July 1, 2003

MEMORANDUM TO: James E. Dyer, Regional Administrator
Region III

FROM: Carl J. Paperiello ***/RA/***
Deputy Executive Director for
Materials, Research and State Programs

SUBJECT: INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM FOR REGION III

On June 10, 2003, the Management Review Board (MRB) met to consider the proposed final Integrated Materials Performance Evaluation Program (IMPEP) report for Region III (RIII). The MRB found the RIII program adequate to protect public health and safety.

Based on the results of the current IMPEP review, the next full review will be in approximately four years.

I appreciate the courtesy and cooperation extended to the IMPEP team during the review and your support of the program.

Attachment: Final IMPEP Report

cc: J. Caldwell, RIII
M. Dapas, RIII

CONTACT: Linda M. Psyk, NMSS/IMNS
(301) 415 -0215

MEMORANDUM TO: James E. Dyer, Regional Administrator
Region III

July 1, 2003

FROM: Carl J. Paperiello ***/RA/***
Deputy Executive Director for
Materials, Research and State Programs

SUBJECT: INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM FOR REGION III

On June 10, 2003, the Management Review Board (MRB) met to consider the proposed final Integrated Materials Performance Evaluation Program (IMPEP) report for Region III (RIII). The MRB found the RIII program adequate to protect public health and safety.

Based on the results of the current IMPEP review, the next full review will be in approximately four years.

I appreciate the courtesy and cooperation extended to the IMPEP team during the review and your support of the program.

Attachment: Final IMPEP Report

cc: J. Caldwell, RIII
M. Dapas, RIII

CONTACT: Linda M. Psyk, NMSS/IMNS
(301) 415 -0215

DISTRIBUTION :

IMNS r/f	PDR YES X NO __		
IMPEP Master File	LRakovan, STP	KSchneider, STP	Rstruckmeyer, IMNS
MVirgilio,NMSS	JGreeves, DWM	CReamer, DWM	DGillen, DWM
RPierson, FCSS	ELeeds, FCSS	FBrown, IMNS	WSchwink, FCSS
GPurdy, DWM	VCampbell, RIV	RGallaghar, Mass.	PLanzisera, RI
LPsyk, IMNS	PLohaus, STP	KCyr, OGC	MFederline, NMSS

G:\imns\psyk\Region III IMPEP 2003\R3IMPEP2003FINAL.WPD
ADAMS-ML031690180

OFC	MSIB*	MSIB*	IMNS*	NMSS	DEDMRS
NAME	FBrown/L Psyk	TEssig	CMiller	MVirgilio	CPaperiello
DATE	6/13/03	6/13/03	6/17/03	6/19/03	07/01/03

OFFICIAL RECORD COPY *See previous concurrence

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

REVIEW OF NRC REGION III PROGRAM

March 24-28, 2003

FINAL REPORT

U.S. Nuclear Regulatory Commission

1.0 INTRODUCTION

This report presents the results of the review of the Region III (RIII) nuclear materials program. The review was conducted during the period of March 24-28, 2003, by a review team comprised of technical staff members from the U.S. Nuclear Regulatory Commission (NRC) and the State of Massachusetts. 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 a Final General Statement of Policy," published in the Federal Register on October 16, 1997, and the November 5, 1999, revision to NRC Management Directive (MD) 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)." Preliminary results of the review, which covered the period April 1999 to March 2003, were discussed with Region III management on March 28, 2003.

A draft of this report was issued to RIII for factual comment on April 25, 2003. RIII responded in a memorandum dated May 23, 2003. The Management Review Board (MRB) met on June 11, 2003, to consider the proposed final report. The MRB found that the RIII nuclear materials program was adequate to protect public health and safety.

The Region III nuclear materials program is administered by the Director, Division of Nuclear Materials Safety (DNMS), who reports directly to the Regional Administrator. The DNMS organization chart is included as Appendix B. At the time of the review, the Region III nuclear materials program regulated more than 1600 specific material licenses.

In preparation for the review, a questionnaire addressing the common and non-common indicators was sent to Region III on February 10, 2003. Region III provided a response to the questionnaire on March 11, 2003. A copy of the completed questionnaire response can be found on NRC's Agency-wide Document Access and Management System (ADAMS) using Accession Number ML030710405.

The review team's general approach for conduct of this review consisted of: (1) examination of Region III'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 licensing, inspection, incident response, allegation, and decommissioning actions or files; (4) field accompaniments of four Region III inspectors; and (5) interviews with staff and management to answer questions or clarify issues. The team evaluated the information that it gathered against the IMPEP performance criteria for each common and non-common indicator and made a preliminary assessment of Region III's performance.

Section 2 below discusses Region III's actions in response to recommendations made following the previous 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 indicators, and Section 5 summarizes the review team's findings and recommendations. The team did not have any recommendations.

2.0 STATUS OF ITEMS IDENTIFIED IN PREVIOUS REVIEWS

During the previous routine IMPEP review, which concluded on March 19, 1999, five recommendations were made (some directed to Region III: others to NRC Headquarters). In addition, one open recommendation (directed to NRC Headquarters) remained from the 1997 IMPEP review, which concluded on April 25, 1997. The team's review of the current status of these recommendations is as follows:

(1) NMSS should examine the need for guidance for initial inspections of new licenses that are issued in the case of an ownership change, mailing office location change, or change in control. (Open item from the 1997 IMPEP)

Current Status: The subject guidance was included in Temporary Instruction (TI) 2800/033, Revision 02, "Revised Materials Inspection Program." This TI will be converted into a permanent revision of Inspection Manual Chapter (IMC) 2800, "Materials Inspection Program" in calender year 2003. This recommendation is closed.

(2) NMSS should revise all inspection field notes to include the location(s) that the inspection is performed.

Current Status: The change to inspection field notes was included in TI 2800/033, Revision 02. This recommendation is closed.

(3) Region III should implement the tools prescribed in the Decommissioning Handbook for ensuring that decommissioning and license termination reviews are complete and fully documented.

Current Status: Region III is utilizing the subject tools. While recent regional self-assessments, and the review team, have found some cases where the tools were not used, these exceptions are being addressed by existing regional corrective actions. This recommendation is closed.

(4) NMSS should evaluate the causes for omission of reference documents from Nuclear Materials Events Database (NMED) reports, and take appropriate follow-up action in response to any findings.

Current Status: NMSS has concluded that NMED does not need to include every reference as long as the NMED item is "complete." Criteria for completeness of NMED items has been included in TI 2800/033, Revision 2. Similar criteria exists in the State and Tribal Program procedure titled "Reporting Materials Events, SA-300." This recommendation is closed.

(5) Region III should develop and implement a process to remove allegation material from the docket files.

Current Status: Region III developed and implemented a process to review the docket files and to remove allegation material. This effort was successful, as demonstrated by the findings of both regional self-assessments and the review team. This recommendation is closed.

(6) The review team recommends that Region III train the DNMS staff on what allegation language, if any, is acceptable to place into the docket file.

Current Status: Region III trained the DNMS staff not to place allegation language into the docket file. This effort was successful, as demonstrated by the findings of both regional self-assessments and the review team. This recommendation is closed.

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) Technical Quality of Inspections; (3) Status of Materials Inspection Program; (4) Technical Quality of Licensing Actions; and (5) Response to Incidents and Allegations.

3.1 Technical Staffing and Training

Issues central to the evaluation of this indicator include the radioactive materials program staffing level, technical qualifications of the staff, training, and staff turnover. To evaluate these issues, the review team examined the Region's questionnaire responses relative to this indicator, interviewed the DNMS management and staff, interviewed members of the Region III's Division of Resource Management and Administration, and considered any possible workload backlogs.

The DNMS organizational structure has not changed since the 1999 IMPEP review with the exception of the closure of the laboratory in 2002. There are four branches: Materials Licensing Branch; Materials Inspection Branch, Decommissioning Branch; and the Fuel Cycle Branch in DNMS. Staffing was relatively stable over the review period with the exception of the Fuel Cycle Branch. The staffing and training for the Fuel Cycle Branch is discussed in Section 4.2.3 of this report.

Region III is currently staffed with 25.5 direct full time equivalents (FTEs) applied to the materials and decommissioning programs. This is a decrease from the previous IMPEP, caused by a reduction in licenses. As noted in the questionnaire response, DNMS has hired three new technical staff members since the last IMPEP review. One of the new non-fuel cycle staff participates in the Nuclear Safety Intern Program. During the review period, eight staff members left DNMS. The Materials Licensing Branch has one vacancy effective March 9, 2003, a Senior Health Physicist position. Regional management plans to post a vacancy announcement for this position soon.

The organization has separate licensing and inspection staff. The review team found a good balance of personnel assigned to the licensing and inspection areas. In addition, DNMS has a cross-training initiative currently limited to the GG-14 positions within the Licensing and Inspection Branches. The intent is to develop staff qualified in both disciplines. Management plans to extend the cross-training opportunity to other staff after the senior staff are cross-trained. The review team concluded that DNMS has a qualified, experienced staff. Three staff members are currently completing the training and qualification program: two are new staff members and the third is a staff member who was reassigned due to the closure of the Region's radio-analytical laboratory. The review team concluded that DNMS has a plan and

schedule for completing the training and qualification of these staff in a timely manner. Many of the licensing staff have full signature authority for licensing actions. The review team spot-checked individual inspector's qualifications, interviewed human resource staff, reviewed staff training records, and interviewed managers concerning technical training in accordance with IMC 1246 requirements. The technical expertise of the DNMS staff continues to be a strength of the program.

