UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

June 15, 2009

Joseph G. Klinger, Assistant Director
Illinois Emergency Management Agency
Division of Nuclear Safety
1035 Outer Park Drive
Springfield, IL 62704

Dear Mr. Klinger:

The U.S. Nuclear Regulatory Commission (NRC) uses the Integrated Materials Performance Evaluation Program (IMPEP) in the evaluation of Agreement State programs. Enclosed for your review is the draft IMPEP report that documents the results of the Agreement State review held in Illinois on May 11-15, 2009. I was the team leader for the review. The review team's preliminary findings were discussed with you and your staff on the last day of the review. The review team's proposed recommendations are that the Illinois Agreement State Program be found adequate to protect public health and safety and compatible with NRC's program.

NRC conducts periodic reviews of Agreement State programs to ensure that public health and safety are adequately protected from the potential hazards associated with the use of radioactive materials and that Agreement State programs are compatible with NRC's program. The process, titled IMPEP, employs a team of NRC and Agreement State staff to assess Agreement State and NRC Regional radioactive materials programs. All reviews use common criteria in the assessment and place primary emphasis on performance. Four additional areas applicable to your program have been identified as non-common performance indicators and are also addressed in the assessment. The final determination of adequacy and compatibility of each program, based on the review team's report, is made by a Management Review Board (MRB) composed of NRC managers and an Agreement State program manager, who serves as a liaison to the MRB.

In accordance with procedures for implementation of IMPEP, we are providing you with a copy of the review team's draft report for your review and comment prior to submitting the report to the MRB. Comments are requested within 4 weeks from your receipt of this letter. This schedule will permit the issuance of the final report in a timely manner that will be responsive to your needs.

The team will review your response, make any necessary changes to the report, and issue it to the MRB as a proposed final report. Through previous coordination with you, we have scheduled the Illinois MRB meeting for August 3, 2009. NRC will provide invitational travel for you or your designee to attend the MRB meeting at NRC Headquarters in Rockville, Maryland. NRC has video conferencing capability if it is more convenient for the State to participate through this medium. Please contact me if you desire to establish a video conference for the meeting.

If you have any questions regarding the enclosed report, please contact me at (817) 860-8143.

Thank you for your cooperation.

Sincerely,

/RA/

Randy Erickson
Regional State Agreements Officer

Enclosure:
Draft Illinois IMPEP Report

cc w/encl:

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INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

REVIEW OF THE ILLINOIS AGREEMENT STATE PROGRAM

May 11-15, 2009

DRAFT REPORT

Enclosure

1.0 INTRODUCTION

This report presents the results of the review of the Illinois Agreement State Program. The review was conducted during the period of May 10-15, 2009, by a review team composed of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the State of Florida. Team members are identified in Appendix A. The review was conducted in accordance with the "Implementation of the Integrated Materials Performance Evaluation Program and Rescission of Final General Statement of Policy," published in the *Federal Register* on October 16, 1997, and NRC Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)," dated February 26, 2004. Preliminary results of the review, which covered the period of April 9, 2005, to May 15, 2009, were discussed with Illinois managers on the last day of the review.

[A paragraph on the results of the Management Review Board (MRB) meeting will be included in the final report.]

By State statute, the Illinois Emergency Management Agency (the Agency) is designated as the State's radiation protection agency. Under the Agency is the Division of Nuclear Safety (the Division). The Division comprises the Bureau of Radiation Safety (the Bureau), the Bureau of Environmental Safety, and the Bureau of Nuclear Facility Safety. The Bureau is headed by the Chief and is composed of the Radioactive Materials Section (the Section) and the Electronic Products Section. The Illinois Agreement State Program is administered by the Section with decommissioning and financial assurance support from the Bureau of Environmental Safety. Organization charts for the Agency, the Division, the Bureau, and the Bureau of Environmental Safety are included in Appendix B.

At the time of the review, the Illinois Agreement State program regulated 736 specific licenses authorizing the possession and use of byproduct, source, and certain special nuclear materials. The review focused on the radioactive materials program as it is carried out under the Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of Illinois.

In preparation for the review, a questionnaire addressing the common and applicable non-common performance indicators was sent to the Agency on January 21, 2009. The Section provided a response to the questionnaire by electronic mail and fax on April 22, 2009. A copy of the questionnaire response can be found in NRC's Agencywide Documents Access and Management System (ADAMS) using the Accession Number ML091310423.

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

Section 2.0 of this report covers the State's actions in response to recommendations made during the previous review. Results of the current review of the common performance indicators

are presented in Section 3.0. Section 4.0 details the results of the review of the applicable non-common performance indicators, and Section 5.0 summarizes the review team's findings and recommendations. The review team's recommendations are comments that relate directly to program performance by the State. A response is requested from the State to any recommendations in the final report.

2.0 STATUS OF ITEMS IDENTIFIED IN PREVIOUS REVIEWS

During the previous IMPEP review, which concluded on April 8, 2005, that review team made one recommendation regarding the State's adoption of regulations or other legally binding requirements remained open. At its meeting on June 26, 2005, the MRB placed the Illinois Agreement State Program on heightened oversight and directed staff to conduct a followup IMPEP review focusing on the non-common performance indicator, Compatibility Requirements, approximately one year later. As a result of the followup IMPEP review, the recommendation from the 2005 review was closed, and no additional recommendations regarding program performance were made.

3.0 COMMON PERFORMANCE INDICATORS

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

3.1 Technical Staffing and Training

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

The Section is responsible for radioactive materials licensing, inspection, and incident response activities. The Section, headed by the Supervisor, is divided into two units: the Licensing Unit and the Inspection and Enforcement Unit. Each of the units has a supervisor. At the time of the review, the Section employed 10 technical staff members (Health Physicists) and 2 administrative staff members. All of the license reviewers and one inspector are located in the Springfield office; the other five inspectors are located in the West Chicago field office.

Three staff members left the Section during the review period. The former Section Supervisor was promoted to the Agency's Assistant Director in 2007, and two license reviewers left the program. One of the license reviewer positions was filled in 2008; the other remains vacant. An additional technical position is also vacant as a result of a string of internal promotions subsequent to the former Section Supervisor's promotion. This position is not currently assigned to a particular unit and will be placed according to the Section's needs. The review team noted that the licensing program is stressed by the current workload The Section has a tremendous licensing workload for only two qualified license reviewers with over 700 licensees

and sealed source and device evaluation authority. The hiring of an additional license reviewer will alleviate some of the stress on the licensing program as he becomes fully trained. Additionally, as the number of security initiatives increases, the inspection staff's workload is also becoming overwhelming for the staff. Division managers indicated that they are hopeful that they will be able to fill the vacant positions despite the State's budgetary shortfalls.

