in use and have been included in the license files for all license actions as well as reviews being performed per recommendation 9.

Scheduled Completion:

Non-medical: Complete and in use

Medical: Complete and in use

**Recommendation 12:**

The review team recommends that the State place documentation of all pre-licensing visits in the appropriate licensing file.

**Response:**

The Kansas inspection procedure is being revised to require all pre-licensing visits to be documented using the regular inspection process, which includes placing all appropriate documentation in the licensing file.

Scheduled Completion:

Complete by January 1999, in the interim we have instructed personnel to place pre-licensing report in licensing file. This is being monitored by management.

**Recommendation 13:**

The team recommends that the State revise their incident response procedure to conform with OSP procedure, SA-300, including medical events.

**Response:**

The RHS Procedures on incident response are being revised to be consistent with OSP procedure, SA-300. All future reportable events will be reported per this procedure.

Scheduled Completion:

Completed Prior to the MRB

**Recommendation 14:**

The review team recommends that a system be established to track the progress of incident investigations and to verify that each investigation is evaluated by management, that all reporting requirements are met, that follow-up actions and close-out information are documented.

**Response:**

RHS-47 "Emergency Response Documentation" has been revised to require that each investigation of incidents, allegations and reportable mis-administrations be evaluated by management, all reporting requirements be met, and that follow-up actions and close-out information is documented and sent to NRC. In addition, a Case Number is assigned to each investigation for tracking and logged in the Investigation File.

Scheduled Completion:  
Complete and in use

**Recommendation 15:**

The review team recommends that the inspection procedure be revised to include narrative documentation of the inspector's review of incidents and description of the licensee's corrective actions.

**Response:**

As stated in recommendation 5, the inspection form is being revised. This revision will include more detail of the inspector's review of incidents and corrective actions.

Scheduled Completion:  
In conjunction with recommendation 5.

**Recommendation 16:**

The review team recommends the State send copies of final close-out reports to the NRC in accordance with the OSP procedure, "Reporting Material Events - SA-300."

**Response:**

This information requested has been provided to the Region IV NRC Office and we feel this recommendation should be closed.

Scheduled Completion:  
Combined with 13, the 4 close-out reports in question have been sent to NRC. We consider this recommendation complete.

**Recommendation 17:**

The review team recommends that the State review and amend all remaining industrial radiography licenses with license conditions necessary to meet the Safety Requirements for Industrial Radiographic Operations

**Response:**

All industrial radiography licenses have been reviewed and license actions have been taken to ensure the inclusion of the radiography equipment rule condition as appropriate.

Scheduled Completion:  
Complete

**Recommendation 18:**

The review team recommends that the State compare the Kansas regulations involved with the "Low-Level Waste Shipment Manifest Information and Reporting" and "Radiation Protection Requirements: Amended Definitions and Criteria" amendments against the final NRC rules and make any necessary changes to ensure compatibility.

**Response:**

These regulations have been reviewed by the staff and no compatibility issues were identified. Kansas regulation 28-35-23 1 b “Transfer for Disposal and Manifests” contains language virtually identical to 10 CFR 20.2006 “Transfer for Disposal and Manifests” and Appendix F. It is our understanding that States have three years after the effective date of regulations in order to implement them. We plan to promulgate regulations implementing 10 CFR 20.2006 with respect to Appendix G within that time frame.

The “Radiation Protection Requirements: Amended Definitions and Criteria” amendments were reviewed and the Kansas regulations are either equivalent or more restrictive.

Scheduled Completion:

Complete



**KANSAS**  
**DEPARTMENT OF HEALTH & ENVIRONMENT**  
BUREAU OF AIR AND RADIATION  
BILL GRAVES, GOVERNOR  
Gary R. Mitchell, Secretary

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July 9, 1998

**PROGRESS REPORT**  
**As of September 4, 1998**

RICHARD L. BANGART DIRECTOR.  
NUCLEAR REGULATORY COMMISSION  
ONE WHITE FLINT NORTH  
11555 ROCKVILLE PIKE 3rd FLOOR  
ROCKVILLE, MD 20852

Dear Mr. Bangart:

Per our conversation on June 29th, these are some of the steps we have initiated. We have begun a comprehensive review of the licensing process and those identified by the IMPEP team were corrected. We have initiated a bi-monthly conference call system with Jack Hornor and Linda Mclean, State Agreement Officers, to update them on our progress. Listed below are some of the actions that have taken place. We continue to be pro-active in our endeavor to correct our shortcomings.

**Licensing:**

1. Develop a comprehensive checklist to be used by license reviewers to ensure consistency and completeness of licenses. This checklist is to be used when reviewing a new license or a license amendment in its entirety and requires signatures of the primary reviewer, secondary reviewer and management.

