

September 14, 2006

Mr. Gary N. Wright, Assistant Director  
Illinois Emergency Management Agency  
Division of Nuclear Safety  
1035 Outer Park Drive  
Springfield, IL 62704

Dear Mr. Wright:

On August 15, 2006, the Management Review Board (MRB) met to consider the proposed follow-up final Integrated Materials Performance Evaluation Program (IMPEP) report on the Illinois Agreement State Program. The MRB found the Illinois program adequate to protect public health and safety and compatible with the U. S. Nuclear Regulatory Commission's program. In addition, due to the program improvement shown since the 2005 IMPEP review, the period of heightened oversight of the Illinois program will be discontinued. Based on these results, the next full IMPEP review of the Illinois Agreement State Program will take place in approximately three years.

I appreciate the courtesy and cooperation extended to the IMPEP team during the review. I also wish to acknowledge your continued support for the Radiation Control Program and the excellence in program administration demonstrated by your staff, as reflected in the team's findings. I look forward to our agencies continuing to work cooperatively in the future.

Sincerely,

***/RA J Strosnider Acting for/***

Martin J. Virgilio  
Deputy Executive Director for Materials, Research,  
State and Compliance Programs  
Office of the Executive Director for Operations

Enclosure:  
As stated

cc: William C. Burke, Director  
Illinois Emergency Management Agency

Paul Eastvold  
Bureau of Radiation Safety  
Illinois Emergency Management Agency

Edgar Bailey, TX  
Organization of Agreement States  
Liaison to the MRB

Mr. Gary N. Wright, Assistant Director  
Illinois Emergency Management Agency  
Division of Nuclear Safety  
1035 Outer Park Drive  
Springfield, IL 62704

September 14, 2006

Dear Mr. Wright:

On August 15, 2006, the Management Review Board (MRB) met to consider the proposed follow-up final Integrated Materials Performance Evaluation Program (IMPEP) report on the Illinois Agreement State Program. The MRB found the Illinois program adequate to protect public health and safety and compatible with the U. S. Nuclear Regulatory Commission's program. In addition, due to the program improvement shown since the 2005 IMPEP review, the period of heightened oversight of the Illinois program will be discontinued. Based on these results, the next full IMPEP review of the Illinois Agreement State Program will take place in approximately three years.

I appreciate the courtesy and cooperation extended to the IMPEP team during the review. I also wish to acknowledge your continued support for the Radiation Control Program and the excellence in program administration demonstrated by your staff, as reflected in the team's findings. I look forward to our agencies continuing to work cooperatively in the future.

Sincerely,

*/RA J Strosnider Acting for/*  
Martin J. Virgilio  
Deputy Executive Director for Materials, Research,  
State and Compliance Programs  
Office of the Executive Director for Operations

Enclosure:  
As stated

cc: William C. Burke, Director  
Illinois Emergency Management Agency

Paul Eastvold  
Bureau of Radiation Safety  
Illinois Emergency Management Agency

Edgar Bailey, TX  
Organization of Agreement States  
Liaison to the MRB

Distribution: See next page.

**DOCUMENT NAME: E:\Filenet\ML062500255.wpd**

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

OFFICE	STP	STP:DD	STP:D	DEDMRS	
NAME	KNSchneider:kk (AMcCraw for)	DKRathbun	JRSchlueter	MJVirgilio (JRStrosnider for)	
DATE	09/06/06	09/06/06	09/06/06	09/14/06	

**ML062500252 Pkg.**

**OFFICIAL RECORD COPY**

Distribution:

DIR RF

DCD (SP01)

**SISP Review Complete**

AMcCraw, STP

Publicly Available     Non-Publicly Available

JLynch, RIII

Non-Sensitive     Sensitive

RBlanton, STP, ASPO

KCyr, OGC

JStrosnider, NMSS

CMiller, NMSS/IMNS

RStruckmeyer, NMSS/IMNS

STreby, OGC

FCameron, OGC

TCombs, OCA (2)

Chairman Klein

Commissioner McGaffigan

Commissioner Merrifield

Commissioner Jaczko

Commissioner Lyons

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM  
FOLLOW-UP REVIEW OF ILLINOIS AGREEMENT STATE PROGRAM

June 6-7, 2006

**FINAL REPORT**

U.S. Nuclear Regulatory Commission

## 1.0 INTRODUCTION

This report presents the results of the follow-up review of the Illinois Agreement State Program, conducted June 6-7, 2006. This follow-up review was directed by the Management Review Board (MRB) based on the results of the April 4-8, 2005, Integrated Materials Performance Evaluation Program (IMPEP) review. The MRB directed that a follow-up review of the non-common performance indicator, Compatibility Requirements, be conducted in approximately one year from the MRB meeting based on the finding of unsatisfactory for the performance indicator. The follow-up review included an evaluation of the actions taken by the Illinois program to address the one recommendation made during the 2005 IMPEP review.