The Section has a documented training and qualification program for staff members who perform licensing, inspection, and incident response duties. The training and qualification program is consistent with NRC Inspection Manual Chapter (IMC) 1246, "Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area" and the NRC and Organization of Agreement States (OAS) Training Working Group's Recommendations for Agreement State Training Programs. Qualification is achieved through a combination of education and experience, formal classroom training, and on-the-job training. Staff members are required to have a Bachelor's degree or equivalent experience in a physical or biological science or engineering.

The Section maintains training and qualification records for each staff member. The review team noted that Section management encourages and supports training opportunities, based on program needs and funding. The review team concluded that the Section has an adequate and well-balanced staff capable of carrying out their regulatory responsibilities.

The Agreement State program receives approximately 88 percent of its budget from licensee fees; the other 12 percent comes from general fund appropriations. The fee-based funding level was increased from approximately 50 percent to its current level with a fee increase in March 2009. Licensees are assessed annual fees to cover the costs associated with licensing amendments, routine inspections, and investigations. Agency rules prohibit annual fees from exceeding 85 percent of NRC fees. In addition, licensees are charged a small Recovery and Remediation fee that allows the Section to build up a fund for emergency remediation at licensee facilities.

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

3.2 Status of Materials Inspection Program

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

The review team's evaluation of the Section's inspection priorities noted that inspection frequencies for various license types are as frequent, or more frequent, than similar license types listed in IMC 2800, "Materials Inspection Program." Examples of license types the Section inspection more frequently include broadscope academic licenses, nuclear laundry licenses, nuclear pharmacy licenses, and broadscope research and development licenses.

The Section performed a total of 713 high priority (Priority 1, 2, and 3) inspections during the review period. In its response to the questionnaire, the Section stated that none of the inspections was conducted overdue, nor was any overdue at the time of the review. The review team evaluated the Section's performance with regards to Priority 1, 2, and 3 inspections and estimated that approximately 8 percent of these inspections were performed overdue. The review team estimated the percent overdue because an exact number of overdue inspections could not be ascertained based on the information obtained from the Section's database. The review team also evaluated the Section's timeliness for conducting initial inspections and found that the Section had conducted 105 initial inspections during the review period. Of the 105 initial inspections conducted, only 10 had been performed greater than 12 months after license issuance. No initial inspections were overdue at the time of the review. Overall, the review team determined that the Section performed less than 10 percent of all Priority 1, 2, and 3 and initial inspections overdue during the review period.

The review team determined that the Section adequately planned for the initial set of Increased Controls inspections. The review team evaluated the Section's prioritization methodology and found it acceptable. The review team verified that the Section performed all of the first-year inspections in a timely manner. The Section also completed all of its Increased Controls inspections within the required 3-year time frame. The Section performs subsequent Increased Controls inspections in conjunction with routine health and safety inspections at the appropriate inspection frequency, based on license type.

The review team evaluated the Section's timeliness in issuing inspection reports through a review of inspection casework and data obtained from the Section's licensing and inspection database. The review team noted that in approximately 65 percent of the cases inspection findings were transmitted to licensees greater than 30 days after the inspection date. The review team determined that the underlying cause of the tardiness of issuance of inspection documentation is due to the overwhelming number of inspection reports that must be reviewed and signed by the Inspection & Enforcement Unit Supervisor. The review team found that competing priorities detract from the Inspection & Enforcement Unit Supervisor's time to review the inspection documentation. The review team and Section managers discussed the Section's procedures and practices for issuing inspection documentation to licensees and areas where the Section might be able to gain efficiencies in the process without compromising quality or consistency of the inspection reports. The review team recommends that the State provide inspection documentation to its licensees within 30 days of a completed inspection in accordance with the Section's policies and procedures.

The Section does not maintain records reflecting which reciprocity licenses are candidates for inspection per calendar year. Instead, the Section identifies these licensees as "current" or "not current." Consequently, the review team was unable to apply the reciprocity inspection frequency criteria prescribed by IMC 1220, "Processing of NRC Form 241 and Inspection of Agreement State Licensees Operating under 10 CFR 150.20." The review team used information obtained from the Section's license and inspection database and information provided by the Section in its response to the questionnaire to determine the number of reciprocity licensees inspected each year. The review team concluded that the Section did not consistently inspect a minimum of 20 percent of candidate reciprocity licensees in each of the calendar years covered by review period. The review team determined that the Section's performance of reciprocity inspections decreased later in the review period, because the

Section redirected resources to address new security initiatives in a timely manner. Although the Section did not inspect the minimum of 20 percent of candidate reciprocity licensees in each of the calendar years covered by review period, the review team found that the Section used a risk-informed approach to conduct reciprocity inspections during the years that the 20 percent requirement was not met.

Based on the IMPEP evaluation criteria, the review team recommends that Illinois's performance with respect to the indicator, Status of Materials Inspection Program, be found satisfactory.

3.3 Technical Quality of Inspections

The review team evaluated inspection reports, enforcement documentation, inspection field notes, and interviewed the responsible inspectors for 24 radioactive materials inspections conducted during the review period. The casework examined consisted of inspections conducted by seven current inspectors. The casework covered a variety of license types, including: academic broadscope, medical broadscope, industrial radiography, self-shielded irradiator, service provider, gamma knife, positron emission tomography, high dose-rate remote after loader (HDR), nuclear pharmacy, fixed gauge, decommissioning, and reciprocity. The review also included initial and followup Increased Controls inspections. Appendix C lists the inspection casework files reviewed and includes case-specific comments.

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

The Section's inspection procedures are consistent with the inspection guidance found in IMC 2800. At the conclusion of each inspection, inspectors have the option to leave the inspection results on a form similar to NRC's Form 591 or to send results from the office. All inspection documentation sent from the office is dispatched under the signature of the Inspection and Enforcement Unit Supervisor. The Section dispatches the majority of its inspection documentation from the office, which has led to the large number of inspection reports dispatched beyond the 30-day goal.

The review team determined that documents involving Increased Controls inspections were uniquely identified to ensure protection from inadvertent release or unauthorized disclosure. Files were held in individual color coded folders, clearly identifying each licensee subject to the Increased Controls. Documents observed were sufficiently marked as sensitive information to be withheld from public disclosure. Increased Controls documentation is not subject to Freedom of Information Act or State equivalent law requests.

The review team verified that the Section maintains an adequate supply of appropriately calibrated survey instruments to support the inspection program, as well as to respond to radioactive materials incidents and emergency conditions. The State has its own accredited

calibration laboratory in Springfield. The State Radiation Safety Officer heads the calibration lab and is responsible for ensuring that the calibration lab maintains its accreditation and that survey instruments are properly calibrated and distributed.

