September 21, 2006

Susan M. Allan, M.D., J.D.
Public Health Division Director
Oregon Department of Human Services
800 NE Oregon Street, Suite 930
Portland, OR 97232

Dear Dr. Allan:

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, which documents the results of the Agreement State review held in Oregon on August 21-24, 2006. I was the team leader for the review. The review team's preliminary findings were discussed with you and your staff on the last day of the review. The review team's proposed recommendations are that the Oregon Agreement State program be found adequate, but needs improvement, and compatible with NRC's program. The review team is recommending a period of Heightened Oversight for the Oregon Agreement State Program until a fully adequate and compatible program is reestablished. Heightened Oversight is an increased monitoring process used by the NRC to follow the progress of improvements needed in an Agreement State program. The process involves the preparation of a Program Improvement Plan by the State, bimonthly conference calls between the State and the NRC, and the submission of status reports by the State prior to each call.

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 both Agreement State and NRC Regional Office radioactive materials programs. All reviews use common criteria in the assessment and place primary emphasis on performance. Two additional areas applicable to your program have been identified as non-common performance indicators and are also addressed in the assessment. The final determination of adequacy and compatibility of each Agreement State program, based on the review team's report, is made by a Management Review Board (MRB) composed of NRC managers and an Agreement State program manager, who serves as a liaison to the MRB.

In accordance with procedures for implementation of IMPEP, we are providing you with a copy of the draft team report for your review and comment prior to submitting the 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 report in a timely manner that will be responsive to your needs.

The team will review your response, make any necessary changes to the report and issue it to the MRB as a proposed final report. Our preliminary scheduling places the Oregon MRB meeting in the week of November 6, 2006. I will coordinate with you to establish the date for the MRB review of the Oregon report. NRC will provide invitational travel for you or your designee to attend the MRB meeting. 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.

Thank you for your cooperation, and if you have any questions regarding the enclosed report, please contact me at (630) 829-9661.

Sincerely,

/RA/

James L. Lynch
State Agreements Officer

Enclosure:
As stated

cc w/encl:
G. Shibley, Oregon
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M. Light, Ohio

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INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

REVIEW OF OREGON AGREEMENT STATE PROGRAM

August 21-24, 2006

DRAFT REPORT

U.S. Nuclear Regulatory Commission

1.0 INTRODUCTION

This report presents the results of the review of the Oregon Agreement State Program. The review was conducted during the period of August 21-24, 2006, by a review team comprised 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 the February 26, 2004, NRC Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)." Preliminary results of the review, which covered the period of August 31, 2002, to August 24, 2006, were discussed with Oregon management on the last day of the review.

The Oregon Agreement State Program is administered by the Radiation Protection Services Section (the Section). The Section is part of the Office of Environmental Public Health (the Office) in the ~~Division of Health Services~~ ***Public Health Division***(the Division). The Division is located within the Department of Human Services (the Department). Organization charts for the Division, the Office and the Section are included as Appendix B. At the time of the review, the Section regulated approximately 334 specific licenses ***and 84 general licenses***, including naturally occurring or accelerator-produced radioactive material (NARM). 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 Oregon.

In preparation for the review, a questionnaire addressing the common and non-common performance indicators was sent to the Section on June 26, 2006. The Section provided its response to the questionnaire on August 10, 2006. A copy of the questionnaire response may be found in the NRC's Agencywide Documents Access and Management System (ADAMS) using the Accession Number ML062480463.

The review team's general approach for conduct of this review consisted of: (1) examination of the Section's response to the questionnaire; (2) review of applicable Oregon statutes and regulations; (3) analysis of quantitative information from the Section's licensing and inspection database; (4) technical evaluation of licensing and inspection actions; (5) field accompaniments of two Oregon inspectors; and (6) interviews with staff and management to answer questions or clarify issues. The review team evaluated the information gathered against the established criteria for each common and applicable non-common performance indicator and made a preliminary assessment of the Agreement State program's performance.

Section 2 of this report discusses the State's actions in response to recommendations made following the previous IMPEP review. Results of the current review for the IMPEP common performance indicators are presented in Section 3. Section 4 discusses results of the applicable non-common performance indicators, and Section 5 summarizes the review team's findings and recommendations. The recommendations made by the review team are comments that relate directly to program performance by the State. A response is requested from the State to all recommendations in the final report.

2.0 STATUS OF ITEMS IDENTIFIED IN PREVIOUS REVIEWS

During the previous IMPEP review, which concluded on August 30, 2002, four recommendations were made and the results were transmitted to Grant K. Higginson, M.D., Acting Department Administrator, on December 11, 2002. The review team's evaluation of the current status of the recommendations is as follows:

1. The review team recommends that the Section complete development of the program management software and continue to maintain capability in this area which is vital to successful performance of the program. (Section 3.3 of the 2002 report)

   Current Status: The radioactive materials program database is approximately 70 percent completed. Although the Section lost its dedicated programmer in 2002 as result of a newly reorganized and centralized Information Technology/Information Management office, the Section's inspection and licensing database did not reveal any overdue activities or workload backlogs. The review team observed that the Section had expended considerable effort to make up the staffing shortfall. The review team determined that the lack of a dedicated Information Technology programmer has not negatively impacted the Section's ability to successfully manage the program electronically nor compromised its ability to protect public health and safety. This recommendation is closed.

   Information Technology Services has assigned a primary and back-up programmer to provide support for the RML database. If they are not assigned to work on other projects, timely response is normally provided. However, the efficiency of receiving accurate reports currently requires 2-3 versions to finalize each report at increased overall cost to programs (poor efficiency) .

2. The review team recommends that the Section discontinue the routine use of advance authorizations pending development of a procedure and basis for issuing the authorizations. Once developed, the Section should have the practice of issuing advance authorizations and the procedure reviewed by counsel and its Radiation Advisory Committee. The review should include the form and content of the authorizations, the legal basis for issuing notifications prior to issuance of a license, as well as a determination of the potential impact on health and safety issues. In addition, the review should determine the State's potential liability and the compatibility of the practice with established State and Federal regulations, including requirements imposed on distributors of devices containing radioactive material. (Section 3.4 of the 2002 report)

   Current Status: The Section continues to issue advance authorizations as noted in Section 3.4. The Section has not developed a procedure and basis for issuing the authorizations and subsequently has not had legal or Radiation Advisory Committee review. This recommendation remains open.

   Issuing Advanced Authorizations was terminated immediately after the IMPEP review on August 25, 2006. The agency has the capability to expedite issuing

license amendments and has implemented internal procedures for this process.