The follow-up review was conducted by a review team comprised of technical staff members from the U.S. Nuclear Regulatory Commission (NRC). Review team members are identified in Appendix A. The follow-up review was conducted in accordance with the February 26, 2004, NRC Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)." Preliminary results of the follow-up review, which covered the period of April 8, 2005 to June 7, 2006, were discussed with Illinois management on the last day of the review.

A draft of this report was issued to Illinois for factual comment on June 26, 2006. Illinois responded to the findings and conclusions of the review by letter dated June 30, 2006, from Mr. Gary N. Wright, Assistant Director, Illinois Emergency Management Agency (the Agency). The MRB met on August 15, 2006 to consider the proposed final report. The MRB found the Illinois Agreement State Program adequate to protect public health and safety and compatible with NRC's program. In addition, the period of heightened oversight status of the Illinois program will be discontinued.

The Illinois Agreement State Program is administered by the Bureau of Radiation Safety (the Bureau) located in the Agency. The Agency's Assistant Director is responsible for the five technical bureaus in the Agency: the Bureau, the Bureau of Operations, the Bureau of Disaster Assistance and Preparedness, the Bureau of Nuclear Facility Safety, and the Bureau of Environmental Safety. The Bureau is supported by the other bureaus in the Agency. The Bureau has one field office located in West Chicago, Illinois.

No changes to the organization of the Agency or the Bureau have occurred since the 2005 IMPEP review. A copy of the organization charts can be found on NRC's Agencywide Document Access and Management System (ADAMS) using the Accession Number ML051230486. The Illinois Agreement program regulates approximately 743 specific licenses authorizing Agreement materials. The review focused on the program as it is carried out under the Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of Illinois.

In 2005, the MRB found the Illinois Agreement State Program adequate to protect public health and safety and not compatible with the NRC's program. Due to the not compatible with NRC's program finding, the MRB placed the Illinois program on heightened oversight. The MRB directed that a follow-up review take place approximately one year after the 2005 MRB meeting.

Prior to the follow-up review, the NRC conducted a period of heightened oversight of the Illinois program, which included Illinois' developing and submitting a Program Improvement Plan (the Plan) in response to the 2005 IMPEP review and bimonthly conference calls with the NRC to

discuss Illinois' progress in implementing the Plan. The Plan was submitted on August 10, 2005. Conference calls were held September 29, 2005, December 1, 2005, February 2, 2006, and April 6, 2006. A listing of correspondence and summaries from the bimonthly calls is included in Appendix B. Illinois' actions and their status, as documented in the Plan and subsequent status updates, were reviewed in preparation for this follow-up review.

The follow-up review focused on the State's performance in regard to the non-common performance indicator, Compatibility Requirements. Other aspects of the program not fully evaluated as part of the follow-up review, were discussed at a periodic meeting held in conjunction with the review. The periodic meeting summary is included as Appendix C.

Due to the ongoing correspondence and information on regulation reviews during the heightened oversight period, the review team determined that a questionnaire addressing the one applicable non-common performance indicator was unnecessary.

The review team's general approach for conduct of this follow-up review consisted of: (1) review of the heightened oversight information including status reports; (2) review of applicable Illinois' statutes and regulations; and, (3) interviews with staff and management to answer questions or clarify issues. The review team evaluated the information gathered against the IMPEP performance criteria for the non-common performance indicator and made a preliminary assessment of the Agreement State program's performance.

Section 2, below, discusses the results of the follow-up review of the Illinois program for the non-common performance indicator, Compatibility Requirements. Section 3 summarizes the follow-up review team's findings.

## 2.0 NON-COMMON PERFORMANCE INDICATORS

The follow-up review addressed one of the non-common performance indicators used in reviewing Agreement State programs, Compatibility Requirements.