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

3.2 Status of Materials Inspection Program

The team focused on five factors in reviewing this indicator: inspection frequency, overdue inspections, initial inspection of new licenses, the timely dispatch of inspection findings to licensees, and the performance of reciprocity inspections. The evaluation is based on the Region's questionnaire responses relative to this indicator, data gathered independently from the NRC's Licensing Tracking System (LTS) and other NMSS and Region III statistical databases, the examination of completed licensing and inspection casework, and interviews with the Region's managers and staff.

The team reviewed Region III's inspection priorities during the period and confirmed that Region III's inspection frequencies for various types or groups of licenses were consistent with program office guidance, as provided in IMC 2800, including the new guidance in Temporary Instruction (TI) 2800/033 Revision 02. This was verified by cross-checking the inspection frequencies noted in a selected sample of docket files for inspections conducted prior to the issuance of the TI. The review team also determined that Region III effectively implemented the TI by cross-checking the actual inspection frequencies entered in the LTS with the frequencies specified in the TI. The team noted that prior to the issuance of TI 2800/033, Revision 02, Region III reduced or extended individual licensee inspection schedules, based on inspection findings and previous licensee performance. Since the issuance of the TI, Region III has reduced the interval between inspections based on poor licensee performance, where appropriate. In addition to the IMC 2800 guidance, the Region continues to implement its broad scope inspection initiative as discussed in the 1999 IMPEP report. This initiative allows several partial inspections of major broad scope licensees to be conducted within the inspection cycle, as long as all inspection objectives are met through the aggregation of the partial inspections.

At the time of the review, there were no overdue core inspections, including initial inspections. The review team examined Region III 's tracking information for a total of 410 licenses, which included 371 initial inspections. The team did not identify any core inspections conducted overdue during the review period. The team noted that during the 1999 IMPEP review, the Region also had no core inspections overdue. Review of monthly NMSS statistical reports rarely showed any Region III core inspections overdue over the past four years. The team reviewed an LTS generated data set comparing the number of licensees in each State with the number of inspections conducted by Region III since the last IMPEP review. There was no geographic bias on the part of Region III in scheduling inspections, as required by IMC 2800. The Region demonstrated exemplary performance in scheduling inspections during the review period.

In discussions, the Region's management attributed this success to the use of several management tools. An Operational Management Information (OMI) report is generated monthly that assesses the Region's performance against performance goals and enables management to identify potential problems in a timely manner. Management also uses cost accounting information generated from information recorded by the staff in NRC's Human Resources Management System to track the direct inspection effort expended. The review team found these tools to be efficient and effective for managing the materials program, especially the use of cost management.

During the review period, the Region granted 93 reciprocity permits, of which, 60 permits were core licensees based upon IMC 1220. Review of the Region's reciprocity records indicate that the Region met and exceeded the reciprocity inspection goals for the entire review period as established in the current IMC 1220.

The timeliness of the issuance of inspection findings was evaluated during the inspection casework review. For 25 routine inspection files examined, all inspection findings were sent to the licensees within 30 days.

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

3.3 Technical Quality of Inspections

The team evaluated the inspection reports, enforcement documentation, and inspection field notes and interviewed inspectors for 25 materials inspections conducted during the review period. Fifteen of Region III's materials inspectors' casework were reviewed. The casework covered inspections of various license types, including: radiography (including temporary job site only, fixed), pacemaker, measuring systems other, portable gauges, medical institution - written directive (WD) required, nuclear pharmacy, research and development broad, medical institution broad, high doserate remote afterloaders (HDR), academic broad scope, gamma stereotactic radiosurgery, and byproduct material possession only. Appendix C lists the inspection casework files reviewed for completeness and adequacy with specific comments.

For review of this indicator, the team utilized both State and Tribal Programs procedure "SA-102, Reviewing Common Performance Indicator #2, Technical Quality of Inspections" and TI 2800/033, Revision 2. This was necessary because some of the guidance contained in SA-102 is no longer applicable for the NRC regions because the TI supersedes IMC 2800, upon which SA-102 is based.

During the onsite review, the team determined that Region III is performing inspections of materials licensees in accordance with IMC 2800. Inspectors used the appropriate inspection field note forms on all the files reviewed. The review team observed that inspectors were reviewing previous open items and past violations during the inspections. For the cases reviewed, the correct inspection documentation was used. Specifically, NRC Form 591s, and 591Xs were used unless the findings warranted a written letter or escalated enforcement actions were involved.

The review team found that inspection reports were thorough, complete, consistent, and of high quality, with sufficient documentation to ensure that licensee's performance with respect to health and safety was acceptable. The documentation supported violations, recommendations made to the licensee, and discussions held with the licensee during exit interviews. Team inspections were performed when appropriate and for training purposes. Based on the casework, routine inspections are covering all aspects of the licensees' radiation programs.

The team determined that DNMS Branch Chiefs had accompanied all inspectors at least once each year since calendar year 2002. A self-assessment performed by regional staff identified that many, but not all, inspectors were accompanied during calendar years 1999, 2000, and 2001. Effective corrective measures were implemented as demonstrated during calendar year 2002. Inspectors receive verbal feedback at the time of the inspection accompaniments, and a portion of the inspectors' annual performance appraisals address their inspection skills.

The team found that Region III maintains a sufficient number of various models of survey instruments to perform radiological surveys of materials licensees. The review team examined Region III's instrumentation and observed that the survey instruments in Region III's office at the time of the onsite review were calibrated and operable. Region III contracts with a commercial radiological service company to provide calibrations, and staggers the calibration dates. The calibration frequency for all instruments is one year, which is consistent with the current NMSS policy. Region III no longer maintains a radioanalytical laboratory, all samples are now sent to a contract laboratory for analyses.

On February 10 - 13, and February 25 - 27, 2003, review team members performed accompaniments of four Region III inspectors on separate inspections of 11 licensed programs (see Appendix C). One of the inspections was an initial, announced, inspection, and the remainder were routine, unannounced, inspections. The inspection accompaniments were conducted as follows: medical (WD not required) licenses, portable gauge licenses, a nuclear pharmacy license, a medical license (WD required), an HDR license, and a mobile nuclear medicine license. All inspectors performed in-depth examinations of the licensees' facilities; interacted with licensee personnel; observed licensees' activities; and reviewed pertinent records. In all cases, the inspectors demonstrated a performance based inspection approach with appropriate technical skills and professional inspection techniques. The inspectors' performance was adequate to assess the radiological health and safety of the licensees' programs.

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

3.4 Technical Quality of Licensing Actions

The team examined completed licensing casework for 20 licensing actions, and interviewed the Branch Chief of the Materials Licensing Branch and various license reviewers. Licensing actions were evaluated for completeness, consistency, accuracy, and adequacy of facilities and equipment, training and experience, and procedures for the radionuclides and quantities used. Licenses were evaluated for overall technical quality, including license conditions and tie-down conditions. Casework was evaluated for timeliness, adherence to good health physics practices, reference to appropriate regulations, adherence to sealed source and device

registration, consideration of enforcement history on renewals, pre-licensing visits, and proper signature authorities. The files were checked for retention of necessary documents to support the licensing action.

During the period from October 1999 to March 2003, Region III completed 5095 licensing actions, including 297 new licenses, 616 renewals, and 3606 amendments. The licensing casework was selected to provide both a representative sample of licensing actions which were completed during the review period and a review of several different license reviewers. The sampling included the following types: medical institution broad; fixed and portable gauges; pacemaker manufacturing and distribution; pool irradiator; medical private practice; well logging; medical institution; and byproduct material-possession only. Types of licensing actions selected for evaluation included four new licenses, three renewals, three amendments, and ten terminations. A list of the licenses evaluated with case-specific comments can be found in Appendix D.

Overall, the team found the licensing actions thorough, complete, of good quality, and properly addressing health and safety issues. The files generally contained appropriate licensing checklists and documentation to support the licensing action. Discussions with license reviewers confirmed that NRC licensing guidance in the NUREG-1556 series was being used. The team identified only minor, non-consequential, differences in some Region III standard license conditions and those found in NUREG-1556, Volumes 1, 4, 11, and 20. The process used by the Branch Chief of the Materials Licensing Branch to assure that licensing actions are reviewed by appropriately qualified license reviewers was also examined. All licenses reviewed were signed by license reviewers with appropriate signature authority.

The deficiencies that were identified by the review team in licensing were minor, isolated, or administrative in nature, with many items corrected during the on-site visit. The review team identified two cases, involving separate licenses, where the records submitted by the licensees were insufficient to adequately document the appropriate transfer of licensed material, and the issue had not been identified by the Region III license reviewer. Each case was discussed with the responsible license reviewer and the Branch Chief, and appropriate steps were being taken to determine the disposition of these materials. The review team examined several additional requests to remove licensed material from a license. Of the cases reviewed and discussed with Region III staff, other than the two cases discussed above, the review team determined that Region III license reviewers verified the transfer of licensed material to authorized recipients prior to completion of the requested licensing action. Therefore, the review team concluded that this issue was not a systemic problem for the Region. See Appendix D for further details.

Region III has written material licenses that list allowed devices by manufacturer and model number rather than listing sources by manufacturer and model number. Because multiple sources can often be used in a single device, this approach provides increased flexibility to licensees and reduces the burden associated with license amendments to NRC staff. The Region III approach conforms to the controlling regulation, 10 CFR 30.32(g)(1), and is an improvement over the guidance currently contained in NUREG 1556, Vol. 1, “Program-Specific Guidance about Portable Gauge Licensees,” and Vol. 4, “Program-Specific Guidance about Fixed Gauge Licensees.” The review team recommended and the MRB agreed that the Region’s practice of identifying device manufacturer and model numbers on licenses in lieu of identifying source manufacturer and model numbers as a good practice. The Division of

Industrial and Medical Nuclear Safety has initiated an evaluation of this practice and will revise the guidance documents, as appropriate.