3. The review team recommends that Oregon report events requiring greater than 24-hour notification to the NRC on a monthly basis; ensure that all reports through August 2002 have been entered into Nuclear Material Events Database (NMED); correct missing data on all NMED reports submitted; update and close out previously reported incidents; and resolve data transmittal problems. (Section 3.5 of the 2002 report)

   Current Status: Following the 2002 IMPEP review, the Section made the required incident reports and corrections to the NRC and to NMED. During this review period, however, the Section had additional failures to report incidents to the NRC Headquarters Operations Center and to NMED. Since the previous recommendation was specific to incidents from the last review period, the team elected to close that recommendation and issue a new recommendation based on the IMPEP review findings outlined in Section 3.5. This recommendation is closed.

   A copy of "Reporting Material Events - SA-300" has been provided to all staff members that respond to reported incidents. Specific training on reporting requirements will be completed prior to January 1, 2007. The incident database will be modified to require management verification whether reporting is required.

   {It should be noted that Oregon RPS responded to an average of 83 incidents per year for the period 2002 through 2006. During that time less than 2 per year were not properly reported to the NRC.}

4. The MRB recommends that the NRC review, in coordination with the States, the issues of data sharing, closing and completing NMED reports, and process used to provide periodic feedback to States on the status of their submittals.

   Current Status: This issue was covered during the June 21, 2005 Periodic Meeting. The NRC representatives discussed with State personnel how NRC shares national event data with the Agreement States. A copy of the Office of State and Tribal Programs (STP) Event Reporting Self-Assessment Report, an NMED Quarterly Report, and an NMED Newsletter that provided guidance on the distinction between "closed" and "complete" event report records, were provided to the State. This recommendation is closed.

   The Section is scheduling NMED up-date training. As noted above, the database will be revised to better identify reportable events.

   The Section would like to recommend that NMED be moved from NRC's oversight and contracted to CRCPD. Grants from several federal agencies provided to CRCPD could fund the program and the reporting system could be used to collect data for all types of incidents. Currently our Agency, as well as other state agencies, must use two databases to record incident information. By shifting responsibility to the CRCPD, incident data for radioactive material, x-ray, tanning, laser, transportation and other non-ionizing events would be available to all federal and state agencies.

3.0 COMMON PERFORMANCE INDICATORS

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

3.1 Technical Staffing and Training

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

The Section is headed by the Section Manager. The Section has two programs: the Radioactive Materials Licensing, Emergency Preparedness, and Tanning Program and the Electronic Products Program. Each program is headed by a Program Manager. An Acting Program Manager is currently managing the Radioactive Materials Licensing, Emergency Preparedness, and Tanning Program. The former Program Manager for that program is retiring in January 2007. For the remainder of his employment with the Section, he has been assigned full-time responsibility and oversight for rulemaking actions.

The Section is responsible for the routine licensing and inspection of 334 specific radioactive materials licenses and 84 general licenses. The Section has approximately 4.5 full-time equivalents (FTE) assigned to perform the technical aspects of the radioactive materials program. The technical staffing level will drop to 3.5 FTE upon the above-mentioned retirement.

> ***Actually RML staffing will increase 1.5 FTE by the recently added Lead Worker and 0.5 FTE for a Medical Physicist position. After the current RML Manager's retirement that will leave 5.0 FTE technical staff n the program.*** (Margaret Lut, Sylvia Martin, Kevin Siebert, Justin Spence, Daryl Leon and Bonnie Wright @ 0.5 FTE)

The qualifications of the staff were determined from the questionnaire, training records, and interviews of personnel. The staff members are well qualified through both education and experience. All staff members have at least a Bachelor's degree in the sciences, or equivalent training and experience. The Section hired a medical physicist in June 2006. The special expertise of the medical physicist should be very advantageous to the Section, both for evaluation of incidents and for training of personnel.

The Section has a comprehensive and effective training plan for staff and new employees, modeled after NRC's Inspection Manual Chapter (MC) 1246, "Formal Qualification Programs in the Nuclear Materials Safety and Safeguards Program Area." The Section uses a combination of formal training and on-the-job experience to qualify the inspectors and license reviewers.

Although, the staff was technically qualified to perform inspection and licensing activities, the review team observed through interviews, that critical knowledge of the reporting requirements for radioactive material events to the NRC and NMED was in need of improvement. The review team believes that this lack of knowledge was the root cause of the Section's failure to report events timely during this review period, as discussed in Section 3.5 of this report. The Section

Manager indicated that a training session would be provided to the staff.

The Section acknowledges not properly reporting of 5-6 incidents of 332 incidents processed during the reporting period. As noted above, training on "Reporting Material Events - SA-300" will be completed before January 1, 2007.

The Section is currently restructuring and ~~a~~ undergoing a comprehensive program review and reorganization. The reorganization will be executed and accomplished in a two-phased transition which has, thus far, included a change from a three-program management organization to the current two-program management organization. In May 2006, during the first phase of the reorganization, a Lead Worker was assigned to the Radioactive Materials Licensing, Emergency Preparedness, and Tanning Program to handle increased responsibilities for program oversight. In the second phase of the plan, planned for **January 2007*,** program functions will be divided by modality. All inspection functions will be located in the Field Operations Unit and all licensing and administration functions will be in the Licensing and Administration Unit. The Field Operations Unit will include all inspection and technical staff from both Programs. The Licensing and Administration Unit will include the Licensing Assistant and all administrative staff. An extensive cross-training program will be implemented for staff in both Units with new assignments for technical staff to assist with radiation materials inspection, emergency preparedness planning, and incident response duties. The Department considers the reorganization to be an improvement in program efficiency and functional assignments resulting in better response to incident investigations, licensing activities and anticipated increases in portable and fixed gauge facilities.

****NOTE: The second phase of the restructuring will occur in the first or second quarter of 2007.***

In August 2006, the Section posted employment announcements for two vacant positions. The two vacant positions are currently assigned to the Electronic Products Program. At the completion of the Section reorganization, the positions will be assigned to the Field Operations Unit and will be the first two positions to undergo full cross-training for inspections in tanning, x-ray and radioactive materials activities. Budgeting for the positions is expected to result from revenue from the 2006 Department request for the radiation program fee increase. The requested fee increase was approved by the Radiation Advisory Committee and Department of Administrative Services and is now subject to legislative review. The Department is expecting the fee change to be approved by July 2007.

Both positions have been filled. One position has been filled by a Board Certified Nuclear Medicine Physician and the other by an experienced inspector with a Bachelor of Science degree in Chemistry.

The review team noted that the Section had stable funding during the review period. The Section collects 100 percent of its budget from fees, which go into a dedicated fund. This radiation control fee fund became effective in July 2005 and has allowed funding of training and grade increases for current staff.

Based on the IMPEP evaluation criteria, the review team recommends that Oregon'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 of Priority 1, 2, and 3 licensees; initial inspection of new licenses; timely dispatch of inspection findings to licensees; and the performance of reciprocity inspections. The review team's evaluation is based on the Section's response to the questionnaire relative to this indicator, data gathered from the Section's licensing and inspection database, the examination of completed inspection casework, and interviews with managers and staff.