The Section receives laboratory and sample analysis support from the State laboratory located in Springfield. The State laboratory has a wide array of analytical equipment and is capable of detailed radiochemistry analysis. Their work is primarily in support of the power plants but they also provide support to the Section, as requested. The uranium recovery site currently under decommissioning has its own lab for sample analysis and is located in West Chicago.

The Section has a policy to perform supervisory accompaniments of all inspectors annually. The supervisor in the Chicago area office performs accompaniments for the inspectors in that area annually. The Inspection & Enforcement Unit Supervisor accompanies the one inspector working from his home in the southern part of the State annually.

The review team accompanied three of the Section's inspectors in March and April 2009. The licensees inspected were an industrial radiography facility, a gamma stereotactic radiosurgery center, and a pool irradiator facility. Two of the inspections included a review of the licensees' implementation of the Increased Controls. Appendix C lists the inspector accompaniments. The inspectors demonstrated performance-based inspection techniques and knowledge of the regulations. The inspectors were well trained, prepared for the inspections, and thorough in their audits of the licensees' radiation safety and security programs. The inspectors conducted interviews with appropriate personnel, observed licensed operations, conducted confirmatory measurements, and utilized good health physics practices. The inspectors held entrance and exit meetings with the appropriate level of licensee management. The review team determined that the inspections were adequate to assess radiological health, safety, and security at the licensed facilities.

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

3.4 Technical Quality of Licensing Actions

The review team examined completed licensing casework and interviewed license reviewers for 30 specific licenses. Licensing actions were reviewed for completeness, consistency, proper radioisotopes and quantities, qualifications of authorized users, adequacy of facilities and equipment, adherence to good health physics practices, financial assurance, Increased Controls requirements, the use of pre-licensing guidance, operating and emergency procedures, appropriateness of license conditions, and overall technical quality. The casework was also reviewed for timeliness, use of appropriate correspondence, reference to appropriate regulations, supporting documentation, consideration of enforcement history, peer/supervisory review, and proper signatures.

The licensing casework was selected to provide a representative sample of licensing actions completed during the review period. Licensing actions selected for evaluation included 6 new licenses, 14 renewals, 7 amendments, and 3 license terminations. The casework reviewed included a cross-section of license types, including: medical diagnostic and therapy,

brachytherapy, gamma knife, industrial radiography, nuclear pharmacies, and industrial licensees. A listing of the licensing casework reviewed can be found in Appendix D.

The review team found that the license reviewers follow appropriate licensing guides, similar to NRC's NUREG-1556 series, during the review process to ensure that licensees submit all the necessary information to support the licensing request. The review team found the checklists used for each license type were comprehensive and incorporated excellent notes to assist the staff with their review of the applications. Letters, documented telephone conversations, and electronic communications retained in the licensing files contained appropriate regulatory language and addressed deficiencies. The Section's use of license templates, including the use of standard license conditions, resulted in notable consistency between reviewers. Overall, the review team found that the licensing actions were thorough, complete, consistent, of high quality, and properly addressed health, safety, and security issues.

When a licensing action is completed by a reviewer, the entire package is given to the Licensing Unit Supervisor who reviews and signs the licensing action. Licenses are issued for a 5-year term. The Section has an expedited renewal process, where a licensee submits an application and identifies any parts of his radiation safety program that have changed, and confirms that all other portions are still current. Licenses that are under timely renewal are amended as necessary to ensure that public health and safety issues are addressed during the period that the license is undergoing the renewal process.

The Section requires certain licensees to maintain financial assurance for decommissioning. Surety instruments are maintained in a locked cabinet. The Bureau of Environmental Safety determines the financial assurance requirements for the licensing staff. The review team noted good communication between the Section and the Bureau of Environmental Safety. The review team evaluated the contents of several financial assurance folders, all of which were properly maintained.

The review team found that terminated licensing actions were well documented. The files included the appropriate radioactive material transfer reports and survey records. An evaluation of selected termination records indicated excellent communication between the licensing, inspection, and decommissioning staff to prevent abandonment of radioactive material. The files contained documentation of proper disposal or transfer.

The review team examined the Section's licensing practices regarding the Increased Controls and fingerprinting orders. The review team noted that the Licensing Unit added legally binding license conditions to the licenses that met the criteria for implementing the Increased Controls and the fingerprinting requirements. The review team found that some medical licenses were authorized possession limits in quantities of concern for certain isotopes that were not subject to the Increased Controls, because the licenses did not contain the appropriate license condition. The Section identified the licenses that potentially contained the error. While the review team was on site, the Section contacted the affected licensees and began the process of issuing the corrected copies of the licenses. The Section completed the issuance of corrected licenses on June 2, 2009. The Section was planning to draft a policy memorandum with instructions and a new medical license template that will be presented at a staff meeting as part of the implementation plan.

The review team reviewed the State's program for the implementation of pre-licensing guidance. At the time of the review, the State had incorporated the essential objectives of the original pre-licensing guidance that required site visits and background checks of applicants requesting risk-significant quantities of radioactive materials. The State had not yet incorporated the essential objectives of the revised pre-licensing guidance that added site visits for any unknown applicant. As detailed in NRC's Office of Federal and State Materials and Environmental Management Programs (FSME) Letter RCPD-08-020, dated September 22, 2008, States were given 6 months from the date of the letter to incorporate the essential objectives of the revised pre-licensing guidance into their respective licensing program. The review team noted two instances where site visits had not been performed following the implementation deadline. The review team discussed the revised requirements of the pre-license guidance with the Illinois program who committed to implementing the new requirements.

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

3.5 Technical Quality of Incident and Allegation Activities

In evaluating the effectiveness of the Section's actions in responding to incidents and allegations, the review team examined the Bureau's response to the questionnaire relative to this indicator, evaluated selected incidents reported for Illinois in the Nuclear Material Events Database (NMED) against those contained in the Section's files, and evaluated the casework for 20 of 49 reported radioactive materials incidents. A listing of the casework examined can be found in Appendix E. The review team also evaluated the Section's response to seven allegations involving radioactive materials reported during the review period.

When notified of an incident or an allegation, the Section discusses the initial response and the need for an on-site investigation, based on the safety significance. The Section maintains a database for tracking the status of all incidents and allegations. If the incident meets the reporting criteria established in FSME Procedure SA-300, "Reporting Material Events," the Section promptly notifies NRC's Headquarters Operations Center, typically by e-mail, using the information template established for NMED. If the investigation is complex and extends over a period of time, NMED is updated as additional information becomes available. Of the incidents evaluated by the review team, all had been reported to NRC within the required time frame and submitted for inclusion in NMED.