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

3.5 Response to Incidents and Allegations

In evaluating the effectiveness of Region III's actions in responding to incidents, the team examined Region III's response to the questionnaire relative to this indicator, evaluated selected incidents reported for Region III in NMED, and evaluated the casework and supporting documentation for 10 material incidents. A list of the incident casework examined with case-specific comments is included in Appendix E. The team also reviewed Region III's response to ten allegations involving radioactive materials and two allegations involving fuel cycle.

The team discussed, with Region III staff and management, incident and allegation procedures, file documentation, use of NMED, and notification of incidents to the NRC Operations Center. The responsibility for initial response and follow-up actions to materials incidents rests with DNMS. All incidents are promptly evaluated for the need for onsite investigations. The review team determined that DNMS took prompt, appropriate, action in response to incidents. For the ten incidents reviewed, the review team observed that Region III consistently addressed health and safety issues during incident follow-up. The review team found that DNMS' level of effort expended on incidents was appropriate and commensurate with the potential health and safety significance of the incidents. Region III staff adequately and clearly identified licensee noncompliance issues, and initiated enforcement actions to ensure prompt compliance, as appropriate. In addition, Region III coordinated materials incident responses in a timely and effective manner with other NRC offices, and, when appropriate, with other regulatory jurisdictions (i.e., States). The review of license files and discussions with staff revealed that Preliminary Notifications (PNs) in response to incidents were prepared and issued in accordance with regional instructions and IMC 1120, "Preliminary Notifications." All PNs received supervisory review and approval before issuance. The review team found good correlation between the PNs issued by Region III, the incident information in ADAMS, and the incident information in NMED.

The inspection staff was found to be familiar with NMED, and review of inspection records and observations during the inspector accompaniments indicated that NMED was being used by the inspection staff. The team found that most NMED records for the event files reviewed were complete and all were accurate. Based upon a review of the guidance in TI 2800/033, Revision 2, the team concluded that Region III is in conformance with the existing expectations for NMED.

In evaluating the effectiveness of Region III's actions in response to allegations, the review team examined Region III's response to the IMPEP questionnaire, and reviewed the allegations files and supporting documentation for ten materials allegations and two fuel cycle allegations. The review team held interviews with the Regional Allegations Coordinators, DNMS managers, and DNMS technical staff regarding the handling of allegations.

Responsibility for initial response and follow-up actions to material allegations rests with the Regional Allegations Coordinator, in conjunction with DNMS staff and management. The team's review of casework, associated documents, and interviews with staff revealed that Region III has an effective and efficient program for managing materials allegations. The region closed 95 percent of its allegations within 180 days, and 100 percent of the cases in less than 360 days during the IMPEP period, thus meeting the Regional Operating Plan goals. In addition, all Allegation Review Board meetings were held within the MD 8.8, "Management of Allegations," goal of 30 days. Acknowledgment letters, responding to allegers, were issued within the performance goal of 30 days.

The review team found that proper procedures were being followed for control and maintenance of allegation materials, in accordance with MD 8.8. DNMS staff received annual allegation training via the computer. Moreover, the review team interviews indicated that the Region III staff had a clear understanding of the applications of MD 8.8.

The review team noted that internal and external coordination of allegations was appropriate and performed in a timely manner. The results of file reviews showed that DNMS routinely referred cases involving potential wrongdoing to the Office of Investigations for resolution. In addition, the review team noted that allegations involving Agreement States were appropriately managed.

Based on the IMPEP evaluation criteria, the review team recommends that Region III's performance with respect to the indicator, Response to Incidents and Allegations, be found satisfactory.

4.0 NON-COMMON PERFORMANCE INDICATORS

IMPEP identifies two non-common performance indicators to be used in reviewing Region III's nuclear materials program: (1) Regional Fuel Cycle Inspection Program, and (2) Site Decommissioning Management Plan and Decommissioning Activities.

4.1 Regional Fuel Cycle Inspection Program

Four IMPEP specified sub-indicators of performance were used in reviewing the Region III Fuel cycle inspection program. The sub-indicators are: (1) Status of the Fuel Cycle Inspection Program; (2) Technical Quality of Inspections; (3) Technical Staffing and Training; and (4) Response to Incidents and Allegations. The team's review was based on interviews with management and inspectors, as well as the examination of documents.

4.1.1 Status of Fuel Cycle Inspection Program

In reviewing the status of the Region's Fuel cycle inspection program, the team focused its review on four areas: inspection frequency; overdue inspections; timely dispatch of inspection findings to licensees; and timely completion of Licensee Performance Reviews (LPRs).

During the four year period under IMPEP review, Region III had successfully accomplished and documented 152 inspections at 4 fuel cycle facility sites. This total included 23 reactive or non-routine inspections, including those associated with security concerns following the events of

September 11, 2001. This quantity of casework represented a significant challenge to Region III's staff.

The review team found that inspections had been scheduled and performed in accordance with the requirements of IMC 2600, "Fuel Cycle Facility Operational Safety and Safeguards Inspection Program," and TI 2600-007, "Interim Guidance for Fuel Cycle Facility Core Inspection Program." Region III effectively utilized the Master Inspection Plan to schedule and track completion of inspections. Recent events and risk considerations were used in identifying and scheduling inspections. Changes to the inspection plan caused by the response to emergent events had been well coordinated with Headquarters.

There were no overdue inspections at the time of the IMPEP review, and the review team did not identify any inspections that were performed late during the IMPEP period. The review team verified that the inspection reports reviewed by the team had been issued in a timely manner.

The review team reviewed the records associated with the fuel cycle facility LPRs. The team found that the material prepared for the LPRs had been timely, of good quality, and consistent with IMC 2604, "Licensee Performance Reviews."

Given the significant licensee and resource challenges experienced by Region III during the IMPEP review period, the IMPEP review team considered the implementation of the fuel cycle inspection program to have been exemplary.

4.1.2. Technical Quality of Inspections

The team reviewed the inspection results for 19 (listed in Appendix C) of the 152 inspections completed at fuel cycle facilities by Region III during the IMPEP review period. The review team found that Region III's implementation of the Fuel cycle inspection program was of high quality and was consistent with IMC 2600 and IMC 0610, "Inspection Reports." Inspection emphasis had been properly focused on risk significant performance and safety significant precursors. Inspection findings were sound, well supported, and effectively communicated. The Region III Fuel cycle inspection program staff had effectively managed inspection open items, although a backlog of unresolved items were in the process of being closed for the Paducah facility. Annual management accompaniment of inspectors was performed. Prior to issuance, inspection reports had been peer reviewed and approved by management.

4.1.3 Technical Staffing and Training

Issues central to the evaluation of this indicator include the fuel cycle inspection program staffing level, technical qualifications of the staff, training, and staff turnover. To evaluate these issues, the review team examined Region III's questionnaire response relative to this indicator, interviewed DNMS management and staff, interviewed members of the Region III's Division of Resource Management, and considered any possible workload backlogs.

The Fuel Cycle Branch has experienced numerous personnel changes over the review period. Six staff were transferred or detailed to other programs in NRC, two retired, and three left the agency. Five of the six Branch staff are new to the Fuel Cycle Branch. With the exception of three staff, all the technical staff have met the qualification requirements. Of the new staff, two

are members of the Nuclear Safety Intern Program who are on a rigorous schedule to complete their qualifications. One new staff member hired from private industry is on schedule to complete qualification training in May 2003. Region III effectively and efficiently managed this staffing issue by borrowing inspection staff from other Branches within DNMS. These inspectors were experienced and qualified in the areas assigned and worked under the supervision of a qualified fuel cycle facility inspector. In spite of the staffing challenges, the Branch was able to meet all the fuel cycle inspection program goals since the last IMPEP. The team did not observe any performance deficiency during the IMPEP review period.

As discussed within this Section of the report, Region III faced significant challenges in meeting the fuel cycle inspection program goals during the IMPEP period. Region III effectively managed the unexpectedly high workload and very high turn-over in the fuel cycle inspection program through the cross training and qualification of staff from the materials and reactors programs. This was separate from the systematic cross training of senior Materials program staff in inspection and licensing, which is now a common practice within the Regions and many Agreement States. In the IMPEP team members experience, they had not previously seen the same level of inter-program training and qualification within the Regions. The inter-program approach was highly beneficial both to the involved individuals and to the Region and Agency. This approach of increasing staff fungibility (or the ability to interchange staff as needed to meet emergent needs) is also consistent with the Agency's long term goals for work force planning. The review team recommends that the inter-program cross training and qualification be recognized as a good practice.

One challenge facing Region III is the impending consolidation of the Region III fuel cycle inspection program with the Region II program. Region III is actively working with Region II management in an effort to make a transparent transition of regulatory responsibility. A transition plan is currently under development.

4.1.4. Response to Incidents and Allegations

In evaluating the effectiveness of Region III's actions in responding to fuel cycle incidents, the team examined Region III's response to the questionnaire relative to this indicator, evaluated selected incidents reported for Region III in the NMED against those contained in Region III's files, and evaluated the casework and supporting documentation for two fuel cycle incidents. A list of the incident casework examined is included in Appendix E. The team also reviewed Region III's response to two allegations involving fuel cycle facilities.

The review team found that Region III response to fuel cycle facility incidents had been timely, effective, of high quality, and consistent with IMC 2600 objectives. Region III response to events was appropriately coordinated with Headquarters. Incident related communications, including PNs and inspection reports, had been timely. Incident communications had effectively described the incident, including; causes, risk significance, plant specific and generic precursor implications, and resolution.

