MEMORANDUM TO: Elmo E. Collins, Regional Administrator
    Region IV
FROM: Martin J. Virgilio /RA/
    Deputy Executive Director for Materials, Waste,
    Research, State, Tribal, and Compliance Programs
    Office of the Executive Director for Operations
SUBJECT: FINAL REPORT OF THE INTEGRATED MATERIALS
    PERFORMANCE EVALUATION PROGRAM REVIEW OF THE
    REGION IV RADIOACTIVE MATERIALS PROGRAM

On June 15, 2009, the Management Review Board (MRB) met to consider the proposed final
Integrated Materials Performance Evaluation Program (IMPEP) report of the U.S. Nuclear
Regulatory Commission’s Region IV radioactive materials program. The MRB found the
program adequate to protect public health and safety.

Section 5.0, page 11, of the enclosed final report summarizes the results of the review. The
review team made no recommendations in regard to program performance by the Region.

I applaud your staff’s efforts during the IMPEP review period, especially during the time of the
team’s visit.

Enclosure:
Region IV Final IMPEP Report

cc w/encl: Charles A. Casto, Deputy Regional Administrator
    Region IV

    Arthur T. Howell, Director
    Division of Nuclear Materials Safety
    Region IV

    Shawn Seeley, Maine
    Organization of Agreement States
    Liaison to the MRB

CONTACT: Kathleen Schneider, FSME/MSSA
        (301) 415-2320
INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

REVIEW OF THE NRC REGION IV RADIOACTIVE MATERIALS PROGRAM

March 23 - April 3, 2009

FINAL REPORT

Enclosure
1.0 INTRODUCTION

This report presents the results of the review of the U.S. Nuclear Regulatory Commission (NRC) Region IV radioactive materials program. The review was conducted during the period of March 23 – April 3, 2009, by a review team comprised of technical staff members from NRC and the States of Ohio and Washington. Team members are identified in Appendix A. The review was conducted in accordance with the "Implementation of the Integrated Materials Performance Evaluation Program and Rescission of Final General Statement of Policy," published in the Federal Register on October 16, 1997 and NRC Management Directive 5.6, “Integrated Materials Performance Evaluation Program (IMPEP),” dated February 26, 2004. Preliminary results of the review, which covered the period of April 2004 to March 2009, were discussed with Region IV managers on March 27, 2009, and April 3, 2009.

A draft of this report was issued to Region IV for factual comment on April 28, 2009. Region IV responded by memorandum dated May 21, 2009, from Arthur T. Howell, Director, Division of Nuclear Materials Safety (the Division). A copy of the Division’s response is included as the Attachment to this report. The Management Review Board (MRB) met on June 15, 2009, to consider the proposed final report. The MRB found the NRC Region IV radioactive materials program adequate to protect public health and safety.

The Region IV radioactive materials program is administered by the Director of the Division, who reports directly to the Regional Administrator. Organization charts for Region IV and the Division are included as Appendix B. At the time of the review, the Division regulated approximately 574 specific licenses authorizing the possession and use of byproduct, source, and special nuclear materials.

In preparation for the review, a questionnaire addressing the common and non-common performance indicators was sent to the Division on December 22, 2008. The Division provided its response to the questionnaire on March 6, 2009. A copy of the questionnaire response may be found in NRC’s Agencywide Documents Access and Management System (ADAMS) using Accession Number ML090930292.

The review team's general approach for conduct of this review consisted of: (1) examination of the Division’s response to the questionnaire; (2) analysis of quantitative information from the licensing, inspection, and allegation databases, as well as ADAMS; (3) technical review of selected regulatory actions; (4) field accompaniments of three of the Division’s radioactive materials inspectors; and (5) interviews with staff and managers. The review team evaluated the information gathered against the established criteria for each common and applicable non-common performance indicator and made a preliminary assessment of the Division’s performance.

Section 2 below discusses Region IV’s actions in response to recommendations made following the previous review. Results of the current review of the common performance indicators are presented in Section 3. Section 4 discusses results of the applicable non-common indicators, and Section 5 summarizes the review team's findings.
2.0  STATUS OF ITEMS IDENTIFIED IN PREVIOUS REVIEWS

During the previous IMPEP review, which concluded on April 8, 2004, the review team made one recommendation in regard to program performance. The current status of the recommendation is as follows:

The review team recommends that guidelines be provided to the Regions on revising inspection frequencies for licensees who were extended due to good performance prior to Temporary Instruction 2800/033, dated December 31, 2002. (Section 3.2)

Current Status: Guidance was provided to the Regions in a May 11, 2004 memorandum from the Division of Industrial and Medical Nuclear Safety, Office of Nuclear Material Safety and Safeguards, and was implemented by all NRC Regions subsequent to the 2004 Region IV IMPEP Review. This recommendation is closed.

3.0 COMMON PERFORMANCE INDICATORS

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

3.1 Technical Staffing and Training

Issues central to the evaluation of this indicator include the Division’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 Division’s questionnaire response relative to this indicator, interviewed Division managers and staff, and reviewed job descriptions, training plans, and training records and considered any possible workload backlogs in evaluating this indicator.

During the 2004 IMPEP review, the Division was composed of three branches: the Nuclear Materials Licensing Branch, the Nuclear Materials Inspection Branch, and the Fuel Cycle and Decommissioning Branch. In 2006, the Division reorganized into the Nuclear Materials Safety Branch A (Branch A), the Nuclear Materials Safety Branch B (Branch B) and the Repository & Spent Fuel Safety Branch. The reorganization consolidated the uranium recovery and decommissioning activities into Branch B in order to focus the Repository & Spent Fuel Safety Branch on the anticipated workload from the high-level waste repository application from the U.S. Department of Energy. The Division is managed by a Director. The previous Senior Materials Analyst position is now a Deputy Director position within the Division. Each branch is headed by a Branch Chief.

The Division experienced turnover of approximately two positions per year since the previous review. One branch chief and 11 staff members either retired or transferred to other NRC positions. At the time of the review, the Division had seven materials inspectors, three materials license reviewers, one licensing assistant, and one inspector who primarily performed decommissioning inspections. In its response to the questionnaire, the Division reported that three technical staff members had been hired during the review period. Technical staffing and qualifications of the uranium recovery inspectors are discussed in Section 4.1.1 of this report.
There were four technical position vacancies in the Division at the time of the on-site review as a result of two recent retirements, one recent transfer, and a new position that was added to reflect increased uranium recovery inspection activities. One vacancy is for an inspector in Branch A. Three vacancies in Branch B are for a decommissioning/uranium recovery inspector, a license reviewer, and a decommissioning inspector. At the time of the review, Division managers were reviewing applications and scheduling interviews with qualified candidates. When these positions are filled, the Division will have a staff of 17 direct full-time equivalents devoted to the radioactive materials program, including the uranium recovery effort.

