

November 17, 2011

Michael Fine, M.D., Director
Rhode Island Department of Health
3 Capitol Hill
Providence, Rhode Island 02908

Dear Dr. Fine:

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 Rhode Island on October 24-28, 2011. The review team's preliminary findings were discussed with you and members of your staff on the last day of the review. The review team's proposed recommendations are that the Rhode Island Agreement State Program be found adequate, but needs improvement, to protect public health and safety, and compatible with NRC's program. The review team is also recommending that the Rhode Island Agreement State Program be placed on Monitoring.

The 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. One additional area applicable to your program was identified as a non-common performance indicator and is 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.

The review team is recommending that Rhode Island's performance be found unsatisfactory for the performance indicator Status of the Materials Inspection Program and satisfactory, but needs improvement, for the performance indicators Technical Quality of Inspections and Compatibility Requirements. The review team found Rhode Island's performance to be satisfactory for the other indicators reviewed. The review team is recommending that the NRC initiate a period of Monitoring according to the criteria in NRC Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)," which states that Monitoring may be used in cases where weaknesses in a program result in a less than fully satisfactory performance for one or more performance indicators. Monitoring is an informal process that allows the NRC to maintain an increased level of communication with an Agreement State program. The review team believes that Monitoring will be a useful tool in assessing the State's progress toward addressing the programmatic issues and deficiencies identified during the review.

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 proposed final IMPEP report to the MRB. Comments are requested within four weeks from your receipt of this letter. This schedule will permit the issuance of the final IMPEP report in a timely manner.

M. Fine

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The team will review your response, make any necessary changes to the report, and issue it to the MRB as a proposed final report. Coordinating with your staff, I scheduled the Rhode Island MRB meeting for January 17, 2012, from 1:00 p.m.-3:00 p.m. EST. The NRC will provide invitational travel for you or your designee to attend the MRB meeting at NRC Headquarters in Rockville, Maryland. The 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) 860-8151.

Thank you for your cooperation.

Sincerely,

/RA/

Janine F. Katanic, Ph.D., CHP
Health Physicist
Division of Materials Safety and State Agreements
Office of Federal and State Materials
and Environmental Management Programs

Enclosure:
Draft Rhode Island IMPEP Report

cc w/encl:

Raymond Rusin, Chief
Office of Facilities Regulation
Division of Environmental and Health Services Regulation

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OFFICIAL RECORD



INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM
REVIEW OF THE RHODE ISLAND AGREEMENT STATE PROGRAM

OCTOBER 24-28, 2011

DRAFT REPORT

Enclosure

EXECUTIVE SUMMARY

This report presents the results of the Integrated Materials Performance Evaluation Program (IMPEP) review of the Rhode Island Agreement State Program. The review was conducted during the period of October 24-28, 2011, by a review team composed of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the State of Ohio.

Based on the results of this review, the review team recommends that Rhode Island's performance be found unsatisfactory for the performance indicator Status of the Materials Inspection Program; satisfactory, but needs improvement, for the performance indicators Technical Quality of Inspections and Compatibility Requirements; and satisfactory for the three other indicators reviewed. The review team made six recommendations regarding the performance of the Rhode Island Agreement State Program. These recommendations included areas for improvement to correct identified performance deficiencies and weaknesses in Rhode Island's Agreement State Program. One of these recommendations remains open from the 2007 IMPEP review. The recommendations address: (1) documentation of the State's training and qualification program for license reviewers and inspectors, including the reimplementation, use, and update of licensing and inspection qualification cards for each staff member; (2) taking appropriate measures to conduct Priority 1, 2, and 3 inspections and initial inspections in accordance with the inspection priority in NRC's Inspection Manual Chapter 2800, "Materials Inspection Program"; (3) taking measures to ensure that inspection records and narrative reports are documented in accordance with the Program's Inspection Manual; (4) ensuring that a Program supervisor or other appropriately qualified senior staff member accompany each inspector, at least annually, to ensure quality and consistency in the inspection program; (5) conducting initial and subsequent security-related inspections in a manner that provides for verification of licensee compliance with the requirements; and (6) adoption of all currently overdue regulations required for compatibility and adopt future regulation amendments within their required three year time frame.

The review team recommends that the Rhode Island Agreement State Program be found adequate, but needs improvement, 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 NRC initiate a period of Monitoring for Rhode Island. The review team further recommends that a Periodic Meeting be held within one year of the current review and that a full IMPEP review take place in four years from the date of the current review.

1.0 INTRODUCTION

This report presents the results of the review of the Rhode Island Agreement State Program. The onsite portion of the review was conducted during the period of October 24-28, 2011, by a review team composed of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the State of Ohio. 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 October 27, 2007, to October 28, 2011, were discussed with Rhode Island 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.]

The Rhode Island Agreement State Program (the Program) is administered by the Office of Facilities Regulation (the Office), in the Division of Environmental and Health Services Regulation (the Division). The Division is part of the Rhode Island Department of Health (the Department). Organizational charts for the Program, the Office, the Division, and the Department are included as Appendix B.

At the time of the review, the Rhode Island Agreement State Program regulated approximately 49 specific licenses authorizing byproduct, source, and certain special nuclear materials. The review focused on the radioactive materials program as it is carried out under the Section 274b (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of Rhode Island.

In preparation for the review, a questionnaire addressing the common and applicable non-common performance indicators was sent to the Program on June 27, 2011. The Program provided its response to the questionnaire via email on October 7, 2011, with supplemental information provided on October 11, 2011 and October 20, 2011. A publicly available version of the questionnaire response can be found in NRC's Agencywide Documents Access and Management System (ADAMS) using the Accession Number ML112840079.