The incidents selected for review included medical events, lost or stolen radioactive material, overexposure, damaged equipment, contamination events, leaking sources, and equipment failures. The review team determined that the Section's response to incidents were thorough, complete, and comprehensive. Initial responses were prompt and well coordinated, and the level of effort was commensurate with the health and safety significance. The Section quickly dispatched inspectors to a site when the possibility of an immediate threat to public health and safety existed. When no immediate threat was present and the Section determined that the licensee had qualified, competent individuals investigating the incident, the Section generally responded telephonically with a followup during the next inspection. The review team noted that, at the conclusion of investigations, inspectors generated narrative reports that thoroughly documented the investigations.

The Section receives approximately 75 to 100 incidents involving radioactive material annually, of which approximately 75 percent are radiation monitor trips at scrap facilities and landfills. With support from the Bureau of Environmental Safety, the Section responds to all monitor trips with an on-site visit. The Section has made this activity a priority because it believes that orphan sources at non-licensed facilities present a serious risk for unnecessary public exposure.

In 2006, the Bureau of Environmental Safety expanded their Orphan Source Recovery Program to include Illinois high schools. This initiative is a non-emergency response hazard mitigation program that collects and properly disposes of unwanted radioactive material from the schools. The collection of unwanted radioactive material is at no cost to the schools. The review team recommends that the State's expansion of its orphan source recovery initiative to high schools be identified as a good practice.

In evaluating the effectiveness of the Section's response to allegations, the review team evaluated the casework for four allegations reported directly to the State and three allegations referred to the State from the NRC during the review period. The review team concluded that the Section consistently took prompt and appropriate action in response to concerns raised. The review team also noted that the Section thoroughly documented the investigations and retained all necessary documentation to appropriately close the allegations. The Section notified the allegers of the conclusion of their investigation. Additionally, the review team determined that the Section adequately protected the identity of allegers.

Based on the IMPEP evaluation criteria, the review team recommends that Illinois's performance with respect to the indicator, Technical Quality of Incident and Allegation Activities, 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) Compatibility Requirements; (2) Sealed Source and Device Evaluation Program; (3) Low-Level Radioactive Waste Disposal Program; and (4) Uranium Recovery Program.

4.1 Compatibility Requirements

4.1.1 Legislation

Illinois became an Agreement State on June 1, 1987. In their response to the questionnaire, the Section provided a listing of legislation that affects the radiation control program. The Agency is designated as the State radiation protection agency under the provisions of the Radiation Protection Act of 1990, as amended (420 Illinois Compiled Statutes (ILCS) 40). The Bureau implements the program for the Agency. The Radiation Protection Act of 1990 grants the Agency the authority to promulgate rules and regulations to be followed in the administration of the State's radiation protection program. This is the only legislation that affects the program that is subject to sunset laws. Public Act 91-752, which was effective June 2, 2000, extended the sunset date for the Radiation Protection Act until January 1, 2011. The Agency plans to file the necessary paperwork to extend the sunset date for the Radiation Protection Act of 1990 in

2010. This will extend the sunset date of the legislation for another 10 years.

Other legislation that affects the radiation control program is as follows: the Radioactive Waste Storage Act (420 ILCS 35); the Illinois Low-level Radioactive Waste Management Act (420 ILCS 20); and the Uranium and Thorium Mill Tailings Control Act (420 ILCS 42), which provide authority for the low-level radioactive waste disposal and uranium recovery programs; Freedom of Information Act [5 ILCS 140]; and Illinois Administrative Procedure Act [5 ILCS 100].

4.1.2 Program Elements Required for Compatibility

The State's regulations for control of radiation are located in Title 32 of the Illinois Administrative Code and apply to all ionizing radiation, whether emitted from radionuclides or devices. Illinois requires a license for possession and use of all radioactive materials.

The public, NRC, other agencies, and all potentially affected licensees and registrants are offered an opportunity to comment during the rulemaking process. Comments are considered and incorporated, as appropriate, before the regulations are finalized, approved, and filed. The Agency also has the authority to issue legally binding requirements (e.g., license conditions) in lieu of regulations until compatible regulations become effective. This process generally takes between one and two years. Regulations are not subject to sunset laws.

The review team evaluated the Section's response to the questionnaire, reviewed the status of regulations required to be adopted by the State under the Commission's adequacy and compatibility policy, and verified the adoption of regulations with data obtained from the State Regulation Status Sheet that FSME maintains. Current NRC policy requires that Agreement States adopt certain equivalent regulations or legally binding requirements no later than 3 years after they are effective unless otherwise mandated by the Commission.

Since the followup review, the State submitted six packages covering eight amendments for compatibility reviews. The review team noted that Illinois is up to date on all NRC regulatory amendments currently required for compatibility.

The following amendments will become due during the next IMPEP review cycle and are included here to assist the Agency in including them in future rulemakings or by adopting alternate generic legally binding requirements:

- "Medical Use of Byproduct Material – Minor Corrections and Clarifications," 10 CFR Parts 32 and 35 amendment (72 FR 45147, 54207), that is due for Agreement State adoption by October 29, 2010.

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

- "Exemptions from Licensing, General Licenses, and Distribution of Byproduct Material: Licensing and Reporting Requirements," 10 CFR Parts 30, 31, 32, and 150 amendment (72 FR 58473), that is due for Agreement State adoption by December 17, 2010.

- "Occupational Dose Records, Labeling Containers, and Total Effective Dose Equivalent," 10 CFR Parts 19 and 20 amendment (72 FR 68043), that is due for Agreement State adoption by February 15, 2011.

Based on the IMPEP evaluation criteria, the review team recommends that Illinois's performance with respect to the indicator, Compatibility Requirements, be found satisfactory.

4.2 Sealed Source and Device Evaluation Program

In reviewing this indicator, the review team used three subelements to evaluate the Section's performance regarding the Sealed Source and Device (SS&D) Evaluation Program. These subelements were: (1) Technical Staffing and Training; (2) Technical Quality of the Product Evaluation Program; and (3) Evaluation of Defects and Incidents Regarding SS&Ds.

In assessing the Section's SS&D evaluation activities, the review team examined information contained in the Section's response to the IMPEP questionnaire for this indicator. The review team examined casework, noted the staff's use of guidance documents and procedures, interviewed staff members involved in SS&D evaluations, and verified the use of regulations and inspections to enforce commitments made in the applications.

4.2.1 Technical Staffing and Training

The Section has three staff members who are qualified to perform safety evaluations of SS&D applications and amendments. The review team interviewed each staff member involved in the reviews and determined that they were familiar with the procedures used in the evaluation of a source or device and had access to applicable reference documents.