Status: Non-medical reviewer checklist **completed and in use**. Checklists for medical applications are under development **completed and in use**. Another checklist has been developed to be used by management to ensure all items of a license are included as well as all inspection information is current **completed and in use**.

2. Review and revision of licensing guides to be used by licensees and license reviewers.  
Status: Radiographer and portable gauge license guides **completed and in use**.  
Revisions to the medical guides **are under development and in progress**.

Completion: Concurrent with item 3.

3. A comprehensive review (utilizing the above checklist) will be performed of the core licensees (priority one excluding radium dial shops).

Status: Have begun review of radiography licenses. Note: these licenses will be reviewed as groups (i.e. radiography, medical, etc.) To ensure consistency. **(Medical was first)**

Completion: This review will be completed by October 31, 1998. **Completed August 13, 1998, we have begun the work on priority II s beginning with the medical**

4. All other licenses will be reviewed back to the last amendment in its entirety as they are up for renewal.

**Status: On-going , We have reviewed a total of 90 licenses**

Completion: All licenses are renewed for two years, therefore this review will be completed within **Two years.**

5. Review the license action log on a biweekly basis to ensure all license actions are acted upon in a timely manner.

Status: Established and on-going. **On-going**

6. Correct specific license problems pointed out by the IMPEP team.

**Status: Completed June & July 98.**

7. Ensure radioactive material properly disposed or transferred upon termination of a license.

Status: Discussed the proper use of RHS-38 with all inspectors.

Completion: **Completed special staff meeting June 98.**

#### Inspection:

1. Ensure inspections are completed on a timely basis per the inspection priority with no inspections exceeding the due date by more than 25%.

Status: The RAM/X-ray Supervisor meets with inspectors on a quarterly basis to discuss and assign inspections. The inspector is then responsible for scheduling and completing the inspections during the quarter. Status is tracked on a monthly basis through each inspector's monthly report and review of the inspection tracking database.

**On going new database to track the inspection process has been developed .**

2. Modify the inspection tracking database to allow tracking the assignment of inspections.  
Status: A field has been added to the database to indicate which inspector is assigned to perform each inspection.

Completion: **Completed will be in use October 1, 1998.**

3. Evaluate modification of the inspection tracking database to improve tracking and trending of inspections data.

Status: Have contacted Texas and California to obtain information about their software systems. In addition, the information services group is currently working on writing visual basic software for licensing and inspection tracking.

Completion: Dependent on information services support. **Database has been developed and will be in use October 1, 1998.**

4. Review inspection priorities for appropriateness;

Status: This is evaluated as part of the license reviews. **We are visiting the process of changing the priority status of some of our licenses based upon their previous inspection history. This is in progress.**

Completion: Core licensees - October 31, 1998 , **Completed August 13, 1998** Other - **Two years.**

#### Other

3. Revise procedures to ensure consistency and closure of investigations.

Status: RHS-47 was revised to provide guidelines for documenting investigations. Guidelines are also provided to ensure NRC notifications as appropriate and ensure reports are filed in the investigation file and if appropriate the license/registration file.

Completion: **Completed and in use**

2. Review training need for all inspectors and schedule training as appropriate.

St&US:

- a. Three facilities have been contacted for proposals to provide teletherapy training for inspectors. Awaiting response.

**Completed August 24-28, 1998**

- b. Applied for admittance to the NRC licensing and teletherapy courses.

**Application made for March 1999 course**

- c. Contacted a licensee to inquire about attending a transportation course they provide in-house.

**Contact made and seminar will be held November or December 98**

- d. Conducted in-house refreshers of licensing guides and checklists.

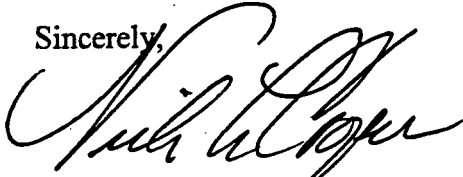
Completion: This will be an on-going effort to ensure inspectors and reviewers maintain qualifications and are kept abreast of the latest developments in licensing and inspection procedures. **On-going**

3. Ensure Kansas regulations meet compatibility requirements with NRC regulations.  
Status: Work has begun on drafting a revision to the Kansas radiography regulations to incorporate the latest changes to 10 CFR Part 34.

Completion: Based on the legislative process. **This is in progress**

Richard, we appreciate the support you have given us. If further information is needed regarding this letter, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Vick L. Cooper", written in a cursive style.

Vick L. Cooper, Chief  
Radiation Control Program  
Bureau of Air and Radiation

VLC/psw