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

Section 2.0 provides the status of recommendations from the previous IMPEP. The results of the review for 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 indicator, and Section 5.0 summarizes the review team's findings and recommendations. The review team's

recommendations are comments that relate directly to the Program's performance. A response is requested from the State to all recommendations in the final report.

2.0 STATUS OF ITEMS IDENTIFIED IN PREVIOUS REVIEWS

During the previous IMPEP review, which covered the period of November 18, 2003, to October 25, 2007, the review team made two recommendations regarding program performance. The current status of the recommendations is as follows:

1. The review team recommends that the State take appropriate measures to conduct Priority 1, 2, and 3 inspections and initial inspections in accordance with the inspection priority schedule in NRC Inspection Manual Chapter (IMC) 2800. (Section 3.2 of the 2007 IMPEP report)

Status: The review team calculated that the Program performed 28 percent of its Priority 1, 2, and 3, and initial inspections overdue during the review period. The review team found no Priority 1, 2, and 3 inspections were overdue at the time of the review. Although no initial inspections were conducted overdue during the review period, one initial inspection was overdue at the time of the review. Based on the results from the current review, the review team is unable to close this recommendation and believes that the actions taken by the State to address the recommendation have not been effective. This recommendation remains open.

2. The review team recommends that the State develop a written documentation of its radioactive materials licensing program to ensure that a memorialized program exists to train and transfer knowledge to future, as well as current, staff. (Section 3.4 of the 2007 IMPEP report)

Status: On October 26, 2011, the Program Manager published a memo to document the specific guidance to be used by Program staff when performing licensing actions. The memo documented: (1) the conditions under which the NRC NUREG-1556 series will be used; (2) the specific circumstances where Rhode Island requires submission and verification in addition to the information requested in the NRC NUREG-1556 series; and (3) the use of Rhode Island specific pre-licensing guidance. This recommendation is closed.

3.0 COMMON PERFORMANCE INDICATORS

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

3.1 Technical Staffing and Training

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

evaluating this indicator.

The Program consists of four technical staff positions and a vacant Supervising Radiological Health Specialist (Program Supervisor) position. The four technical staff positions consist of three license reviewers/inspectors, whose roles vary in support of the Program, and an individual that provides support to emergency response and equipment maintenance. During the review period, one license reviewer/inspector left in January 2009 and then returned to the Program in June 2010. All four technical staff members provide partial support to the radioactive materials program ranging from 0.2 full-time equivalents (FTE) to 0.9 FTE. Based on discussions and information provided in response to the questionnaire, the team determined that 1.8 FTE are allocated to the radioactive materials program. This does not include the contribution from the vacant Program Supervisor position. With a total of 49 licenses, the level of staffing appeared adequate to perform the Program's licensing and inspection activities.

The Program Supervisor position has been vacant since October 2008. Efforts to fill the vacancy are ongoing; however, due to current State budget matters the position has not been allowed to be filled and is not expected to be approved to be filled in Rhode Island fiscal year 2012. The Rhode Island Fiscal Year 2008 Budget Act, which became effective July 1, 2007, created a restricted receipts account for deposit of the Program's licensing fees. The dedicated fund for the Program allows the radioactive materials program to be financially self-sufficient, recovering associated costs through licensing fees. Even though this dedicated fund is in place, since the State as a whole currently has budget issues, the Program has not been approved to use these dedicated funds to fill the vacant position.

The review team found that the Program trains its technical staff in a manner that is consistent with the requirements in the NRC/Organization of Agreement States Training Working Group Report and NRC's Inspection Manual Chapter (IMC) 1246, "Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area", however this training and qualification program is not formally documented. The technical staff members have degrees in a physical or life science and have several years of professional experience in radiation protection. The Program uses on-the-job training to supplement formal coursework. Staff members are typically assigned increasingly complex duties as they progress through the qualification process. The review team found that while personnel file memoranda qualification cards were in place during the last IMPEP review, they have not been updated to reflect the current qualifications of the technical staff. At the time of the review, one technical staff member was a fully qualified license reviewer/inspector, and the other technical staff member was still completing the qualification process. As a result of the lack of formal documentation of the State's training program and the lack of current or updated technical staff qualification cards, it was difficult to determine what was necessary for the one technical staff member to become fully qualified for licensing and inspection activities. The review team recommends that the State document its training and qualification program for license reviewers and inspectors, including the reimplementation, use, and update of licensing and inspection qualification cards for each staff member.

Rhode Island statute Title 23, Chapter 23, Section 23-1.3-13 provides for the creation of an 11-member State Radiation Advisory Commission (the Advisory Commission), whose members have expertise in radiation protection and radiation health. The Advisory Commission provides advice on radiation protection issues and regulations to the Program and meets on an as-

needed basis. Since the Advisory Commission functions in a purely advisory capacity, the Program has the discretion to accept or reject direction it receives from the Advisory Commission. The review team identified no potential conflicts of interest.

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

3.2 Status of Materials Inspection Program

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

The review team verified that the Program's inspection frequencies for all types of radioactive material licenses are at least the same frequency as NRC's inspection frequencies, listed in NRC IMC 2800, "Materials Inspection Program." The review team determined that the Program conducted a total of 42 inspections of Priority 1, 2, and 3 licensees during the review period. Of the 42 Priority 1, 2, and 3 inspections, the review team determined that 12 inspections were completed overdue during the review period by more than 25 percent of the inspection frequency prescribed by IMC 2800. The review team identified that at the time of the review, no Priority 1, 2, and 3 inspections were overdue by more than 25 percent of the inspection frequency prescribed by IMC 2800.

