

June 11, 2003

Kathleen A. Dunn, MPH, Director  
Office of Community and Public Health  
Department of Health and Human Services  
6 Hazen Drive  
Concord, NH 03301-6527

Dear Ms. Dunn:

On May 21, 2003, the Management Review Board (MRB) met to consider the proposed final Integrated Materials Performance Evaluation Program (IMPEP) report on the New Hampshire Agreement State Program. The MRB found the New Hampshire program adequate but needs improvement and not compatible with the Nuclear Regulatory Commission's (NRC) program. Four recommendations were carried forward from the 2001 IMPEP review by the follow-up review team.

The review team noted significant program improvements that have been implemented by New Hampshire. The MRB also noted program improvements that had been implemented since the review team completed their on-site review. These program improvements included: reduction in the licensing and inspection backlogs; improvement in the program data management systems; development of a new fee schedule through legislative action and rulemaking which will now provide increased and designated funding for the program; a new salary schedule that provides technical staff additional earning potential as well as additional career ladder potential; aggressively recruiting for both the technical staff positions as well as the Bureau Administrator position; and reorganization of some functions in the Bureau of Radiological Health. These actions have demonstrated a high level of Department management support for the Bureau and the Agreement State program, and a commitment to operating a fully satisfactory program in the future.

The follow-up review team found New Hampshire's performance to be satisfactory with recommendations for improvement for the indicator, Technical Staffing and Training. The review team found New Hampshire's performance to be unsatisfactory for the indicators, Status of the Materials Inspection Program, and Legislation and Program Elements Required for Compatibility. Although the findings for the program did not change, the review team found noted improvements in the program, efforts to address the root causes of the program deficiencies, and continued commitment by the Department to support the Bureau. However, at the time of the review, the positive affect of these improvements had not yet been realized within the program due to the short time between the new initiatives and the on-site review. The period of Heightened Oversight will continue in order to assess the progress of the State in implementing the Program Improvement Plan which addressed the recommendations in the final 2001 IMPEP report. Bi-monthly status reports and bi-monthly conference calls to discuss progress on the State's Program Improvement Plan will also continue. Based on the results of the current IMPEP review and at the direction of the MRB, the next full review will be in approximately one year.

Section 4.0, page 10, of the enclosed final report presents the follow-up IMPEP team's recommendations for the State of New Hampshire. We received your April 28, 2003 letter which described your actions taken in response to the recommendations in the draft report. We request no additional information at this time.

I appreciate the courtesy and cooperation extended to the IMPEP team during the review. I also wish to acknowledge your continued support for the Radiation Control Program and the significant underlying improvements in the program which are beginning to be reflected in the program's performance. I look forward to our agencies continuing to work cooperatively in the future.

Sincerely,

*/RA/*

Carl J. Paperiello  
Deputy Executive Director  
for Materials, Research and State Programs

Enclosure:  
As stated

cc: John Wallace, Deputy Commissioner  
Department of Health and Human Services

Brook Dupee, Assistant Director  
Legislative Liaison  
Office of Community and Public Health

Dennis O'Dowd, Supervisor  
Radioactive Materials Section  
Bureau of Radiological Health

Donald P. Bliss, Director  
New Hampshire Department of Safety  
Office of Emergency Management

William Sinclair, Utah  
OAS Liaison to the MRB

Section 4.0, page 10, of the enclosed final report presents the follow-up IMPEP team's recommendations for the State of New Hampshire. We received your April 28, 2003 letter which described your actions taken in response to the recommendations in the draft report. We request no additional information at this time.

I appreciate the courtesy and cooperation extended to the IMPEP team during the review. I also wish to acknowledge your continued support for the Radiation Control Program and the significant underlying improvements in the program which are beginning to be reflected in the program's performance. I look forward to our agencies continuing to work cooperatively in the future.

Sincerely,

*/RA/*

Carl J. Paperiello  
Deputy Executive Director  
for Materials, Research and State Programs

Enclosure:  
As stated

cc: John Wallace, Deputy Commissioner  
Department of Health and Human Services

Brook Dupee, Assistant Director  
Legislative Liaison  
Office of Community and Public Health

Dennis O'Dowd, Supervisor  
Radioactive Materials Section  
Bureau of Radiological Health

Donald P. Bliss, Director  
New Hampshire Department of Safety  
Office of Emergency Management

William Sinclair, Utah  
OAS Liaison to the MRB

bcc: Chairman Diaz  
Commissioner Dicus  
Commissioner McGaffigan  
Commissioner Merrifield

Distribution: See next page

**DOCUMENT NAME: C:\ORPCheckout\FileNET\ML031490791.wpd**

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	STP		STP:DD		STP:D		DEDMRS			
NAME	DSollenberger:gd	JMPiccone (PLohaus for)		PHLohaus		CJPaperiello				
DATE	05/29/03	05/29/03		05/29/03		06/11/03				

**OFFICIAL RECORD COPY**

Distribution:

DIR RF

KSchneider, STP

LRakovan, STP

AMauer, STP

CMiller, NMSS/IMNS

DWhite, RI/RSAO

STreby, OGC

MVirgilio, NMSS

FCameron, OGC

TCombs, OCA (2 copies)

New Hampshire File

DCD (SP01) PDR (YES√)

RBores, RI

KHsueh, ASPO

RStruckmeyer, NMSS

RVirgilio, STP

JLieberman, OGC

KCyr, OGC

ISchoenfeld, EDO

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM  
REVIEW OF NEW HAMPSHIRE AGREEMENT STATE PROGRAM  
FEBRUARY 4-6, 2003

# FINAL REPORT

U.S. Nuclear Regulatory Commission

## 1.0 INTRODUCTION

This report presents the results of the follow-up review of the New Hampshire radiation control program, conducted February 4-6, 2003. This follow-up review was directed by the Management Review Board (MRB) based on the results of the June 25-29, 2001 Integrated Materials Performance Evaluation Program (IMPEP) review. The MRB directed that a follow-up review of the Technical Staffing and Training, Status of Materials Inspections, and Legislation and Program Elements Required for Compatibility indicators, be conducted in about one year from the MRB meeting based on findings of two unsatisfactory and one satisfactory with recommendations for improvement for the performance indicators. The follow-up review also included evaluation of the actions taken by the State to address the six recommendations made during the 2001 IMPEP review. During the review, the review team also took the opportunity to discuss the items to be addressed in a periodic meeting that were not reviewed as part of the follow-up review. The summary of these discussions are in Appendix D.

The follow-up review was conducted by a review team consisting of technical staff members from the Nuclear Regulatory Commission (NRC). Review team members are identified in Appendix A. The follow-up review was conducted in accordance with the November 5, 1999, [NRC Management Directive 5.6](#), "Integrated Materials Performance Evaluation Program (IMPEP)." Preliminary results of the follow-up review, which covered the period of June 30, 2001 to February 6, 2003, were discussed with New Hampshire management on February 6, 2003 and by teleconference on March 4, 2003.

A draft of this report was issued to New Hampshire for factual comment on March 14, 2003. The State responded by letter dated April 28, 2003. The Management Review Board (MRB) met on May 21, 2003 to consider the proposed final report. The MRB found the New Hampshire radiation control program adequate, but needs improvement, and not compatible with NRC's program.

The New Hampshire Agreement State program is administered by the Bureau of Radiological Health (the Bureau). The Bureau contains the Radioactive Materials Section (the Section), Radiation Machines Section, Radiochemistry Section, Emergency Response Section, and Radon Section. The Bureau is located within the Office of Community and Public Health, Department of Health and Human Services (the Department). The Department Commissioner is appointed by and reports to the Governor. Organization charts for the Department and the Bureau are included as Appendix B. At the time of the follow-up review, the New Hampshire Agreement State Program regulated approximately 80 specific licenses authorizing Agreement materials. The review focused on the regulatory 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 New Hampshire.

Prior to the follow-up review, the NRC conducted a period of heightened oversight of the New Hampshire program which included New Hampshire developing and submitting a Program Improvement Plan in response to the 2001 IMPEP review, and bimonthly conference calls with the NRC to discuss New Hampshire's progress in implementing the Program Improvement Plan. The Program Improvement Plan was submitted on December 27, 2001. Conference calls were held March 12, 2002, May 21, 2002, July 30, 2002, October 8, 2002, and December 17, 2002. The Program Improvement Plan and minutes from the calls can be found in Appendix C. New Hampshire's actions and their status were reviewed in preparation for this

follow-up review. New Hampshire's completion of the majority of the activities in the Program Improvement Plan has essentially eliminated the inspection backlog, eliminated the licensing backlog, developed a new fee legislation and rule, and improved the operation of the Bureau. However, several of the program improvements and accomplishments were not evaluated by the review team since they were outside the scope of the follow-up review.

The New Hampshire radiation control program has made improvements through developing and passing legislation to allow the increased revenue from fees to be directed to the program rather than the general fund, through creation of an HP series and career ladder, through the hiring of two new staff, and through creative use of contractors to assist in licensing and inspection activities. Considerable efforts were also expended in meeting with licensees to gather their views and suggestions to improve the program and in improving licensing timeliness. However, there continues to be two vacant staff positions, including the Bureau Administrator. Although the inspection program has essentially eliminated the backlog of inspections, the inspection program needs additional time to operate at a satisfactory level. The program has not yet progressed in the adoption of regulations to be compatible with the NRC program, due to placing priority on the licensing and inspection programs as detailed in their Program Improvement Plan and bimonthly call summaries.

The review team's general approach for conduct of this follow-up review consisted of: (1) examination of the heightened oversight information; (2) review of applicable New Hampshire statutes and regulations; (3) analysis of quantitative information from the Bureau's licensing and inspection data bases; (4) interviews with staff and management to answer questions or clarify issues; and (5) review of the Bureau's inspection files. The review team evaluated the information gathered against the IMPEP performance criteria for the two common and one non-common performance indicators and made a preliminary assessment of the State's performance.

Section 2 below discusses the results of the follow-up review of the New Hampshire program for the two common performance indicators. Section 3 below discusses the results of the follow-up review of the New Hampshire program for the one non-common performance indicator. Section 4 summarizes the follow-up review team's findings and recommendations. The general status of the other aspects of New Hampshire program addressed during periodic meeting discussions can be found in Appendix D.

## 2.0 COMMON PERFORMANCE INDICATORS

The follow-up review addressed two of the five common performance indicators used in reviewing both NRC Regional and Agreement State programs. The two indicators are: (1) Technical Staffing and Training and (2) Status of Materials Inspection Program.