4.2.2 Technical Quality of the Product Evaluation Program

During the review period, the Section conducted six new SS&D evaluations and issued thirteen amendments to an existing registration. The review team examined casework for 10 actions covering work from each of the SS&D reviewers. A list of SS&D casework examined, with case-specific comments, may be found in Appendix F.

Analysis of the casework and interviews with staff members confirmed that the Section follows the recommended guidance from NRC's SS&D Workshop and NUREG-1556, Volume 3, Revision 1, "Consolidated Guidance About Materials Licenses – Applications for Sealed Source and Device Evaluation and Registration." The review team confirmed that all applicable and pertinent American National Standards Institute standards, NUREG-1556 Series guides, NRC Regulatory Guides, and applicable references were available and used appropriately in performing the SS&D reviews.

The review team determined that the registration files contained all photographs, engineering drawings, radiation profiles, and details of the applicant's quality assurance and quality control program. The registrations clearly summarized the product evaluation to provide license reviewers with adequate information to license the possession and use of the product. Deficiency letters clearly stated regulatory positions and all health and safety issues were

properly addressed. The review team found that the evaluations were generally of high quality with health and safety issues properly addressed.

The review team identified programmatic practices that were found to be inconsistent with generally accepted practices for case evaluations. The review team noted that some of the files were missing correspondence dates and that the reviewers were using a checklist that was not consistent with the most current guidance. This was discussed with the Program who committed to update the checklist to include the most current guidance. The review team did not identify any associated performance issues through the review of casework.

4.2.3 Evaluation of Defects and Incidents Regarding SS&Ds

Utilizing NMED and the Section's response to the questionnaire, the review team examined a selected sample of events involving registered products that occurred during the review period. The events involved equipment and sources, registered by the State of Illinois, that occurred both within the State and nationwide.

One event related to a leaking source registered by the State was reported during the review period. The State conducted an investigation to obtain additional information about the leaking source. The results of the investigation were documented and complete, and stated corrective actions taken by the licensee. These corrective actions, relating to the licensee's quality assurance program, were never incorporated into the license or the SS&D registry. For future events of this nature, the Section committed to leaving NMED reports open until the license has been appropriately amended and the licensee has implemented their corrective actions.

Based on the IMPEP evaluation criteria, the review team recommends that Illinois's performance with respect to the indicator, Sealed Source and Device Evaluation Program, be found satisfactory.

4.3 Low-level Radioactive Waste Disposal Program

Although NRC's Agreement with the State of Illinois relinquishes the authority for a low-level radioactive waste (LLRW) program, the State's LLRW program is currently inactive. No further activity is anticipated at this time; therefore, the LLRW program staff is working on other projects. Accordingly, the review team did not review this indicator.

4.4 Uranium Recovery Program

The Bureau of Environmental Safety administers the State's uranium recovery program. The Bureau of Environmental Safety regulates one uranium recovery license, which is in the process of decommissioning. During the review period, operations at the site included accepting excavated contaminated material from off site properties for limited storage, the shipment of material for disposal, and water treatment and groundwater monitoring.

On January 11, 2009, the licensee notified the Bureau of Environmental Safety that they had filed under Chapter 11 of the U.S. Bankruptcy laws. The Bureau of Environmental Safety holds a financial surety instrument to cover any outstanding remediation activities at the site and is closely monitoring the situation to determine if that financial surety instrument needs to be used.

The surety instrument does not cover any Superfund remedial activities.

The State's uranium recovery activities are currently inactive, and it's anticipated that the only remaining activities at the site will be decommissioning activities. Staff has been reassigned to other activities. Accordingly, the review team did not review this indicator.

5.0 SUMMARY

As noted in Sections 3.0 and 4.0, the review team found Illinois's performance to be satisfactory for all performance indicators reviewed. The review team made one recommendation in regard to program performance by the State. The review team also identified one potential good practice. Overall, the review team recommends that the Illinois Agreement State Program be found adequate to protect public health and safety and compatible with NRC's program. Based on the results of the current IMPEP review, the review team recommends that the next full IMPEP review take place in approximately 4 years.

Below is the recommendation, as mentioned earlier in the report, for evaluation and implementation by the State:

> The review team recommends that the State provide inspection documentation to its licensees within 30 days of a completed inspection in accordance with the Section's policies and procedures. (Section 3.2)

Below is the good practice, as mentioned earlier in the report:

> In 2006, the Bureau of Environmental Safety expanded their Orphan Source Recovery Program to include Illinois high schools. This initiative is a non-emergency response hazard mitigation program that collects and properly disposes of unwanted radioactive material from the schools. The collection of unwanted radioactive material is at no cost to the schools. The review team recommends that the State's expansion of its orphan source recovery initiative to high schools be identified as a good practice. (Section 3.5)

LIST OF APPENDIXES

APPENDIX A

IMPEP REVIEW TEAM MEMBERS

Name	**Area of Responsibility**
Randy Erickson, Region IV	Team Leader Technical Quality of Inspections Low-level Radioactive Waste Disposal Program
James Lynch, Region III	Technical Staffing and Training Technical Quality of Incident and Allegation Activities Inspector Accompaniments
Monica Orendi, FSME	Status of the Materials Inspection Program Compatibility Requirements
Shirley Xu, FSME	Technical Quality of Licensing Actions Uranium Recovery Program
Tristan Timm, Florida	Sealed Source and Device Evaluation Program

APPENDIX B

ILLINOIS ORGANIZATION CHARTS

ADAMS ACCESSION NO.: ML091170313

APPENDIX C

INSPECTION CASEWORK REVIEWS

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

File No.: 1
Licensee: PetroChem Inspection Services — License No.: IL-00408-01
Inspection Type: Reciprocity/Special, Announced — Priority: 1
Inspection Date: 11/12/08 — Inspector: JP

Comment:
Inspection documentation issued to licensee 56 days late.

File No.: 2
Licensee: Advanced Radiation Oncology Center — License No.: IL-02178-01
Inspection Type: Routine/Special, Announced — Priority: 2
Inspection Date: 9/7/07 — Inspector: JK

File No.: 3
Licensee: Southern Illinois School of Medicine — License No.: IL -01161-01
Inspection Type: Routine/Special, Announced — Priority: 2
Inspection Date: 6/25/08 — Inspector: GM

Comment:
Inspection documentation issued to licensee 46 days late.

File No.: 4
Licensee: Caterpillar, Inc. — License No.: IL-01463-01
Inspection Type: Routine/Special, Announced — Priority: 1
Inspection Date: 1/5/07 — Inspector: GM

Comment:
Inspection documentation issued to licensee 13 days late.