During the IMPEP review period, Region III closed 136 fuel cycle facility allegations, a very high workload. Allegations were closed within 180 days, with the exception of 4 unique allegations that were closed within a year, consistent with the Regional Operational Plan goal. Region III's response to allegations was found to have been focused on safety and highly effective, as discussed in Section 3.5 of this report.

4.1.5 Summary for Regional Fuel Cycle Inspection Program

Based on the IMPEP evaluation criteria, the review team recommends that Region III's performance with respect to the indicator, "Regional Fuel Cycle Inspection Program," be found satisfactory.

4.2 Site Decommissioning Management Plan (SDMP)

In conducting this review, six sub-indicators were reviewed to evaluate Region III's performance regarding their Site Decommissioning Management Plan (SDMP). These sub-indicators include: (1) Quality of SDMP Decommission Reviews; (2) Financial Assurance for Decommissioning; (3) Termination Radiological Surveys; (4) Inspections; (5) Staff Qualifications; and (6) SDMP Milestones. In performing this review, the review team interviewed DNMS management and staff, examined SDMP inspection files, non-SDMP licensing files, and reviewed financial assurance documents.

SDMP and non-SDMP sites that require substantial decommissioning actions, such as remediation or final radiological surveys, are the responsibility of the Decommissioning Branch. Non-complex decommissioning license terminations, such as for Group I licensees, are assigned to the Materials Licensing Branch.

One particular strength effecting several aspects of the SDMP program was observed by the IMPEP team. Region III has elected to develop communication plans for all complex decommissioning activities. This approach is consistent with Division of Waste Management practice for Headquarters managed decommissioning activities, but exceeds any current direction to the Regions.

4.2.1 Quality of SDMP Decommissiong Reviews

To assess Region III's performance on reviews for license terminations, the review team interviewed Region III staff and examined docket files for 3 SDMP sites, 7 non-SDMP licenses and 20 licenses that were terminated during the review period. Appendix F lists the casework files reviewed for completeness and adequacy with specific comments. Region III does not have project management responsibilities for SDMP facilities, and is only responsible for the inspection requirements.

Decommissioning licensing review actions undertaken by Region III staff include: reviewing the status of sites in accordance with timeliness requirements; reviewing/approving radiological criteria for release of sites; reviewing licensees' decommissioning plans; ensuring adequate financial assurance; reviewing licensees' final status survey plans and reports; and conducting confirmatory surveys.

Licensee decommissioning plans, where required, were reviewed and documented by DNMS in accordance with NRC guidance. For license terminations, the review team examined closeout documentation in ADAMS. In all cases, a Form 314, "Certificate of Disposition of Materials," or equivalent, was included in ADAMS. In the majority of cases, a license termination checklist was used and included. The check list was not consistently being used for Group I licensees which is not safety significant. From the 1999 IMPEP, Region III committed to using a checklist for all license terminations. In a recent self assessment, Region III identified that the checklist

was not consistently being used. Region III has implemented new procedures and provided training to ensure that checklists are being used consistently.

4.2.2 Financial Assurance for Decommissioning

The review team evaluated Region III's financial assurance program for conformance with requirements of MD 8.12, "Decommissioning Financial Assurance Instrument Security Program."

To assess the performance of Region III for financial assurance, the review team examined the LTS; Region III's "Financial Assurance Inventory; " 15 financial assurance instruments in the file, including a comparison with the inventory list information; Region III's annual self-evaluations, security of decommissioning financial assurance instruments, and interviewed licensing staff.

The review team confirmed that Region III has staff assigned as a Decommissioning Financial Assurance Instrument Custodian (Custodian), Alternate Custodian (Alternate), and Manager, in accordance with MD 8.12. The Manager is the Licensing Branch Chief. The review team confirmed that the Custodian, Alternate, and Manager have been designated in writing, and that no one has access to the financial assurance records other than through these individuals, as required by MD 8.12. The review team confirmed that the decommissioning financial assurance instruments are stored in a fire-rated safe, having a fire rating in accordance with MD 8.12. The review team also confirmed that the Custodian maintains an inventory list of the financial assurance instruments held in the safe, and this inventory contains the information required by MD 8.12.

The team reviewed the self assessment required by MD 8.12 for 2000, 2001, and 2002. MD 8.12 requires the annual self assessments review of 100 percent of the files on the inventory list against the guidelines in the Handbook. Additionally, MD 8.12 requires that two evaluations of financial assurance instruments be conducted annually, one by the Custodian or Alternate, and one by the Manager. All of the required audits were performed by the Manager and Custodian.

The team reviewed the security of the financial assurance instruments. Region III has established check out/in procedures. Each time the safe is opened and closed, an entry is made on a log sheet. Instruments that are taken from the safe are returned before the end of the business day. The safe is checked daily to ensure that it is locked which is also noted on a log sheet. The Region III audit determined that the safe was not always checked on a daily basis or at least not indicated on the log sheet. Region III has placed signs at both exits to remind staff to check the safe. Recent log sheets indicated that the safe was checked daily.

The team compared the inventory list of the financial assurance instruments with the LTS. The team found minor discrepancies between the inventory list and LTS. One Statement of Intent did not include documentation that the individual signing the statement was authorized to provide funding for decommissioning. These minor discrepancies would not prevent the execution of these instruments.

4.2.3 Termination Radiological Surveys

The review team discussed termination surveys with Region III staff and managers and evaluated casework for adequacy of licensee and Region III surveys to support license termination. The review team observed that licensee final status survey plans and reports have been prepared in accordance with NUREG/CR-5849, "Manual for Conducting Radiological Surveys in Support of License Termination;" NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM);" or other appropriate methods, and are reviewed by Region III staff. The review team concluded that Region III's reviews are adequate to ensure that residual radioactivity levels comply with release criteria. Confirmatory or closeout surveys are performed, as necessary, for each licensee's site, by Region III or NRC's contractor to validate licensee survey data. These surveys were performed as outlined in IMC 2605, "Decommissioning Procedures," Inspection Procedure (IP) 87104, "Decommissioning Inspection Procedure for Materials Licensees," and IP 88104, "Decommissioning Inspection Procedure for Fuel Cycle Facilities."

4.2.4 Inspections

The review team evaluated the number of inspections performed at SDMP and non-SDMP sites during the review period. The review team concluded Region III has performed inspections in accordance with IMC 2602, "Decommissioning Inspection Program for Fuel Cycle Facilities and Materials Licensees," Inspection Procedure 87104, "Decommissioning Inspection Procedure for Materials Licensees," and IP 88104, "Decommissioning Inspection Procedure for Fuel Cycle Facilities." No decommissioning inspections were overdue. Closeout inspections are performed, as appropriate, to terminate licenses.

4.2.5 Staff Qualifications

The review team found that the decommissioning staff is very experienced and highly qualified to perform licensing and inspection functions on decommissioning sites. The staff is knowledgeable about the process and procedures for decommissioning, and the staff follows the process and procedures, as applicable, to each decommissioning site and license termination action. Two staff members to the Decommissioning Branch have not completed the training required for decommissioning technical reviewers and decommissioning inspectors in IMC 1246. One has completed all of the required courses and is preparing for an oral board. The other is a recently hired nuclear safety intern.

4.2.6 SDMP Milestones

Region III does not have project management responsibilities for SDMP facilities. This sub-indicator was not evaluated for this review.

4.2.6 Summary for SDMP

Based on the IMPEP evaluation criteria, the review team recommends that Region III's performance with respect to the indicator, Site Decommissioning Management Plan, be found satisfactory.

5.0 SUMMARY

As noted in Sections 3 and 4 above, the review team found Region III's performance with respect to each of the performance indicators to be satisfactory. Accordingly, the review team recommended and the MRB concurred in finding the Region III nuclear material program to be adequate to protect public health and safety. Based on the results of the current IMPEP review, the next full review will be in approximately four years. The review team made no recommendations.

GOOD PRACTICES:

1) Region III has written material licenses that list allowed devices by manufacturer and model number rather than listing sources by manufacturer and model number. Because multiple sources can often be used in a single device, this approach provides increased flexibility to licensees and reduces the burden associated with license amendments to NRC staff. The Region III approach conforms to the controlling regulation, 10 CFR 30.32(g)(1), and is an improvement over the guidance currently contained in NUREG 1556, Vol. 1 and Vol. 4 (Section 3.4). The Division of Industrial and Medical Nuclear Safety has initiated an evaluation of this practice, and will revise the guidance documents, as appropriate.

2) As discussed within this Section of the report, Region III faced significant challenges in meeting the fuel cycle inspection program goals during the IMPEP period. Region III effectively managed the unexpectedly high workload and very high turn-over in the fuel cycle inspection program through the cross training and qualification of staff from the materials and reactors programs. This was separate from the systematic cross training of senior Materials program staff in inspection and licensing, which is now a common practice within the Regions and many Agreement States. In the experience of the IMPEP team members, they had not previously seen the same level of inter-program training and qualification within the Regions. The inter-program approach was highly beneficial both to the involved individuals and to the Region and Agency. This approach of increasing staff fungibility (or the ability to interchange staff as needed to meet emergent needs) is also consistent with the Agency's long term goals for work force planning. (Section 4.1.3).