### 2.1 Technical Staffing and Training

During the follow-up review, the review team evaluated actions taken by the New Hampshire program in response to the finding of satisfactory with recommendations for improvement made during the 2001 IMPEP review, as well as, the status of the staffing and training of the New Hampshire program.

Issues central to the evaluation of this indicator include the Bureau'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 Bureau's training program, interviewed Bureau management and staff, and reviewed job descriptions and training records. The review team also considered any possible workload backlogs.

The review team's evaluation of the New Hampshire program's response to the three recommendations from the 2001 IMPEP review is presented below.

### Recommendation 3

The review team recommends that the Bureau document a training plan for personnel that is consistent with the guidance provided in the NRC/Organization of Agreement States Training Working Group Report or the NRC Inspection Manual Chapter (IMC) 1246.

### Current Status

The Bureau has drafted a training/qualification policy following IMC 1246. The review team discussed this approach and made several suggestions on simplifying the policy particularly in the documentation required. The Bureau staff indicated that the training policy would be finalized and implemented for all staff conducting materials activities. In the April 28, 2003, response to the draft IMPEP report, New Hampshire submitted their final training and qualification policy and supporting documentation. The documentation submitted satisfies Recommendation 3; therefore, this recommendation is closed.

### Recommendation 4

The review team recommends that the Department take the necessary actions to address the staff turnover and staff vacancies as appropriate.

### Current Status

The Bureau has experienced additional staff turnover since the previous review. The review team believes that this turnover has significantly impacted the performance of the Section. The Bureau Administrator retired in April 2002 and has not yet been replaced. Section Supervisors have been taking turns serving in the Administrator position in an acting capacity. After interviewing a number of candidates, the Bureau hired two health physicists. One for a position in the Section and one position (CDC funded for bioterrorism) reporting directly to the Bureau Administrator. The Section currently has one vacant staff position. The Department conducted a nationwide search for the Bureau Administrator position. Although their searches found qualified staff, two offers for the Bureau Administrator position were declined and one health physicist declined the week before reporting to work. The main reason offered was low salaries. The Department developed and received approval for a new Rad Health Physicist series that provides increased salary potential and an extended career ladder. This new series should help with staff hiring and retention. In early January 2003, the recently elected Governor froze all vacant positions including the Bureau Administrator position and other staff positions, but the Department has reallocated Federal monies to recruit staff for these positions. On July 1, 2003, these positions will be fee supported and, as such, they will not be subject to the hiring freeze.

Although both the Department and Bureau have taken reasonable actions to fill these key



program vacancies, the Bureau Administrator and the staff health physicist positions remain vacant. Since the vacancies, in particular the Bureau Administrator position, significantly impact the performance of the Bureau in other indicators, the review team considers this recommendation open.

#### Recommendation 5

The review team recommends that the Bureau examine and change the business processes and organization of the Section to improve the effectiveness and efficiency of the program.

#### Current Status

The Bureau has stopped the practice of rotating staff on a routine basis and the Section Supervisor for Materials and Section Supervisor for Machines assign work to the staff, as necessary. Support for the Materials Section is also supplemented with contractor support (in both licensing and inspection activities). Until permanent staff are available including the Bureau Administrator, the review team does not believe this recommendation can be closed.

The review team concludes that the New Hampshire program has made progress with their staffing and training, but still needs to complete the hiring of new staff. Based on the IMPEP evaluation criteria, the review team recommended and the MRB agreed that New Hampshire's performance with respect to the indicator, Technical Staffing and Training, continues to be found satisfactory with recommendations for improvement.

### 2.2 Status of Materials Inspection Program

During the follow-up review, the review team evaluated actions taken by the Bureau in response to the finding of unsatisfactory made during the 2001 IMPEP review, as well as the status of the inspections performed since the 2001 review and the current status of due and overdue inspections.

The review team reviewed the timeliness of core and initial inspections performed since the last review period, the current and projected backlog of overdue inspections, reciprocity inspections and the timeliness in communication of inspection results to licensees. The review team reviewed data provided by the Bureau from their inspection tracking system to determine the timeliness of inspections, and reviewed inspection files to determine the date of the issuance of inspection results to licensees relative to the date of inspection.

The review team's evaluation of the Bureau's responses to the two 2001 IMPEP review recommendations is presented below.

### Recommendation 1

The review team recommends that the process for extending inspection frequency for good license performance be clearly defined and the Bureau maintain documentation of inspection extensions.

### Current Status

In response to this recommendation, the Bureau developed an "Inspection Interval Change Authorization Form" that documents the basis for extending inspection frequency for good licensee performance. The review team noted that this form was completed and placed in each docket file, as appropriate. The Bureau's inspection tracking spreadsheet was also modified to include an entry for good performance extension. The next inspection due dates were appropriately modified for those licensees with extensions. This recommendation is closed.

### Recommendation 2

The review team recommends that the Bureau take the appropriate management measures to conduct inspections (both initial and core) in accordance with the State's established inspection priority system.

### Current Status

Since the last review, the Bureau completed 12 inspections of core licenses. Four of these inspections were overdue at the time of the last review. Seven of the eight remaining inspections of core licensees were performed overdue. The amount of time overdue ranged from one to 13 months. There were no routine inspections overdue at the time of the follow-up review.

The State's performance with regard to initial inspections was also reviewed by the review team. At the time of the 2001 IMPEP review, there were three new licensees that had not been inspected, one of which was overdue. Two of these licensees were inspected (including the overdue one) and the third one, issued in October 2000, has yet to be inspected. Since the last review, the Bureau has issued six new licenses that authorize byproduct materials. None of these licensees have been inspected and one license, issued in January 2002, is currently overdue. In summary, for initial inspections since the 2001 review, the program inspected one licensee at 16 months, has two initial inspections currently overdue, and five initial inspections not yet due.

Overall, the Bureau inspected nine of the 10 initial and core licensees overdue and currently has two initial inspections overdue. The review team determined that two factors contributed to the large percentage of overdue inspections. First, new licenses issued since the last review were not added to the inspection tracking system and were not part of the inspection plan for 2003. The new licenses were part of the master list used for licensing. The Section Supervisor indicated that this was an oversight, but also indicated that the lack of coordinated databases contributed to the failure to schedule the initial inspections. The Bureau continues to track inspections in the same manner as during the 2001 review. The Bureau is in the process of testing a new integrated database for their licensing and inspection information which should eliminate the difficulties experienced in the old system. Second, the review team found that the

Section Supervisor would schedule core inspections on the month before they were overdue (i.e., inspection priority in years plus 25 percent since the last inspection), not at the anniversary month and year (i.e., inspection priority in years since the last inspection). This scheduling practice gives the Bureau little if no chance to conduct the inspection without it being overdue. Based on the Bureau's performance for conducting initial and core inspections and their current scheduling practices, the review team concludes that this recommendation should remain open.

The review team also reviewed the Bureau's performance with regard to the conduct of core inspections for licensees working in the State under reciprocity. During calendar year 2001, the State approved reciprocity requests from seven core licensees and conducted one inspection. During calendar year 2002, eight core licensees worked in the State under reciprocity and one inspection was performed. The performance criterion for reciprocity inspections is 20 percent of core licensees as indicated in IMC 1220. The Bureau's performance in 2001 and 2002 in this area was approximately 13 percent of candidate licensees, or one inspection short of meeting the performance criteria.

The timeliness of issuance of inspection results was the final area reviewed by the review team for this indicator. The review team reviewed 19 inspection reports and found that 14 were issued to the licensee within 30 days. Three of the reports were issued at 32, 34, and 84 days after the conclusion of the inspection. At the time of the review, the results for a fourth inspection had not been issued for an inspection that was conducted 47 days prior. The Section Supervisor indicated that a number of issues identified during this inspection had not been resolved, which was holding up the issuance of the report. The review team found a fifth inspection that was completed in January 2002 where the report had not been issued.

Since the last review, the Bureau completed 14 core inspections, including two initial inspections, and one reciprocity inspection. The completion of these inspections, seven of which were completed by their contractor, puts the Bureau on a course to improve performance for this indicator in the future. However, due to the percentage of inspections still performed on an overdue basis, the failure to include initial inspections in the inspection tracking system, and the practice of scheduling core inspections at the time they would become overdue, the review team believes that continued improvement in the program is needed.

In their April 28, 2003, response to the draft IMPEP report, New Hampshire indicated that the two overdue initial inspections had been completed, as well as 10 other inspection which were complete on schedule. New Hampshire also stated that they have implemented the new data licensee database that integrates licensing and inspection information. The MRB noted these improvements which should put New Hampshire in a position to perform at the satisfactory level in the future.

Based on the IMPEP evaluation criteria, the review team recommended and the MRB agreed that New Hampshire's performance with respect to the indicator, Status of Materials Inspection Program, continues to be found unsatisfactory.

### 3.0 NON-COMMON PERFORMANCE INDICATORS

The follow-up review addressed one of the non-common performance indicators used in reviewing NRC Regional and Agreement State programs. The indicator is "Legislation and Program Elements Required for Compatibility."

### 3.1 Legislation and Program Elements Required for Compatibility

#### 3.1.1 Legislation

The Department is authorized as the State's radiation control agency under the New Hampshire Revised Statutes Annotated (RSA) 1990, Chapter 125. The radiation control program is administered by the Bureau. The review team identified that one legislative change affecting the radiation control program was passed since the last review. This legislation created a specified radiation fund which can only be used by the Bureau. The Bureau is developing a revised fee schedule to increase fees and generate revenue for this fund. No other changes have occurred in the legal authority of the Bureau since the previous review.

#### 3.1.2 Program Elements Required for Compatibility

The New Hampshire Rules for Control of Radiation are found in He-P 4000-4095 and apply to all ionizing radiation, whether emitted from radionuclides or devices. New Hampshire requires a license for possession, and use, of all radioactive materials.

The review team's evaluation of the New Hampshire response to the 2001 IMPEP review recommendation is presented below.

#### Recommendation 6

The review team recommends that the Bureau develop and implement an action plan to adopt NRC regulations in accordance with current policy on adequacy and compatibility.

#### Current Status

The New Hampshire program has not yet taken action to adopt overdue regulations due to focusing efforts of existing staff and contractors on improvements to the licensing and inspection programs. This activity has historically been a responsibility of the Bureau Administrator, a position which is currently vacant. The new bioterrorism health physicist position has recently been assigned this activity, but this individual started three weeks before the follow-up review, and therefore, no action has occurred to date.