The review team determined that the Program issued four new licenses during the review period. Three of the initial inspections were conducted within one year of license issuance in accordance with Rhode Island's equivalent inspection manual to NRC's IMC 2800. The review team identified that one new license had not been inspected within one year of license issuance and was still overdue at the time of the review. As required by IMC 2800 and by Rhode Island's equivalent inspection manual, initial inspections should be conducted within 12 months of license issuance. This applies even if the licensee still has not received licensed material. This criterion was discussed with Program management and staff and the review team determined that the reason this initial inspection had not been conducted was due to a misunderstanding of the criteria for initial inspections of licensees that have not possessed licensed material or performed licensed activities. The Program committed to conducting this overdue initial inspection. Overall, the review team calculated that the Program performed 28 percent of its Priority 1, 2, and 3, and initial inspections overdue during the review period.

The timely conduct of inspections has been an ongoing issue for the State. Specifically, the 2002 IMPEP also identified issues with inspection timeliness, which led to the State being placed on Heightened Oversight. A follow-up IMPEP performed in 2003 found improvement in this area, which resulted in the State being taken off Heightened Oversight. During the 2007 IMPEP review, the State was found satisfactory, but needs improvement for this indicator. The 2007 IMPEP review did not make a determination as to the percent of overdue inspections during the review period, but noted that many inspections had been conducted overdue during

the review period and several were overdue at the time of the review. The 2007 IMPEP made a recommendation that the State take appropriate measures to conduct Priority 1, 2, and 3 inspections and initial inspections in accordance with the inspection priority in IMC 2800 (Section 3.2 of the 2007 IMPEP report). Based on the results from the current review, the review team believes that the recommendation regarding conducting inspections in accordance with NRC's IMC 2800 remain open.

The review team evaluated the Program's timeliness of issuance of inspection reports. The Program has a policy of issuing the inspection findings to licensees within 30 days from the date of the inspection. Inspection reports were generally issued to the licensee within 30 days. Of the 42 inspection files reviewed, the review team identified five inspection findings that were issued beyond the 30-day goal.

During the review period, the Program granted 49 reciprocity requests to candidate licensees based upon the criteria in IMC 1220, "Processing of NRC Form 241 and Inspection of Agreement State Licensees Operating under 10 CFR 150.20". The review team determined that the Program was unable to consistently perform inspections of 20 percent of the reciprocity licensees annually. During calendar years 2008 and 2009, the Program inspected less than 20 percent of candidate licensees operating under reciprocity. However, during calendar year 2010 and for January thru October 2011 the Program inspected greater than 20 percent of candidate licensees operating under reciprocity.

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

3.3 Technical Quality of Inspections

The review team evaluated 13 inspection reports that included inspection records, enforcement documentation and letters to licensees. The review team also interviewed the Program Manager as well as technical staff members who were responsible for radioactive materials inspections conducted during the review period. The casework reviewed covered a wide variety of inspection types, including academic broad scope, industrial radiography, nuclear pharmacy, self-shielded irradiators, and medical-written directives required. The casework reviewed represented inspections conducted by the two current members of the technical staff. Appendix C lists the inspection casework files reviewed as well as the results of the inspector accompaniments performed by the review team.

Based on the review of casework, the review team noted that the methodology for documenting inspections was based on the Program's Radiation Control Agency Inspection Manual, dated May 18, 2002. The Program's Inspection Manual directs the staff to document inspections in an inspection record or a narrative report. The review team found that it was the practice of the inspectors that for routine health and safety inspections, the inspectors duplicated the previous inspection record or narrative report and, if no violations were found during the current inspection, the current inspection record or narrative report largely remained the same with no additional documentation. The review team identified several casework files where the current inspection record or narrative report had been duplicated and was nearly identical to several

previous inspection records or narrative reports. Because each inspection is a snapshot in time, it is unlikely that the snapshot remains the same from inspection to inspection. Furthermore, inspection observations of licensed activities are likely to vary from inspection to inspection. The duplication of the previous inspection record can result in a static inspection record that is fixed at a point in time several inspections prior to the current inspection. The review team found that although the inspection records and narrative reports were completely filled in by the inspectors, the technical quality of the information contained therein was lacking. For Increased Controls inspections, the review team found that it was the practice of the inspectors that if the previous inspection did not result in any violations, the current inspection was not documented in an inspection record or a narrative report.

The Program's Inspection Manual provides instructions to staff regarding methods to document inspection results. As described above, the review team found that the Program's inspection documentation practices for inspection records and narrative reports often did not follow the Program's Inspection Manual. As a result, inspection records and narrative reports did not contain sufficient detail to: describe the inspection that was conducted, areas inspected, or observations made; contain sufficient documentation to ensure that licensees' performance with respect to health, safety and security were acceptable; provide the status of violations from previous inspections; or provide sufficient information to support identified violations. The issues with respect to inspection report or narrative report technical quality were compounded due to a lack of appropriate management review resulting from the vacancy of the Program Supervisor. The review team recommends that the State take measures to ensure that inspection records and narrative reports are documented in accordance with the Program's Inspection Manual.

The review team found that during the review period, the two inspectors had not been accompanied annually by a supervisor or other senior staff member during any year of the review period. The lack of supervisory accompaniments was due, in part, to the vacant Program Supervisor position. As noted in Office of Federal and State Materials and Environmental Management Programs (FSME) Procedure SA-102, "Reviewing the Common Performance Indicator, Technical Quality of Inspections," in an Agreement State where there is a vacancy in a supervisory position, the accompaniments may be performed by an experienced senior staff member until the vacancy is filled. The review team recommends that a Program supervisor or other appropriately qualified senior staff member accompany each inspector, at least annually, to ensure quality and consistency in the inspection program.

The review team noted that the Program maintained appropriately calibrated survey instruments to support the inspection program. The instrumentation is calibrated by an outside vendor according to the manufacturer's recommendations. The vendor utilizes National Institute of Standards and Technology traceable sources to perform calibrations. The Program uses a database to track each instrument, its current location, and next calibration date.