The Division uses Inspection Manual Chapter (IMC) 1246, “Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area,” and associated procedures as its qualification and training program. The qualifications of the staff were determined from the questionnaire, training records, and interviews of managers and personnel. The review team determined that the staff is well qualified from an education and experience standpoint. All staff has at least a Bachelor’s degree in the one of the sciences or has equivalent training and experience.

Generally, newly hired inspectors and license reviewers are trained and certified in a reasonable time period. In cases where completion of the qualification journal or certification process took longer than originally expected, the Branch Chiefs adequately documented the exception and justification in the appropriate personnel files.

The Division has a policy of qualifying personnel as either license reviewers or inspectors; however, the Division has implemented a voluntary cross-training program among staff of Branches A and B. This allows Division managers to have flexibility to allocate resources where needed and to readjust the workload between licensing and inspection, as necessary.

The review team determined that Region IV has a well-organized system for planning, approving, and tracking training. Division managers were fully cognizant of the qualification status and training plans for their staff, and the managers exhibited a commitment to training. Technical staff members regularly attended specialty training courses and refresher training and appeared to maintain technical currency for their assigned positions. The review team concluded that Region IV has a good mix in staffing for materials licensing and inspection activities, as well as decommissioning activities.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Region IV’s performance with respect to the indicator, Technical Staffing and Training, was satisfactory.

3.2 Status of Materials Inspection Program

The review team focused on five factors while reviewing this indicator: inspection frequency, overdue inspections, initial inspections of new licenses, timely dispatch of inspection findings to licensees, and performance of reciprocity inspections. The review team’s evaluation was based on the Division’s questionnaire response relative to this indicator, data gathered from the Division’s database, examination of completed inspection casework, and interviews with Division managers and staff.
The review team verified that the Division adheres to the inspection priorities prescribed in IMC 2800, “Materials Inspection Program.” The Division appropriately modified inspection schedules in response to revisions to IMC 2800 during the review period.

The review team determined that the Division conducted 382 inspections of high priority (Priority 1, 2, and 3) licensees during the review period. The review team identified 11 of these inspections as performed overdue by more than 25 percent of the inspection frequency listed in IMC 2800. Six of the overdue inspections had been delayed in order to conduct the Increased Controls inspections coincidental with the health and safety inspection, as permitted by NRC’s Guidance for Increased Controls Prioritization Methodology. The remaining overdue inspections can be attributed to input errors in the Licensing Tracking System. Region IV covers a significant geographical area, and Division managers schedule inspections in remote locations to minimize resource implications when possible. The review team determined that the Division conducted 118 initial inspections of new radioactive materials licenses during the review period. Of the 118 initial inspections, 4 were performed greater than 12 months after license issuance. Overall, the review team calculated that the Division performed 3 percent of all Priority 1, 2, and 3 inspections and initial inspections overdue during the review period.

The timeliness of the issuance of inspection findings was evaluated during the inspection casework review. For the routine inspection files examined, inspection findings were sent to the licensees within 30 days with the exception of one report which was less than a week late.

The Division granted 39 reciprocity permits in 2004, 39 reciprocity permits in 2005, 28 reciprocity permits in 2006, 33 reciprocity permits in 2007 and 35 reciprocity permits in 2008 to candidate licensees, based upon the criteria in IMC 1220. In 2004, the Division missed the reciprocity inspection goal of 20 percent by 3 inspections. The Division developed an action plan to determine the cause of the missed target and implemented a strategy to achieve the reciprocity goal. The Division met the reciprocity inspection goals in 2005 and 2007. In 2006, the Division focused resources on completion of the initial Increased Control inspections and missed the reciprocity inspection goal by two inspections. Since the reciprocity inspection program was unfunded in 2008, the Division attempted to meet the goal by coordinating reciprocity inspections with routine inspection trips and inspected 9 percent of the candidates.

The review team determined that with respect to Commission Staff Requirements Memorandum (SRM) for COMSECY-05-0028, on Increased Controls, the Division completed the initial set of inspections of these licensees in accordance with the SRM. The Division’s prioritization methodology was consistent with the prioritization methodology provided by NRC Headquarters. The Division has 78 licensees that are implementing the Increased Controls. They perform subsequent inspections of the licensee’s Increased Controls program during the routine health and safety inspection. At the time of the review, no Increased Control inspections were conducted overdue.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Region IV’s performance with respect to the indicator, Status of Materials Inspection Program, was satisfactory.
3.3 **Technical Quality of Inspections**

The review team evaluated the inspection reports, enforcement documentation, and inspection field notes and interviewed the responsible inspectors for 21 radioactive materials inspections conducted during the review period. The casework reviewed included inspections conducted by 11 of the Division’s inspectors and covered inspections of various license types including: medical broadscope, medical institutions-written directive required, medical high dose rate afterloader, mobile medical, industrial radiography, research and development broadscope, irradiator, well logging, nuclear pharmacy, decommissioning, manufacturing and distribution, security, and reciprocity. Appendix C lists the inspection files reviewed and includes case-specific comments.

The Division uses IMC 2800 and other NRC inspection procedures for its inspection guidance. After the conclusion of each inspection, inspectors dispatched inspection findings to the respective licensees either in the field or from the office after Branch management review and approval. The Branch Chief’s review of each inspection report was appropriately documented and all inspection documentation was entered into ADAMS.

The review team found that inspection reports were thorough, complete, consistent, and of high quality, with sufficient documentation to ensure that a licensee’s performance with respect to health, safety, and security was acceptable. Inspection findings led to appropriate and prompt regulatory action, when necessary. Based on the review of casework, the review team concluded that the inspections covered all aspects of the licensees’ radiation safety programs commensurate with licensed activities.

During the casework review, the review team found that some documents containing security-related information were not marked with the appropriate designation of “Official Use Only – Security-Related Information”. These documents included NRC Form 591 Part 3 inspection forms. The review team did not discover any evidence that any of the information was inadvertently released to the public. The Division identified and marked all documentation that contained security-related information while the review team was on site. In addition, the Division retrained staff to use the 591 Part 3 template with the appropriate markings if security-related information is included on the form.