LIST OF APPENDICES AND ATTACHMENTS

APPENDIX A

IMPEP REVIEW TEAM MEMBERS

Name	**Area of Responsibility**
Frederick D Brown, NMSS/IMNS	Team Leader
Vivian H. Campbell, RIV, DNMS	Status of Materials Inspection Program Technical Staffing and Training
Robert L. Gallaghar, Massachusetts	Technical Quality of Inspections
Penny A. Lanzisera, RI/DNMS	Technical Quality of Licensing Actions
Gary Purdy, NMSS/DWM	Site Decommissioning Management Plan
Linda M. Psyk, NMSS/IMNS	Response to Incidents and Allegations
Walter S. Schwink, NMSS/FCSS	Regional Fuel Cycle Inspection Program

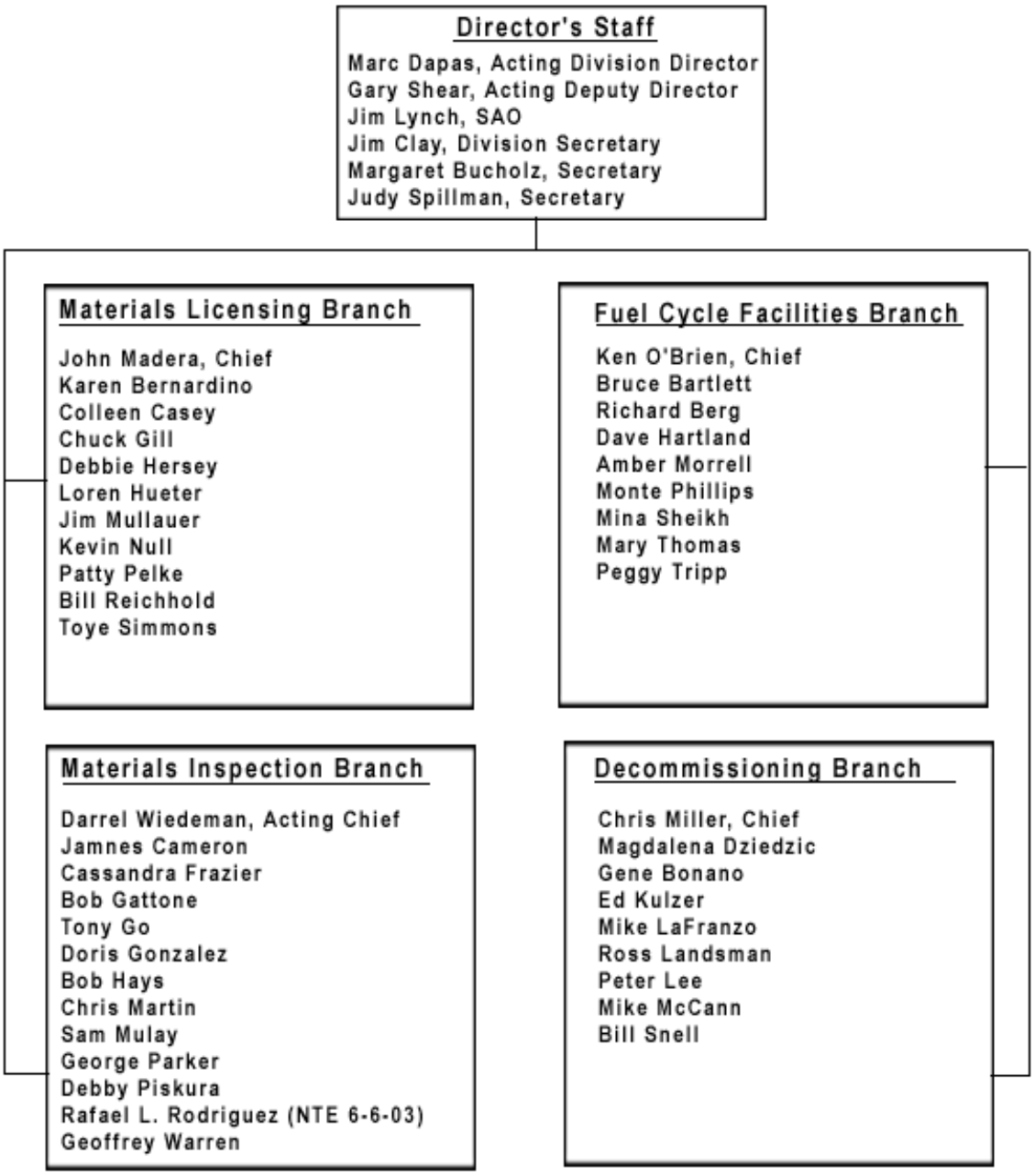
APPENDIX B

REGION II

DIVISION OF NUCLEAR MATERIAL SAFETY

ORGANIZATION CHART

Region III Final Report
Organization Chart, Region III DNMS



APPENDIX C

INSPECTION CASEWORK REVIEWS

NOTE: CASE WORK LISTED WITHOUT COMMENT ARE INCLUDED FOR COMPLETENESS ONLY; NO SIGNIFICANT COMMENTS WERE IDENTIFIED BY THE IMPEP TEAM.

Materials Program Inspection Casework

File No.: 1
Licensee: Dayton X-Ray Company — License No.: 34-06943-02
Location: Dayton, OH — Inspection Type: Special
License Type: Industrial Radiography — Priority: 1
Inspection Date: 9/3-4/02 — Inspector: CM

File No.: 2
Licensee: Southeast Missouri Hospital — License No.: SNM-1595
Location: Cape Girardeau, MO — Inspection Type: Telephone
License Type: Pacemaker-Medical Institution — Priority: T
Inspection Date: 12/19, 23/02 — Inspector: GW

File No.: 3
Licensee: Wayne State University — License No.: SUD -232
Location: Detroit, MI — Inspection Type: Routine/Unannounced
License Type: Byproduct Material Possession, Permanent Shutdown — Priority: 3
Inspection Date: 10/25-26/01 — Inspector: CM

Comment: Cover letter enclosing 591 Form contained wrong license number for the Academic Type A Broad.

File No.: 4
Licensee: Standard Imaging, Inc. — License No.: 48-32389-01
Location: Middletown, WI — Inspection Type: Initial, announced
License Type: Measuring Systems Other — Priority: T
Inspection Date: 8/27/02 — Inspector: SM

File No.: 5
Licensee: Elten Engineering Company, Inc. License No.: 21-25940-02
Location: Port Huron, MI Inspection Type: Follow Up
License Type: Portable gauge Priority: 2
Inspection Date: 9/19/01 Inspector: TG

Comment:
a) Order Revoking License Following Immediately Effective 30-Day Suspension ("Order") contains the wrong license number.
b) Record of inspection performed to ascertain compliance with Order not documented in ADAMS or in the license file. The report was subsequently added to ADAMS.
c) Correspondence from licensee pertaining to inspection findings not documented in ADAMS under docket number for licensee. Report was found to be mis-profiled, and was subsequently corrected.
d) Written notification of termination not provided to licensee in accordance with Order.

File No.: 6
Licensee: Pike County Memorial Hospital License No.: 24-18095-01
Location: Louisiana, MO Inspection Type: Routine, unannounced
License Type: Medical, QMP Required Priority:3
Inspection Date: 12/10/01 Inspector: DW

File No.: 7
Licensee: PharmaLogic Michigan, L.L.C. License No.: 21-32190-01MD
Location: Traverse City, MI Inspection Type: Routine, unannounced
License Type: Nuclear Pharmacy Priority:1
Inspection Date: 5/8, 5/10/01 Inspector: ML

File No.: 8
Licensee: Mallinckrodt, Inc. License No.: 24-17450-01
Location: St. Louis, MO Inspection Type: Routine, unannounced
License Type: Research and Development Type A Broad Priority: 2
Inspection Date: 2/13-14/02, 2/20/02 Inspector: RG

File No.: 9
Licensee: Harper Hospital Division License No.: 21-04127-06
Location: Detroit, MI Inspection Type: Routine, unannounced
License Type: Stereotactic Radiosurgery - Gamma Knife Priority: 2
Inspection Date: 4/18-19/02 Inspector: DP

File No.: 10
Licensee: Marshfield Clinic License No.: 48-10966-03
Location: Marshfield, WI Inspection Type: Routine, unannounced
License Type: Medical Broad Scope Priority:2
Inspection Date: 1/28-30/02 Inspector: GP

File No.: 11
Licensee: Law Engineering & Env. Serv. License No.: 34-25898-02
Location: North Canton, OH Inspection Type: Routine, unannounced
License Type: Industrial Radiography - Temporary Job sites Priority:1
Inspection Date: 9/18-27/01 Inspector: SM

Comment: Inspection performed at the licensee's facility and at a temporary job site in OH, both of which are non-NRC jurisdictions. Region III indicated this was an abnormal situation.

File No.: 12
Licensee: Research Medical Center License No.: 24-18625-01
Location: Kansas City, MO Inspection Type: Reactive, announced
License Type: HDR Priority: 2
Inspection Date: 10/11/01 Inspector: KN

File No.: 13
Licensee: Des Peres Hospital License No.: 24-32195-01
Location: St. Louis, MO Inspection Type: Routine, unannounced
License Type: Medical, Written Directive Required Priority: 3
Inspection Date: 4/4/01 Inspector: JC

Comment: Inspection failed to identify violation of unauthorized material usage. Licensee will request license amendment to remove material usage limiting license condition. In this case, the team concluded the issue was of low safety significance, and was isolated rather than representative of a programmatic weakness.

File No.: 14
Licensee: Niles Steel Tank Company License No.: 21-04741-01
Location: Niles, MI Inspection Type: Routine, unannounced
License Type: Industrial Radiography, Fixed Location Priority: 1
Inspection Date: 5/6/02 Inspector: CM

File No.: 15
Licensee: Department of Veterans Affairs License No.: 21-00159-04
Location: Ann Arbor, MI Inspection Type: Routine, unannounced
License Type: Medical Broad Scope Priority: 2
Inspection Date: 4/17/02 Inspector: RH

File No.: 16
Licensee: Goshen General Hospital License No.: 13-18845-01
Location: Goshen, IN Inspection Type: Routine, unannounced
License Type: HDR Priority: 1
Inspection Date: 5/22/01 Inspector: SM

File No.: 17
Licensee: University of Notre Dame du Lac License No.: 13-01983-15
Location: Notre Dame, IN Inspection Type: Routine, unannounced
License Type: Academic Type A Broadscope Priority: 3
Inspection Date: 6/27-28/02 Inspector: CF

Comment: Inspection Record (591X Form) does not contain licensee's corrective action for the cited violation.