A review team member accompanied the two inspectors during the week of September 26, 2011. One inspector was a fully qualified inspector and the other inspector was qualified to independently inspect the license type selected for the accompaniment inspection. The license types inspected as part of the accompaniments included industrial radiography and veterinary therapeutic non-human use. Two of the inspections included a review of the licensee's implementation of the Increased Controls. The accompaniments and associated comments are

identified in Appendix C.

The Program's Radiation Control Agency Inspection Manual, dated May 18, 2002, as well as the recent revision dated October 2011, describes the approach to be taken by Program inspectors while conducting inspections. Both of these documents describe that inspector emphasis should be placed on observing licensee performance, and that the review of licensee records should be directed toward verifying that current operations are in compliance rather than a review of historical records, which should only occur if the inspector believes it is necessary to determine the presence of a persistent problem. During the inspector accompaniments, the review team member observed both inspectors spend the majority of their inspection time directed toward a review of historical records rather than observing licensed activities and licensee performance or interviewing workers. This matter was discussed with the inspectors, who indicated that they performed the inspections in this manner because this is the way they were trained and has become a normal practice for them. The review team member discussed this with the Program manager, who indicated that the Department is very focused on performance objectives and that he would begin taking measures to instill these practices on the Program technical staff.

During the observed inspections of the Increased Controls and Fingerprinting requirements, the inspectors did not review or verify licensee compliance with many of the requirements. This matter was discussed with the inspectors, who indicated that the practice was that if the previous inspection did not result in any violations then the matter did not require review during future inspections. The practice of not verifying licensee compliance with many of the Increased Controls requirements is contrary to the purpose of performing an inspection. The Program may wish to review NRC's inspection guidance related to initial Increased Controls inspections found in NRC Temporary Instruction 2800/038, "Inspection of the Implementation of Increased Controls for Licensees Authorized to Possess Risk Significant Radioactive Material," dated March 30, 2006, and inspection guidance for subsequent inspections of Increased Controls licensees which was transmitted to the Agreement States in RCPD 07-006, "Continuing Inspections of Increased Controls Licensees," dated September 27, 2007. The review team recommends that the State conduct initial and subsequent security-related inspections in a manner that provides for verification of licensee compliance with the requirements.

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

3.4 Technical Quality of Licensing Actions

The review team examined completed licensing casework and interviewed the staff for 15 licensing actions. Licensing actions were reviewed for completeness, consistency, proper radioisotopes and quantities, qualifications of authorized users, adequate facilities and equipment, adherence to good health physics practices, operating and emergency procedures, appropriateness of the license conditions, Increased Controls, and overall technical quality. The casework was also reviewed for use of appropriate deficiency letters, reference to appropriate regulations, supporting documentation, consideration of enforcement history, pre-licensing visits, peer/supervisory review, and proper signatures. The casework was checked for retention of necessary documents and supporting data.

The licensing casework was selected to provide a representative sample of licensing actions completed during the review period. Licensing actions selected for evaluation included five new licenses, one renewal, five amendments, and four terminations. Casework reviewed included a cross-section of license types, including: industrial radiography; medical broad scope; veterinary non-human use; stereotactic radiosurgery; academic broad scope; nuclear pharmacy; manufacturing and distribution; portable gauges; medical institution-written directive required; medical private practice; and research and development. A listing of the licensing casework reviewed can be found in Appendix D.

All licensing actions received by the Program are assigned a log number in the Radiation Control Program computer tracking system. The licensing action is then assigned for review to one of two license reviewers for their action. The assigned license reviewer is responsible for reviews, deficiency letters, coordination with the licensee/applicant, and finalizing the licensing action. When a licensing action is completed, a senior staff member reviews the licensing action for quality and the Program manager signs and issues the licensing action. The review team noted that the licensing actions were consistent with the licensing guidance found in the State's regulations as well as the NRC NUREG-1556 series "Consolidated Guidance About Materials Licensees."

The review team found that the licensing actions were thorough, complete, consistent, and of high quality, with health, safety, and security issues properly addressed. License tie-down conditions were stated clearly, backed by information contained in the file, and auditable. Licensees' compliance histories were taken into account when reviewing all renewal applications and major amendments.

The review team evaluated a license termination that was found to be a thorough and complete documentation of the termination process, to include an on-site inspection and verification of material transfer. The review team found that terminated licensing actions were well-documented, showing appropriate material transfer and survey records. The review team noted that confirmatory surveys were conducted, when appropriate.

The review team found that the Program addressed maximum possession limits on all active radioactive materials licenses as requested by the FSME Letter RCPD-10-007, "Requesting Implementation of a Policy on Maximum Possession Limits for Radioactive Materials Licenses" dated June 21, 2010. The review team noted that the licensing casework files examined had maximum possession limits in accordance with the guidance provided by NRC.

The review team assessed the Program's implementation of NRC's pre-licensing guidance issued on September 22, 2008, and transmitted to the Agreement States via FSME Letter RCPD-08-020, "Requesting Implementation of the Checklist to Provide a Basis for Confidence That Radioactive Material Will Be Used as Specified on a License and the Checklist for Risk-Significant Radioactive Material." The Program had incorporated the NRC pre-licensing guidance into its own Rhode Island specific "Enhanced Pre-Licensing Guidance." The review team found that the Program determined and documented the basis of confidence, through consistent use of the pre-licensing checklist and guidance, that radioactive materials will be used as intended and as described in the application or amendment request, prior to authorizing the material on the license.