The following 11 regulations are overdue. Current NRC policy requires that Agreement States adopt certain equivalent regulations or legally binding requirements no later than three years after they are effective. The Bureau will need to promptly address these regulations in upcoming rule making or by adopting alternate legally binding requirements.

- "Timeliness in Decommissioning of Materials Facilities," 10 CFR Parts 30, 40 and 70 amendments (59 FR 36026) that became effective August 15, 1994.
- "Low-Level Waste Shipment Manifest Information and Reporting," 10 CFR Parts 20 and 61 amendments (60 FR 15649 and 60 FR 25983) that became effective March 1, 1998. Agreement States were expected to have an equivalent rule effective on the same date, and this rule is designated as Category B for compatibility.

- “Termination or Transfer of Licensed Activities: Recordkeeping Requirements,” 10 CFR Parts 20, 30, 40, 61, 70 amendments (61 FR 24669) that became effective June 17, 1996.
- “Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act,” 10 CFR Part 20 amendment (61 FR 65120) that became effective January 9, 1997.
- “Recognition of Agreement State licenses in Areas Under Exclusive Federal Jurisdiction Within an Agreement State,” 10 CFR Part 150 amendment (62 FR 1662) that became effective February 27, 1997.
- “Criteria for the Release of Individuals Administered Radioactive Material,” 10 CFR Parts 20 and 35 amendments (62 FR 4120) that became effective May 29, 1997. Portions of the Part 20 amendment are designated as Category A for compatibility.
- “Radiological Criteria for License Termination,” 10 CFR Parts 20, 30, 40, and 70 amendments (62 FR 39057) that became effective August 20, 1997. Parts of this amendment are designated as A or B for compatibility.
- “Deliberate Misconduct by Unlicensed Persons,” 10 CFR Parts 30, 40, 61, 70, 71, and 150 (63 FR 1890; 63 FR 13733) that became effective on February 12, 1998.
- “Minor Corrections, Clarifying Changes, and a Minor Policy Change,” 10 CFR Parts 20, 35, and 36 amendments (63 FR 39477; 63 FR 45393) that became effective October 26, 1998. Portions of this amendment are designated as Category A for compatibility.
- “Transfer for Disposal and Manifests: Minor Technical Conforming Amendment,” 10 CFR Part 20 amendment (63 FR 50127) that became effective November 20, 1998.
- “Respiratory Protection and Controls to Restrict Internal Exposures,” 10 CFR Part 20 amendment (64 FR 54543; 64 FR 55524) that became effective February 2, 2000. Portions of this amendment are designated as Category B for compatibility.

The Bureau will need to address the following five regulations in upcoming rule makings or by adopting alternate legally binding requirements:

- “Energy Compensation Sources for Well Logging and Other Regulatory Clarifications,” 10 CFR Part 39 amendment (65 FR 20337) that became effective May 17, 2000. Portions of this amendment are designated as Category B for compatibility.
- “New Dosimetry Technology,” 10 CFR Parts 34, 36, and 39 amendments (65 FR 63749) that became effective January 8, 2001.
- “Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material,” 10 CFR Parts 30, 31, and 32 amendments (65 FR 79162) that became effective Feb. 16, 2001. Portions of this amendment are designated as Category B for compatibility.

- “Revision to the Skin Dose Limit,” 10 CFR Part 20 amendment (67 FR 16298) that became effective April 5, 2002. Portions of this amendment are designated as Category A for compatibility.
- “Medical Use of Byproduct Material,” 10 CFR Parts 20, 32, and 35 (67 FR 20249) that became effective April 24, 2002. Portions of these amendments are designated as either Category A or B for compatibility.

The review team determined that, at the time of the review, the State has not adopted 16 NRC amendments to regulations required for compatibility. Eleven of these amendments are overdue and will be adopted in a time frame greater than three years after the effective date of their adoption by the NRC. Five of these eleven amendments are designated as A or B for compatibility as indicated above, and the “Low-Level Waste Shipment Manifest Information and Reporting,” amendment requires that an Agreement State adopt the amendment in the same time frame as the NRC, but no later than six months after the effective date of the NRC amendment.

The review team concluded that the delay in the promulgation of regulations in a timely fashion was caused in part by the high turnover in staff, which required the Section Supervisor and upper management to divert their time and efforts to other essential program elements such as licensing, inspection, incident response, and training of new staff. The Bureau Administrator vacancy significantly impacts this indicator since historically this individual has had responsibility for rulemaking. Based on the follow-up review, the review team considers this recommendation still open.

The State of New Hampshire has a sunset provision that limits any State regulation to a specific period of time. For the State’s radiation protection regulations, this duration is eight years. The review team noted that 16 of the 40 Parts that comprise the radiation regulations have expired. Six of these Parts are important to the Agreement State Program. These expired sections include: He-P 4037: Transportation of Radioactive Material; He-P 4061: Land Disposal for Low-Level Radioactive - Technical Requirements for Waste Classification; 4062: Requirements for Transfer of Low-Level Radioactive Waste for Disposal at Land Disposal Facilities - Manifest, Records, Reports, Quality Assurance and Audits; He-P 4070: Fees; 4090: Annual Limits of Intakes (ALI) and Derived Air Concentrations (DAC) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sanitary Sewers; and He-P 4092: Quantities of Radioactive Materials Requiring Labeling. These expired regulations may impact the State’s ability to implement a complete regulatory program. There may be regulatory gaps that need to be addressed through other implementing mechanisms such as orders or license conditions.

The State’s Program Improvement Plan presented to the NRC in December 2001 included specific milestones for steps toward the adoption of NRC regulations required for compatibility. In implementing the Program Improvement Plan, the State chose to place other parts of the plan as higher priority and, during the review period, chose not to work on the adoption of regulations until after they had hired a Bureau Administrator which has not occurred to date. Since the 2001 review, the number of overdue NRC amendments has increased from eight to 11, and a number of the State’s regulations have expired. In their April 28, 2003, response to the draft IMPEP report, New Hampshire submitted a rulemaking schedule that will address the regulation adoption in several phases and has assigned a staff member to work on the

rulemaking. The MRB considers this plan a good step in bringing the New Hampshire program into compatibility, which should be achieved by the end of calendar year 2003.

Based on the IMPEP evaluation criteria, the review team recommended and the MRB agreed that New Hampshire's performance with respect to the indicator, Legislation and Program Elements Required for Compatibility, continues to be found unsatisfactory.

#### 4.0 SUMMARY

The review team noted significant program improvements that have been implemented by New Hampshire. These program improvements included: reduction in the licensing and inspection backlogs; improvement in the program data management systems; development of a new fee schedule through legislative action and rulemaking which will now provide designated funding for the program; a new salary schedule that provides technical staff additional earning potential as well as additional career ladder potential; aggressively recruiting for both the technical staff positions as well as the Bureau Administrator position; and reorganization of some functions in the Bureau of Radiological Health. These actions have demonstrated a high level of Department management support for the Bureau and the Agreement State program, and a commitment to operating a fully satisfactory program in the future.

The follow-up review team found New Hampshire's performance to be satisfactory with recommendations for improvement for the indicator, Technical Staffing and Training. The review team found New Hampshire's performance to be unsatisfactory for the indicators, Status of the Materials Inspection Program, and Legislation and Program Elements Required for Compatibility. Accordingly, the follow-up review team recommended and the MRB agreed in finding the New Hampshire Agreement State Program to be adequate, but needs improvement, and not compatible with NRC's program. The review team considered recommending that the New Hampshire Agreement State program be put on probation given that two indicators were found unsatisfactory. However, the review team did not recommend probation because, although the findings for the program did not change, the review team found noted improvements in the program, efforts to address the root causes of the program deficiencies, and continued commitment by the Department to support the Bureau in completing actions in the Program Improvement Plan. The period of Heightened Oversight will continue in order to assess the progress of the State in implementing corrective actions in the Program Improvement Plan which addressed the recommendations in the final 2001 IMPEP report. Bi-monthly status reports and bi-monthly conference calls to discuss progress on the State's Program Improvement Plan will also continue. Based on the results of the current IMPEP review and at the direction of the MRB, the next full review will be in approximately one year.

Below is a summary list of open recommendations from the 2001 IMPEP report. No new recommendations were identified during the current review.

1. The review team recommends that the Bureau take the appropriate management measures to conduct inspections (both initial and core) in accordance with the State's established inspection priority system. (Section 3.1) (Recommendation 2 from the 2001 report)

2. The review team recommends that the Department take the necessary actions to address the staff turnover and staff vacancies as appropriate. (Section 3.3) (Recommendation 4 from the 2001 report)
3. The review team recommends that the Bureau examine and change the business processes and organization of the Section to improve the effectiveness and efficiency of the program. (Section 3.3) (Recommendation 5 from the 2001 report)
4. The review team recommends that the Bureau develop and implement an action plan to adopt NRC regulations in accordance with current policy on adequacy and compatibility. (Section 4.1.2) (Recommendation 6 from the 2001 report)



## LIST OF APPENDICES

Appendix A	IMPEP Review Team Members
Appendix B	New Hampshire Organization Charts
Appendix C	Heightened Oversight Program Correspondence
Appendix D	Periodic Meeting Summary
Attachment	April 28, 2003 Letter from Kathleen A. Dunn, RN, MPH Response to Draft Follow-up IMPEP Report

APPENDIX A  
IMPEP REVIEW TEAM MEMBERS

<b>Name</b>	<b>Area of Responsibility</b>
Dennis M. Sollenberger, NRC/STP	Team Leader Technical Staffing and Training Legislation and Program Elements Required for Compatibility
Duncan White, NRC/RI	Status of Materials Inspection Program Periodic Meeting