The review team's evaluation of the Section's inspection priorities verified that **[**~~most~~**]** ***several*** inspection frequencies for various license types are more frequent than similar license types listed in NRC's MC 2800. Typical of Oregon's inspection frequencies are medical broad scope licenses, which the State inspects annually, compared to NRC's two-year***** frequency, and high dose-rate remote afterloaders, which Oregon inspects annually, versus NRC's two-year frequency. Two license categories, source material and special nuclear material possession, had inspection frequencies of three years as opposed to the two-year frequency in MC 2800. According to the Section Manager, these two categories are not currently used and will be changed to conform with the NRC's frequency.

> ****NOTE: The NRC changed the frequency for high dose-rate remote afterloaders from one year to two years during this review period. The Section's inspection frequency for these licensees was changed to two years at that time.***
>
> ***Inspection frequencies in Oregon are primarily the same as those <u>recommended</u> by the NRC. An increased frequency is based on experience obtained during the inspection process, risk and security concerns.*** **(The IMPEP review should only note the fact that an Agreement State has assigned a more frequent inspection frequency to a license category.)**

The Section tracks all inspection activities in a computer database. The review team observed that the database can be queried by program managers and staff members to determine inspection status for any licensed facility. Since the loss of its dedicated computer programmer in 2002, the Section has lost flexibility to rapidly develop useful information technology reporting tools, but has adjusted to the centralization of the information technology functions in the Division.

> ***NOTE: This is actually a less efficient model for IT services. Currently, if IT staff are assigned to another project (with a perceived higher priority), resources are diverted to that project leaving RPS without timely support.***

The Section Manager indicated that no licenses were currently overdue for inspection using Oregon's inspection frequencies, which as stated earlier, require more frequent inspections than NRC standards. Of the 147 inspections completed during the review period, only one was completed overdue. All 17 initial inspections required during the review period were completed within one year of license issuance.

The timeliness of the issuance of inspection findings was determined by the review team's evaluation of inspection casework. The Section typically issues an Oregon Form 591, similar to NRC's Form 591M, to a licensee at the conclusion of an inspection; therefore, the Section exceeds the timeliness criteria for this indicator. The Section requires a written response to any

violations identified on an Oregon Form 591. Licensee compliance with that response requirement, as well as inspection report handling and tracking is discussed in Section 3.3 below.

Reciprocity was granted to 11 licensees in 2002, 20 licensees in 2003, 15 licensees in 2004, 23 licensees in 2005 and 20 licensees thus far in 2006. The Section's reciprocity inspection goals are equivalent to the requirements in MC 1220 (20 percent of candidate licensees). The review team determined that the Section inspected 72 percent of candidate licensees during the review period, which is significantly greater than the MC 1220 reciprocity inspection requirements.

The review team examined the list of licensees that the Section had determined met the criteria for the increased controls per COMSECY-05-0028. The review team determined that the Section had correctly identified the Oregon licensees that require increased controls based on this criteria. The Section has prioritized its licensees and has begun inspections of these licensees in accordance with the increased control requirements.

The team also reviewed the Section's work on general licensees. The Section currently has 84 registered general licensees. Each year, the Section requires a confirmatory inventory and a fee from registrants. ***Currently, all*** General licensees are **[**~~not normally~~**]** inspected ***at 5 year intervals***. Nationally, Oregon has joined the Organization of Agreement States in petitioning the NRC for rulemaking concerning general licenses (and specifically compatibility of regulations). Presently, compatibility with the NRC's general license rule (10 CFR 31.5) is held in abeyance, pending Commission action on the petition. In the interest of public health and safety, Oregon requires several companies using some higher quantity generally-licensed radiation sources to obtain specific licenses for possession of the sources in the State.

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

3.3 Technical Quality of Inspections

The review team evaluated the inspection reports, enforcement documentation, and inspection field notes, and interviewed inspectors and supervisory staff for 15 radioactive materials inspections conducted during the review period. The casework reviews included inspections conducted by two radioactive materials inspectors and covered various license types including: industrial radiography, academic and industrial broad scopes, high dose-rate remote afterloaders, nuclear medicine, radiopharmaceutical therapy, brachytherapy, nuclear pharmacies, and veterinary imaging. The review team evaluated documentation for one Increased Controls inspection. Appendix C lists the inspection casework reviewed, with case-specific comments, as well as the results of the review team's inspector accompaniments.

Based on the evaluation of the casework, the review team found that, over the review period, inspection reports evolved from a checklist format to a performance-based format following MC 2800 guidance that included focus elements. The majority of inspection reports, however, did not provide at least one of the following elements: the scope of the licensee's program, material possessed at the time of the inspection, authorized locations that were inspected, observations of licensed activities, or inspector independent survey results.

NOTE: Performance based inspection reports were completed based on information presented in the NRC's "Inspection For Performance" course presented in Portland , Oregon. Inspectors were following recommendations presented by the contract instructor. It is recommended that the NRC review the materials presented in this course to determine if they meet NRC standards.

The Section does agree with the IMPEP team's concerns and will require inspectors to provide above identified elements in future inspection reports.

The review team noted that medical and nuclear pharmacy inspections also did not include any documentation of iodine-131 procedures. The review team's evaluation of industrial radiography license inspections identified that Section inspectors did not document the review of radiographer certification cards or whether an inspection had been conducted at a temporary job site. Discussions with inspection staff indicated that performance-based inspections were conducted, including inspections at temporary job sites, but not always properly documented.

The majority of violations are documented on an Oregon Form 591. In most of the casework evaluated, specific regulation or licensee procedure support for violations was not included on the Oregon Form 591 or in the inspection file. The Oregon Form 591 requires the licensee to provide a written response to the violations. The review team noted that prompt regulatory actions were not always taken in response to violations identified. Acknowledgment letters were routinely sent to the licensee more than 30 days after receipt of the licensee's response. The review team recommends that the State place greater emphasis on providing sufficient detail in inspection reports to allow Section management and staff to understand the technical basis for inspection findings.

NOTE: The Section has implemented new requirements for tracking inspection reports, licensee responses and Agency follow-up to inspections. In general, both licensing actions and inspection report completions will be required within a 45 day period from receipt of licensing action or date of inspection, including reviews by management. The Open Inspection's report will be modified to provide the Manager with more comprehensive status of current open inspections.

When escalated enforcement is appropriate, the Division has the authority to require management conferences, suspend licenses, and impound licensed material. Legislation is currently pending giving the Division authority to levy civil penalties.

Regarding supervisory inspector accompaniments, the team noted that accompaniments are not performed annually, as required by the Section's inspection procedures. Of the three staff members currently assigned to inspection positions, none were accompanied by their supervisor in 2004. One of the inspectors was accompanied by a supervisor in 2005 and another was accompanied in 2006. The Acting Program Manager, new to the position, has not yet accompanied staff on inspections. To increase familiarity with the radioactive materials program, the newly assigned Lead Worker in the program accompanied two inspectors in 2006. The review team and the Section managers discussed the value of annual supervisory inspector accompaniments. The review team recommends that the State ensure that radioactive materials inspectors are accompanied by supervisors, at least annually, to promote

quality and consistency in the inspection program.