The review team verified that the Program used license conditions to require licensees to follow Increased Controls and Fingerprinting requirements. The review team determined that documents containing sensitive security-related information were appropriately controlled and maintained in a manner to limit access. The Program reviews documents requested under Rhode Island Code, Chapter 38-2, "Rhode Island-Access to Public Records" to determine whether the document should be withheld from public disclosure.

Section 3.4 of the 2007 IMPEP report recommended that the State develop a written documentation of its radioactive materials licensing program to ensure that a memorialized program exists to train and transfer knowledge to future, as well as current, staff. The review team found that when processing licensing actions, the Program consistently used the licensing guidance in the NRC NUREG-1556 series "Consolidated Guidance About Materials Licensees." However, use of these licensing guidance documents was not a formalized policy within the Program. This matter was discussed with the Program Manager. Although the Program's process was to follow the licensing guidance, the process had not been documented to ensure that a memorialized program exists to train and transfer knowledge to current and future staff. During the review, the Program manager held a staff meeting with the Program staff to discuss this issue. Following the meeting, on October 26, 2011, the Program Manager published a memo to document the Rhode Island specific guidance to be used by Program staff when performing licensing actions. The memo documented: (1) the conditions under which the NRC NUREG-1556 series will be used; (2) the specific circumstances where Rhode Island requires the submission and verification in addition to the information requested in the NRC NUREG-1556 series; and (3) the use of Rhode Island specific pre-licensing guidance. This memo satisfies the recommendation from the 2007 IMPEP and the recommendation is considered closed.

Based on the IMPEP evaluation criteria, the review team recommends that Rhode Island'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 Program's actions in responding to incidents and allegations, the review team examined the Program's response to the questionnaire relative to this indicator, evaluated selected incidents reported for Rhode Island in the Nuclear Material Events Database against those contained in the Program's files, and evaluated the casework for four radioactive materials incidents. A listing of the casework examined, with case-specific comments, can be found in Appendix E. The review team also evaluated the Program's response to one allegation that was referred to the Program during the review period. The Program reported that they did not receive any other allegations during the review period.

In evaluating the effectiveness of the Program's response to incidents and events, the review team evaluated the program's response to four incidents. The incidents selected for review included incidents related to: contamination/transportation events, release of radioactive material, and a reported medical event. When incidents were reported to the Program by licensees, the Program in turn took actions consistent with the potential health and safety significance of the incident. For minor incidents, the Program typically followed up on the event through phone calls and emails for the licensee. In the case of the potential medical event, the

Program conducted an onsite review that was performed by one of the members of the Program's technical staff as well as an individual from outside of Program staff that had extensive training and experience in conducting investigations related to the medical arena.

In evaluating the effectiveness of the Program's response to allegations, the review team identified one allegation that had been referred to the Program by NRC during the review period. The Program reported that they did not receive any other allegations during the review period. The review team found that the Program's review of the allegation referred by NRC included an on-site inspection by a member of the Program staff and was appropriate with the potential health and safety significance of the allegation.

When notification of an allegation or complaint is received, the Office's Incident Response Coordinator enters the information into the Office-wide Aspen Complaints Tracking System (ACTS). The Office Incident Response Coordinator will review the allegation and contact the appropriate State program responsible for the allegation. The Office Incident Response Coordinator, working in consultation with the Program staff, determines the appropriate initial response to an allegation or complaint. As appropriate, the pertinent information is forwarded to the Program for investigation and follow-up and/or enforcement actions. The allegations are tracked to completion in ACTS. The review team noted that Rhode Island law requires that certain documents be made available upon request from a member of the public. The Program makes every effort to protect an alleger's identity, but cannot guarantee that an alleger's identification would not be released under applicable State laws or in the event of legal proceedings.

Based on the IMPEP evaluation criteria, the review team recommends that Rhode Island's performance with respect to the indicator, Technical Quality of Incident and Allegation Activities, be found satisfactory.

4.0 NON-COMMON PERFORMANCE INDICATORS

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

4.1 Compatibility Requirements

4.1.1 Legislation

Rhode Island became an Agreement State on January 1, 1980. The currently effective statutory authority for the Program is contained in the State of Rhode Island and Providence Plantations Department of Health Rules and Regulations for the Control of Radiation, Title 23, Chapter 23-1.3. In addition to 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. The review team noted that no legislation affecting the Program was passed during the review period.

Rhode Island Regulations are subject to Rhode Island General Laws-42-35-4.1, requiring all regulations promulgated by State agencies to be re-filed every five years to remain effective. The radiation control regulations were last filed in January 2007 and are due to be re-filed in January 2012.

4.1.2 Program Elements Required for Compatibility

The review team examined the Program'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 is maintained by FSME.

The Rhode Island Rules and Regulations for the Control of Radiation (R23-1.3-RAD) apply to all sources of ionizing radiation. Rhode Island requires a license for possession and use of all radioactive material including naturally occurring materials, such as radium, and accelerator-produced radionuclides. Rhode Island also requires registration of all equipment designed to produce x-rays or other ionizing radiation, as well as non-ionizing radiation from tanning equipment.

The initial timeframe for promulgation of a proposed regulation can vary depending on the complexity and number of regulations amended. The review team examined the State's administrative rulemaking process and found that the process takes between four and 12 months once the Program prepares a proposed regulation. This variance is due in part to the document being presented to the Rhode Island Radiation Advisory Commission for review and comment. Per Rhode Island statute Title 23, Chapter 23-1.3 the Advisory Commission is strictly consultative in nature and the Program has the discretion to accept or reject any recommendations that are made. After being reviewed by the Advisory Commission, the proposed regulations go through a Regulations Subcommittee for further review and modification to produce a final document. Once the regulations are adopted in final, the regulations are then filed with the Secretary of State and become effective 20 days after filing. Discussions with the staff indicated that there are no outside factors which affect the adoption of regulations within NRC's three year time requirement. The State has the authority to issue legally-binding requirements (e.g., license conditions) in lieu of regulations until compatible regulations become effective.