APPENDIX B

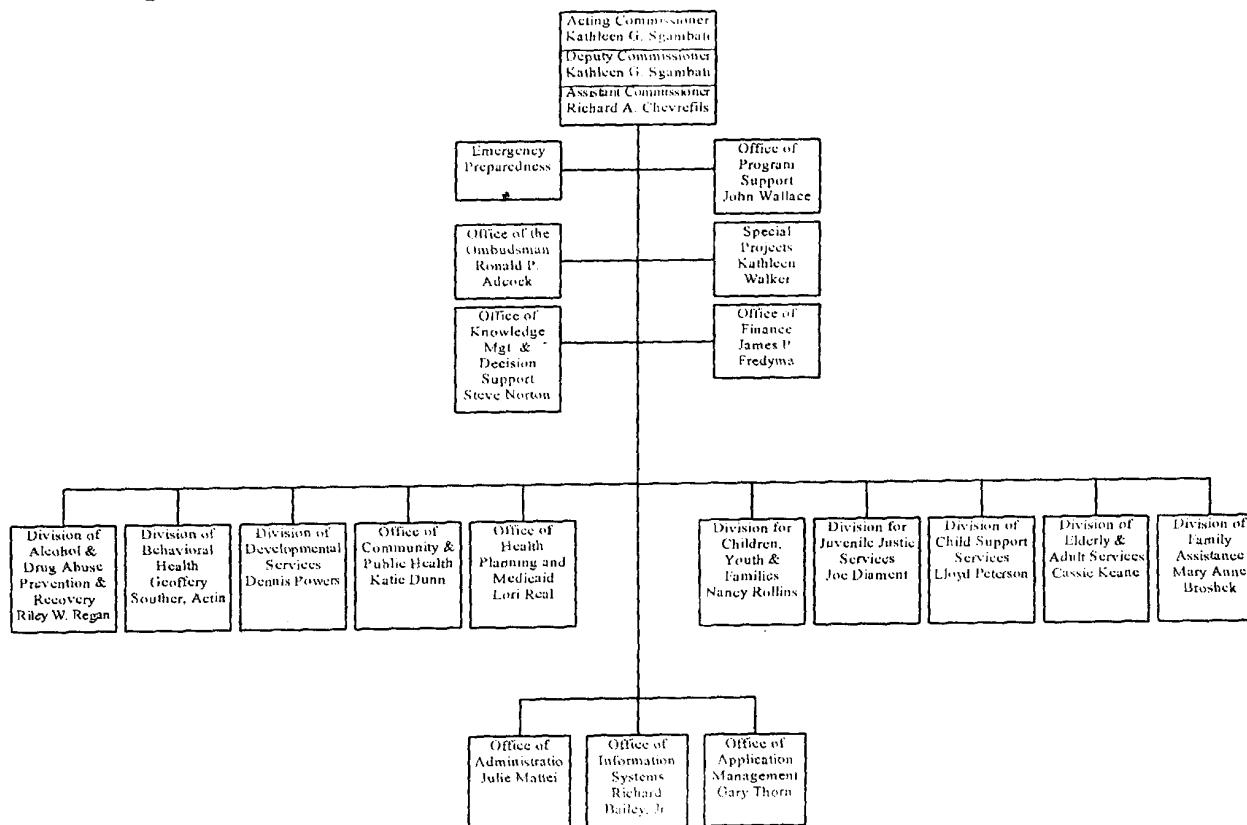
DEPARTMENT OF HEALTH AND HUMAN SERVICES

ORGANIZATIONAL CHARTS

ML030720471

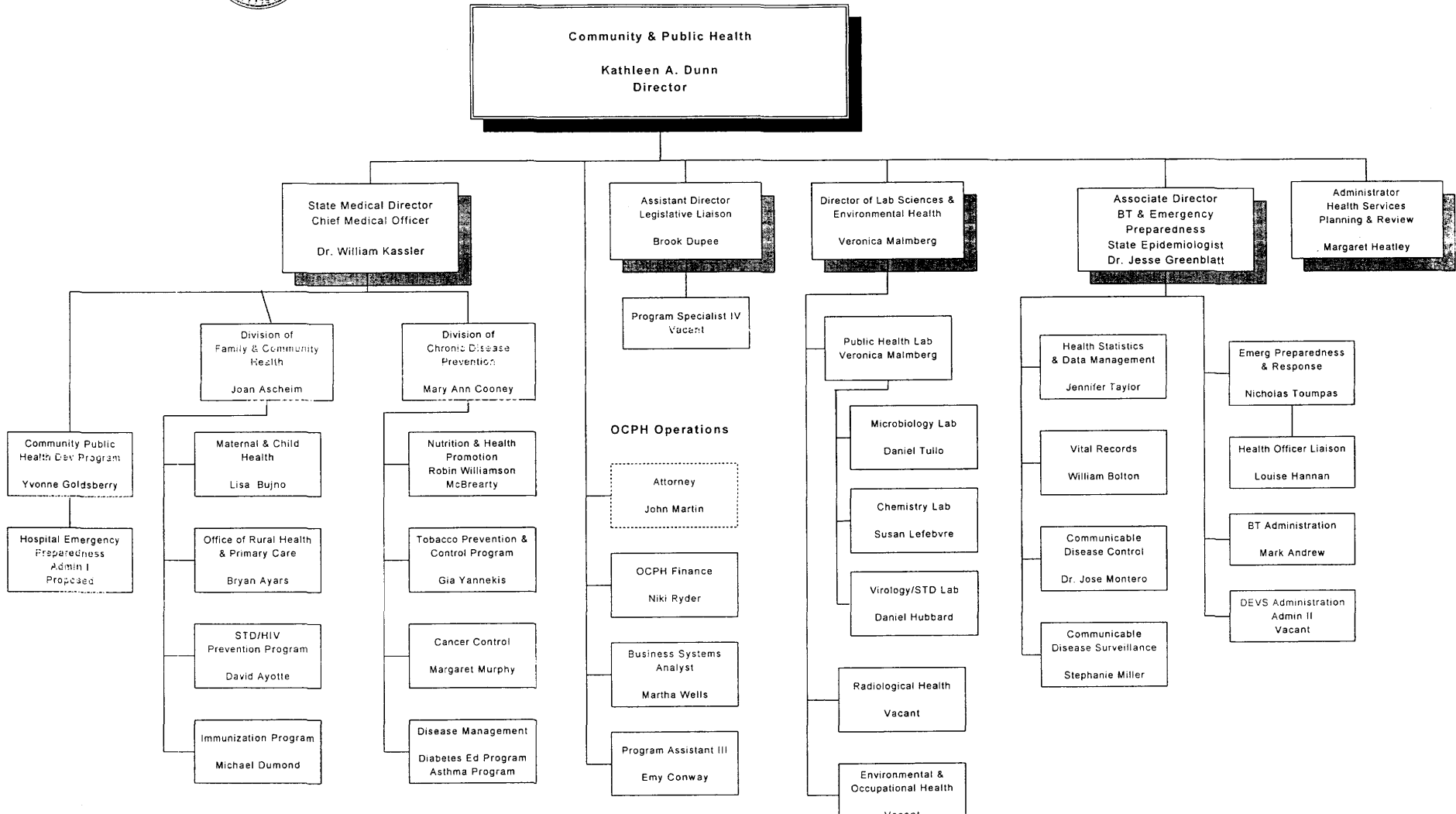


State of New Hampshire  
Department of Health and Human Services  
Organization Chart 2002

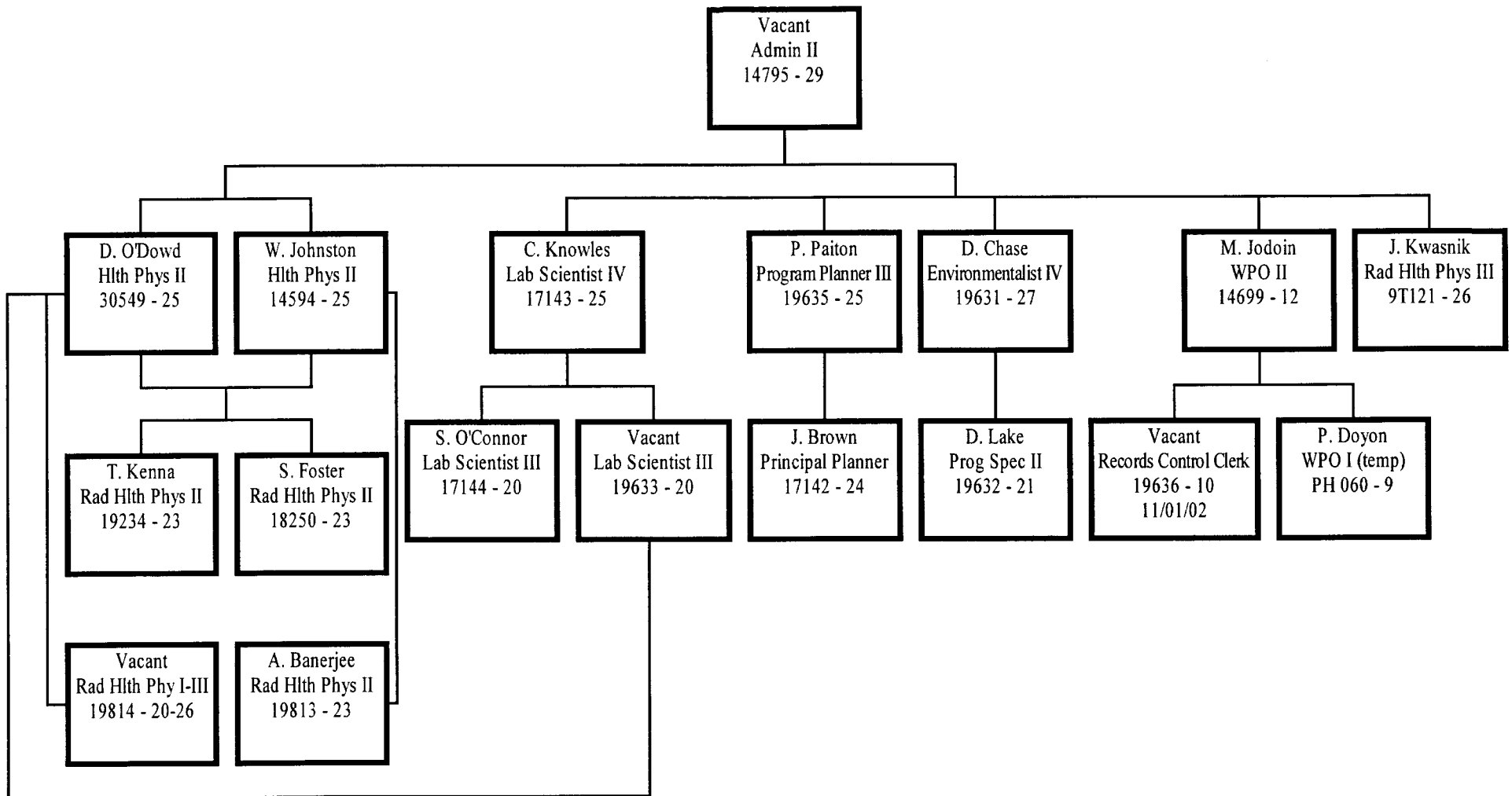




STATE OF NEW HAMPSHIRE  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
OFFICE OF COMMUNITY AND PUBLIC HEALTH



# Community and Public Health Community Support - Bureau of Radiological Health



## APPENDIX C

### HEIGHTENED OVERSIGHT PROGRAM CORRESPONDENCE

#### Minutes of Bimonthly Conference Calls:

1. March 12, 2002 Minutes (ML030720593)
2. May 21, 2002 Minutes (ML030720603)
3. July 30, 2002 Minutes (ML03020608)
4. October 8, 2002 Minutes (ML030720611)
5. December 17, 2002 Minutes (ML030160738)

#### Letters from/to New Hampshire:

1. December 27, 2001 Letter from Shumway to C. Paperiello submitting Program Improvement Plan (PIP) (ML020070241)
2. May 14, 2002 Letter from K. Dunn to P. Lohaus updating PIP (ML021410108)
3. July 23, 2002 Letter from K. Dunn to P. Lohaus updating PIP (ML022470292)
4. October 5, 2002 Letter from K. Dunn to P. Lohaus updating PIP (ML030720511)
5. December 12, 2002 Letter from K. Dunn to P. Lohaus updating PIP (ML030160717)

## APPENDIX D

### PERIODIC MEETING SUMMARY INCLUDING STATUS OF OTHER RECOMMENDATIONS FROM THE PREVIOUS REVIEW

A periodic meeting was held with New Hampshire management by Dennis Sollenberger, Team Leader, and Duncan White, Regional State Agreements Officer (RSAO), during the follow-up review pursuant to [STP Procedure SA-116](#), "Periodic Meeting with Agreement States Between IMPEP Reviews." Those topics normally documented during the periodic meeting that were reviewed and documented as part of the follow-up review will not be discussed in this Appendix. The following topics were discussed.