### 2.1 Compatibility Requirements

Illinois became an Agreement State on June 1, 1987. The State regulations for control of radiation are located in Title 32 of the Illinois Administrative Code and apply to all ionizing radiation, whether emitted from radionuclides or devices. Illinois requires a license for possession and use of radioactive materials, including naturally occurring and accelerator-produced radionuclides.

The review team's evaluation of the State's response to Recommendation 1 from the 2005 IMPEP review is presented below.

#### Recommendation 1:

The review team recommends that the State adopt the regulations, or other legally binding requirements, which are overdue for adoption and send them to the NRC for review. (Section 4.1 of the 2005 IMPEP report)

#### Current Status:

As noted in the 2005 IMPEP report, Illinois' rulemaking process takes approximately six months after preparation of a draft rule which includes an additional review of regulations by the Governor's office. Proposed rules are published in the Illinois Register with a minimum 45-day comment period, and may include a public hearing. At that point, the proposed rules are sent to the NRC for review. After resolution of comments, the Bureau provides the comments and responses to the Joint Committee on Administrative Rules (JCAR), a bipartisan committee consisting of legislators from the Illinois House of Representatives and Senate. After resolution of JCAR comments, the rule must be re-published for comment if substantial changes were made or scheduled for a vote at the next available monthly JCAR meeting. Approved rules are published as final in the Illinois Register. Final rules are sent to the NRC for a final review and compatibility determination and updated on the Bureau's web site. The Bureau has the authority to issue legally binding requirements (e.g., license conditions) in lieu of regulations until compatible regulations become effective.

The review team evaluated the status of regulations required to be adopted by the State under the Commission's adequacy and compatibility policy, and verified the adoption of regulations with data obtained from the State Regulation Status (SRS) sheet as maintained by the NRC's Office of State and Tribal Programs.

During the 2005 IMPEP review, the State had ten rule amendments overdue. Seven of the overdue rule amendments were in draft form at various stages in the Bureau's legal review process. The remaining three overdue amendments would be superceded when the State adopted the amendment "Medical Use of Byproduct Material." In addition to the ten amendments that were identified as overdue during the 2005 IMPEP review, the State had adopted 14 amendments late (i.e., past the three-year window for Agreement State adoption) during the review period. Those 14 amendments had not been submitted to NRC for a final compatibility determination.

During the heightened oversight period, the Bureau completed all work on the previously identified regulations. The review team found that the Program had adopted, and sent in for NRC's review, all of the regulations that were overdue for Agreement State adoption. The list of the regulation submissions and review correspondences can be found in Appendix B. The Bureau exerted a significant effort to complete this work prior to the follow-up review. Bureau staff stated that they will continue to utilize the Plan as a tool for tracking schedules for upcoming rulemakings.

The team identified the following regulation changes and adoptions that will be needed in the future, and the State related that the regulations would be addressed in upcoming rulemaking or by adopting alternate legally binding requirements:

- "Medical Use of Byproduct Materials - Recognition of Specialty Boards - Part 35," 10 CFR Part 35 amendment (70 FR 16336 and 71 FR 1926) that became effective on April 29, 2005. This amendment is due for Agreement State implementation on April 29, 2008.
- "Security Requirements for Portable Gauges Containing Byproduct Material," 10 CFR Part 30 amendment (70 CFR 2001) that became effective on July 11, 2005. This amendment is due for Agreement State implementation on July 11, 2008.

The review team recommends that Recommendation 1 be closed.

Based on the IMPEP evaluation criteria, the review team recommended and the MRB agreed that Illinois' performance with respect to the indicator, Compatibility Requirements, be found satisfactory.

### 3.0 SUMMARY

The follow-up review team found Illinois' performance to be satisfactory for the indicator, Compatibility Requirements. Accordingly, the review team recommended and the MRB agreed that the Illinois Agreement State Program is adequate to protect public health and safety and compatible with NRC's program. The review team recommended and the MRB agreed that the period of heightened oversight be discontinued. Based on the results of the follow-up IMPEP review, the review team recommended and the MRB agreed that the next full IMPEP review should take place in approximately three years.

Based on the results of this review, there are no new recommendations and the recommendation from the 2005 IMPEP report is closed.