The review team determined that supervisory accompaniments were conducted annually for all inspectors. The Branch Chiefs made a total of 92 accompaniments during the review period. Inspectors receive verbal feedback at the time of the accompaniments and a portion of the inspectors’ annual performance appraisals address their inspection skills, as demonstrated during the accompaniments.

The review team observed that the Division maintains an adequate supply of survey instruments to support their inspection program. Appropriate, calibrated survey instrumentation, such as Geiger-Mueller (GM) meters, scintillation detectors, ion chambers, and micro-R meters, was observed to be available. Instruments are calibrated annually through several commercial calibration services. The Division uses the services of the Oak Ridge Institute for Science and Education for the analysis of wipe samples taken during inspections.
The review team accompanied two of the Division’s inspectors during the months of February and March 2009. The inspectors were accompanied during health and safety inspections of mobile and fixed medical programs, an academic broadscope, and a research and development facility. The review team also observed an inspector perform a security inspection. The accompaniments are identified in Appendix C. During the accompaniments, both inspectors demonstrated appropriate inspection techniques, knowledge of the regulations, and conducted performance-based inspections. The inspectors were trained, well prepared for the inspection, and thorough in their audits of the licensees’ radiation safety programs and implementation of the Increased Controls requirements. The inspectors conducted interviews with appropriate personnel, observed licensed operations, conducted confirmatory measurements, and utilized good health physics practices. The inspections were adequate to assess radiological health, safety, and security at the licensed facilities.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Region IV’s performance with respect to the indicator, Technical Quality of Inspections, was satisfactory.

3.4 Technical Quality of Licensing Actions

The review team examined the casework for 27 materials licensing actions, and held interviews with the license reviewers, the licensing assistant, the Branch Chief and the project manager for the Department of the Air Force Master Materials License. The licensing casework was selected to provide a cross-section of the different types of licensing actions completed by all license reviewers during the review period. The following types of licenses were included in the review: industrial radiography, research and development, medical institution - written directive required, medical private practice, medical high dose rate afterloader, portable gauge, well logging, manufacturing and distribution, special nuclear material, irradiator, master materials license, and possession only. Licensing actions included 4 new applications, 3 renewals (including associated decommissioning financial assurance), 3 terminations, and 17 amendments. A listing of the licensing casework reviewed, with case-specific comments, can be found in Appendix D.

The review team examined the processes used by Branch for receipt and assignment of licensing actions. Licensing actions are logged in by the licensing assistant upon receipt. Branch staff members pre-screen the actions received each week using an Acceptance Review Memo (ARM) to ensure the applicant has provided sufficient information for license reviewers to conduct a review of the request. The ARM is periodically updated to reference changes in regulations and licensing guidance. The pre-screening also checks if the request contains sensitive information to ensure that the documents are appropriately scanned, marked, and entered into ADAMS. Licensing actions are then assigned to a reviewer during a weekly Branch meeting.

The review team found that the licensing actions were thorough, complete, consistent, and of high quality, with health, safety, and security issues properly addressed. License tie-down conditions were stated clearly, backed by information contained in the file, and auditable. Licenses and correspondence are generated using standardized conditions and formats. Licensing staff appropriately used licensing guides, policies, and standard license conditions.
Licensees’ compliance histories were taken into account when reviewing all renewal applications and major amendments.

The review team examined the list of licensees that were determined to meet the criteria for the Increased Controls. The review team found that the appropriate license conditions were added to those licenses in a timely manner. In reviewing the licensing documents, the review team found that licenses containing sensitive information were properly marked as such; however, the cover letter transmitting the license was not always appropriately marked as required by NRC Management Directive 12.6, “NRC Sensitive Unclassified Information Security Program.” The Division identified that discrepancies exist between Management Directive 12.6 and Regulatory Information Summary (RIS) 2005-031 regarding the marking of transmittal documents. The review team recommends that the Office of Federal and State Materials and Environmental Management Programs (FSME) develop and provide clarification to the NRC Regions on the requirements for marking of inspection and licensing correspondence.

The review team found that the Division reduced authorized possession limits on some licenses listing radionuclides of concern in order to be below the threshold limits requiring implementation of the Increased Controls; however, these lower possession limits were calculated based on activities in curies instead of terabequerels. As a result, possession limits for certain isotopes were authorized at quantities that were still above the Increased Controls threshold limits and did not contain the appropriate license condition. The Division identified those licenses that potentially contained such errors and gave refresher training on the *Guidance for Applying the Additional Requirements for Increased Controls*, issued December 14, 2006. While the review team was on site, the Division completed corrections on a number of the affected licenses and developed an action plan to correct the remainder in a timely manner.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Region IV’s performance with respect to the indicator, Technical Quality of Licensing Actions, was satisfactory.

3.5 Technical Quality of Incident and Allegation Activities

In evaluating the effectiveness of the Division’s actions in responding to incidents, the review team examined the Division’s response to the questionnaire relative to this indicator, evaluated selected incidents reported for Region IV in the Nuclear Material Events Database (NMED) against those contained in the Division’s files, and evaluated the casework for 21 radioactive materials incidents. A listing of the incident casework examined can be found in Appendix E. The review team also evaluated the Division’s response to 19 allegations involving radioactive materials.

The review team identified 220 radioactive materials incidents in NMED for Region IV during the review period. The incidents selected for review included the following categories: medical, lost/stolen material, exposure to the embryo/fetus, contamination events, and equipment failure. The review team discussed incident and allegation procedures, file documentation, NMED, and the role of the NRC Headquarters Operations Center with Division staff and managers. The Division is responsible for initial response and followup actions to radioactive materials incidents. The review team determined that the Division’s response to incidents was complete.
and comprehensive. Initial responses were prompt and well coordinated, and the level of effort was commensurate with the health and safety significance in all cases. The Division dispatched inspectors for on-site investigations, as appropriate, and took suitable enforcement and followup actions.

In evaluating the effectiveness of the Division’s actions in response to allegations, the review team evaluated the casework for 19 allegations. The review team held interviews with the Regional Allegation Coordinators, Division managers, and Division technical staff regarding the handling of allegations. The Division adheres to NRC Management Directive 8.8, “Management of Allegations” in the handling of allegations. The review team’s evaluations of casework, associated documentation, and interviews of staff and managers revealed that the Division has an effective and efficient program for managing radioactive materials allegations. The casework review indicated that the Division took prompt and appropriate action in response to all concerns raised. All of the allegations reviewed were appropriately closed, and appropriate parties were notified of the actions taken.