All Inspectors will be accompanied by a manager or lead-worker at least annually with complete documentation maintained for future IMPEP reviews.

The Section has adequate quantities and types of radiation detection equipment to support their radiation protection efforts, with recent upgrades acquired through funding provided by the Department of Homeland Security. Appropriate and calibrated survey instruments such as Geiger-Mueller (GM) meters, scintillation detectors, ion chambers, micro-R-meters, and air samplers were observed. The instrumentation is calibrated annually by Oregon State University, and air samplers are calibrated by Oregon's Occupational Health and Safety Administration **Laboratory**.

Two Section inspectors were accompanied during inspections by a review team member during the week of July 23, 2006. Inspection accompaniments included an industrial radiography facility requiring increased controls and a high dose-rate remote afterloader program. The accompaniments and associated comments are included in Appendix C. During the accompaniments, each inspector demonstrated appropriate performance-based inspection techniques and knowledge of the regulations. The inspectors were appropriately trained, prepared, and thorough in their audits of the licensees radiation safety programs. Overall, each inspector utilized good health physics practices. Interviews with licensee personnel were performed in an effective manner, and the inspections were adequate to assess radiological health and safety at the licensed facilities. During the industrial radiography inspection, the inspector, seeing that essential increased controls were not in place, required the licensee to take immediate compensatory measures until a corporate security evaluation was completed. The inspector's approach was commendable.

Based on the IMPEP evaluation criteria, the review team recommends that Oregon'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 interviewed license reviewers, evaluated the licensing process, and examined licensing casework for 22 specific licenses. Twenty-three 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, financial assurance, operating and emergency procedures, appropriateness of the license conditions, and overall technical quality. The casework was also reviewed for timeliness, use of appropriate deficiency letters and cover letters, reference to appropriate regulations, product certifications, supporting documentation, consideration of enforcement history, pre-licensing visits, peer and supervisory review as indicated, and proper signatures. The casework was checked for retention of necessary documents and supporting data.

The casework was selected to provide a representative sample of licensing actions completed during the review period. The sample included the following license types: medical and academic broad scope, manufacturing and distribution, medical institution - limited, high dose-rate remote afterloader, gamma stereotactic radiosurgery, mobile nuclear medicine, nuclear

pharmacy, industrial radiography, and fixed gauge. Types of licensing actions selected for evaluation included new licenses, renewals, amendments to existing licenses, and license terminations. A listing of the licensing casework evaluated, with case specific comments, may be found in Appendix D.

The review team found that the licensing actions were generally thorough, complete, consistent, and of high quality with health and safety issues properly addressed. License tie-down conditions were stated clearly, backed by information contained in the file, and inspectible. Deficiency letters clearly stated regulatory positions, were used at the proper time, and identified substantive deficiencies in the licensees' documents. The Section has one senior staff member whose primary responsibility is licensing. At a minimum, each licensing action has a peer review and a management review. Peer reviews are completed by inspection staff with expertise in the radioactive material use being licensed. In addition, licenses usually undergo review by the Program Manager and a final review by the Section Manager. The Section Manager, or his designated representative, signs all licenses. The review team noted that the Section has a very efficient and effective licensing process with the exception of the practice of advance authorizations, as discussed below.

The review team noted that the Section has continued to issue advance authorizations for licensing, after an informal health and safety evaluation. Senior staff members have continued to grant these authorizations, which were unspecific as to the requirements imposed on the licensee or applicant. At the December 3, 2002 Management Review Board (MRB) meeting, the MRB members and Oregon program management discussed discontinuing routine use of this practice until it was fully proceduralized and its legality was confirmed. As of the date of this review, the development of a procedure and a legal review of the process has not been accomplished.

Two advance authorizations were evaluated by the team. The first was a medical center's request for authorization to obtain a gamma stereotactic radiosurgery unit. The advance authorization was issued on July 7, 2006. No health and safety or security instructions were issued with the authorization. After consultation with the review team, the State opted to issue a possession-only license to the medical center with appropriate license conditions addressing this area. The license was issued on August 24, 2006. The second advance authorization, issued on July 26, 2002, to a testing company, authorized possession of a portable gauge. The testing company lost the gauge on September 23, 2002, prior to the issuance of a license on October 23, 2002.

> ***Note: As indicated before, the issuance of Advanced Authorizations has been discontinued.***

In light of the health and safety potential for possession and use of these radioactive materials, and the need for security for the sources, the review team recommends that the recommendation from the 2002 IMPEP review regarding advance authorizations remain open.

The review team examined the list of licensees that the Section had determined met the criteria for the increased controls per COMSECY-05-0028. The review team determined that the Section had correctly identified the Oregon licensees that require increased controls based on this criteria and have procedures in place to issue increased controls to any additional

licensees, as appropriate. Each licensee was issued a license amendment requiring increased controls in accordance with the timelines established by the Commission in the Staff Requirements Memorandum for COMSECY-05-0028.

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

3.5 Technical Quality of Incident and Allegation Activities

In evaluating the effectiveness of the Section's actions in responding to incidents, the review team examined the Section's response to the questionnaire relative to this indicator, evaluated selected incidents reported for Oregon in NMED against those contained in the State's database and incident files, and evaluated casework and supporting documentation for 14 radioactive material incidents. A listing of the incident casework examined, with case-specific comments, is included in Appendix E. The review team also evaluated the Section's response to allegations involving radioactive materials, including one allegation referred to the State by the NRC. Incident and allegation policies, file documentation, the Section's incident and allegation tracking system, NMED, and notification of incidents to the NRC Headquarters Operations Center were discussed with Section management and staff.

The review team found incident information was maintained in several locations: the license files, the Section's database, the incident files, the NMED files, and the inspectors' personal files. In most cases, no single file had all of the pertinent documents. The review team found the Section's documentation was often incomplete, and in some cases, the investigation results were missing from both the database and the license files and had to be found in other locations (e.g., staff personal files).

The Section recognizes that this is an area of concern. Training will be provided to incident response staff on NMED and NRC reporting requirements. Recordkeeping was also affected by the Section move to new spaces last fall with required consolidation of many records. These files are still being reviewed for archiving and retention requirements.

Written procedures exist for handling incidents. When notified of an incident after hours, the information is received by a 24-hour emergency response system. The information is recorded on a incident report summary form, and the individual on call is notified. After notification of an incident, Section supervisors determine if the event requires a call to the NRC Headquarters Operations Center. A member of the inspection staff is assigned to investigate the incident and to complete any required follow-up activities.

During the review period, the Section received reports of 27 radioactive material incidents. The review team evaluated 14 incidents that required reporting under NRC criteria. The incidents selected for review included the following categories: overexposure, lost/stolen radioactive material, damaged gauge, and medical event. When investigations were conducted, initial responses were prompt and the level of effort was commensurate with the health and safety significance. Several exceptions are noted below.