## LIST OF APPENDICES AND ATTACHMENT

Appendix A	IMPEP Review Team Members
Appendix B	Heightened Oversight Program Correspondence
Appendix C	Periodic Meeting Summary
Attachment	June 30, 2006 Letter from Gary N. Wright Illinois' Response to Draft IMPEP Report

APPENDIX A

IMPEP REVIEW TEAM MEMBERS

<b>Name</b>	<b>Area of Responsibility</b>
Kathleen Schneider, STP	Team Leader Compatibility Requirements Periodic Meeting
James Lynch, RIII	Periodic Meeting

## APPENDIX B

### HEIGHTENED OVERSIGHT PROGRAM CORRESPONDENCE

#### Minutes of Bimonthly Conference Calls:

1. September 29, 2005 Minutes (ML052800445)
2. December 1, 2005 Minutes (ML060340622)
3. February 2, 2006 Minutes (ML061670173)
4. April 6, 2006 Minutes (ML061660195)

#### Letters from/to Illinois:

1. July 21, 2005 Letter to Gary Wright from M. J. Virgilio, Illinois Final IMPEP Report (ML052010282)
2. August 10, 2005 Letter to Paul Lohaus from Gary Wright, Response to the Illinois Final Report and Program Improvement Plan (ML052360047)
3. September 21, 2005 Letter to Gary Wright from Paul Lohaus, Acceptance of the Illinois Program Improvement Plan (ML052640312)

#### Regulations Review Correspondence from/to Illinois:

1. April 29, 2005 Letter to Paul Lohaus from Joe Klinger Submitting Final Illinois Regulations (ML051220064)
2. May 2, 2005 E-mail to John Zabko Submitting Proposed Illinois Regulations (ML051240343)
3. June 30, 2005 Letter to Gary Wright from Dennis Rathbun, Regulations Review Results (ML051870423)
4. August 23, 2005 Letter to Gary Wright from Dennis Rathbun, Regulations Review Results (First Letter) (ML052370399)
5. August 23, 2005 Letter to Gary Wright from Dennis Rathbun, Regulations Review Results (Second Letter) (ML052360596)
6. September 27, 2005 Letter to Dennis Rathbun from Gary Wright, Reconsideration of Comments from August 23, 2005 Letter on GL Regulations (ML052770457)
7. September 27, 2005 Letter from Gibb Vinson to Kathleen Schneider, Final Regulations (ML0527101170)
8. October 18, 2005 Letter to Gary Wright from Dennis Rathbun, Regulations Review Results (ML052940176)
9. October 26, 2005 E-mail to Andrew Mauer from Gibb Vinson, Proposed License Condition (ML052990499)
10. October 31, 2005 Letter to Gary Wright from Dennis Rathbun, Regulations Review Results (ML053050005)
11. November 17, 2005 Letter to Gary Wright from Dennis Rathbun, Regulations Review Results (ML053210292)
12. January 31, 2006 Letter to Dennis Rathbun from Gary Wright, Submitting Final Illinois Regulations (ML060250219)
13. March 7, 2006 Letter to Gary Wright from Dennis Rathbun, Regulations Review Results (ML060660001)

14. April 4, 2006 E-mail to Dennis Rathbun from Gibb Vinson, Submitting Final Illinois Regulations (ML060970127)
15. May 30, 2006 Letter to Gary Wright from Dennis Rathbun, Regulations Review Results (ML061510035)
16. June 14, 2006 E-mail to Dennis Rathbun from Gibb Vinson, Submitting Final Illinois Regulations (ML061660148)
17. July 18, 2006 Letter to Gary Wright from Dennis Rathbun, Regulations Review Results (ML061990338)

## APPENDIX C

### PERIODIC MEETING SUMMARY

A periodic meeting was held with the Illinois Emergency Management Agency (IEMA) staff by Kathleen Schneider, Team Leader, and James Lynch, Region III Regional State Agreements Officer (RSAO), during the follow-up review pursuant to the Office of State and Tribal Programs (STP) Procedure SA-116, "Periodic Meetings with Agreement States Between IMPEP Reviews." Those topics normally documented during the periodic meeting that were reviewed and documented as part of the follow-up review will not be discussed in this Appendix. The following topics were discussed.