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Region IV’s performance with respect to the indicator, Technical Quality of Incident and Allegation Activities, was satisfactory.

4.0 NON-COMMON PERFORMANCE INDICATORS

IMPEP identifies one non-common performance indicator to be used in reviewing Regional radioactive materials programs, the Uranium Recovery Program.

4.1 Uranium Recovery Program

This non-common indicator includes five subelements of the uranium recovery regulatory program: 1) Technical Staffing and Training, 2) Status of the Uranium Recovery Inspection Program, 3) Technical Quality of the Uranium Recovery Inspection Program, 4) Technical Quality of Licensing, and 5) Technical Quality of Incidents and Allegation Activities. Region IV does not conduct uranium recovery licensing, this is performed by staff in the Division of Waste Management and Environmental Protection, FSME; therefore, Subelement 4 was not addressed in this review.

4.1.1 Technical Staffing and Training

In reviewing this subelement, the review team considered staffing level, technical qualifications of the staff, staff training, and staff turnover. There are presently two inspectors who perform the uranium recovery inspections. The review team determined that the Division’s staffing level for uranium recovery inspections was appropriate based on workload at the time of the review.

The review team determined that staff qualifications and training were adequate. The Region IV uranium recovery inspectors have reactor health physics or radioactive materials safety backgrounds, so the health physics focus of the inspections was strong. Region IV inspectors routinely coordinated inspections with technical staff from FSME for the necessary expertise to review other areas; such as geotechnical engineering, hydrology, and geosciences; for the two
operating in situ leach facilities: Power Resources Smith Ranch and Crow Butte. At the conventional mill sites in decommissioning, there was little ongoing activity that warranted joint inspections between Region IV and FSME staff; however, Region IV staff maintained communication with FSME technical and licensing uranium recovery staff for effective inspections at the decommissioning sites.

4.1.2 Status of the Uranium Recovery Inspection Program

The review team focused on several factors in evaluating Region IV's performance for this subelement, including inspection frequency, overdue inspections, timely issuance of inspection findings to licensees, and inspection followup. The review team's evaluation is based on a review of the Division's response to the questionnaire relative to this indicator, the uranium recovery inspection schedule, selected inspection casework files, and interviews with inspection staff and managers.

During the review period, the Division conducted 39 inspections and 5 site visits. Most of the sites are non-operating conventional mills that are in various stages of decommissioning and reclamation. Inspection frequency is established through a Master Inspection Plan developed by the Division in conjunction with the FSME. The inspection schedule is based on guidance in NRC IMC 2641, “In-Situ Leach Facilities Inspection Program,” and IMC 2801, “Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program.” There were three inspections during the review period that were conducted overdue. During Fiscal Years 2003-2007, two inspections, Western Nuclear – Split Rock and Anadarko Petroleum – Bear Creek, were deferred at the request of the FSME. These inspections were subsequently performed during 2008. Another inspection, Hydro Resources, was also deferred because the licensee was issued a source material license, although construction had not started due to adjudication. FSME uranium recovery staff requested inspection deferral until the adjudication is complete.

The review team evaluated the timeliness of the issuance of inspection findings during the inspection file review. The review team determined that all inspection reports that were reviewed were issued within 30 days after completion of the inspection and final closeout with licensee managers and operations staff.

4.1.3 Technical Quality of Uranium Recovery Inspections

In reviewing this subelement, the review team examined inspection reports and other documentation for eight inspections conducted during the review period. The cases selected for review covered various licensees representing a range of uranium recovery licensing activities in different stages of operation. The review team interviewed inspectors and managers to assess the adequacy of their preparation for the inspections, the depth and content of the actual inspections, and the appropriateness of inspection findings. A list of the uranium recovery inspection files that were reviewed is included as Appendix F.

Generally, one Region IV uranium recovery inspector will conduct an inspection with occasional assistance from other inspectors, supervisors, or FSME technical staff. The inspectors coordinate, plan, and prepare for inspections by reviewing relevant manual chapters, inspection procedures, previous inspection reports, licenses, incident reports, notices of violations, and
other background information. They will often consult with the uranium recovery licensing staff in FSME before inspections.

The review determined that, during a typical inspection, inspectors observe licensee operations; interview workers, managers, and contractors; review facility records; examine site operating plans and procedures; and make independent measurements during inspections. During the week of March 16, 2009, a review team member accompanied an inspector at the Power Resources, Inc. facility, as indicated in Appendix F. The inspector was prepared and thorough in her review of the aspects of the licensee’s radiation safety program. Although the Division’s uranium recovery inspectors primarily focus on health physics and radiation safety issues, they also routinely inspect for environmental monitoring, management, and organizational issues. The inspectors typically observe a broad spectrum of licensee operations.

The review team found that the Region IV uranium recovery inspection reports were well written, provided appropriate depth, and were promptly reviewed by supervisors. They addressed compliance conditions for the licensees, and demonstrated that the inspectors pursued root causes where problems or violations were identified.

The inspection findings lead to appropriate and prompt regulatory action. Licensees are given 30 days to reply to the Notice of Violation. After the response, a letter is sent to the licensee indicating if the review of the proposed corrective actions is satisfactory or not.

The review team determined that during the review period, the uranium recovery inspectors had been accompanied by their supervisors at least once a year. The review team found that the supervisors routinely meet with the uranium recovery inspectors after their inspections to review inspection findings and to plan followup strategy.

4.1.4 Technical Quality of Licensing Actions

Since the Division does not perform uranium recovery licensing actions, this subelement was not evaluated during the review.

4.1.5 Technical Quality of Incident and Allegation Activities

To evaluate this subelement, the review team examined the information on the uranium recovery incidents provided by the Division in its response to the questionnaire. The Division received notification of one uranium recovery incident during the review period. The incident was captured in NMED; however, it did not meet the reporting criteria. A followup inspection was performed during which the inspector determined that the license condition requiring reporting of events needed clarification. This was discussed with FSME uranium recovery staff as an item to be resolved during the next license renewal.