#### Status of Recommendations from 2001 Report

See Sections 2.1, 2.2 and 3.1 for details.

#### Program Strengths and/or Weaknesses

The Department representatives indicated that staffing still remains the biggest issue facing the Bureau. This issue is discussed in Sections 2 and 3 of the follow-up review report. A second bioterrorism position with health physics qualifications has been transferred to the Commissioner's office.

The use of contract personnel has been successful in completing numerous inspections and licensing actions. These contracts expire in June 2003. The Department has initiated the process to renew the contracts.

The Section Supervisor indicated that a significant amount of time is spent interviewing potential candidates. In particular, the State's personnel rules require that each candidate be given a structured oral examination as part of the interview process. NRC staff offered suggestions that other States have used to evaluate or screen candidates and agreed to provide feedback on the structured oral exam currently in use.

The Bureau's integrated database ("Rads") is scheduled to begin testing the week of February 10, 2003.

With the exception of gaining legislative approval for a dedicated fund for revenue generated by fees, the Bureau has not taken any action since the 2001 review to amend the State's regulations. This issue is discussed in Section 3.2 of the follow-up review report.

One area of success in the Bureau since the 2001 review has been the significant reduction of the licensing backlog. This has been done with the use of a retired Agreement State supervisor from Kentucky under contract and one of the program's health physicists.



### Feedback on NRC's Program

Department and Bureau representatives expressed their appreciation for NRC staff's assistance with regard to a number of issues raised over the past year. The Section Supervisor stated that the NUREG 1556 series of program specific guidance documents has been very useful. The Bureau also expressed concern with regard to NRC's decision to extend inspection frequencies (Temporary Instruction [TI] 2800/033).

Department management indicated that the NRC should pursue an interagency program for the exchange or temporary assignment of managers to the States. NRC staff indicated that, to their knowledge, the last time there was a long-term personnel exchange of an NRC staff member with an Agreement State staff member was 20 plus years ago.

### Status of Program and/or Policy Changes

A detailed discussion of the program status can be found in Section 2.1 of the follow-up review report. A discussion of the Legislative changes to the program can be found in Section 3.1 of the follow-up review report.

### Impact of NRC Program Changes

The NRC representatives discussed security issues, recent changes to the inspection frequencies (TI 2800/033), the forthcoming departure of the Chairman from the Commission and the status of pilot projects with regard to the National Materials Program.

### Internal Program Audits and Self-Assessments

With the exception of the bimonthly status reports to the NRC in preparation for the conference calls, the Department managers reported that currently no self-assessments were being performed. It was noted that the Section Supervisor is required to provide weekly status reports to Department management. Department management also noted that the Food and Drug Administration conducted an audit of the Bureau's radiochemistry laboratory. According to Department management, the principal finding was the need to update the lab's equipment.

### Status of Allegations Previously Referred

Region I referred one allegation to the Bureau since the 2001 review. The Bureau indicated that an on-site inspection was performed and that the only radioactive material present was an exempt quantity source. The review team concluded that the Bureau's actions were appropriate.

### Nuclear Material Events Database (NMED) Reporting

A general discussion was held with the representatives concerning the NMED reporting system. The review team noted that the Bureau had updated and closed out each of three events (one event involved radium and other two involved byproduct material) reported since the 2001 review. The review team indicated that a new field was recently added to indicate if the event was closed by the State. The Bureau was not aware of this change and indicated that they

would take appropriate action to update the NMED record.

#### Radiation Advisory Committee

At the invitation of Department management, the review team attended a regularly scheduled meeting of the State's Radiation Advisory Committee on the evening of February 4, 2003. At the meeting, the review team leader provided an overview of the IMPEP process and follow-up review. The RSAO provided an overview of the liaison functions between the NRC and the States. The Committee expressed their appreciation for the NRC's availability and assistance to the Bureau during the heightened oversight process. The Committee also discussed Bureau staffing, the distribution of potassium iodide tablets to the public, committee membership, the need for fee increases to fund the Bureau, upcoming emergency response exercises, the need to include the ability to issue civil penalties as part of the Bureau's enforcement policy, and the issuance of a letter of introduction as well as the Radiation Advisory Committee's 2002 annual report to the new Governor.

ATTACHMENT

April 28, 2003 Letter from Kathleen A. Dunn, RN, MPH  
New Hampshire's Response to Draft Follow-up IMPEP Report

ML031340782



**STATE OF NEW HAMPSHIRE  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
OFFICE OF COMMUNITY & PUBLIC HEALTH**

**Nicholas J. Vallas  
Commissioner**

6 HAZEN DRIVE, CONCORD, NH 03301-6527  
603-271-4501 1-800-852-3345 Ext. 4501  
Fax: 603-271-4827 TDD Access: 1-800-735-2964

**Kathleen A. Dunn  
Director**

April 28, 2003

Dennis M. Sollenberger  
Team Leader  
Office of State and Tribal Programs  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

Re: IMPEP Follow-up Review

Dear Mr. Sollenberger:

I am sending you this letter in response to your communication dated 14 March 2003, regarding the results of the State of New Hampshire follow-up IMPEP review, which occurred during February 4-6th of this year. At that time, we were re-evaluated on three criteria that had been deemed unsatisfactory during a previous (June 25-29 2001) IMPEP review. These three criteria are: 1) Technical Staffing and Training, 2) Status of Materials Inspection Program, and 3) Legislation and Program Elements Required for Compatibility.

First of all, let me express my staff's appreciation for the high quality evaluation provided by the members of the NRC review team. In every case where program improvements were identified, their observations were either couched in a way that provided helpful options or identified potential solutions.

Second, we do wish to offer comment regarding the Review Team's findings as articulated in the draft IMPEP report. I believe that the statement on page 6 of the draft report, "The review team concludes that the status of the materials inspection program has not shown improvement since the 2001 IMPEP review..." is, unduly harsh and does not acknowledge a number of accomplishments of the Bureau which, although not specific to the inspection program, do have a direct impact on the assessment of our operations and in our addressing IMPEP recommendations. Specifically:

- There is no acknowledgment that the remedial work plan, submitted to and approved by the NRC after the 2001 review, has been adhered to with a majority of the tasks completed.
- Prioritizing the completion of core inspections and cleaning up a backlog of licensee actions over completing the adoption of rules was consistently communicated to the NRC in both writing and during bi-monthly phone calls. At no time was I asked to re-set our priorities.

03 APR 30 PM 4:03

STP

- In addition to withstanding a number of vacancies in the Bureau, I was taken ill suddenly and out of work from the end of December 2002 to the beginning of March 2003. My senior staff had to pick up my responsibilities and, at the same time, deal with the Presidential mandate to begin the small pox vaccination program in NH. These two unforeseen issues further impacted the Department's ability to make consistent progress on the re-engineering of the Bureau, which, I believe, is at the core of being successful in attaining compatibility with the NRC regulations.
- There is no acknowledgment of the time and effort that went into working with disenchanted licensees to accommodate their unmet needs; little acknowledgment of the time and effort that went into passing the legislation that allows fees to be directed to the program rather than the general fund; no acknowledgment of the time and effort that went into creating the Health Physicist series and career ladder; no acknowledgment of the completion of the decommissioning of a reactor at UNH.
- Finally, no acknowledgment of what has been described by NRC administration as creative leadership and exemplary management practice to address the staff turnover and business practices which were done without my having the benefit of an administrator for the Bureau and without health physics education or training on my part.

In summary, if one was to take a strict constructionist view of the NRC Agreement State regulations, then, yes, NH is in default. I believe given the number of confounding factors impacting the Radiation Materials Program, a strict constructionist view does a disservice to the Bureau, the NRC and our customers. Most parties will not read beyond the cover letter and/or executive summary of the report. I, therefore, respectfully request that consideration be given to including the many accomplishments that are documented in the bi-monthly conference call reports and minutes, either in the report or at least by some type of acknowledgement in the cover letter.

Third, we wish to take this opportunity to present the remedial actions that have been put in place to address the recommendations contained in the draft report.

*Recommendation 1.* The review team recommends that the Bureau take the appropriate management measures to conduct inspections (both initial and core) in accordance with the State's established inspection priority system. (Section 3.1) (Recommendation 2 from the 2001 report)

*Remedial action:* The Bureau has made and continues to make significant program improvements and to take appropriate measures to conduct inspections in accordance with the State's established inspection priority system. As of this writing, there are no overdue inspections and we are on schedule to meet our quarterly inspection quota. Inspection schedules are enclosed. I note at the time of the February re-evaluation we were completely up to date on our inspection obligations, and that since that time, we have completed twelve inspections, with two more scheduled to be completed by the end of April.

We have also changed our policy of scheduling inspections the month before they are due, thus allowing more time to meet deadlines in the event of changing circumstances. With regard to the issue of the overdue initial inspections, this particular issue has been addressed, through several mechanisms, including reminding the staff to update the inspection schedule to include new licensees in accordance with the established procedures.