The review team determined that 9 of the 14 incidents evaluated had not been reported to NMED as required. The review team identified four incidents that had not been completed or closed out in NMED, although the review of incident files revealed that inspections and follow-up actions were performed. The unreported and open incidents were discussed with the Section managers, who agreed to contact the NRC contractor responsible for maintaining NMED to complete and close the identified incidents.

After reviewing the incident documentation, the review team determined that the Section dispatched inspectors for on-site investigations and took appropriate follow-up actions in all but four cases. The first instance, in October 2005, related to a gamma stereotactic radiosurgery medical event involving a 32 gray (3,200 rad) dose to the wrong treatment site. A reactive inspection was not conducted. The incident was mistakenly identified by a Section supervisor as a 32 rad dose instead of the much higher 32 gray dose. The licensee's incident report was apparently not reviewed by any other Section staff members. The Section contacted the licensee to discuss the incident during the IMPEP review and has scheduled a follow-up inspection. In another instance, a stolen gauge, the event report was not in the license file; therefore, no follow-up occurred at the next inspection of that licensee.

The final two instances involved the loss of control of radioactive material. These incidents involved improper disposal of iodine-125 seed implants and a vial containing 237 microcuries of iodine-125 labeled hormones. The Section knew of the incidents, but because of the low activities involved, and the likely wrong disposal locations of the material (landfill, sewer), the Section did not believe that any follow-up or enforcement action was necessary. Under the NRC's enforcement program, these incidents would likely be considered for follow-up and enforcement actions. The review team recommends that the State take measures to ensure proper documentation and appropriate response, review, enforcement, and follow-up of all radioactive materials incidents.

During the review period, the Section received four allegations involving Agreement material. The review team evaluated the casework for all four allegations, one of which was referred to the State by the NRC. The review team's evaluation indicated that prompt and appropriate action was taken in response to the concerns raised. Allegers requesting anonymity were informed that every effort would be made to protect his/her identity, but could not be guaranteed. Each of the allegations reviewed were appropriately closed, and the allegers were informed of the results, when possible. There were no performance issues identified from the review of the allegation casework documentation.

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

4.0 NON-COMMON PERFORMANCE INDICATORS

IMPEP identifies four non-common performance indicators to be used in reviewing Agreement State programs: (1) Compatibility Requirements, (2) Sealed Source and Device Evaluation Program, (3) Low-Level Radioactive Waste Disposal Program, and (4) Uranium Recovery Program. Only the performance indicators, Compatibility Requirements and Low-Level Radioactive Waste Disposal Program, were applicable to this review.

4.1 Compatibility Requirements

4.1.1 Legislation

Oregon became an Agreement State on June 22, 1965. Legislative authority to create an agency and enter into an Agreement with the NRC is granted in Oregon Statute 453.625. Oregon Statute 453 governs the use of radioactive materials, x-ray, emergency response and laboratory services. The Section is designated as the State's radiation control agency. There were no legislative changes during the review period. Oregon has no sunset provisions either for the Section or for its regulations.

4.1.2 Program Elements Required for Compatibility

The State's regulations governing radiation protection requirements are contained in the Oregon Administrative Rules (OAR) 333. Oregon requires a license for the possession and use of all radioactive material, including NARM. Oregon also requires registration of all machines designed to produce radiation.

The review team evaluated the Section's response to the questionnaire relative to this indicator, 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 NRC's STP State Regulation Status Data Sheet.

Since the previous IMPEP review, the Section has addressed a large number of NRC regulation amendments. The first package containing 25 final amendments was received December 3, 2002. In a letter dated January 23, 2003, the NRC transmitted comments concerning the Oregon final regulations and requested that when these comments become incorporated into the rules, a copy of the final, as published, version of the rules be sent to STP. The rules became effective on March 27, 2003. The second package received on May 18, 2006, contained 9 proposed amendments. In a letter dated July 10, 2006, the NRC transmitted 30 comments concerning the Oregon proposed regulations and also requested that when these comments become incorporated into the rules, a copy be sent to STP. These rules became effective on June 16, 2006. Eighteen of the NRC comments regarded the General License rule, and 11 of those comments were held in abeyance pending the determination of the adequacy and compatibility of those rules, as Oregon has the essential elements of the NRC's rule and is more restrictive than the NRC's rule.

As of the date of this review, the Section had not submitted any of the requested regulations to the NRC for a final compatibility review. Furthermore, 23 of these amendments were adopted from one to seven years later than the three-year time frame required after the effective date of NRC's final rule. Under NRC's current procedure, a finding that a State's regulations meet the compatibility and health and safety categories of the equivalent NRC regulations is based on a review of the final State regulations and the adoption of the regulations in the 3-year time frame after the effective date of NRC's final rule.

NOTE: A final rules package will be submitted no later than October 20, 2006.

The Section Manager indicated that the NRC comments on the final and proposed regulations

were incorporated in their effective regulations. The review team found that with the exception of two, all comments have been incorporated into the regulations adopted on June 16, 2006. The Section committed to submitting the final regulations to the NRC using STP Procedure SA-201 "Review of State Regulatory Requirements" as a guide. The review team recommends that the State develop and implement an action plan to adopt NRC regulations in accordance with current NRC policy on adequacy and compatibility.

The review team noted that the following requirement was incorporated by license condition since the last IMPEP review:

"Increased Controls for Risk-Significant Radioactive Sources," NRC Order EA-05-090 (70 FR 72128) that became effective December 1, 2005.

The following proposed regulations were submitted to the NRC for review and comment. By letter dated July 16, 2006, NRC responded to the submission with 30 comments:

"Respiratory Protection and Controls to Restrict Internal Exposure," 10 CFR Part 20 amendment (64 FR 54543 and 64 FR 55524) that became effective February 2, 1999.

"Energy Compensation Sources for Well Logging and Other Regulatory Clarifications," 10 CFR Part 39 amendment (65 FR 20337) that became effective on May 17, 2000.

"New Dosimetry Technology," 10 CFR Parts 34, 36, and 39 amendments (65 FR 63750) that became effective on January 8, 2001.

"Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material," 10 CFR Parts 30, 31, 32 amendments (65 FR 79162) that became effective on February 16, 2001.

"Revision of the Skin Dose Limit," 10 CFR Part 20 amendment (67 FR 16298) that became effective on April 5, 2002.

"Medical Use of Byproduct Material," 10 CFR Parts 20, 32, and 35 amendments (67 FR 20249) that became effective on October 24, 2002.

"Financial Assurance for Materials Licensees," 10 CFR Parts 30, 40, and 70 amendments (68 FR 57327) that became effective on December 3, 2003.

"Medical Use of Byproduct Material - Recognition of Specialty Boards," 10 CFR Part 35 amendment (70 FR 16336, 71 FR 1926) that became effective on April 29, 2005.