4.1.6 Conclusion

Based on the IMPEP evaluation criteria, the review team recommended, and the MRB agreed, that Region IV’s performance with respect to the indicator, Uranium Recovery Program, was satisfactory.
5.0 SUMMARY

As noted in Sections 3.0 and 4.0 above, Region IV’s performance was found satisfactory for all performance indicators reviewed. Accordingly, the review team recommended, and the MRB agreed, that the NRC Region IV radioactive materials program be found adequate to protect public health and safety. Based on the results of the current IMPEP review, the review team recommended, and the MRB agreed, that the next full IMPEP review of the NRC Region IV radioactive materials program take place in approximately 4 years.

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

The review team recommends that FSME develop and provide clarification to the NRC Regions on the requirements for marking of inspection and licensing correspondence. (Section 3.4)
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APPENDIX A

IMPEP REVIEW TEAM MEMBERS

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<td>Kathleen Schneider, FSME</td>
<td>Team Leader&lt;br&gt;Technical Staffing and Training&lt;br&gt;Status of Materials Inspection Program</td>
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<tr>
<td>Michele Beardsley, FSME</td>
<td>Technical Quality of Inspections&lt;br&gt;Inspector Accompaniments</td>
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<td>Stephen James, OH</td>
<td>Technical Quality of Licensing Actions</td>
</tr>
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<td>George Parker, Region III</td>
<td>Technical Quality of Incident and Allegation Activities</td>
</tr>
<tr>
<td>Dorothy Stoffel, WA</td>
<td>Uranium Recovery Program&lt;br&gt;Inspector Accompaniments</td>
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APPENDIX C

INSPECTION CASEWORK REVIEWS

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

File No.: 1
Licensee: Materials Integrity Inc. License No.: 50-27722-01
Inspection Type: Routine, Unannounced Priority: 1
Inspection Date: 12/10/08 Inspector: LD

File No.: 2
Licensee: Materials Integrity, Inc. License No.: 50-27722-01
Inspection Type: Special, Announced Priority: 1
Inspection Date: 9/19/07 Inspector: LD

Comment:
NRC 591 Part 3 not marked appropriately.

File No.: 3
Licensee: Como Tech Inspection License No.: 15-26978-01
Inspection Type: Routine, Unannounced Priority: 1
Inspection Date: 2/26/09 Inspector: AG

Comment:
NRC 591 Part 3 not marked appropriately.

File No.: 4
Licensee: Advanced Isotopes of Idaho License No.: 11-29216-01MD
Inspection Type: Routine, Unannounced Priority: 2
Inspection Date: 12/4/08 Inspector: JR

File No.: 5
Licensee: Anvil Corporation License No.: 46-23236-03
Inspection Type: Routine, Unannounced Priority: 1
Inspection Date: 8/15/07 Inspector: LD

File No.: 6
Licensee: Edge Solutions License No.: 50-29244-01
Inspection Type: Special, Announced Priority: 1
Inspection Date: 12/5/07 Inspector: LD

Comment:
NRC 591 Part 3 not marked appropriately.
Region IV Final Report  
Inspection Casework Reviews  

File No.: 7  
Licensee: Edge Solutions  
License No.: 50-29244-01  
Inspection Type: Routine, Unannounced  
Priority: 1  
Inspection Date: 12/9/08  
Inspector: LD

File No.: 8  
Licensee: Alaska Industrial X-Ray  
License No.: 50-16084-01  
Inspection Type: Routine, Unannounced  
Priority: 1  
Inspection Date: 8/1/06  
Inspector: RE

File No.: 9  
Licensee: Queens Medical Center  
License No.: 53-16533-02  
Inspection Type: Routine, Unannounced  
Priority: 2  
Inspection Date: 3/28/08  
Inspector: RL

Comment:  
NRC 591 Part 3 not marked appropriately.

File No.: 10  
Licensee: Big State X-Ray Inc.  
License No.: 35-21144-01  
Inspection Type: Routine, Unannounced  
Priority: 1  
Inspection Date: 12/10/07  
Inspector: RM

Comment:  
NRC 591 Part 3 not marked appropriately.

File No.: 11  
Licensee: Unitech Services Group  
License No.: 53-13668-01  
Inspection Type: Routine, Announced  
Priority: N/A  
Inspection Date: 4/22/08  
Inspector: RE

File No.: 12  
Licensee: Department of the Air Force  
License No.: 42-23539-01AF  
Inspection Type: Routine, Announced  
Priority: N/A  
Inspection Date: 10/24/08  
Inspectors: RB, JC

File No.: 13  
Licensee: Lovelace Respiratory  
License No.: 30-29237-01  
Inspection Type: Routine, Unannounced  
Priority: 5  
Inspection Dates: 5/1/07 and 5/6/07  
Inspector: AG

Comment:  
Report contained a non-cited violation without an explanation as to why it was non-cited versus cited.
Region IV Final Report
Inspection Casework Reviews

File No.: 14
Licensee: Department of Commerce- NOAA  License No.: 25-11997-01
Inspection Type: Routine, Telephone  Priority: 5
Inspection Date: 6/6/06  Inspector: LG

File No.: 15
Licensee: Department of the Army-Wm. Beaumont Med. Ctr.  License No.: 42-05255-07
Inspection Type: Routine, Unannounced  Priority: 2
Inspection Date: 11/13/06  Inspector: RL

File No.: 16
Licensee: Department of the Army-Tripler Army Med. Ctr.  License No.: 53-00458-04
Inspection Type: Routine, Unannounced  Priority: 2
Inspection Date: 10/22/08  Inspector: AG

File No.: 17
Licensee: SABIA, Inc.  License No.: 11-27727-01
Inspection Type: Reactive, Follow-up  Priority: 5
Inspection Date: 2/29/08 and 9/18/08  Inspectors: JK, AG, LD

File No.: 18
Licensee: Integrated Product Svcs.  License No.: 17-27763-01
Inspection Type: Routine, Announced  Priority: 3
Inspection Date: 10/23/06  Inspector: RL

File No.: 19
Licensee: Integrated Product Svcs.  License No.: 17-27763-01
Inspection Type: Initial Special, Announced  Priority: 3
Inspection Date: 9/12/07  Inspector: RM

File No.: 20
Licensee: Dept. of Army-White Sands Missile Range  License No.: 30-02405-10
Inspection Type: Routine, Unannounced  Priority: 1
Inspection Dates: 1/18 to 2/13/06  Inspector: RL