File No.: 18
Licensee: Harrison Steel Casting Company License No.: 13-02141-01
Location: Attica, IN Inspection Type: Routine, unannounced
License Type: Industrial Radiography Fixed Site Priority: 1
Inspection Date: 4/19/02 Inspector: TG

File No.: 19
Licensee: Fort Wayne State Developmental Center License No.: 13-13530-01
Location: Fort Wayne, IN Inspection Type: Routine, unannounced
License Type: Research & Development Other Priority: 5
Inspection Date: 3/28/02 Inspector: CF

File No.: 20
Licensee: Biomedical Scanning Services, Inc. License No.: 24-18087-01
Location: St. Louis, MO Inspection Type: Special, unannounced
License Type: Mobile Nuclear Medicine Service Priority: 2
Inspection Date: 5/5/01 Inspector: JC

File No.: 21
Licensee: Derby City Engineering & Inspection License No.: 201-523-05
Location: Newburgh, IN Inspection Type: Reciprocity
License Type: Industrial Radiography Priority: 1
Inspection Date: 3/4/02 Inspector: MF

File No.: 22
Licensee: Stan A. Huber Consultants, Inc. License No.: IL-01013-01
Location: Ontonagon Memorial Hospital; Ontonagon MI Inspection Type: Reciprocity
License Type: Other Services Priority: 5
Inspection Date: 5/16/02 Inspector: RH

File No.: 23
Licensee: Alpha Omega Services License No.: CA-2641-19
Location: Rochester, MN Inspection Type: Reciprocity
License Type: Other Services, Gamma Knife Source Exchange Priority: 5
Inspection Date: 8/28/02 Inspector: DP

Comment: Inspection Record (591X Form) does not list License Number of service provider [CA-2641-19].

File No.: 24
Licensee: Heuft USA, Inc. License No.: IL-01354-22
Location: Walworth, WI Inspection Type: Reciprocity
License Type: Service/Installation General Licensed Gauges Priority: 5
Inspection Date: 6/22/01 Inspector: BJ

File No.: 25
Licensee: McNDT License No.: IL-01875-01
Location: Schererville, IL Inspection Type: Reciprocity
License Type: Industrial Radiography Priority: 1
Inspection Date: 2/1/01 Inspector: ML

Inspection Accompaniments

Accompaniment No.: 1
Licensee: Southgate Radiology License No.: 21-20030-01
Location: Southgate, MI Inspection Type: Routine, unannounced
License Type: Medical QMP Not Required Priority:5
Inspection Date: 2/10/03 Inspector: DW

Accompaniment No.: 2
Licensee: Oakland County Road Commission License No.: 21-15646-01
Location: Waterford, MI Inspection Type: Routine, unannounced
License Type: Portable Gauge Priority: 5
Inspection Date: 2/11/03 Inspector: DW

Accompaniment No.: 3
Licensee: Cardiovascular Consultants, P.C. License No.: 21-32102-01
Location: Shelby Township, MI Inspection Type: Routine, unannounced
License Type: Medical WD Not Required Priority: 5
Inspection Date: 2/11/03 Inspector: DW

Accompaniment No.: 4
Licensee: Medi-Physics, Inc. License No.: 21-24828-01MD
Location: Livonia, MI Inspection Type: Routine, unannounced
License Type: Nuclear Pharmacy Priority: 2
Inspection Date: 2/12/03 Inspector: GP

Comment:
Inspector failed to identify violation of licensee procedures for frisking upon exit of the restricted area. Observer discussed with inspector who addressed the issue with the licensee. In this case, the team concluded the issue was of low safety significance, and was isolated rather than representative of a programmatic weakness.

Accompaniment No.: 5
Licensee: Nowak & Fraus, L.L.C. License No.: 21-26122-01
Location: Pontiac, MI Inspection Type: Routine, unannounced
License Type: Portable Gauges Priority: 5
Inspection Date: 2/12/03 Inspector: GP

Accompaniment No.: 6
Licensee: St. John Oakland Hospital License No.: 21-11494-01
Location: Madison Heights, MI Inspection Type: Routine, unannounced
License Type: Medical, WD Required Priority: 5
Inspection Date: 2/25/03 Inspector: SF

Accompaniment No.: 7
Licensee: Oakland Family Practice, P.C. License No.: 21-32109-01
Location: Madison Heights, MI Inspection Type: Routine, unannounced
License Type: Medical, WD Not Required Priority: 5
Inspection Date: 2/25/03 Inspector: SF

Accompaniment No.: 8
Licensee: Millennium Diagnostic Center License No.: 21-32035-01
Location: Southfield, MI Inspection Type: Routine, unannounced
License Type: Medical, WD Not Required Priority: 5
Inspection Date: 2/26/03 Inspector: SF

Accompaniment No.: 9
Licensee: Mount Clemens General Hospital License No.: 21-04080-01
Location: Mount Clemens, MI Inspection Type: Routine, unannounced
License Type: HDR Priority: 2
Inspection Date: 2/26-27/03 Inspector: RG

Accompaniment No.: 10
Licensee: National Diagnostic Service, L.L.C. License No.: 21-32432-01
Location: Farmington Hills, MI Inspection Type: Initial, announced
License Type: Mobile medical imaging Priority: 5
Inspection Date: 2/27/03 Inspector: RG

Accompaniment No.: 11
Licensee: Associates in Medicine, P.C. License No.: 21-26696-01
Location: Berkley, MI Inspection Type: Routine, unannounced
License Type: Medical WD not Required Priority: 5
Inspection Date: 2/27/03 Inspector: RG

Fuel Cycle Inspection Casework Review

File No.: 1
Licensee: USEC (GDP) — License No.: GDP-1
Location: Paducah, KY — Inspection Type: Routine
License Type: Fuel Cycle Facility — Priority: 1
Inspection Date: 11/25/02 — Inspector: BB, MT, BT

File No.: 2
Licensee: USEC (GDP) — License No.: GDP-1
Location: Paducah, KY — Inspection Type: Routine
License Type: Fuel Cycle Facility — Priority: 1
Inspection Date: 05/01/02 — Inspector: BB, MT, MP, BC

File No.: 3
Licensee: USEC (GDP) — License No.: GDP-1
Location: Paducah, KY — Inspection Type: Routine
License Type: Fuel Cycle Facility — Priority: 1
Inspection Date: 06/17/02 — Inspector: BB, MT, MP, LS

File No.: 4
Licensee: USEC (GDP) — License No.: GDP-1
Location: Paducah, KY — Inspection Type: Special
License Type: Fuel Cycle Facility — Priority: 1
Inspection Date: 03/02/01 — Inspector: CB, MP, DM

File No.: 5
Licensee: USEC (GDP) — License No.: GDP-1
Location: Paducah, KY — Inspection Type: Special
License Type: Fuel Cycle Facility — Priority: 1
Inspection Date: 09/21/00 — Inspector: MP

File No.: 6
Licensee: USEC (GDPs) — License No.: GDP-1 & 2
Location: Paducah, KY & Portsmouth, OH — Inspection Type: Special
License Type: Fuel Cycle Facility — Priority: 1
Inspection Date: 10/28/99 — Inspector: SB, RK, PS,YF, PH

File No.: 7
Licensee: Honeywell — License No.: 04003392
Location: Metropolis, ILL — Inspection Type: Routine
License Type: Fuel Cycle Facility — Priority: 1
Inspection Date: 05/10/02 — Inspector: MP

File No.: 8
Licensee: Honeywell — License No.: 04003392
Location: Metropolis, ILL — Inspection Type: Routine
License Type: Fuel Cycle Facility — Priority: 1
Inspection Date: 08/17/01 — Inspector: DH

File No.: 9
Licensee: Honeywell
Location: Metropolis, ILL
License Type: Fuel Cycle Facility
Inspection Date: 11/28/00
License No.: 04003392
Inspection Type: Routine
Priority: 1
Inspector: CB, MP

File No.: 10
Licensee: Honeywell
Location: Metropolis, ILL
License Type: Fuel Cycle Facility
Inspection Date: 02/19/99
License No.: 04003392
Inspection Type: Routine
Priority: 1
Inspector: RK

File No.: 11
Licensee: USEC (GDP)
Location: Portsmouth, OH
License Type: Fuel Cycle Facility
Inspection Date: 12/16/02
License No.: GDP-2
Inspection Type: Routine
Priority: 1
Inspector: DH, MP

File No.: 12
Licensee: USEC (GDP)
Location: Portsmouth, OH
License Type: Fuel Cycle Facility
Inspection Date: 10/22/01
License No.: GDP-2
Inspection Type: Routine
Priority: 1
Inspector: DH, DL, DM

File No.: 13
Licensee: USEC (GDP)
Location: Portsmouth, OH
License Type: Fuel Cycle Facility
Inspection Date: 11/20/00
License No.: GDP-2
Inspection Type: Routine
Priority: 1
Inspector: MT

File No.: 14
Licensee: USEC (GDP)
Location: Portsmouth, OH
License Type: Fuel Cycle Facility
Inspection Date: 08/09/99
License No.: GDP-2
Inspection Type: Routine
Priority: 1
Inspector: DH

File No.: 15
Licensee: Westinghouse
Location: Festus, MO
License Type: Fuel Cycle Facility
Inspection Date: 11/16/01
License No.: SNM-33
Inspection Type: Routine
Priority: 1
Inspector: SC

File No.: 16
Licensee: CE Nuclear Power LLC
Location: Festus, MO
License Type: Fuel Cycle Facility
Inspection Date: 09/01/00
License No.: SNM-33
Inspection Type: Routine
Priority: 1
Inspector: MP

File No.: 17
Licensee: CE Nuclear Power LLC
License No.: SNM-33
Location: Festus, MO
Inspection Type: Special
License Type: Fuel Cycle Facility
Priority: 1
Inspection Date: 08/23/00
Inspector: DW, DL, RP

File No.: 18
Licensee: ABB Combustion Engineering
License No.: SNM-33
Location: Festus, MO
Inspection Type: Special
License Type: Fuel Cycle Facility
Priority: 1
Inspection Date: 12/03/99
Inspector: DW, MP

File No.: 19
Licensee: ABB Combustion Engineering
License No.: SNM-33
Location: Festus, MO
Inspection Type: Special
License Type: Fuel Cycle Facility
Priority: 1
Inspection Date: 12/03/99
Inspector: DW

APPENDIX D

LICENSE CASEWORK REVIEWS

NOTE: ALL CASEWORK LISTED WITHOUT COMMENT IS INCLUDED FOR COMPLETENESS ONLY; NO SIGNIFICANT COMMENTS WERE IDENTIFIED BY THE IMPEP TEAM.