"Security Requirements for Portable Gauges Containing Byproduct Material," 10 CFR Part 30 amendment (70 FR 2001) that became effective on July 11, 2005.
The Section will need to address the following regulations in upcoming rulemakings or by adopting alternate legally binding requirements by the date indicated:

"Compatibility with IAEA Transportation Safety Standards and Other Transportation Safety," 10 CFR Part 71 amendment (69 FR 3697) that became effective on October 1, 2004 and is due for

State adoption by October 1, 2007.

“Minor Amendments - 10 CFR Parts 20, 30, 32, 35, 40 and 70," 10 CFR amendments (71 FR 15005) that became effective March 27, 2006 and is due for State adoption by March 27, 2009.

It should be noted that the Section expended considerable effort in regulation development during the review period. As discussed in Section 3.1 of this report, the former Program Manager was assigned full-time responsibility and oversight for rulemaking actions and regulations. The Section Manager expects that all required regulations will be adopted and approved by the NRC by the end of the year.

Based on the IMPEP evaluation criteria, the review team recommends that Oregon’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, the NRC amended its Policy Statement, "Criteria for Guidance of States and NRC in Discontinuance of NRC Authority and Assumption Thereof by States Through Agreement" to allow a State to seek an amendment for the regulation of LLRW as a separate category. Those States with existing Agreements prior to 1981 were determined to have continued LLRW disposal authority without the need of an amendment. Although Oregon has such disposal authority, 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, they are expected to put in place a regulatory program which will meet the criteria for an adequate and compatible LLRW disposal program. There are no plans for a LLRW disposal facility in Oregon. Accordingly, the review team did not evaluate this indicator.

5.0 SUMMARY

As noted in Sections 3 and 4 above, the review team found Oregon’s performance to be satisfactory for two performance indicators, and satisfactory, but needs improvement, for the performance indicators, Technical Quality of Inspections; Technical Quality of Licensing Actions; Technical Quality of Incident and Allegation Activities; and Compatibility Requirements. Accordingly, the review team recommends that the Oregon Agreement State Program be found adequate, but needs improvement and compatible with NRC's program. The review team recommends that a period of Heightened Oversight be implemented to assess the progress of the State addressing the recommendations from this review. The period of Heightened Oversight should include bimonthly conference calls and a follow-up IMPEP review in approximately one year from the date of this review.

Below is a summary list of recommendations, as mentioned in earlier sections of the report, for evaluation and implementation by the State. Included is one open recommendation from the 2002 IMPEP report:

RECOMMENDATIONS:

1. The review team recommends that the State place greater emphasis on providing sufficient detail in inspection reports to allow Section management and staff to understand the technical basis for inspection findings. (Section 3.3)

   Inspection procedures will be developed to include detailed check lists and performance based inspection forms. Additional training will be provided to each inspector as each license type inspection form is developed.

2. The review team recommends that the State ensure that radioactive materials inspectors are accompanied, at least annually by supervisors, to promote quality and consistency in the inspection program. (Section 3.3)

   Inspectors will be accompanied by either the RML manager or the lead-worker annually. A review report will be provided to the RPS manager within 5 working days of the accompaniment.

3. The review team recommends that the Section discontinue the routine use of advance authorizations pending development of a procedure and basis for issuing the authorizations. Once developed, the Section should have the practice of issuing advance authorization and the procedure reviewed by counsel and its Radiological Advisory Committee (RAC). The review should include the form and content of the authorizations, the legal basis for issuing notifications prior to issuance of a license, as well as a determination of the potential impact on health and safety issues. In addition, the review should determine the State's potential liability and the compatibility of the practice with established State and Federal regulations, including requirements imposed on distributors of devices containing radioactive material. (From 2002 IMPEP review) (Section 3.4)

   Advanced Authorizations were discontinued as of August 25, 2006.

4. The review team recommends that the State take measures to ensure proper documentation and appropriate response, review, enforcement, and follow-up of all radioactive materials incidents. (Section 3.5)

   All incident response personnel will receive training in NMED and NRC reporting requirements. In addition, the database will be modified to require determination of reporting requirements.

5. The review team recommends that the State develop and implement an action plan to adopt NRC regulations in accordance with current NRC policy on adequacy and compatibility. (Section 4.1.2)

   An Action Plan will be submitted to the NRC Region IV State Agreements Officer no later than December 31, 2006.

LIST OF APPENDICES

APPENDIX A

IMPEP REVIEW TEAM MEMBERS

Name	**Area of Responsibility**
James Lynch, RIII	Team Leader Status of Materials Inspection Program Inspector Accompaniments
Andrea Jones, STP	Technical Staffing and Training
Robert Hays, RIII	Technical Quality of Inspections
Mark Light, Ohio	Technical Quality of Licensing Actions
Linda McLean, RIV	Technical Quality of Incident and Allegation Activities Compatibility Requirements

APPENDIX B

OREGON ORGANIZATION CHARTS

ADAMS: ML062480465

APPENDIX C

INSPECTION CASEWORK REVIEWS

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

File No.: 1
Licensee: Acuren Inspection, Inc. License No.: ORE-90621
Inspection Type: Increased Controls, Announced Priority: 1
Inspection Date: 5/3/06 Inspectors: KS, JS

File No.: 2
Licensee: PCC Stucturals, Inc. License No.: ORE-90232
Inspection Type: Routine, Unannounced Priority: 3
Inspection Date: 1/20/06 Inspector: JS

Comments:
a) Management review was completed six months after the inspection, with no comments.
b) No inspection report in file for December 2002 inspection as a reference for inspectors.
c) Inspection report did not include program scope and what is actually possessed at any of the eight authorized locations.

File No.: 3
Licensee: Portland State University License No.: ORE-90156
Inspection Type: Routine, Announced Priority: 3
Inspection Date: 9/24/04 Inspector: JS

Comments:
a) Licensee response received one year after the inspection.
b) Violations on Form 591 did not specify what requirements were specifically violated.
c) Management review of the inspection report performed one year after the inspection, with no comments.
d) Inspection report did not comment on the licensee's use of an expired waste manifest for a waste shipment.

File No.: 4
Licensee: Cardinal Health License No.: ORE-90509
Inspection Type: Not specified on inspection report Priority: 1
Inspection Date: 3/29/06 Inspector: KS

Comments:
a) Only unrestricted area independent surveys documented.
b) No iodine-131 inspection activities documented, however, I-131 uptakes were indicated on dosimetry records.
c) No documentation of licensee audit results.
d) No documentation pertaining to radiopharmaceutical dispensing errors.
e) Nuclear pharmacy staff dosimetry records in file without redaction of personal information.