File No.: 21
Licensee: Riverton Memorial Hospital  License No.: 49-21004-01
Inspection Type: Routine, Announced  Priority: 3
Inspection Date: 11/29/07  Inspector: JT
INSPECTOR ACCOMPANIMENTS

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

Accompaniment No.: 1
Licensee: Lovelace Respiratory
Inspection Type: Routine, Unannounced
Inspection Date: 3/12/09
License No.: 30-29237-01
Priority: 2
Inspector: RM

Accompaniment No.: 2
Licensee: Lovelace Respiratory
Inspection Type: Routine/Special, Announced
Inspection Date: 3/12/09
License No.: 30-29237-01
Priority: 2
Inspector: RM

Accompaniment No.: 3
Licensee: Front Range Nuclear Svcs.
Inspection Type: Routine, Unannounced
Inspection Date: 2/10/09
License No.: 49-27531-01
Priority: 3
Inspector: JR

Accompaniment No.: 4
Licensee: University of Wyoming
Inspection Type: Routine, Unannounced
Inspection Date: 2/10/09
License No.: 49-09955-10
Priority: 3
Inspector: JR
APPENDIX D

LICENSE CASEWORK REVIEWS

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

File No.: 1
Licensee: Lovelace Respiratory
Type of Action: Amendment
Date Issued: 11/3/08
License No.: 30-29237-01
Amendment No.: 10
License Reviewer: RT

File No.: 2
Licensee: Guam Memorial Hospital
Type of Action: Renewal
Date Issued: 1/13/06
License No.: 56-18134-01
Amendment No.: 25
License Reviewer: RT

File No.: 3
Licensee: H & H X-Ray
Type of Action: Amendment
Date Issued: 2/22/05
License No.: 17-19236-01
Amendment No.: 25
License Reviewers: RB, AG

File No.: 4
Licensee: Precision Energy
Type of Action: Termination
Date Issued: 2/13/09
License No.: 35-26895-02
Amendment No.: 02
License Reviewer: RT

File No.: 5
Licensee: Southwest X-Ray Corporation
Type of Action: Amendment
Date Issued: 9/14/04
License No.: 49-27434-01
Amendment No.: 08
License Reviewer: JC

File No.: 6
Licensee: The Queen’s Medical Center
Type of Action: Amendment
Date Issued: 1/19/07
License No.: 53-16533-02
Amendment No.: 53
License Reviewer: JC

File No.: 7
Licensee: Department of Commerce-NOAA
Type of Action: Amendment
Date Issued: 2/24/09
License No.: 05-11997-01
Amendment No.: 40
License Reviewer: RT

File No.: 8
Licensee: Defense Microelectronics Activity
Type of Action: Renewal
Date Issued: 12/4/07
License No.: 04-29107-01
Amendment No.: 6
License Reviewer: JM

Comment:
Open-ended authorized possession limits used.
File No.: 9  
Licensee: Acuren Inspection, Inc  
Type of Action: Amendment  
Date Issued: 4/1/08  
License No.: 42-27593-01  
Amendment No.: 31  
License Reviewer: RS

File No.: 10  
Licensee: Sanford Medical Center  
Type of Action: Amendment  
Date Issued: 4/16/07  
License No.: 40-12378-01  
Amendment No.: 68  
License Reviewer: JM

Comment: Possession limits not calculated properly to exempt licensee from certain license conditions.

File No.: 11  
Licensee: Sanford Medical Center  
Type of Action: Amendment  
Date Issued: 11/20/07  
License No.: 40-12378-01  
Amendment No.: 69  
License Reviewer: RT

Comment: Possession limits not calculated properly to exempt licensee from certain license conditions.

File No.: 12  
Licensee: Sanford Medical Center  
Type of Action: Amendment  
Date Issued: 11/18/08  
License No.: 40-12378-01  
Amendment No.: 70  
License Reviewer: RB

Comment: Possession limits not calculated properly to exempt licensee from certain license conditions.

File No.: 13  
Licensee: Texas Gamma Ray, LLC  
Type of Action: New License  
Date Issued: 1/6/09  
License No.: 42-29303-01  
Amendment No.: N/A  
License Reviewer: JC

Comment: Licensee authorized to analyze own leak tests; however, this activity was not requested by licensee.

File No.: 14  
Licensee: Carroll College  
Type of Action: Termination  
Date Issued: 1/17/06  
License No.: 25-07093-01  
Amendment No.: 12  
License Reviewer: RB
<table>
<thead>
<tr>
<th>File No.</th>
<th>Licensee</th>
<th>License No.</th>
<th>Type of Action</th>
<th>Amendment No.</th>
<th>Date Issued</th>
<th>License Reviewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>National Aeronautics and Space Administration</td>
<td>42-09388-01</td>
<td>Amendment</td>
<td>33</td>
<td>4/21/06</td>
<td>RB</td>
</tr>
<tr>
<td>16</td>
<td>Genencor International</td>
<td>04-27770-01</td>
<td>New License</td>
<td>N/A</td>
<td>2/5/04</td>
<td>JM</td>
</tr>
<tr>
<td>17</td>
<td>Genencor International</td>
<td>04-27770-01</td>
<td>Termination</td>
<td>01</td>
<td>3/10/06</td>
<td>JM</td>
</tr>
<tr>
<td>18</td>
<td>Treadwell &amp; Rollo, Inc.</td>
<td>04-29219-01</td>
<td>New License</td>
<td>N/A</td>
<td>11/18/05</td>
<td>RB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Comment:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Open-ended authorized possession limits used.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>GlaxoSmithKline Biologicals</td>
<td>25-19852-01</td>
<td>Decommissioning Amendment</td>
<td>21</td>
<td>5/30/07</td>
<td>RB</td>
</tr>
<tr>
<td>20</td>
<td>Avera St. Luke’s</td>
<td>40-18000-01</td>
<td>Amendment</td>
<td>30</td>
<td>4/4/07</td>
<td>RB</td>
</tr>
<tr>
<td>21</td>
<td>Pocatello Cardiology Associates</td>
<td>11-27809-01</td>
<td>Amendment</td>
<td>02</td>
<td>12/23/08</td>
<td>JC</td>
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<tr>
<td>22</td>
<td>International Isotopes, Inc.</td>
<td>11-27680-01</td>
<td>Amendment</td>
<td>35</td>
<td>3/19/08</td>
<td>RT</td>
</tr>
</tbody>
</table>
License Casework Reviews

File No.: 23
Licensee: Century Geophysical Corporation
Type of Action: Renewal
Date Issued: 6/10/08
License No.: 35-04017-04
Amendment No.: 30
License Reviewer: JC

Comment:
License issued without certain required license condition based on authorized possession limits.