*Recommendation 2.* The review team recommends that the Bureau document a training plan for personnel that is consistent with the guidance provided in the NRC/Organization of Agreement States Training Working Group Report or the NRC IMC 1246. (Section 3.3) (Recommendation 3 from the 2001 report)

*Remedial action:* The Bureau has implemented a training plan for personnel that is consistent with the guidance provided in the NRC/OAS Training Working Group Report. This plan consists of establishing a new training policy, development and use of qualification approval templates, creating qualification journals for personnel, development of a staff-training matrix (to aid in "at-a-glance" assessments of training needs for the Bureau), and a training planning sheet. Please reference the attached supporting documents.

*Recommendation 3.* The review team recommends that the Department take the necessary actions to address the staff turnover and staff vacancies as appropriate. (Section 3.3) (Recommendation 4 from the 2001 report)

*Remedial action:* The state's compensation package has been an underlying factor in recruiting and retaining qualified staff. While we believe OCPH has been competitive in regards to fringe benefits, the gap between NH state wages, the wages of surrounding states, and private sector wages has caused us to lose competent staff, as well as to lose promising recruits. We have addressed this matter through the State personnel system and were able to negotiate the following new classification and wage scales:

<b>Classification</b>	<b>Old Salary Range</b>	<b>New Salary Range</b>
Rad Health Physicist I	\$ 30,381 - 41,164	\$ 30,381 - 53,586
Rad Health Physicist II	\$ 30,381 - 41,164	\$ 34,515 - 53,586
Rad Health Physicist III	\$ 30,381 - 41,164	\$ 39,390 - 53,586
Rad Health Physicist IV	\$ 34,515 - 46,976	\$ 44,928 - 61,913
Rad Health Physicist V	N/A - new position	\$ 51,422 - 71,019

While modest by some standards, this represents a substantial improvement over the previous salary structure, and is expected to be a significant factor in our ability to retain and recruit qualified staff.

In addition to the enhanced salary structure, we were also successful in implementing a "career ladder" for Health Physicists, meaning that incumbents can automatically be promoted to the next higher classification, subject to meeting education, experience, and job performance standards. This too will undoubtedly prove to be a useful retention tool.

As was noted in the draft report, we have proposed to move the entire Bureau to a fee-based funding system, beginning in State Fiscal Year 2004 (7/1/03 - 6/30/04). One potential advantage to this funding source is a greater accountability to the regulated community. Another advantage is that state-imposed hiring freezes typically exempt positions not funded by the general tax revenues of the state.

We remain in active recruitment for the Administrator (Bureau Chief) position, and plan to interview the second of two current candidates by 4/22/03. We have several potential candidates for the Records Control Clerk, and we are now in the second interview stage. In order to keep hiring on track, I have identified other sources of funds that can be used to pay any vacancies filled between now and the beginning of the new fiscal year.

Our current vacancy list contains the following positions:

Classification	Date vacant	Recruiting Plan
Administrator II	05/01/2002	Active recruitment
Rad Health Physicist III	03/10/2003	Active recruitment
Rad Health Physicist III	04/05/2001	Active recruitment
Program Specialist II	04/11/2003	Active recruitment
Laboratory Scientist III	03/15/2002	Active recruitment
Records Control Clerk	10/31/2002	Active recruitment

I should note that one Radiation Health Physicist position, supported by Bioterrorism funds, has been transferred to the Officer of the Commissioner and has become a member of the Department's overall emergency response staff. While clearly still available for overall emergency response, this position will not be participating in licensing or inspections.

*Recommendation 4.* The review team recommends that the Bureau examine and change the business processes and organization of the Section to improve the effectiveness and efficiency of the program. (Section 3.3) (Recommendation 5 from the 2001 report)

*Remedial action:* After reviewing our operational structure at the macro level, I have transferred oversight responsibility for the Bureau of Radiological Health from Veronica Malmberg, to my Assistant Director, Brook Dupee. This frees Veronica to focus on pressing bioterrorism and laboratory preparedness matters and allows me to work more directly through Brook as my immediate representative. In addition to Brook's direct responsibility for BRH, I have tasked another member of my staff to oversee financial matters, such as purchasing and procurement, until such time as the Bureau Chief position is filled. While not directly related to the IMPEP process, I have also decided to transfer the Radiochemistry Lab to Veronica's supervision, and plan to transfer the Radon Program to our Bureau of Environmental and Occupational Health.

These changes, I believe, will re-focus the attention of the Bureau on its core regulatory mission, while strengthening the administrative and programmatic support for radiochemistry and radon outreach/education.

On the more immediate level of the Bureau itself, continuous examination and improvements in the operational aspects of the program continue to be made. As noted several months ago, the Bureau has long since abandoned monthly rotational assignments for health physics staff, which has resulted in very apparent improvements in efficiency. In addition, resources within the Bureau in terms of staffing are now utilized in a manner that more readily recognizes urgent demands and priorities that may occur.

For example, despite an original assignment in our x-ray inspection program, our newest health physicist within the Bureau involved in the regulatory programs has now been placed on the "fast-track" in terms of training and experience in the radioactive materials program activities, and has recently attended both the NRC-sponsored Licensing Procedures Course and the Inspection Procedures Course. Arrangements are currently underway to have this individual accompany health physicist inspectors in Massachusetts, with that state's more varied categories of materials licensees. In the not-so-distant future, it is expected that this individual will be the program's primary health physicist inspector.

Also, health physicists in other program areas within the Bureau, such as emergency response, are now being utilized to assist the Bureau in responding to radiological incidents, incident reporting, rules revisions, reciprocity, and other similar aspects, thus freeing up time and resources for the program-dedicated staff to carry out activities in materials inspections and licensing. Finally, the Program Supervisor recently spent a day meeting with the staff of the Maine Radiation Control Program in order to investigate further options to improve program efficiency in carrying out its mission.

*Recommendation 5.* The review team recommends that the Bureau develop and implement an action plan to adopt NRC regulations in accordance with current policy and adequacy and compatibility. (Section 4.12) (Recommendation 6 from the 2001 report)

*Remedial action:* An action plan has been developed that will address all BRH Rules-associated NRC regulations. Bureau of Radiological Health Rules that are lapsed will be addressed first. This initial phase will include:

<b>Expired Regulations</b>	<b>Corresponding NRC Regulation</b>	<b>Submittal Date</b>
He-P 4070 - Fees	10 CFR 170 and 171	June 23, 2003
He-P 4037 - Transportation of RAM	10 CFR 71	August 21, 2003
He-P 4061 - Land Disposal of Radioactive Waste	10 CFR 60, Subpart D	N/A*
He-P 4062 - Requirements for Transfer of LLRW for Disposal	10 CFR 20, Appendix G	August 21, 2003
He-P 4090 - ALIs, DACs and Effluent Concentrations	10 CFR 20, Appendix B	August 21, 2003



<b>Expired Regulations</b>	<b>Corresponding NRC Regulation</b>	<b>Submittal Date</b>
He-P 4092 - Quantities of RAM Requiring Labeling	10 CFR 20, Appendix C	August 21, 2003

\* There are presently no plans for the operation of a Low Level Radioactive Waste Disposal Site within the State of New Hampshire.

The Bureau is currently pursuing a two-phase approach for the 11 overdue, recommended changes to current rules.

These changes to rulemaking include:

- Timeliness in Decommissioning of Materials Facilities
- Low-Level Waste Shipment Manifest Information and Reporting
- Termination or Transfer of Licensed Activities
- Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials, Clean Air Act
- Recognition of Agreement State Licenses In Area Under Exclusive Federal Jurisdiction Within an Agreement State
- Criteria for the Release of Individuals Administered Radioactive Materials
- Radiological Criteria for License Termination
- Deliberate Misconduct of Unlicensed Persons
- Minor Corrections, Clarifying Questions, and a Minor Policy Change
- Transfer for Disposal and Manifests: Minor Technical Conforming Amendment
- Respiratory Protection and Controls to Restrict Internal Exposures

These requirements will be evaluated as to their applicability to Bureau Rules. Those changes that are required will then be imposed as license conditions to the appropriate license holders. These license amendments will be in place by July 1, 2003. Adoption of these as rules will continue to be pursued. These rule changes will be proposed for submittal to the Joint Legislation Committee on Administrative Rules for approval and adoption no later than December 18, 2003.

The changes to current State rules that are not overdue will be pursued following the completion of the previous rule changes. These changes to rulemaking include:

- Energy Compensation Sources for Well Logging and Other Regulatory Clarifications.
- New Dosimetry Technology.
- Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material.
- Revision to the Skin Dose Limit.
- Medical Use of Byproduct Material.

These changes will also be reviewed as to their applicability to State Rules. Adoption of the relevant changes to State rules will be pursued following successful promulgation of the expired State Rules and the recommended overdue changes to current State rules.

In closing, let me reiterate our appreciation for the thorough and professional manner in which the IMPEP review was handled by the NRC staff. I hope that our deeds, as reflected in this letter, as well as our words, convey the importance that we attach to our Agreement State status, and that we are well on the way to eliminating our remaining program deficiencies. Please feel free to contact either Mr. Brook Dupee at (603) 271-4716, or me at (603) 271-4612, should you have any questions regarding this letter or the responses contained herein.

Sincerely,



Kathleen A. Dunn, RN, MPH  
Director

pc: John Wallace, Assistant Commissioner  
Department of Health and Human Services

Brook Dupee, Assistant Director  
Office of Community and Public Health  
Department of Health and Human Services

Veronica Malmberg, Director  
Division of Laboratory Science and Environmental Health  
Department of Health and Human Services

Dennis O'Dowd, Chief, Materials Section  
Bureau of Radiological Health  
Department of Health and Human Services

Donald Bliss, Director  
Office of Fire Standards & Emergency Management  
Department of Safety

STATE OF NEW HAMPSHIRE  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
BUREAU OF RADIOLOGICAL HEALTH

INTEROFFICE MEMORANDUM

**TRAINING FOR RADIATION HEALTH PHYSICISTS -  
RADIOACTIVE MATERIALS SECTION**

Radiation health physicist (RHP) training in conducting radioactive material license application reviews and radioactive materials inspections (as well as other radioactive materials regulatory-related activities) consists of initial training (or validation of previous training and experience radioactive materials licensing reviews and/or inspections) for newly hired RHPs, and refresher training for RHPs who have been authorized to perform independent license reviews and/or inspections.