Current NRC policy requires that Agreement States adopt certain equivalent regulations or legally-binding requirements no later than three years after they become effective. The review team identified the following six amendments as overdue at the time of the review, including one that was identified as overdue during the previous IMPEP review:

- "Compatibility with IAEA Transportation Safety Standards (TS-R-1) and Other Transportation Safety Amendments," 10 CFR Part 71 amendment (69 FR 3697, 58038), that became effective October 1, 2004 and was due for Agreement State adoption by October 1, 2007.
- "Minor Amendments," 10 CFR Parts 20, 30, 32, 35, 40, and 70 amendment (71 FR 15005), that became effective March 27, 2006 and was due for Agreement State adoption on March 27, 2009.

- “Medical Use of Byproduct Material – Minor Corrections and Clarifications,” 10 CFR Parts 32 and 35 amendment (72 FR 45147 and 72 FR 54207), that became effective October 29, 2007 and was 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 became effective on November 30, 2007 and was 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 became effective December 17, 2007 and was 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 became effective on February 15, 2008 and was due for Agreement State adoption by February 15, 2011.

Through discussions with the Program, the team determined that Rhode Island does have a plan in place to adopt the six currently overdue regulations which includes submission of final regulations to the NRC by the second calendar quarter of 2012.

The State will need to address the following three amendments in upcoming rulemakings or by adopting alternate legally binding requirements:

- “Medical Use of Byproduct Material – Authorized User Clarification,” 10 CFR Part 35 amendment (74 FR 33901), that became effective on September 28, 2009 and is due for Agreement State adoption by September 28, 2012.
- “Licenses, Certifications, and Approvals for Materials Licensees,” 10 CFR Parts 30, 36, 39, 40, 51, 70, and 150 amendment (76 FR 56951), that became effective on November 14, 2011 and is due for Agreement State adoption by November 14, 2014.
- “Decommissioning Planning,” Parts 20, 30, 40, and 70 amendment (76 FR 35512) that will become effective on December 17, 2012, and is due for Agreement State adoption by December 17, 2015.

The review team recommends that the State adopt all currently overdue regulations required for compatibility and adopt future regulation amendments within their required three year time frame.

Based on the IMPEP evaluation criteria, the review team recommends that Rhode Island’s performance with respect to the indicator, Compatibility Requirements, be found satisfactory, but needs improvement.

4.2 Low-Level Radioactive Waste (LLRW) Disposal Program

In 1981, NRC amended its Policy Statement, "Criteria for Guidance of States and NRC in Discontinuance of NRC Authority and Assumption Thereof by states Through Agreement," to allow a State to seek an amendment for the regulation of 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 Rhode Island has such authority to regulate a LLRW disposal facility, NRC has not required States to have a program for licensing a disposal facility until such time as the State has been designated as a host State for a LLRW disposal facility. When an Agreement State has been notified or becomes aware of the need to regulate a LLRW disposal facility, it is expected to put in place a regulatory program that will meet the criteria for an adequate and compatible LLRW program. There are no plans for a commercial LLRW disposal facility in Rhode Island. Accordingly, the review team did not review this indicator.

5.0 SUMMARY

As noted in Sections 3.0 and 4.0 above, the review team recommends that Rhode Island's performance be found unsatisfactory for the performance indicator Status of the Materials Inspection Program; satisfactory, but needs improvement for the performance indicators Technical Quality of Inspections and Compatibility Requirements; and satisfactory for the three other indicators reviewed. The review team made six recommendations regarding the performance of the State. Overall, the review team recommends that the Rhode Island Agreement State Program be found adequate, but needs improvement, to protect public health and safety, and compatible with NRC's program.

Based on the results of the current IMPEP review, and in accordance with the criteria in NRC Management Directive 5.6, the review team recommends that a period of Monitoring be initiated for Rhode Island. Monitoring may be used in cases where weaknesses in a program result in a less than fully satisfactory performance for one or more performance indicators. Monitoring is an informal process that allows the NRC to maintain an increased level of communication with an Agreement State program. The review team believes that Monitoring will be a useful tool in assessing the State's progress toward addressing the programmatic issues and deficiencies identified during the review.

The review team further recommends that a Periodic Meeting be held within one year to assess the State's progress in addressing the open recommendations. The team recommends that the next IMPEP review take place in approximately four years from the date of the current IMPEP. The review team believes that the performance of a Periodic Meeting within one year will provide time to assess the State's progress and that if progress is not apparent, the timing of the next IMPEP review can be reassessed at that time.

Below are the review team's recommendations, as mentioned in the report, for evaluation and implementation by the State:

1. The review team recommends that the State document its training and qualification program for license reviewers and inspectors, including the reimplementation, use, and update of licensing and inspection qualification cards for each staff member. (Section

3.1)

2. The review team recommends that the State take appropriate measures to conduct Priority 1, 2, and 3 inspections and initial inspections in accordance with the inspection priority in IMC 2800. (Section 3.2 of the 2007 IMPEP report)
3. The review team recommends that the State take measures to ensure that inspection records and narrative reports are documented in accordance with the Program's Inspection Manual. (Section 3.3)
4. The review team recommends that a Program supervisor or other appropriately qualified senior staff member accompany each inspector, at least annually, to ensure quality and consistency in the inspection program. (Section 3.3)
5. The review team recommends that the State conduct initial and subsequent security-related inspections in a manner that provides for verification of licensee compliance with the requirements. (Section 3.3)
6. The review team recommends that the State adopt all currently overdue regulations required for compatibility and adopt future regulation amendments within their required three year time frame. (Section 4.1)