File No.: 5
Licensee: Senco Construction, Inc. — License No.: IL-02002-01
Inspection Type: Routine/Special, Unannounced — Priority: 1
Inspection Date: 7/5/06 — Inspector: GM

File No.: 6
Licensee: St. Francis Medical Center — License No.: IL-01463-01
Inspection Type: Special, Announced — Priority: 2
Inspection Dates: 1/8-10/08 — Inspector: GM

File No.: 7
Licensee: Northern Illinois University
License No.: IL-01773-01
Inspection Type: Routine/Special, Unannounced
Priority: 3
Inspection Dates: 7/13-14/06
Inspectors: RM, AG

Comment:
Inspection documentation issued to licensee 12 days late.

File No.: 8
Licensee: Mistras Group, Inc.
License No.: IL-01968-01
Inspection Type: Routine/Special, Announced
Priority: 1
Inspection Dates: 8/30/06 and 9/5/06
Inspector: AG

Comment:
Inspection documentation issued to licensee 22 days late.

File No.: 9
Licensee: Baxter Healthcare Corporation
License No.: IL-01278-02
Inspection Type: Routine/Special, Unannounced
Priority: 5
Inspection Dates: 5/7-8/08
Inspector: WH

Comment:
Inspection documentation issued to licensee 34 days late.

File No.: 10
Licensee: Neurologic and Orthopedic Institute of Chicago
License No.: IL-02207-01
Inspection Type: Initial/Special, Announced
Priority: 2
Inspection Date: 2/1/07
Inspector: WH

File No.: 11
Licensee: Ingalls Memorial Hospital
License No.: IL-01342-01
Inspection Type: Routine, Unannounced
Priority: 3
Inspection Dates: 4/19-20/07
Inspector: WH

File No.: 12
Licensee: ConocoPhillips Pipe Line Company
License No.: IL-01332-01
Inspection Type: Routine, Announced
Priority: 5
Inspection Date: 6/22/06
Inspector: GM

File No.: 13
Licensee: Chicago Magnesium Casting Company
License No.: IL-01077-01
Inspection Type: Decommissioning, Announced
Priority: 1
Inspection Date: 11/10/08
Inspector: DP

File No.: 14
Licensee: Pathfinder Brain SPECT, LLC. License No.: IL-02247-01
Inspection Type: Initial, Announced Priority: 5
Inspection Date: 3/13/06 Inspector: AG

File No.: 15
Licensee: Southwest Comprehensive Oncology Center License No.: IL-02328-01
Inspection Type: Initial, Unannounced Priority: 2
Inspection Date: 11/9/07 Inspector: RM

Comment:
Inspection documentation issued to licensee 30 days late.

File No.: 16
Licensee: Landauer License No.: IL-01376-01
Inspection Type: Routine/Special, Announced Priority: 1
Inspection Date: 1/22/08 Inspector: JP

File No.: 17
Licensee: River to River Heart Group License No.: IL-02351-01
Inspection Type: Initial, Unannounced Priority: 5
Inspection Date: 7/7/08 Inspector: GM

Comment:
Inspection documentation issued to licensee 37 days late.

File No.: 18
Licensee: Advanced Cardiology and Vascular Services, LLC. License No.: IL-02308-01
Inspection Type: Routine/Special, Announced Priority: 5
Inspection Date: 4/30/08 Inspector: GM

Comment:
Inspection documentation issued to licensee 13 days late.

File No.: 19
Licensee: Joliet Radiation Oncology at Hoffman Cancer Center License No.: IL-02344-01
Inspection Type: Initial, Announced Priority: 2
Inspection Date: 11/21/08 Inspector: JK

File No.: 20
Licensee: The Heart Care Group License No.: IL-02302-01
Inspection Type: Initial, Announced Priority: 5
Inspection Date: 10/5/06 Inspector: GM

File No.: 21
Licensee: Gamma Irradiator Service License No.: IL-00392-01
Inspection Type: Reciprocity, Announced Priority: 5
Inspection Date: 3/23/06 Inspector: JK

File No.: 22
Licensee: Berwyn Radiation Oncology Center License No.: IL-02240-01
Inspection Type: Routine, Unannounced Priority: 2
Inspection Date: 2/25/09 Inspector: WH

Comment:
Inspection documentation issued to licensee 6 days late.

File No.: 23
Licensee: Varian Medical Systems License No.: IL-01143-01
Inspection Type: Routine, Announced Priority: 5
Inspection Date: 11/29/06 Inspector: JP

File No.: 24
Licensee: Chicago Prostate Cancer Center License No.: IL-02015-01
Inspection Type: Routine, Unannounced Priority: 3
Inspection Date: 10/6/06 Inspector: JK

INSPECTOR ACCOMPANIMENTS

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

Accompaniment No.: 1
Licensee: PetroChem Inspection Services, Inc. License No.: IL-02365-01
Inspection Type: Special, Announced Priority: 1
Inspection Date: 3/6/09 Inspector: AG

Accompaniment No.: 2
Licensee: Neurologic and Orthopedic Institute of Chicago License No.: IL-02207-01
Inspection Type: Special, Announced Priority: 2
Inspection Date: 3/19/09 Inspector: JP

Accompaniment No.: 3
Licensee: STERIS, Inc. License No.: IL-01123-02
Inspection Type: Routine, Unannounced Priority: 2
Inspection Date: 4/8/09 Inspector: JK

APPENDIX D

LICENSE CASEWORK REVIEWS

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

File No.: 1
Licensee: ADCO Services, Inc — License No.: IL-01347-01
Type of Action: Renewal — Amendment No.: 35
Date Issued: 2/27/09 — License Reviewer: MB

File No.: 2
Licensee: Eichrom Technologies, LLC — License No.: IL-02371-01
Type of Action: New — Amendment No.: 0
Date Issued: 2/23/09 — License Reviewer: SK

File No.: 3
Licensee: Equistar Chemicals, LP — License No.: IL-01737-01
Type of Action: Renewal — Amendment No.: 15
Date Issued: 12/5/07 — License Reviewer: SK

File No.: 4
Licensee: Raymond G. Scott Cancer Care — License No.: IL-02217-01
Type of Action: New — Amendment No.: 0
Date Issued: 12/17/08 — License Reviewer: SK

File No.: 5
Licensee: Brian Szydzik — License No.: IL-02337-01
Type of Action: New — Amendment No.: 0
Date Issued: 8/30/07 — License Reviewer: MB

File No.: 6
Licensee: Southern Cook Radiation Oncology, Ltd. — License No.: IL-02299-01
Type of Action: New — Amendment No.: 0
Date Issued: 9/20/06 — License Reviewer: SK