**Initial Inspector Training**

The Department of Health and Human Services' Bureau of Radiological Health ("BRH") will provide new RHPs in the Radioactive Materials Section ("Section") initial training intended to permit the RHP to perform independent activities in the section (i.e., radioactive materials licensing reviews, inspections, and/or investigations). Upon completion of the initial training or validation of previous training and experience the RHP-in-training will be evaluated by a senior radiation health physicist and the Section Supervisor, Radioactive Materials Section ("Supervisor"). Initial training will consist of self-study, on-the-job training, and classroom training sponsored by the United States Nuclear Regulatory Commission (NRC), Federal Emergency Management Agency (FEMA), United States Department of Energy (DOE), United States Department of Transportation (DOT), the United States Environmental Protection Agency (EPA), the New England Radiological Health Committee (NERHC), the National or New England Chapter Health Physics Society (HPS), or the New Hampshire Department of Health and Human Services (NH DHHS) or one its programs. Prior training and experience may be substituted for equivalent courses. Prior training and experience may be used to substitute for equivalent courses or experience.

*On-the-job training consists of a period of instruction at the BRH office, attending staff meetings, and, as applicable, performing licensing reviews under the supervision of a senior reviewer and/or accompanying senior inspectors on inspections. The training should be accomplished as quickly as possible, taking into consideration availability of senior section RHPs and formal training courses. The goal is to have an RHP-in-training provisionally qualified to perform basic reviews/inspections within 120 days and fully qualified to perform most categories of reviews/inspections within 360 days of being employed.<sup>1</sup>*

**Refresher/Continuing Training**

RHPs who have been authorized to perform independent radioactive material reviews/inspections will receive follow-up training. The training will consist of notices and other documents forwarded to RHPs, information presented during the periodic staff meeting, on-the-job training, and classroom training sponsored by the NRC, FEMA, DOT, or the NH DHHS.

---

<sup>1</sup>These goals are based on the assumption that a new radiation health physicist will perform new duties only radioactive materials section. However, if cross-training in the radiation machine (x-ray) section will take place during the first year, expected qualification times may take longer.

## **Qualification Journal**

The Supervisor will maintain a qualification journal for all RHPs carrying out radioactive material regulatory activities. The journal will document regulatory health physics training received by the RHP, the annual accompaniment reports for the inspector, reports on licensing activities, and any review comments and suggestions submitted by supervising/senior RHPs.

## **BRH in-house training**

BRH in-house training involves working closely with BRH staff, and being instructed in staff members' duties and interaction with the RHP. RHPs-in-training will meet with staff from other BRH program areas.

There will be a designated supervising/senior RHP assigned to the RHP-in-training to provide instruction on the New Hampshire Rules for the Control of Radiation (NHRCR) and radioactive material regulation. Instruction and guidance will also be provided on basic licensing and inspection procedures and techniques, the preparation and submission of licensing, inspection and investigation reports, and the licensing, inspection and investigation documents sent to licensees and applicants.

## **Classroom Training**

Classroom training will be provided to all inspectors on an "as-needed" basis. Attendance at formal training will be based on class availability and priority, and on the individual RHP's prior knowledge and experience. Classroom training will generally be sponsored by the NRC, FEMA, DOE, DOT, EPA, NERHC, HPS, NECHPS, and NH DHHS. Section RHPs are required to attend and successfully complete all the job-related courses.

### **Core Courses for Radioactive Materials Section Radiation Health Physicists:**

- Applied Health Physics (5-Week Health Physics Course)
- Licensing Practices and Procedures
- Inspection Procedures
- Safety Aspects of Industrial Radiography
- Diagnostic and Therapeutic Nuclear Medicine
- Teletherapy and Brachytherapy (as required)
- Transportation of Radioactive Material

A RHP may receive a waiver from any of the training if it can be documented the individual has sufficient education and prior experience in the subject matter. A written waiver must be completed detailing the equivalent education and/or experience and submitted by the supervising RHP for approval by the Supervisor. The Supervisor will establish the best manner to determine if the waiver is warranted. The request for waiver and documentation supporting the Supervisor's determination will be placed in the RHP's qualification journal. It is the intent of this policy that radioactive material RHPs be fully trained in each of the applicable areas within 36 months of their employment with the BRH, subject to funding and training opportunities.

## **Prior Radioactive Material Experience**

RHPs will be given credit for their experience with using radioactive material, and understanding radiation safety, protection and control concepts, prior to being employed by the BRH.

## **On-the-Job Training**

After receiving training in the BRH office the RHP-in-training will accompany senior inspectors on inspections, and will begin supervised work involving license reviews. Senior RHPs are those who have been an RHP with the BRH for at least three years and have been designated as such by the Supervisor.

The supervising RHP and Supervisor will coordinate the RHP-in-training's on-the-job training schedule. Training should be scheduled to permit the RHP-in-training to travel to different areas of the state, to observe inspections conducted by other state and federal radiation control programs (as available), to work on inspection reports, licensing reviews, and have reports and findings reviewed by the senior RHP, and to attend classroom training.

With regard to inspections specifically, the RHP-in-training should initially observe the senior RHP perform inspections. As the individual progresses in knowledge in an authorized use area and the applicable sections of the NHRCCR, they will perform portions of the inspection, under the supervision of the senior RHP. Senior RHPs will document the RHP-in-training's participation in each inspection. The documentation will include the level of participation and his/her ability to perform the various portions of the inspection, and the inspectors understanding of the NHRCCR related to the inspection. The documentation may be submitted as a narrative on a memorandum or on an inspector training form. As the RHP-in-training becomes more proficient, he/she will be permitted to perform more of the inspection. Ultimately he/she will perform the entire inspection, with the senior RHP observing and providing assistance only when needed. During the training phase, all inspection reports must be reviewed and signed by the senior RHP prior to being submitted to the Supervisor.

After the RHP-in-training has performed a minimum of two inspections in a use area, and the senior RHP(s) who accompanied the individual concur that the new inspector is capable of performing independent inspections in the area, the Supervisor will be notified. The Supervisor will grant provisional authorization to perform independent inspections in that use area if the RHP-in-training demonstrates his/her competence in that area. The Supervisor will provide the RHP-in-training with written provisional authorization detailing in which area(s) the RHP-in-training is authorized to perform independent inspections. A copy will be provided to the RHP-in-training's supervisor and a copy placed in the RHP's training file.

### **USE AREAS**

- Industrial Radiography (both fixed and temporary field use)
- Irradiator (both self contained and unshielded)
- Medical Therapy (sealed and unsealed sources)
- Nuclear Medicine (both diagnostic and therapy)
- Nuclear Pharmacy
- Gauge Other (moisture-density, etc)
- Laboratory (includes academic, sealed and unsealed RAM)

### **AUTHORIZATION, ACCOMPAINMENT AND INSPECTION REPORTS EVALUATION**

The senior RHP and Supervisor will communicate regarding the quality of radioactive material license reviews and inspections and the RHP's knowledge of the NHRCCR and radioactive materials regulation. The Senior RHP will evaluate reports submitted by the RHP-in-training. When the senior RHP(s) agree(s) that the RHP-in-training is ready to perform independent radioactive materials licensing reviews and/or inspections in all use areas, they will make a recommendation to the Supervisor that the RHP-in-training be evaluated for authorization to perform independent licensing/inspections.

The senior RHP will conduct accompaniments, as assigned. The accompaniment may consist several inspections, and be sufficient to verify the RHP-in-training's ability to perform independent radioactive material inspections and to properly complete and submit inspection reports. The inspections will be a mixture of industrial, laboratory, and medical licensees and should to the degree possible, be representative of the make-up the state's licensee base.

The senior RHP and Supervisor will evaluate the RHP-in-training's performance and provide input to the RHP after each inspection or review action. At the conclusion of an inspection accompaniment or senior peer review, a written evaluation of the RHP-in-training's performance will be prepared. The evaluation will be placed in the RHP's qualification journal.

The RHP-in-training will complete the licensing and/or inspection reports and submit the reports to the appropriate senior RHP for his/her review, and then, provide the Supervisor with a written evaluation of the report quality. The Senior RHP's evaluation will be placed in the RHP-in-training's qualification journal.

Evaluations may recommend the RHP-in-training be authorized to perform reviews and inspections in all the use areas, in specific use areas, or that the RHP-in-training is not ready to perform independent reviews or inspections.

In the case when certain categories of use are not available for training, the RHP-in-training may be authorized to perform independent reviews or inspections with the exception of certain areas of use.

## **QUALIFICATION DETERMINATION**

At the completion of training, the Supervisor will review all the documentation in the RHP-in-training's qualification journal and determine if the inspector can be authorized to perform independent reviews and/or inspections or whether the RHP requires additional training.

Once determined to be qualified to perform independent licensing or inspections in a particular area of use, the Supervisor will document the decision. A copy will be provided to the RHP-in-training and his/her supervisor. The determination and written authorization will be placed in the RHP's qualification journal. If the RHP-in-training is not ready to perform independent work in a particular area, the Supervisor will communicate this decision to the staff members who assisted with the RHP's training and evaluation. If it is determined the RHP needs training in a specific use area or portions of NHRCCR, this will be documented in writing. The RHP-in-training, the RHP's supervisor, and Supervisor will be notified in writing of the RHP's deficiencies and RHP will be provided additional training.

After additional training, the RHP-in-training will be re-evaluated and if it is determined that the RHP is still not capable of performing independent reviews and/or inspections, the Supervisor will recommend to the BRH Administrator that consideration needs to be given for termination (for probationary employees), or for available options for non-probationary period staff. Note that prior to contacting the RHP-in-training's supervisor, the Supervisor is to notify the Administrator of the determination. If the RHP-in-training has corrected the areas of deficiencies, the Supervisor will document the determination and provide the RHP, and his/her supervisor written authorization to perform independent licensing/inspections in specific or all use areas. The determination and written authorization will be placed in the RHP-in-training's qualification journal.

If after the refresher training is completed, it is determined that the RHP-in-training failed to demonstrate his/her ability to perform independent inspections, the Supervisor will document the decision in writing. The Supervisor will then notify the Administrator of the determination. The RHP-in-training's supervisor and the RHP-in-training will then be notified the RHP failed to demonstrated the knowledge, skills, or abilities necessary to perform independent reviews or inspections and will recommend to the supervisor that the RHP be terminated.

STATE OF NEW HAMPSHIRE  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
**BUREAU OF RADIOLOGICAL HEALTH**

**INTEROFFICE MEMORANDUM**

TO: Dennis P. O'Dowd, Supervisor  
Radioactive Materials Section  
Bureau of Radiological Health

FROM: \_\_\_\_\_

DATE: \_\_\_\_\_

SUBJECT: TRAINING OF NEW RADIATION HEALTH PHYSICIST INSPECTOR

Inspector receiving training: \_\_\_\_\_

---

Licensee Name: \_\_\_\_\_

Licensee Number: \_\_\_\_\_

Primary Use: \_\_\_\_\_

The Radiation Health Physicist Inspector-in-training received training and observed/participated/performed the following activities during this inspection.