File No.: 5

Licensee: Legacy Emanuel Hospital License No.: ORE-90014
Inspection Type: Routine, Unannounced Priority: 3
Inspection Date: 9/15/05 Inspector: JS

Comments:
a) Brachytherapy procedures not inspected.
b) No documentation of I-131 use, if any.
c) Dosimetry records for nuclear medicine technologist not available. No reason stated.
d) Personnel dosimetry badges not exchanged as required. No violation cited, nor a reason why a violation was not cited.
e) Management review of the inspection report performed nine months after the inspection, with no comments.

File No.: 6
Licensee: Samaritan Lebanon Community Hospital License No.: ORE-90990
Inspection Type: Initial, Unannounced Priority: 3
Inspection Date: 8/29/03 Inspector: KS

Comments:
a) No scope of licensed activities identified in report.
b) Only one individual contacted during inspection; RSO not contacted.

File No.: 7
Licensee: Community Cancer Center License No.: ORE-90422
Inspection Type: Routine, Unannounced Priority: 3
Inspection Date: 3/9/05 Inspector: JS

Comments:
a) Inspection record indicated a declared pregnant female received 960 mrem Deep Dose Equivalent in June 2004, no other specific information provided.
b) Inspection report indicated nuclear pharmacist on staff, but no radiopharmaceuticals administered.
c) Inspection report indicated the licensee has a high dose-rate afterloader, but no other information provided.
d) Management review of the inspection report performed five months after the inspection, with no comments.

File No.: 8
Licensee: International Inspection License No.: ORE-90651
Inspection Type: Not specified on Inspection Report Priority: 1
Inspection Date: 8/10/05 Inspector: KS

Comment:
No detail about the violation cited on Form 591.

File No.: 9
Licensee: Acuren Inspection, Inc. License No.: ORE-90621
Inspection Type: Routine, Unannounced Priority: 1
Inspection Date: 7/27/06 Inspector: JS

Comment:
No information provided about temporary job site work, if any.

File No.: 10
Licensee: Central Oregon Community Hospital License No.: ORE-90510
Inspection Type: Routine, Unannounced Priority: 3
Inspection Date: 10/1/03 Inspector: JS

Comment:
Licensee response dated October 31, 2003, acknowledgment letter dated July 30, 2004.

File No.: 11
Licensee: University of Portland License No.: ORE-90934
Inspection Type: Routine, Unannounced Priority: 5
Inspection Date: 5/24/06 Inspector: KS

Comment:
The violation indicated on the Form 591 was not a specific requirement in the licensee's procedures.

File No.: 12
Licensee: St. Vincent Hospital and Medical Center License No.: ORE-90104
Inspection Type: Routine, Unannounced Priority: 3
Inspection Date: 9/8/05 Inspector: JS

Comment:
A portable gauge program checklist used as part of the inspection of this medical license.

File No.: 13
Licensee: Northwest Equine Performance License No.: ORE-90968
Inspection Type: Routine, Announced Priority: 3
Inspection Date: 2/27/06 Inspector: JS

Comments:
a) No close out surveys provided by the licensee to indicate no contamination at the previous address before released for unrestricted use.
b) Violations not clear on the Form 591. Violations not detailed in the inspection report.

File No.: 14
Licensee: Salem Hospital License No.: ORE-91006
Inspection Type: Routine, Unannounced Priority: 2
Inspection Date: 3/17/04 Inspector: JS

Comments:
a) Inspection report was completed four months after the inspection.
b) Inspection information in file not clear about when the next inspection is due.

File No.: 15
Licensee: Oncology Associates of Oregon License No.: ORE-91030
Inspection Type: Initial, Unannounced Priority: 3
Inspection Date: 3/29/05 Inspector: KS

Comments:
a) No performance-based inspection information provided in the inspection report.
b) No information about authorized locations listed on the license.

INSPECTOR ACCOMPANIMENTS

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

Accompaniment No.: 1
Licensee: Oncology Associates of Oregon License No: ORE-90862
Inspection Type: Routine, Announced Priority: 2
Inspection Date: 7/27/06 Inspector: KS

Comment:
The inspector missed an opportunity to interview technologists, dosimetrists and ancillary personnel.

Accompaniment No.: 2
Licensee: Professional Service Industries, Inc. License No: ORE-90056
Inspection Type: Increased Controls, Announced Priority: 1
Inspection Date: 7/28/06 Inspector: JS

Comment:
The inspector identified the licensee's lack of Increased Controls and required the licensee to immediately implement compensatory measures.

APPENDIX D

LICENSE CASEWORK REVIEWS

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

File No.: 1
Licensee: Oregon Health and Science Center — License No.: ORE-90980
Type of Action: Termination — Amendment No.: 7
Date Issued: 3/31/06 — License Reviewer: SM

File No.: 2
Licensee: Oregon Health Sciences University — License No.: ORE-90731
Type of Action: Amendment — Amendment No.: 68
Date Issued: 11/23/05 — License Reviewer: SM

File No.: 3
Licensee: Oregon Health Sciences University — License No.: ORE-90731
Type of Action: Amendment — Amendment No.: 69
Date Issued: 1/18/06 — License Reviewer: SM

File No.: 4
Licensee: Oregon State University — License No.: ORE-90005
Type of Action: Amendment — Amendment No.: 80
Date Issued: 11/23/05 — License Reviewer: SM

File No.: 5
Licensee: Oregon Health and Science University — License No.: ORE-90013
Type of Action: Renewal — Amendment No.: 90
Date Issued: 12/1/03 — License Reviewer: SM

File No.: 6
Licensee: Sacred Heart Medical Center — License No.: ORE-91054
Type of Action: New — Amendment No.: N/A
Date Issued: 7/7/06 — License Reviewer: SM

Comments:
a) An advance authorization was issued to possess and use radioactive material. Neither the procedural basis, the health and safety review, or security issues for the advance authorization were clearly documented in the file.
b) A possession-only license was issued on August 24, 2006.

File No.: 7
Licensee: Oncology Associates of Oregon — License No.: ORE-90862
Type of Action: Amendment — Amendment No.: 11
Date Issued: 7/31/06 — License Reviewer: SM

File No.: 8
Licensee: Cardinal Health License No.: ORE-90509
Type of Action: Amendment Amendment No.: 36
Date Issued: 8/17/06 License Reviewer: SM

Comment:
The license was issued on August 17, 2006, however, the signature date indicated August 26, 2006.