File No.: 7
Licensee: MidWest Brachytherapy, Inc. — License No.: IL-02262-01
Type of Action: New — Amendment No.: 0
Date Issued: 10/12/05 — License Reviewer: SK

File No.: 8
Licensee: Viktron-West Chicago — License No.: IL-01101-01
Type of Action: Termination — Amendment No.: 4
Date Issued: 2/27/09 — License Reviewer: RH

File No.: 9
Licensee: Abbott Laboratories — License No.: IL-01478-01
Type of Action: Amendment — Amendment No.: 22
Date Issued: 12/4/07 — License Reviewer: SK

File No.: 10
Licensee: UniTech Services Group, Inc. — License No.: IL-01008-01
Type of Action: Renewal — Amendment No.: 31
Date Issued: 4/9/09 — License Reviewer: MB

File No.: 11
Licensee: Northwestern University — License No.: IL-01879-01
Type of Action: Renewal — Amendment No.: 17
Date Issued: 10/12/07 — License Reviewer: MB

File No.: 12
Licensee: Veterinary Specialty Center — License No.: IL-02071-01
Type of Action: Amendment — Amendment No.: 9
Date Issued: 2/23/09 — License Reviewer: DP

File No.: 13
Licensee: Northwestern memorial Hospital — License No.: IL-01037-01
Type of Action: Amendment — Amendment No.: 40
Date Issued: 1/14/09 — License Reviewer: MB

File No.: 14
Licensee: Mallinckrodt, Inc — License No.: IL-01117-01
Type of Action: Renewal — Amendment No.: 38
Date Issued: 3/29/09 — License Reviewer: SK

File No.: 15
Licensee: Radiocat — License No.: IL-02024-01
Type of Action: Renewal — Amendment No.: 8
Date Issued: 12/20/07 — License Reviewer: MB

File No.: 16
Licensee: Principia College — License No.: IL-01650-01
Type of Action: Amendment — Amendment No.: 7
Date Issued: 3/22/06 — License Reviewer: SK

File No.: 17
Licensee: Rosalind Franklin University of Medicine and Science — License No.: IL-01480-02
Type of Action: New — Amendment No.: 0
Date Issued: 11/17/06 — License Reviewer: MB

File No.: 18
Licensee: Northrop Grumman Systems Company
Type of Action: Amendment
Date Issued: 4/10/08
License No.: IL-02127-01
Amendment No.: 11
License Reviewer: CV

File No.: 19
Licensee: Cardinal Health, Inc.
Type of Action: Renewal
Date Issued: 6/26/07
License No.: IL-01721-01
Amendment No.: 42
License Reviewer: MB

File No.: 20
Licensee: Oxford Instruments America, Inc.
Type of Action: Renewal
Date Issued: 12/29/08
License No.: IL-01694-01
Amendment No.: 18
License Reviewer: SK

File No.: 21
Licensee: Rush University Medical Center
Type of Action: Renewal
Date Issued: 01/22/07
License No.: IL-01766-03
Amendment No.: 5
License Reviewer: TH

File No.: 22
Licensee: Landauer, Inc.
Type of Action: Renewal
Date Issued: 2/5/09
License No.: IL-01376-01
Amendment No.: 11
License Reviewer: MB

File No.: 23
Licensee: The Art Institute of Chicago
Type of Action: Amendment
Date Issued: 6/21/07
License No.: IL-01631-01
Amendment No.: 9
License Reviewer: MB

File No.: 24
Licensee: Orland Park Equine Hospital, Ltd.
Type of Action: Renewal
Date Issued: 10/26/06
License No.: IL-07152-01
Amendment No.: 11
License Reviewer: SK

File No.: 25
Licensee: Varian Medical Systems
Type of Action: Renewal
Date Issued: 1/14/08
License No.: IL-01143-01
Amendment No.: 13
License Reviewer: TH

File No.: 26
Licensee: Bard Brachytherapy, Inc.
Type of Action: Renewal
Date Issued: 5/24/05
License No.: IL-02062-01
Amendment No.: 9
License Reviewer: MB

File No.: 27
Licensee: Tronox LLC
License No.: STA-583
Type of Action: Renewal
Amendment No.: 73
Date Issued: 2/25/09
License Reviewer: JB

File No.: 28
Licensee: Raymond G. Scott Cancer Center
License No.: IL-02371-01
Type of Action: Termination
Amendment No.: 1
Date Issued: 1/11/06
License Reviewer: SK

File No.: 29
Licensee: Life Source Blood Services of Corporate
License No.: IL-01851-01
Type of Action: Termination
Amendment No.: 12
Date Issued: 8/17/07
License Reviewer: TH

File No.: 30
Licensee: Washington County Hospital
License No.: IL-01035-01
Type of Action: Amendment
Amendment No.: 27
Date Issued: 10/23/08
License Reviewer: RH

APPENDIX E

INCIDENT CASEWORK REVIEWS

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

File No.: 1
Licensee: Pharmacy Services of Peoria
Date of Incident: 10/26/05
Investigation Dates: 10/26-27/05
License No.: IL-01874-01
NMED Log No.: 050720
Type of Incident: Contamination
Type of Investigation: Telephone

File No.: 2
Licensee: Medi-Physics, Inc.
Date of Incident: 11/28/05
Investigation Date: 11/29/05
License No.: IL-01052-01
NMED Log No.: 050782
Type of Incident: Contamination
Type of Investigation: Telephone

File No.: 3
Licensee: Indev Gauging Systems
Date of Incident: 8/24/05
Investigation Date: 8/26/05
License No.: IL-02050-01
NMED Log No.: 050599
Type of Incident: Leaking Source
Type of Investigation: Site

File No.: 4
Licensee: Bard Brachytherapy
Date of Incident: 11/9/06
Investigation Date: 11/10/06
License No.: IL-02062-01
NMED Log No.: 060695
Type of Incident: Lost Material
Type of Investigation: Telephone

File No.: 5
Licensee: Rush-Copley Medical Center
Dates of Incidents: 7/28/06 and 8/22/06
Investigation Date: 8/28/06
License No.: IL-01207-01
NMED Log No.: 060551
Type of Incident: Medical Event
Type of Investigation: Telephone

File No.: 6
Licensee: Oxford Instruments
Date of Incident: 4/18/06
Investigation Date: 6/23/06
License No.: IL-01694-01
NMED Log No.: 060602
Type of Incident: Leaking Source
Type of Investigation: Telephone

File No.: 7
Licensee: Children's Memorial Medical Center
Date of Incident: 7/24/06
Investigation Date: 7/28/06
License No.: IL-01165-01
NMED Log No.: 060480
Type of Incident: Medical Event
Type of Investigation: Site