Inspected Program and Management Review: \_\_\_\_\_

Inspected Training and Personnel Monitoring: \_\_\_\_\_

Inspected Licensee's Radiation Surveys: \_\_\_\_\_

Inspected Radiation Source Controls: \_\_\_\_\_

Inspected Inventory: \_\_\_\_\_

Performed Inspector's Facility and Equipment Inspection: \_\_\_\_\_

Performed Inspector's Survey: \_\_\_\_\_

Performed Inventory: \_\_\_\_\_

Participated Interview of Staff: \_\_\_\_\_

Inspector in Training \_\_\_\_\_

Licensee No.: \_\_\_\_\_

Page 2 of 2

The following is for areas of special requirements and/or activities authorized for the licensee.

\_\_\_\_\_:\_\_\_\_\_

\_\_\_\_\_:\_\_\_\_\_

\_\_\_\_\_:\_\_\_\_\_

\_\_\_\_\_:\_\_\_\_\_

\_\_\_\_\_:\_\_\_\_\_

\_\_\_\_\_:\_\_\_\_\_

Review of inspection report by senior radiation health physicist inspector. Was the report reviewed prior to submission? \_\_\_\_\_ The inspection report \_\_\_\_\_ If the report required additional work, describe deficiency. \_\_\_\_\_

Other areas noted by senior RHP:

Is the RHP inspector-in-training capable of performing independent inspections of this use of radioactive material? \_\_\_\_\_ If not what area(s) does the inspector need to improve? \_\_\_\_\_

Inspector's strength(s) is/are: \_\_\_\_\_

Inspector's weakness(es) is/are: \_\_\_\_\_

Was the inspection report received within 14 days of the inspection?

Was the inspection report complete? \_\_\_\_\_ Describe any deficiencies: \_\_\_\_\_



STATE OF NEW HAMPSHIRE  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
**BUREAU OF RADIOLOGICAL HEALTH**

**INTEROFFICE MEMORANDUM**

TO: \*\*\*\*\* , Radiation Health Physicist

FROM: Dennis P. O'Dowd, Supervisor  
Radioactive Materials Section  
Bureau of Radiological Health

DATE: \*\*\*\*\*

SUBJECT: Provisional authorization to perform independent inspections of various types of industrial/medical/laboratory licensees.

---

Based on the on-the-job training \*\*\*\*\* (Position No. \*\*\*\*\*) received, successful completion of U.S. Nuclear Regulatory Commission-sponsored training courses, Mr./Ms. \*\*\*\*\* , senior Radiation Health Physicist accompaniment documentation, and review of inspection reports submitted to the Radioactive Materials Section supervisor, Mr./Ms. \*\*\*\*\* is hereby granted provisional authorization to perform independent inspections of the following categories of radioactive material license holders:

- moisture/density gauges
- x-ray fluorescence analyzers (portable and non-portable)
- fixed nuclear gauging devices
- nuclear gauges (other)

This provisional authorization remains in effect until Mr./Ms. \*\*\*\*\* has received final evaluation by the section supervisor, or it has been withdrawn.

STATE OF NEW HAMPSHIRE  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
**BUREAU OF RADIOLOGICAL HEALTH**

**INTEROFFICE MEMORANDUM**

TO: [\*\*\*\*\*], Radiation Health Physicist]

FROM: Dennis P. O'Dowd, Supervisor  
Radioactive Materials Section  
Bureau of Radiological Health

DATE: \*\*\*\*\*

SUBJECT: Authorization to perform certain independent inspections

CC: \*\*\*\*\*, Administrator  
Bureau of Radiological Health

---

Mr./Ms. \*\*\*\*\* is hereby authorized to perform independent inspections of the following industrial/medical/academic/service uses of radioactive material:

- . Broadscope
- . Self-Contained Irradiators
- . Nuclear Medicine, Diagnostic only
- . Nuclear Pharmacy
- . Therapy, Sealed Sources
- . Calibration and Reference Sources
- . Therapy, Unsealed Sources
- . Eye Applicators
- . HDR Brachytherapy Devices

Mr./Ms. \*\*\*\*\* accompanied Mr./Ms. \*\*\*\*\* and myself on inspections of both diagnostic and therapy nuclear medicine licensees. Mr. \*\*\*\*\* and myself also observed Mr. \*\*\*\*\* perform inspections of nuclear medicine inspections. During the inspections Mr. \*\*\*\*\* demonstrated his knowledge in He-P \*\*\*\*, NHRCR, and procedures related to \*\*\*\*\* uses. Both Mr. \*\*\*\*\* and myself determined that Mr. \*\*\*\*\* is capable of performing independent inspections of all types of industrial/medical/academic/services licensees.

The review of Mr. \*\*\*\*\*'s inspections reports, by Messrs. \*\*\*\*\* and \*\*\*\*\*, revealed that Mr. \*\*\*\*\* documented his review of all required areas for these types of licensees and Mr. \*\*\*\*\* documented the violations found during the inspections.

Mr. \*\*\*\*\* previously worked at \*\*\*\*\* in the \*\*\*\*\* . In addition, Mr. \*\*\*\*\* has been employed by the Department of Health and Human Services' Bureau of Radiological Health as [\*\*\*\*specify capacity related to authorized regulatory activity\*\*\*] for \*\* years and for the last year as a \*\*\*\*\*.

**MASTER PROFESSIONAL-LEVEL TRAINING TRACKING SHEET**

NAME/YEAR ATTENDED		NRC-SPONSORED COURSES	
			Air Sampling for Radioactive Materials
			Cobalt Teletherapy
86			Diagnostic & Therapeutic NM (Med Uses) (40-hrs)
	89	93	Environmental Monitoring
	95		Financial Assurance for Decommissioning
93			Gamma Knife Workshop
89			Applied Health Physics ("Five-Week") Course
86	85	95	Health Physics Technology ("2-Week") Course
95	89		Incident Investigation Training Course
			Incident Investigation Training Course
87	88	02	Safety Aspects of Industrial Radiography (40-hrs)
	98		Inspecting for Performance - Materials Version
87	89	02	03 Inspection Procedures (40-hrs)
	00		
85	88	02	03 Licensing Practices and Procedures (40-hrs)
	98		LLW Regulation Workshop
			Medical QA Pilot Program
			Mgmt II: A Mid-Mgmt Seminar
			Multi-Agency Radiation Survey & Site Investigation
			Basic Health Physics (40-hrs)
01			Nuclear Transportation for State Regulatory Personnel
90			Performance Assessment Workshop
			Protective Measures
86			Radiation Protection Engineering (40-hrs)
			Radiation Protection for Pool-type Irradiators
			Radiochemical Sampling & Analysis/Nuc Effluent
85			Radiochemistry for State Regulators
94			Radiological Survey in Support of Decommissioning
94			RESRAD Dose Assessment
			Revised 10 CFR Part 20
			Root Cause - Analysis Refresher
			Root Cause - Incident Investigation
			Rulemaking Workshop - Irradiators
			Rules Workshop
91			Sealed Sources and Devices Workshop
			Site Decommissioning Management Plan
92			Environmental Issues - Special Topics Workshop
			STW - Environmental Issues
89			Teletherapy and Brachytherapy Workshop
87		96	Transportation of Radioactive Materials
92	94	94	10 CFR Part 20
87			10 CFR Part 33 - Broadscope Licensing Workshop
			10 CFR Part 34
92			10 CFR Part 35
93			Well Logging

**MASTER PROFESSIONAL-LEVEL TRAINING TRACKING SHEET**

NAME/YEAR ATTENDED		
Banerjee, Ashish		
Foster, Stephen		
Iannaccone, Mario		
Jeffs, Vicki		
Johnston, Wayne		
Kenna, Twila		
Knowles, Craig		
Kwasnik, Jerry		
O'Connor, Susan		
O'Dowd, Dennis		
<b>OTHER RADIATION TRAINING</b>		
95	01	Portable X-Ray Fluorescence Analyzer Course
88	88	Portable Nuclear Gauging Device Training (Troxler)
	01	Hazmat Worker Training
86	94	
		Radiation Safety in the Laboratory
86	86	Medical X-ray Inspection Procedures Course
87		Medical X-ray Quality Assurance Course
		Radiation Biology
88		National Conference on Radiation Control
		National Conference on Radiation Control
		National Conference on Radiation Control
	94	Radiation Instrumentation
		Monitoring Methods/Measurement of Radon
	99	Nationwide Evaluation of X-ray Trends training
<b>RADIOLOGICAL EMERGENCY RESPONSE</b>		
86	86	Nuclear Power Plant Operations Course
88	94	
		Nuclear Power Plant Operations Course - Refresher
86	84	Radiological Emergency Response Operations (RERO)
	98	Radiological Emergency Response (IS-301)
88	83	Radiological Accident Assessment
88		Advanced Radiological Accident Assessment
	91	Radiological Emergency Preparedness Planning (FEMA)
95	95	EPA-400 Protective Action Guides Workshop
02	95	02
	02	Introduction to Incident Commands Systems
<b>COMPUTER-RELATED</b>		
	95	Microsoft Windows
95	96	Microsoft Word
99	99	Microsoft Access
		Microsoft Excel
		Lotus Notes
		Lotus Organizer
		WordPerfect
<b>PROGRAM MANAGEMENT</b>		
97		Certified Public Supervisor Program
89		How to Supervise People
85		Managing People Seminar
90		Essentials of Management
92		EAP Supervisor Training
96	98	Understanding and Valuing Differences
96		Introduction to Supervision

New Hampshire Department of Health and Human Services  
 Bureau of Radiological Health

**MASTER PROFESSIONAL-LEVEL TRAINING TRACKING SHEET**

NAME/YEAR ATTENDED	
Baronjee, Asish	Interaction Management
Foster, Stephen	Performance Management and Appraisal
Iannaccone, Mario	Personnel Rules Review
Jeffs, Vicki	Continuous Process Improvement
Johnston, Wayne	Myers-Briggs Type Indicator
Kenna, Twila	Creating and Maintaining Organized Files
Knowles, Craig	<b>GENERAL</b>
Kwasnik, Jerry	Defensive Driving Course
O'Connor, Susan	Elements of Safe Driving - Advanced Course
O'Dowd, Dennis	Elements of Safe Driving Refresher Course
	Elements of Safe Driving Refresher Course