LIST OF APPENDICES

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APPENDIX A

IMPEP REVIEW TEAM MEMBERS

Name	Area of Responsibility
Janine Katanic, FSME	Team Leader Inspector Accompaniments Technical Quality of Inspections Technical Quality of Incident and Allegation Activities
Monica Orendi, Region I	Technical Staffing and Training Status of Materials Inspection Program Compatibility Requirements
Mark Light, Ohio	Technical Quality of Licensing Actions Technical Quality of Incident and Allegation Activities

APPENDIX B

RHODE ISLAND ORGANIZATION CHARTS

ADAMS ACCESSION NO.: ML112840093

APPENDIX C

INSPECTION CASEWORK REVIEWS

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

File No.: 1

Licensee: Primary Flow Signal, Inc.
Inspection Type: Routine, Initial, Announced
Inspection Date: 4/27/10

License No.: 3D-140-01
Priority: 1
Inspector: DK

File No.: 2

Licensee: Geisser Engineering
Inspection Type: Routine, Unannounced
Inspection Dates: 6/14, 20/11

License No.: 3L-050-01
Priority: 5
Inspector: DK

Comments:

- 1) The inspection report, which identified issues related to security as well as health and safety, was issued to the licensee on 10/7/2011, approximately 109 days after the date of the inspection.
- 2) Based on the information contained in the inspection records, some of the violations issued to the licensee were not well developed or well documented.

File No.: 3

Licensee: Primary Flow Signal, Inc.
Inspection Type: Special, Initial, Announced
Inspection Date: 4/27/10

License No.: 3D-140-01
Priority: 1
Inspector: DK

Comment:

The special inspection record did not contain sufficient information related to the inspection findings and observations, especially considering that this was the initial inspection of licensee compliance with the requirements.

File No.: 4

Licensee: Rhode Island Blood Center
Inspection Type: Special
Inspection Date: 7/28/10

License No.: 3E-100-01
Priority: 5
Inspector: CW

Comment:

The special inspection observations were not formally documented because no violations were identified. After discussing this with the inspector, the inspector was able to re-create an inspection record based on personal notes retained from the inspection.

File No.: 5

Licensee: Cardinal Health
Inspection Type: Routine, Unannounced
Inspection Date: 1/27/10

License No.: 3B-114-01
Priority: 2
Inspector: DK

Comment:

The inspection was performed overdue (greater than 25% of the due date) by approximately 30 days.

File No.: 6

Licensee: Brown University
Inspection Type: Routine, Unannounced
Inspection Dates: 6/14, 15, 22/10

License No.: 3K-036-01
Priority: 3
Inspector: DK

Comment:

The former Program Supervisor had placed a note in the file, dated 6/26/08, that the next inspector review and confirm licensee actions related to a recently-added licensed activity. The note to file mentioned 3 specific areas that warranted review and verification during the inspection. The inspection record did not document the inspector's review of these 3 specific items.

File No.: 7

Licensee: Brown University
Inspection Type: Special, Unannounced
Inspection Date: 6/22/10

License No.: 3K-036-01
Priority: 3
Inspector: DK

File No.: 8

Licensee: DiPrete Engineering, Inc.
Inspection Type: Initial, Unannounced
Inspection Date: 3/2/11

License No.: 3L-141-01
Priority: 5
Inspector: CW

File No.: 9

Licensee: Baker Testing Services, Inc.
Inspection Type: Reciprocity, Unannounced
Inspection Date: 5/12/08

License No.: RMRA-08-011
Priority: 1
Inspector: CW

File No.: 10

Licensee: St. Joseph Health Services
Inspection Type: Routine, Unannounced
Inspection Date: 4/2/08

License No.: 7B-025-01
Priority: 3
Inspector: DK

Comment:

The inspection was performed overdue (greater than 25% of the due date) by approximately 30 days.

File No.: 11

Licensee: Rhode Island Hospital
Inspection Type: Routine, Announced
Inspection Date: 8/2/10

License No.: 7A-051-02
Priority: 2
Inspector: DK

Comments:

- 1) The inspection was performed overdue (greater than 25% of the due date) by approximately 177 days.
- 2) The inspection record refers to the inspector's review of license conditions that were no longer part of the license at the time of the inspection.
- 3) The inspection report was issued to the licensee on 11/16/10, approximately 106 days after the date of the inspection.

File No.: 12

Licensee: Rhode Island Emergency Management Agency

License No.: 8A-009-01

Inspection Type: Routine and Special, Announced

Priority: 5

Inspection Date: 3/4/10

Inspector: DK

Comments:

- 1) The inspection reports, which identified issues related to security and health and safety, was issued to the licensee on 6/4/10, approximately 92 days after the date of the inspection.
- 2) Some of the violations issued to the licensee were not well developed based on the information contained in the inspection records.

File No.: 13

Licensee: Rhode Island Hospital

License No.: 7D-051-01

Inspection Type: Routine, Unannounced

Priority: 2

Inspection Dates: 1/NR/10-8/17/10

Inspector: DK

Comments:

- 1) The inspection report was issued to the licensee on 11/17/10, approximately 92 days after the date of the inspection.
- 2) The inspection record did not document if a review was performed related to items of non-compliance that were identified during the previous inspection.
- 3) The inspection record did not document a review of an incident that occurred in April 2010.

INSPECTOR ACCOMPANIMENTS

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

Accompaniment No.: 1

Licensee: Ocean State Technical Services

License No.: 3D-117-01

Inspection Type: Routine and Special, Announced

Priority: 1

Inspection Date: 9/27/11

Inspector: CW

Comments:

- 1) The inspection of licensee implementation of security requirements warranted a more detailed review and verification of licensee implementation than what was performed by the inspector, especially considering that the facility layout had

- changed from the last inspection.
- 2) The inspection was not in accordance with Program's inspection guidance which directs the inspector to focus on observations rather than a review of records. Also, the inspector's methodology for asking questions of the licensee did not facilitate verification of licensee compliance.