File No.: 1
Licensee: Kraft Foods, Inc. License No.: 31-32204-01
Location: New Ulm, MN Amendment No.: 00
License Type: Fixed Gauge Type of Action: New
Date Issued: 02/05/01 License Reviewer: JM

File No.: 2
Licensee: Kraft Foods, Inc. License No.: 12-16690-01
Location: New Ulm, MN Amendment No.: 20
License Type: Fixed Gauge Type of Action: Termination
Date Issued: 02/05/01 License Reviewer: JM

Comments:
a) Records of disposal for 10 sources identified in the license not provided by licensee. Region III is following up on all sources with the manufacturers.
b) Personal privacy information contained in source transfer records and publicly available in ADAMS. Document subsequently re-profiled as non-publically available.

File No.: 3
Licensee: Construction Consulting & Testing License No.: 34-26746-03
Location: Waterville, OH Amendment No.: 00
License Type: Portable Gauge Type of Action: New
Date Issued: 04/29/02 License Reviewer: TS

Comments:
a) Mailing address incorrect and storage location not listed, as required, on the license.
b) Application not found in ADAMS.

File No.: 4
Licensee: Kenosha Testing and Engineering License No.: 48-26643-01
Location: Kenosha, WI Amendment No.: 02
License Type: Portable Gauge Type of Action: Amendment
Date Issued: 12/08/00 License Reviewer: CF

File No.: 5
Licensee: Curators of the University of Missouri License No.: 24-00513-34
Location: Columbia, MO Amendment No.:21
License Type: Pool Irradiator Type of Action: Termination
Date Issued: 08/09/01 License Reviewer: PP

File No.: 6
Licensee: Michigan Department of Natural Resources License No.: 21-24958-01
Location: East Lansing, MI Amendment No.: 03
License Type: Well Logging Type of Action: Termination
Date Issued: 10/13/99 License Reviewer: GM

Comment: File did not contain documentation of a finding that a variance from the decommissioning time limit in 10 CFR 30.36(d)(3) is "not detrimental to the public health and safety and is in the public's interest," as required.

File No.: 7
Licensee: Aurora Health Center License No.: 48-26668-01
Location: Waukesha, WI Amendment No.: 06
License Type: Medical Institution Type of Action: Termination
Date Issued: 12/20/02 License Reviewer: WR

File No.: 8
Licensee: Des Peres Hospital License No.: 24-32195-01
Location: St. Louis, Missouri Amendment No.:00
License Type: Medical Institution Type of Action: New
Date Issued: 10/05/99 License Reviewer: JM

Comments:
a) Quality Management Program submitted by licensee contained one error, however no safety impact since beta emitters had not been used.
b) Package referenced as "sensitive" in ADAMS. Subsequently corrected. Also, the telephone conversation record not in ADAMS.

File No.: 9
Licensee: St. Louis Pet Centers, LLC License No.: 24-32395-01
Location: St. Louis, MO Amendment No.: 00
License Type: Medical Private Practice Type of Action: New
Date Issued: 07/18/02 License Reviewer: KN

Comments:
a) Licensee did not submit information on therapy in-patient facilities and license does not address issue via a license condition.
b) QMP does not address yttrium 90, even though this isotope was specifically requested in application.

File No.: 10
Licensee: Department of Veterans Affairs License No.: 12-02642-06
Location: Chicago, IL Amendment No.: 42
License Type: Medical Institution Broad Type of Action: Amendment
Date Issued: 04/02/01 License Reviewer: CG

Comment: Material transfer was subsequently determined to be acceptable; however, the information reviewed at the time of the licensing action was insufficient to reach this conclusion.

File No.: 11
Licensee: University of Minnesota
Location: Minneapolis, MN
License Type: Medical Institution Broad
Date Issued: 12/20/02
License No.: 22-00187-46
Amendment No.:52
Type of Action: Renewal
License Reviewer: PP

File No.: 12
Licensee: University of Wisconsin-Superior
Location: Superior, WI
License Type: Byproduct Material Possession Only
Date Issued: 04/27/01
License No.: 48-20005-01
Amendment No.:07
Type of Action: Renewal/Term
License Reviewer: CC

Comment: Referenced telephone conversation log not in ADAMS licensing package.

File No.: 13
Licensee: Medtronic, Inc.
Location: Minneapolis, MN
License Type: Pacemaker Manufacturing & Distribution
Date Issued: 06/19/02
License No.: SNM-1156
Amendment No.:23
Type of Action: Renewal
License Reviewer: CC

Comment: Privacy information entered into ADAMS and publicly available. Issue resolved during review.

File No.: 14
Licensee: Medtronic, Inc.
Location: Minneapolis, MN
License Type: Pacemaker Manufacturing & Distribution
Date Issued: 01/28/03
License No.: SNM-1156
Amendment No.:24
Type of Action: Amendment
License Reviewer: CC

File No.: 15
Licensee: Elmer P. Manalo, M.D.
Location: Indianapolis, IN
License Type: Medical Private Practice
Date Issued: Retired
License No.: 13-26433-01
Amendment No.:N/A
Type of Action: Termination
License Reviewer: N/A

Comment: License stamped retired, but not terminated and written notification to licensee not provided.

File No.: 16
Licensee: City of Independence Missouri
Location: Independence, MO
License Type: Portable Gauge
Date Issued: 11-24-00
License No.: 24-18757-03
Amendment No.: 02
Type of Action: Termination
License Reviewer: LH

File No.: 17
Licensee: Madison Community Hospital
Location: Madison Heights, MI
License Type: Medical Institution
Date Issued: 12/13/02
License No.: 21-32128-01
Amendment No.: 01
Type of Action: Termination
License Reviewer: CG

File No.: 18
Licensee: Sundberg, Carlson & Associates, Inc.
Location: Marquette, MI
License Type: Portable Gauge
Date Issued: 04/30/02
License No.: 21-30397-01
Amendment No.: 08
Type of Action: Termination
License Reviewer: LH

File No.: 19
Licensee: Indianapolis Department of Capital Asset Management
Location: Indianapolis, IN
License Type: Portable Gauge
Date Issued: 10/28/02
License No.: 13-19983-01
Amendment No. 08
Type of Action: Termination
License Reviewer: KN

Comment: No leak test records in termination action file.

File No.: 20
Licensee: Elten Engineering Company Inc.
Location: Port Huron, MI
License Type: Portable Gauge
Date Issued: Retired
License No. 21-25940-02
Amendment No.: N/A
Type of Action: Termination
License Reviewer: N/A

Comment: See File No. 5 in Appendix C of this report.

APPENDIX E

INCIDENT CASEWORK REVIEWED

NOTE: ALL INCIDENTS LISTED WITHOUT COMMENT ARE INCLUDED FOR COMPLETENESS ONLY; NO SIGNIFICANT COMMENTS WERE IDENTIFIED BY THE IMPEP TEAM.

Materials Incident Response Casework Reviewed

File No.: 1
Licensee: Conam inspection, Inc. License No.: 12-16559-02
Site of Incident: Philadelphia, PA Incident ID No: NMED 011014
Date of Incident: 11/08/01 Type of Incident: Radiography Source Failed to Retract
Investigation Date: 03/05/02 Type of Investigation: Routine inspection

Comment: Licensee 30 day written report was not found in ADAMS and not listed in the NMED report. Report was found in docket file and added to ADAMS.

File No.: 2
Licensee: .Mallinckrodt Medical, Inc. License No.: 24-04206-01
Site of Incident: Maryland Heights, MO Incident ID No: NMED 000269
Date of Incident: 03/31/2000 Type of Incident: Occupational Extremity Overexposure
Investigation Date: 04/14/2000-05/26/2000 Type of Investigation: Special Team and AIT

File No.: 3
Licensee: General Mills License No.: General License
Site of Incident: Covington, GA Incident ID No: NMED 990595
Date of Incident: 05/01/1999 Type of Incident: Loss of 6 Density Gauges
Investigation Date: None Type of Investigation: None

Comment: Licensee 30 day written report could not be found in ADAMS or docket file. Document pre-dates ADAMS. Region searching for location of the report.