File No.: 9
Licensee: Providence Portland Medical Center License No.: ORE-90053
Type of Action: Renewal Amendment No.: 90
Date Issued: 4/30/03 License Reviewer: SM

File No.: 10
Licensee: Reed College License No.: ORE-90010
Type of Action: Renewal Amendment No.: 51
Date Issued: 8/30/05 License Reviewer: SM

File No.: 11
Licensee: PCC Structurals, Inc. License No.: ORE-90232
Type of Action: Renewal Amendment No.: 59
Date Issued: 8/16/06 License Reviewer: SM

File No.: 12
Licensee: Legacy Health System License No.: ORE-90008
Type of Action: Renewal Amendment No.: 83
Date Issued: 6/24/03 License Reviewer: SM

File No.: 13
Licensee: Comprehensive Cancer Center License No.: ORE-90790
Type of Action: Renewal Amendment No.: 16
Date Issued: 12/21/05 License Reviewer: SM

File No.: 14
Licensee: OGI School of Science and Engineering License No.: ORE-90676
Type of Action: Termination Amendment No.: 51
Date Issued: 2/20/03 License Reviewer: SM

File No.: 15
Licensee: Samaritan Lebanon Community Hospital License No.: ORE-90990
Type of Action: New Amendment No.: N/A
Date Issued: 2/24/03 License Reviewer: SM

File No.: 16
Licensee: Cascade Health Services License No.: ORE-90979
Type of Action: New Amendment No.: N/A

Date Issued: 2/21/03 License Reviewer: SM

File No.: 17
Licensee: Oregon Advanced Imaging License No.: ORE-91001
Type of Action: New Amendment No.: N/A
Date Issued: 2/18/03 License Reviewer: SM

File No.: 18
Licensee: Pacific Technical Industries, Inc. License No.: ORE-90779
Type of Action: Termination Amendment No.: 12
Date Issued: 4/7/05 License Reviewer: SM

File No.: 19
Licensee: Northwest Inspection, Inc. License No.: ORE-90889
Type of Action: Termination Amendment No.: 13
Date Issued: 8/18/05 License Reviewer: SM

File No.: 20
Licensee: St. Vincent Hospital and Medical Center License No.: ORE-90965
Type of Action: Termination Amendment No.: 2
Date Issued: 8/16/04 License Reviewer: SM

File No.: 21
Licensee: Southern Oregon Rock, LLC License No.: ORE-91008
Type of Action: New Amendment No.: N/A
Date Issued: 6/3/03 License Reviewer: DL

File No.: 22
Licensee: P.E.T. Imaging Services, LLC License No.: ORE-91007
Type of Action: Amendment Amendment No.: 7
Date Issued: 6/16/05 License Reviewer: JS

File No.: 23
Licensee: ACS Testing License No.: ORE-90987
Type of Action: New Amendment No.: N/A
Date Issued: 7/26/02 License Reviewer: SM

Comments:
a) An advance authorization was issued for possession and use of radioactive material. Neither the procedural basis, the health and safety review, or security issues for the advance authorization were clearly documented in the file. The licensee lost the portable gauge on September 23, 2002, prior to the license being issued.
b) A license was issued on October 23, 2002.

APPENDIX E

INCIDENT CASEWORK REVIEWS

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

File No.: 1
Licensee: Cardinal Health Pharmacy — License No.: ORE-90914
Date of Incident: 1/5/06 — Event No.: 06-0001
Investigation Date: 1/5/06 — Type of Incident: Vehicle Accident
Type of Investigation: Telephone

Comment:
Not reported to NMED.

File No.: 2
Licensee: Geo Pacific Testing, Inc. — License No.: ORE-90950
Date of Incident: 3/4/05 — Event No.: 05-0013
Investigation Date: 3/8/05 — Type of Incident: Stolen Gauge
Type of Investigation: On-site

Comments:
a) Not reported to NMED.
b) No follow-up during the next inspection because the event report was not in the license file.

File No.: 3
Licensee: Oregon Health & Science University — License No.: ORE-90731
Date of Incident: 2/28/06 — Event No.: 06-0005
Investigation Date: N/A — Type of Incident: Lost Source
Type of Investigation: N/A

Comment:
Not reported to NMED.

File No.: 4
Licensee: Geo Engineering — License No.: ORE-90987
Date of Incident: 6/3/05 — Event No.: 05-0037, NMED No.: 020901
Investigation Date: N/A — Type of Incident: Stolen Gauge
Type of Investigation: N/A

Comment:
Inspection was not conducted because the gauge was found the same day. To be followed-up at the next inspection.

File No.: 5
Licensee: Kaiser Sunnyside Hospital License No.: ORE-90464
Date of Incident: 8/22/05 Event No.: 05-0062
Investigation Date: N/A Type of Incident: Medical
Type of Investigation: N/A

Comments:
a) No follow-up inspection conducted. Event was due to an equipment software problem.
b) Not reported to NMED.

File No.: 6
Licensee: Providence Portland Medical Center License No.: ORE-90946
Date of Incident: 10/3/05 Event No.: 05-0072
Investigation Date: N/A Type of Incident: Medical
Type of Investigation: N/A

Comments:
a) May be an Abnormal Occurrence report.
b) Follow-up inspection scheduled for August 30, 2006.
c) Not reported to the Headquarters Operations Center or to NMED.

File No.: 7
Licensee: Longview Inspection License No.: ORE-90621
Date of Incident: 3/23/04 Event No.: 04-0013
Investigation Date: 3/23/04 Type of Incident: Potential Overexposure
Type of Investigation: On-site

Comment:
Not reported to NMED.

File No.: 8
Licensee: Geo Pacific Engineering License No.: ORE-90605
Date of Incident: 11/3/03 Event No.: 03-0063, NMED No.: 030909
Investigation Dates: 11/5/03, 12/22/03, 2/11/04 Type of Incident: Stolen Gauge
Type of Investigations: On-site

File No.: 9
Licensee: Meridian Park Hospital License No.: ORE-90293
Date of Incident: 5/30/03 Event No.: 03-0064
Investigation Date: N/A Type of Incident: Medical: N/A
Type of Investigation: N/A

Comments:
a) No follow-up inspection conducted. The incident involved an administration to the wrong patient.
b) Not reported to NMED.

File No.: 10
Licensee: Longview Inspection
License No.: ORE-90621
Date of Incident: 2/18/03
Event No.: 03-0008
Investigation Date: 2/18/03
Type of Incident: Overexposure
Type of Investigation: On-site

Comment:
Not reported to NMED.

File No.: 11
Licensee: Rogue Valley Medical Center
License No.: ORE-90064
Date of Incident: 3/10/03
Event No.: 03-0010, NMED No.: 030201
Investigation Date: 3/12/03
Type of Incident: Medical
Type of Investigation: On-site

File No.: 12
Licensee: Geo Pacific Testing, Inc.
License No.: ORE-90950
Date of Incident: 9/23/02
Event No.: 02-0037, NMED No.: 020901
Investigation Date: 9/23/02
Type of Incident: Lost Gauge
Type of Investigation: On-site

File No.: 13
Licensee: Geocon Northwest
License No.: ORE-90921
Date of Incident: 10/15/02
Event No.: 02-0041, NMED No.: 020953
Investigation Date: 10/16/02
Type of Incident: Lost gauge
Type of Investigation: On-site

File No.: 14
Licensee: Providence St. Vincent Medical Center
License No.: ORE-90104
Date of Incident: 12/30/02
Event No.: 02-0055
Investigation Date: 12/31/02
Type of Incident: Medical
Type of Investigation: On-site

Comment:
Not reported to NMED.