File No.: 24
Licensee: Souixland Urology Center LLC
Type of Action: New License
Date Issued: 7/15/05
License No.: 40-34223-01
Amendment No.: N/A
License Reviewer: JC

File No.: 25
Licensee: Memorial Hospital of Sweetwater
Type of Action: Amendment
Date Issued: 12/15/08
License No.: 49-17940-01
Amendment No.: 09
License Reviewer: RT

File No.: 26
Licensee: Cancer Center of Hawaii
Type of Action: Amendment
Date Issued: 12/18/06
License No.: 53-27797-01
Amendment No.: 01
License Reviewer: JC

Comment:
Possession limits not calculated properly to exempt licensee from certain license conditions.

File No.: 27
Licensee: Dept. of the Army, Brooke Army Medical Center
Type of Action: Amendment
Date Issued: 1/14/09
License No.: 42-01368-01
Amendment No.: 93
License Reviewer: RB
APPENDIX E

INCIDENT CASEWORK REVIEWS

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

File No.: 1
Licensee: Department of the Army  
License No.: 30-02405-01  
Date of Incident: 9/25/05  
Incident Log No.: 050649  
Investigation Date: 10/4/05  
Type of Incident: Equipment failure  
Type of Investigation: Site

File No.: 2
Licensee: TEAM Industrial Svcs.  
License No.: 42-32219-01  
Date of Incident: 4/18/06  
Incident Log No.: 060262  
Investigation Date: 4/19/06  
Type of Incident: Equipment failure  
Type of Investigation: Licensee report

File No.: 3
Licensee: National Institute of Standards and Technology
License No.: 05-03166-05  
Date of Incident: 6/9/08  
Incident Log No.: 083026  
Investigation Date: 6/12/08  
Type of Incident: Contamination  
Type of Investigation: Site

File No.: 4
Licensee: SABIA  
License No.: 11-27727-01  
Date of Incident: 2/29/08  
Incident Log No.: 080128  
Investigation Date: 2/29/08  
Type of Incident: Ruptured source  
Type of Investigation: Site

File No.: 5
Licensee: Department of the Air Force  
License No.: 42-23539-01AF  
Date of Incident: 6/4/08  
Incident Log No.: 080514  
Investigation Date: 9/5/08  
Type of Incident: Dose to embryo/fetus  
Type of Investigation: Site

File No.: 6
Licensee: Schlumberger Technology  
License No.: 42-27055-01  
Date of Incident: 4/5/07  
Incident Log No.: 070609  
Investigation Date: 4/6/07  
Type of Incident: Abandoned source  
Type of Investigation: Licensee report

File No.: 7
Licensee: Alaska Industrial X-Ray  
License No.: 50-16084-01  
Date of Incident: 8/30/06  
Incident Log No.: 060553  
Investigation Date: 12/15/06  
Type of Incident: Lost material  
Type of Investigation: Licensee report
<table>
<thead>
<tr>
<th>File No.</th>
<th>Licensee</th>
<th>License No.</th>
<th>Incident Log No.</th>
<th>Date of Incident</th>
<th>Incident Log No.</th>
<th>Type of Incident</th>
<th>Type of Investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>FMC Idaho</td>
<td>11-27071-01</td>
<td>060565</td>
<td>9/7/06</td>
<td></td>
<td>Recovered material</td>
<td>Site</td>
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<tr>
<td>9</td>
<td>National Aeronautics &amp; Space Admin</td>
<td>04-07845-04</td>
<td>060696</td>
<td>11/13/06</td>
<td></td>
<td>Lost sources</td>
<td>Licensee report</td>
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<tr>
<td>10</td>
<td>General Electric</td>
<td>SNM-0960</td>
<td>060663</td>
<td>9/1/06</td>
<td></td>
<td>Contamination</td>
<td>Site</td>
</tr>
<tr>
<td>11</td>
<td>Department of the Air Force</td>
<td>42-23539-01AF</td>
<td>050766</td>
<td>9/6/05</td>
<td></td>
<td>Lost source</td>
<td>Licensee report</td>
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<tr>
<td>12</td>
<td>TEAM Industrial Svcs.</td>
<td>42-32219-01</td>
<td>060606</td>
<td>7/22/06</td>
<td></td>
<td>Equipment failure</td>
<td>Licensee report</td>
</tr>
<tr>
<td>13</td>
<td>Wal-Mart</td>
<td>General licensee</td>
<td>080765</td>
<td>4/28/08</td>
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<td>Equipment failure</td>
<td>Licensee report</td>
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<tr>
<td>14</td>
<td>Department of Commerce-NOAA</td>
<td>05-11997-01</td>
<td>080805</td>
<td>8/23/08</td>
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<td>Leaking source</td>
<td>Site</td>
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<td>15</td>
<td>Cardinal Health Radiopharmacy</td>
<td>04-26507-01MD</td>
<td>040874</td>
<td>7/22/04</td>
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<td>Transportation</td>
<td>Licensee report</td>
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<td>File No.</td>
<td>Licensee</td>
<td>License No.</td>
<td>Incident Log No.</td>
<td>Type of Incident</td>
<td>Type of Investigation</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>-------------------------</td>
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</tr>
<tr>
<td>16</td>
<td>Department of the Air Force</td>
<td>42-23539-01AF</td>
<td>040718</td>
<td>Lost source</td>
<td>Licensee report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Department of the Air Force</td>
<td>42-23539-01AF</td>
<td>050051</td>
<td>Lost equipment</td>
<td>Licensee report</td>
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<tr>
<td>18</td>
<td>Halliburton Energy Svcs.</td>
<td>42-01068-07</td>
<td>080040</td>
<td>Abandoned source</td>
<td>Licensee report</td>
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<tr>
<td>19</td>
<td>ACUREN USA</td>
<td>42-32443-01</td>
<td>070260</td>
<td>Lost source</td>
<td>Licensee report</td>
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<tr>
<td>20</td>
<td>Baker Hughes Oilfield Ops</td>
<td>17-27437-01</td>
<td>070251</td>
<td>Abandoned source</td>
<td>Licensee report</td>
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<tr>
<td>21</td>
<td>Department of the Interior</td>
<td>05-01399-08</td>
<td>060426</td>
<td>Contamination</td>
<td>Site</td>
<td></td>
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</tr>
</tbody>
</table>
## APPENDIX F