File No.: 8
Licensee: Quad City Testing Laboratory
Date of Incident: 7/17/06
Investigation Date: 7/18/06
License No.: IL-01089-01
NMED Log No.: 060493
Type of Incident: Overexposure
Type of Investigation: Site

File No.: 9
Licensee: S.T.A.T.E Testing, LLC
Date of Incident: 6/2/06
Investigation Date: 6/2/06
License No.: IL-01015-01
NMED Log No.: 060368
Type of Incident: Stolen Material
Type of Investigation: Site

File No.: 10
Licensee: Chicago Prostate Cancer Center
Date of Incident: 1/5/06
Investigation Date: 1/11/06
License No.: IL-02015-01
NMED Log No.: 0060040
Type of Incident: Leaking Source
Type of Investigation: Site

File No.: 11
Licensee: St. James Hospital and Health Center
Date of Incident: 11/29/06
Investigation Date: 1/8/07
License No.: IL-01289-01
NMED Log No.: 070014
Type of Incident: Medical Event
Type of Investigation: Site

File No.: 12
Licensee: Pinnacle Foods Group, Inc.
Date of Incident: 3/13/07
Investigation Date: 4/6/07
License No.: 9223630 (General)
NMED Log No.: 070213
Type of Incident: Lost Material
Type of Investigation: Telephone/Site

File No.: 13
Licensee: McNDT Leasing, Inc.
Date of Incident: 7/20/07
Investigation Date: 7/20/07
License No.: IL-01875-01
NMED Log No.: 070468
Type of Incident: Damaged Equipment
Type of Investigation: Site

File No.: 14
Licensee: Nuclear Oncology, S.C.
Date of Incident: 11/19/07
Investigation Date: 11/21/07
License No.: IL-01641-01
NMED Log No.: 070724
Type of Incident: Medical Event
Type of Investigation: Telephone

File No.: 15
Licensee: Miller Compressing
Date of Incident: 12/10/07
Investigation Date: 12/10/07
License No.: Non-Licensee
NMED Log No.: N/A
Type of Incident: Recovered Material
Type of Investigation: Telephone

File No.: 16
Licensee: Chicago Prostate Cancer Center
Date of Incident: 4/24/08
Investigation Date: 4/25/08
License No.: IL-02015-01
NMED Log No.: 080282
Type of Incident: Leaking Source
Type of Investigation: Telephone

File No.: 17
Licensee: Sterling Steel Company
Date of Incident: 7/7/08
Investigation Date: 7/7/08
License No.: IL-01785-01
NMED Log No.: 080518
Type of Incident: Damaged Sources
Type of Investigation: Site

File No.: 18
Licensee: Team Industrial Services
Date of Incident: 9/12/08
Investigation Date: 9/12/08
License No.: IL-01136-01
NMED Log No.: 080566
Type of Incident: Equipment Failure
Type of Investigation: Telephone

File No.: 19
Licensee: GSG Material Testing, Inc.
Date of Incident: 11/6/08
Investigation Date: 11/7/08
License No.: IL-02340-01
NMED Log No.: 080776
Type of Incident: Stolen Material
Type of Investigation: Telephone

File No.: 20
Licensee: GE Healthcare
Date of Incident: 12/5/08
Investigation Date: 12/5/08
License No.: IL-01052-01
NMED Log No.: N/A
Type of Incident: Contamination
Type of Investigation: Telephone

APPENDIX F

SEALED SOURCE & DEVICE (SS&D) CASEWORK REVIEWS

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

File No.: 1
Registry No.: IL-1074-S-101-S
Manufacturer: Bard Brachytherapy, Inc.
Date Issued: 4/1/08
SS&D Type: (AA) Manual Brachytherapy
Model No.: STM 125I
Type of Action: Amendment
SS&D Reviewers: SK,CV

Comment:
Licensee's corrective actions were not incorporated into the license of the SS&D registry.

File No.: 2
Registry No.: IL-1074-S-101-S
Manufacturer: Bard Brachytherapy, Inc.
Date Issued: 6/6/07
SS&D Type: (AA) Manual Brachytherapy
Model No.: STM 125I
Type of Action: Amendment
SS&D Reviewer: CV

File No.: 3
Registry No.: IL-1074-S-101-S
Manufacturer: Bard Brachytherapy, Inc.
Date Issued: 1/31/07
SS&D Type: (AA) Manual Brachytherapy
Model No.: STM 125I
Type of Action: Amendment
SS&D Reviewer: CV

File No.: 4
Registry No.: IL-1074-S-101-S
Manufacturer: Bard Brachytherapy, Inc.
Date Issued: 1/31/06
SS&D Type: (AA) Manual Brachytherapy
Model No.: STM 125I
Type of Action: Amendment
SS&D Reviewer: CV

File No.: 5
Registry No.: IL-1074-S-101-S
Manufacturer: Bard Brachytherapy, Inc.
Date Issued: 12/16/05
SS&D Type: (AA) Manual Brachytherapy
Model No.: STM 125I
Type of Action: Amendment
SS&D Reviewer: SK

File No.: 6
Registry No.: IL-1074-S-101-S
Manufacturer: Bard Brachytherapy, Inc.
Date Issued: 9/13/05
SS&D Type: (AA) Manual Brachytherapy
Model No.: STM 125I
Type of Action: Amendment
SS&D Reviewer: SK

File No.: 7
Registry No.: IL-1082-S-101-S
Manufacturer: REVISS Services, Inc.
Date Issued: 11/1/08
SS&D Type: (J)(K)(L)(M) Gamma Irradiator
Model No.: RSL2089
Type of Action: Amendment
SS&D Reviewers: MB,CV

Comment:
An e-mail containing a diagram was not included as a tie down in the SS&D registry.

File No.: 8
Registry No.: IL-235-D-102-B
Manufacturer: Oxford Instruments America, Inc.
Date Issued: 12/29/08
SS&D Type: (U) X-Ray Fluorescence
Model No.: Various
Type of Action: Amendment
SS&D Reviewers: SK,CV

File No.: 9
Registry No.: IL-605-D-106-B
Manufacturer: Siemens Medical Solutions USA, Inc.
Date Issued: 10/8/08
SS&D Type: (Y) Calibrator
Model No.: 07837722
Type of Action: Amendment
SS&D Reviewers: SK,CV

File No.: 10
Registry No.: IL-605-D-106-B
Manufacturer: Siemens Medical Solutions USA, Inc.
Date Issued: 7/25/07
SS&D Type: (Y) Calibrator
Model No.: 07837722
Type of Action: Amendment
SS&D Reviewer: SK