Accompaniment No.: 2

Licensee: Electric Boat Corporation

Inspection Type: Routine and Special, Announced

Inspection Date: 9/28/11

License No.: 3D-005-01

Priority: 1

Inspector: DK

Comments:

- 1) The inspection of licensee implementation of security requirements warranted a more detailed review and verification of licensee implementation than what was performed by the inspector.
- 2) The inspection focused on documentation rather than a review licensee performance. The inspector's methodology for asking questions of the licensee did not facilitate verification of licensee compliance.

Accompaniment No.: 3

Licensee: Ocean State Veterinary Specialists

Inspection Type: Routine, Announced

Inspection Date: 9/29/11

License No.: 3K-126-01

Priority: 5

Inspector: DK

Comments:

- 1) The inspection focused on documentation rather than a review licensee performance. The inspector's methodology for asking questions of the licensee did not facilitate verification of licensee compliance.
- 2) The inspector did not have a thorough understanding of the proper use and operation of radiation survey and measurement instrumentation and the concept of instrument efficiency.

APPENDIX D

LICENSE CASEWORK REVIEWS

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

File No.: 1 Licensee: Primary Flow Signal, Inc. Type of Action: New Date Issued: 10/15/09	License No.: 3D-140-01 Amendment No.: 0 License Reviewer: DK
File No.: 2 Licensee: Roger Williams Radiation Therapy, LLC Type of Action: New Date Issued: 10/29/08	License No.: 7B-139-01 Amendment No.: 0 License Reviewer: WD
File No.: 3 Licensee: Rhode Island Hospital Type of Action: Amendment Date Issued: 07/12/10	License No.: 7A-051-02 Amendment No.: 38 License Reviewer: JF
File No.: 4 Licensee: Cardinal Health Type of Action: Renewal Date Issued: 02/14/11	License No.: 3D-114-01 Amendment No.: 17 License Reviewers: JF, DK
File No.: 5 Licensee: DiPrete Engineering Associates Type of Action: New Date Issued: 05/20/10	License No.: 3L-141-01 Amendment No.: 0 License Reviewer: CW
File No.: 6 Licensee: Thermo Niton Analyzers, LLC Type of Action: Termination Date Issued: 07/31/09	License No.: 3A-105-01 Amendment No.: 21 License Reviewer: DK
File No.: 7 Licensee: Thermo Niton Analyzers, LLC Type of Action: Termination Date Issued: 07/31/09	License No.: 3G-105-02 Amendment No.: 14 License Reviewer: DK
File No.: 8 Licensee: Brown University Type of Action: Amendment Date Issued: 10/11/11	License No.: 3K-036-01 Amendment No.: 40 License Reviewer: DK

Comment:

The additional safety considerations for the specific model of irradiator (Standard License Condition 75, from NUREG-1556, Volume 20, "Consolidated Guidance About Materials Licenses: Guidance About Administrative Licensing Procedures") were not included in the license conditions or alternately in tie-down documents to the license.

File No.: 9	
Licensee: Navix Diagnostics	License No.: 7B-109-01
Type of Action: Termination	Amendment No.: 07
Date Issued: 7/12/10	License Reviewer: CW
File No.: 10	
Licensee: Rhode Island Atomic Energy Commission	License No.: 3K-063-01
Type of Action: Termination	Amendment No.: 25
Date Issued: 04/13/09	License Reviewer: DK
File No.: 11	
Licensee: Women's and Infant's Hospital of Rhode Island	License No.: 1D-045-02
Type of Action: Amendment	Amendment No.: 17
Date Issued: 03/14/08	License Reviewer: JF
File No.: 12	
Licensee: Cardiovascular Institute of New England	License No.: 7B-137-01
Type of Action: New	Amendment No.: 0
Date Issued: 10/20/10	License Reviewer: CW
File No.: 13	
Licensee: St. Joseph Health Services	License No.: 7B-025-01
Type of Action: Amendment	Amendment No.: 20
Date Issued: 07/20/2010	License Reviewer: CW
File No.: 14	
Licensee: Veroscience, LLC	License No.: 3K-136-01
Type of Action: Amendment	Amendment No.: 3
Date Issued: 09/24/10	License Reviewer: CW
File No.: 15	
Licensee: ATC Associates	License No.: 3L-142-01
Type of Action: New	Amendment No.: 0
Date Issued: 04/15/11	License Reviewer: CW

APPENDIX E

INCIDENT CASEWORK REVIEWS

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

File No.: 1

Licensee: Rhode Island Hospital

Date of Incident: 12/22/2009

Investigation Date: 12/23/2009

License No.: 7D-051-01

NMED No.: NA

Type of Incident: Contamination/Transportation

Type of Investigation: Phone/email

File No.: 2

Licensee: Rhode Island Hospital

Date of Incident: 12/22/09

Investigation Date: 12/24/2009

License No.: 7D-051-01

NMED No.: NA

Type of Incident: Contamination/Transportation

Type of Investigation: Phone/email

File No.: 3

Licensee: Kent Hospital

Date of Incident: 9/2/10

Investigation Date: 9/2/10

License No.: 7B-020-01

NMED No.: NA

Type of Incident: Release of Radioactive Material

Type of Investigation: Phone/email

File No.: 4

Licensee: Rhode Island Hospital

Date of Incident: 4/21/10

Investigation Date: 5/11-20/10

License No.: 7D-051-01

NMED No.: 100388

Type of Incident: Medical

Type of Investigation: Licensee Report, Site Visit