### URANIUM RECOVERY INSPECTION CASEWORK REVIEWS

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

<table>
<thead>
<tr>
<th>File No.:</th>
<th>Licensee:</th>
<th>License No.:</th>
<th>Inspection Type:</th>
<th>Priority:</th>
<th>Inspectors:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power Resources, Inc.</td>
<td>SUA-1548</td>
<td>Routine</td>
<td>N/A</td>
<td>LG, DM, ES</td>
</tr>
<tr>
<td></td>
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<td>Inspection Dates: 9/23-25/08</td>
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<tr>
<td>2</td>
<td>Power Resources, Inc.</td>
<td>SUA-1548</td>
<td>Routine</td>
<td>N/A</td>
<td>RE, LG, DM, ES</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inspection Dates: 3/24-27/08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Western Nuclear, Inc.</td>
<td>SUA-56</td>
<td>Routine</td>
<td>N/A</td>
<td>LG</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inspection Date: 6/4/08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Crow Butte</td>
<td>SUA-1534</td>
<td>Routine</td>
<td>N/A</td>
<td>RE, RL</td>
</tr>
<tr>
<td></td>
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<td>Inspection Dates: 9/17-19/07</td>
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<tr>
<td>5</td>
<td>United Nuclear Corporation</td>
<td>SUA-1475</td>
<td>Routine</td>
<td>N/A</td>
<td>RE</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Inspection Date: 7/24/07</td>
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<tr>
<td>6</td>
<td>Exxon Mobil Refining and Supply Co.</td>
<td>SUA-1139</td>
<td>Routine</td>
<td>N/A</td>
<td>RE, LG</td>
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<tr>
<td></td>
<td></td>
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<td>Inspection Date: 5/1/07</td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td>Umetco Mineral Corporation</td>
<td>SUA-648</td>
<td>Routine</td>
<td>N/A</td>
<td>RE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inspection Date: 8/31/06</td>
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<td></td>
</tr>
<tr>
<td>8</td>
<td>Crow Butte Resources, Inc.</td>
<td>SUA-1534</td>
<td>Routine</td>
<td>NA</td>
<td>RE, SC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inspection Dates: 8/15-17/06</td>
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</tr>
</tbody>
</table>
INSPECTOR ACCOMPANIMENT

The following inspector accompaniment was performed prior to the on-site IMPEP review:

Accompaniment No.: 5
Licensee: Power Resources, Inc. License No.: SUA-1548
Inspection Type: Routine, Announced Priority: NA
Inspection Dates: 3/16-20/09 Inspector: LG
ATTACHMENT

May 21, 2009 Memorandum from Arthur T. Howell
Region IV’s Response to the Draft Report

ADAMS Accession No.: ML091420085
MEMORANDUM TO: Kathleen N. Schneider, Senior Project Manager  
Division of Materials Safety and State Agreements  
Office of Federal and State Materials  
and Environmental Management Programs  

FROM: Arthur T. Howell III, Director  /RA/  
Division of Nuclear Materials Safety  

SUBJECT: COMMENTS ON THE DRAFT REGION IV INTEGRATED  
MATERIALS PERFORMANCE EVALUATION PROGRAM REPORT  

May 21, 2009  

Thank you for the opportunity to review the subject draft report you provided us on April 28, 2009. We believe the draft report provides an accurate assessment of the implementation of the nuclear materials program in Region IV during the subject review period. We request that you consider the enclosed comments in finalizing the report.  

If you have any questions in regard to these comments, please contact me or Chuck Cain.  

Enclosure:  
As stated  

cc:  
V. Campbell  
J. Whitten  
L. McLean  
R. Erickson
COMMENTS ON DRAFT REGION IV INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM REPORT

Section 3.1, Paragraph 3

“The Division experienced considerable staff turnover during the review period.” Consider stating that the division experienced turnover of about two positions per year since the last IMPEP review, but this did not prevent us from implementing program requirements.

Section 3.2, paragraph 3

We recommend that the second sentence be replaced with the following: “Six of the overdue inspections had been delayed based on the Inspection Prioritization Methodology provided by the program office in order to conduct the Increased Controls (IC) inspections coincidental with the health and safety inspections.”

Section 3.2, paragraph 5

This paragraph describes the reciprocity inspection program. Consider stating that the Region attempts to inspect every notice of work under reciprocity but has unique challenges due to geography, timing, and licensee types. It may also be important to note that Region IV has the most reciprocity requests among the regional offices.

Section 3.3, paragraph 4

This paragraph discusses a failure to mark NRC Form 591s in some instances. We recommend that a statement be added that none of these documents had been released to the public.

Section 3.4, penultimate paragraph

This paragraph discusses the efforts by the licensing staff to reduce the authorized possession limits of selected licenses in order to be below the threshold limits requiring implementation of the Increased Controls. Please consider adding statements to further expand and clarify this issue. For example, it should be made clear that many of the examples pertained to HDR licenses that were issued possession limits twice the usual amount in order to facilitate source exchanges. In these cases, the licensees were authorized 21.9 curies rather than 21.6 curies of iridium-192. The authorized possession limit of 21.9 curies is less than the published threshold of 22 curies as noted in the table in Appendix E of 10 CFR Part 20, Nationally Tracked Source Threshold, but this 21.9 curie value is slightly greater than the IC threshold of 21.6 curies, which is derived when converting the IC threshold value from terabecquerels to curies. There were no instances in which the actual quantity of iridium-192 that was possessed by any of these HDR licensees exceeded the slightly smaller threshold quantity of 21.6 curies. Since this issue was identified during the IMPEP review, all HDR licenses have been corrected to reduce the authorized possession limits to below the 21.6 curie value.
Section 4.1.2, Paragraph 2

NRC IMC 3641 should be changed to IMC 2641.

Section 4.1.3, penultimate paragraph

Unless an exception is to be identified, we request that the word “generally” be deleted.

Appendix C, Accompaniment No. 2, Lovelace

This was a routine rather than special inspection.

Appendix D, File No. 2

There was no incorrect date on the tie-down list. Since the September 14, 2005, application was not dated, a received (postmark) date was used to identify this document on the license.

Appendix E, File No. 5

The Type of Incident was “Failure to Report” or “Unintended Exposure” rather than “Overexposure.”