File No.: 4
Licensee: Vulcan Chemicals License No.: 48-26761-01
Site of Incident: Port Edwards, WI Incident ID No: NMED 020234
Date of Incident: 01/31/2002 Type of Incident: Doses in Excess of Limits for Member of Public
Investigation Date: 01/31/2002 Type of Investigation: Routine Inspection

File No.: 5
Licensee: Spectrum Pharmacy, Inc. License No.: 13-26367-01MD
Site of Incident: Mishawaka, IN Incident ID No: NMED 990594
Date of Incident: 08/31/1999 Type of Incident: Contamination Incident
Investigation Date: 08/31/1999-09/01/1999 Type of Investigation: Special Inspection

File No.: 6
Licensee: Saint John Hospital License No.:21-03210-01
Site of Incident: Detroit, MI Incident ID No: NMED 990741
Date of Incident: 09/07/1999 Type of Incident: Misadministration
Investigation Date: 10/20/1999-10/21/1999 Type of Investigation: Special Inspection

File No.: 7
Licensee: Materials Testing Consultants, Inc. License No.: 21-15281-02
Site of Incident: Grand Rapids, MI Incident ID No: NMED 000048
Date of Incident: 07/13/1999 Type of Incident: Damaged Moisture/Density Gauge
Investigation Date: 09/10/1999 Type of Investigation: Routine Inspection

File No.: 8
Licensee: Environmental Protection Agency License No.: 34-12736-02
Site of Incident: Cincinnati, OH Incident ID No: NMED 000374
Date of Incident: 04/03/2000 Type of Incident: Leaking Source
Investigation Date: None Type of Investigation: None

File No.: 9
Licensee: MidAmerica Peterbuilt License No.: General License
Site of Incident: O'Fallon, MO Incident ID No: NMED 000801
Date of Incident: 09/25/2000 Type of Incident:: Loss of Source
Investigation Date: None Type of Investigation: None

File No.: 10
Licensee: William Beaumont Hospital License No.: 21-01333-01
Site of Incident: Royal Oak, MI Incident ID No: NMED 020714
Date of Incident: 07/29/2002 Type of Incident:: Misadministration
Investigation Date: 08/06/2002-08/29/2002 Type of Investigation: Special Inspection

Comment: Licensee 30 day written report could not be found in ADAMS or the docket file, and was not referenced in the NMED report. Document subsequently added to the docket file.

<u>Fuel Facility Incident Response Casework Reviewed</u>

File No.: 1
Licensee: USEC (GDP) License No.: GDP-1
Site of Incident: Paducah, KY Incident ID No: NMED 021065
Date of Incident: 11/15/02 Type of Incident: Safety Equipment Failure
Investigation Date: 01/03/03 Type of Investigation: Resident Routine Inspection

File No.: 2
Licensee: USEC (GDP) License No.: GDP-1
Site of Incident: Paducah, KY Incident ID No: NMED 030004
Date of Incident: 12/28/02 Type of Incident: Safety Equipment Failure
Investigation Date: 02/17/03 Type of Investigation: Resident Routine Inspection

APPENDIX F

DECOMMISSIONING CASEWORK REVIEWS

NOTE: ALL CASEWORK LISTED WITHOUT COMMENT ARE INCLUDED FOR COMPLETENESS ONLY; NO SIGNIFICANT COMMENTS WERE IDENTIFIED BY THE IMPEP TEAM.

Terminated license review

File No.: 1
Licensee: Telnet Health System DI, INC. License No: 24-13975-01
Location: St. Louis, MO License Type: Medical

File No.: 2
Licensee: Finch, Raymond J., D.O. License No: 21-15910-01
Location: Lansing, MI License Type: Medical

File No.: 3
Licensee: Affinity Medical Group License No: 48-26288-01
Location: Neenah, WI License Type: Medical

File No.: 4
Licensee: Welborn Cancer Center License No: 13-01674-02
Location: Evansville, IN License Type: HDR

File No.: 5
Licensee: Blodgett Memorial Medical Center License No: 13-01674-02
Location: Grand Rapids, MI License Type: HDR

File No.: 6
Licensee: Boone Hospital Center License No: 24-01565-02
Location: Columbia, MO License Type: Teletherapy

File No.: 7
Licensee: Kellog Company License No: 21-05990-05
Location: Battle Creek, MI License Type: Fixed gauge
Comment: License termination checklist not in ADAMS or not used.

File No.: 8
Licensee: Wisconsin Power & Light License No: 48-26304-01
Location: Cassville, WI License Type: Fixed gauge

File No.: 9
Licensee: Dave O'Mara Contractor, INC. License No: 13-24835-01
Location: North Vemon, IN License Type: Portable gauge

File No.: 10
Licensee: ATC Associates INC. License No: 24-26467-01
Location: St, Louis, MO License Type: Portable gauge
Comment: Termination checklist not in ADAMS or not used. Termination request located with other documents in a single ADAMS file, making it difficult to find.

File No.: 11
Licensee: Army, Department of the License No: 24-25852-01
Location: Caruthersville, MO License Type: Portable gauge

File No.: 12
Licensee: RSV Engineering, INC. License No: 48-32173-01
Location: Jefferson, WI Type: Portable gauge
Comment: Letter requesting termination not in ADAMS.

File No.: 13
Licensee: Litton Interconnect Printed Circuit License No: 24-25911-01
Location: Springfield, MO License Type: Analytical instruments

File No.: 14
Licensee: ADAC Medical Technologies, INC. License No: 24-26293-01
Location: Washington, MO License Type: Service

File No.: 15
Licensee: Pelton Casteel, INC. License No: 48-02669-02
Location: Milwaukee, WI License Type: Industrial radiography fixed

File No.: 16
Licensee: Wisconsin-Milwaukee, University of License No: 48-09944-03
Location: Milwaukee, WI License Type: Self shielded irradiator less than 10000 Ci
Comments: License termination checklist not in ADAMS or not used.

File No.: 17
Licensee: Bioanalytical Systems License No: 13-26086-02
Location: Mt. Vemon, IN License Type: R & D
Comments: License termination checklist not in ADAMS or not used.

File No.: 18
Licensee: Northern Indiana Oncology Center License No: SUB-1546
Location: Valparaiso, IN License Type: Source material shielding
Comments: License termination checklist not in ADAMS or not used.

File No.: 19
Licensee: Allied Signal Aerospace License No: STB-286
Location: Mishawaka, IN License Type: Source material greater than 150 Kg

File No.: 20
Licensee: Mayo Clinic License No: SNM-1380
Location: Rochester, MN License Type: Pacemaker

Inspections

SDMP

File No.: 1
Licensee: Dow Chemical Company — License No: STB-572
Location: Bay City, MI — License Type: Manufacturing
Comment: Inspection report incorrectly profiled in ADAMS. Subsequently corrected.

File No.: 2
Licensee: SCA Services — License No: SUC-1555
Location: Bay County, MI — License Type: Land fill

File No.: 3
Licensee: Jefferson Proving Ground — License No.: SNM-1097
Location: Madison, IN — License Type: Firing range

Non-SDMP

File No.: 1
Licensee: Battlelle — License No.: SNM-00007
Location: Columbus, OH — License Type:

File No.: 2
Licensee: Ravenna — License No.: SNM-01332
Location: Ravenna, OH — License Type: Manufacturing

File No.: 3
Licensee: H.C. Starck — License No.: STB-1161
Location: Coldwater, MI — License Type: Manufacturing

File No.: 4
Licensee: Alliant Techsystems, INC. — License No.: SUB-971
Location: New Brighton, MN — License Type: Manufacturing

File No.: 5
Licensee: Breckenridge Disposal Site — License No.: SUB-833
Location: Breckenridge, MI — License Type: Terminated (disposal site)

File No.: 6
Licensee: Mallinckrodt Chemical — License No.: STB-401
Location: St. Louis, MO — License Type: Manufacturing

File No.: 7
Licensee: Southeast Missouri State University — License No.: 24-09296-02
Location: Cape Girardeau, MO — License Type: R & D

Financial Assurance Instrument Files Reviewed

File No.: 1
Licensee: Hitchcock Industries
Location: Minneapolis, MN
License No: SMB-1404

File No.: 2
Licensee: Indiana University
Location: Bloomington, IN
License No: 13-00108-05, 13-02752-03

File No.: 3
Licensee: Pfizer, INC.
Location: Terre Haute, IN
License No: 13-10179-01

File No.: 4
Licensee: General Motors Corp.
Location: Warren, MI
License No: 21-00016-04

File No.: 5
Licensee: Harper Hospital Division
Location: Detroit, MI
License No: 21-04127-06

File No.: 6
Licensee: Minnesota Mining & Manufacturing Co.
Location: St. Paul, MN
License No: 22-00057-07, -61

File No.: 7
Licensee: Norther States Power Co.
Location: Minneapolis, MN
License No: 22-08799-09

File No.: 8
Licensee: Curators of the University of Missouri
Location: Columbia, MO
License No: 24-00513-32

File No.: 9
Licensee: Mallinckrodt INC.
Location: Maryland Heights, MO
License No: 24-04206-01

File No.: 10
Licensee: Quintiles, INC.
Location: Kansas City, MO
License No: 24-15595-01

File No.: 11
Licensee: Sigma Chemical Co.
Location: St. Louis, MO
License No: 24-16273-0, 24-16607-02, -03

File No.: 12
Licensee: American Radiolabeled Chemicals INC.
Location: St. Louis, MO
License No: 24-21362-01

File No.: 13
Licensee: Environmental Protection Agency
Location: Cincinnati, OH
License No: 34-12736-02
Comment: No copy of authority document in financial assurance package. Will be fixed at renewal.

File No.: 14
Licensee: University of Wisconsin
Location: Madison, WI
License No: 48-09843-18, -28, -32, -34

File No.: 15
Licensee: Covance Laboratories, INC.
Location: Madison, WI
License No: 48-11805-02