#### Organization

In July 2003, the Illinois Department of Nuclear Safety became a division of the Illinois Emergency Management Agency (IEMA). Although changes were made to the organizational structure, the basic radiation control program remained intact. Mr. Gary Wright, Assistant IEMA Director, remains our main contact and is responsible for the radiation control program.

The reorganization under IEMA resulted in most of the radioactive materials program functions residing in the Bureau of Radiation Safety. Some programs, such as decommissioning and financial surety are located in the Bureau of Environmental Safety. Discussions with personnel from both Bureaus indicated that they work cooperatively together. An internal policy memorandum describes the relationship between the Bureaus.

#### Radiation Control Program Staffing

A well-trained, experienced staff, of approximately 15 FTE, remains a strength of the Illinois radiation control program. The licensing and inspection staffs are identical to that seen during the last IMPEP review. Five of the six materials inspectors are located in the West Chicago office, as the bulk of the inspection load is in the Chicago area.

#### Training

A training matrix was developed for all employees to track their training history. Formalized training requirements were developed for license reviewers and inspectors, and will be utilized if a new reviewer or inspector is hired. IEMA management was strongly encouraged to support the IMPEP program by providing technical staff for IMPEP reviews of NRC and other Agreement State programs to share Illinois' expertise and to strengthen staff skills and perspectives.

Several staff members have attended the security training course. Program management hopes to get one additional staff member to the training so that Illinois will have adequate resources to perform required security inspections.

Illinois has a significant number of pool irradiators containing large quantities of radioactive material. It was noted that only the Inspection Chief and one license reviewer have attended the Pool Irradiator training course. The value of additional training, as offered by this training course, was identified as a potential benefit to the program.

### Inspections

Illinois inspection frequencies are at least as frequent as those of the NRC. No inspections are currently overdue. Approximately 33 inspections are completed per month. New licensees are inspected within 12 months of license issuance, regardless of whether the licensee has received radioactive material.

### Licensing

No significant licensing backlogs exist. Currently, one renewal is pending for more than one year and all other actions have been pending for less than 9 months. Financial assurance obligations are reevaluated every two years for the 76 licensees requiring such plans. Financial assurance evaluations are completed by Bureau of Environmental Safety staff.

### Security

Increased Control (IC) inspections were started in May 2006. Two IC inspections are completed to date and four others are in process. Communications are made to local law enforcement agencies during all IC inspections. Coordination of the IC process is well coordinated with STP and Region III.

Inspections of the recently issued radioactive materials quantities of concern orders will be conducted, in the near future, by the State under the 274i Agreement with the NRC. Mr. Joe Klinger is the Safeguards information manager for the Bureau and has implemented adequate controls over Safeguards information.

### Incidents

IEMA staff communicates reportable incidents promptly to the NRC Operations Center and Region III. Messrs. Daren Perrero or Joe Klinger input incident information directly into the Nuclear Material Events Database (NMED) as incidents occur. A review of NMED identified timely and quality input of incidents into the system.

### Allegations

One allegation was received by the IEMA since the last IMPEP review. IEMA staff investigated the allegation and took prompt, appropriate action. No allegations were transferred to Illinois from NRC during the review period.

### Kerr-McGee Decommissioning Project

On September 15, 2005, Kerr-McGee Chemical LLC reorganized and changed its name to Tronox LLC, a wholly owned subsidiary of Tronox Incorporated. The Rare Earths Facility management remained unchanged under the direction of Kerr-McGee Environmental Management Corporation (KMEMC). KMEMC is now a subsidiary of Tronox Incorporated.

The Rare Earths Facility remediation is approximately 97% complete. Contaminated soil remains under the footprints of the Rail Car Loading Facility and associated rail spur, the

Stabilized Material Storage Building, and the operational area between these buildings. These facilities were retained to support the Kress Creek remediation. Licensed activities include dumping of contaminated material from the Creek, accumulation and storage of this material, and the loading and shipping of rail cars to Envirocare of Utah. All health physics and license support activities continue, including: work area monitoring, dosimetry reporting, environmental monitoring, onsite laboratory services, storm water monitoring, access control, and contamination surveys. These remaining facilities will likely be demolished and the area remediated during the construction season after the Creek is completed. This is currently projected to be 2010. The ongoing groundwater protection program continues to operate and will likely continue to do so for a number of years after remediation has been completed.

The Residential Area remediation is complete with the exception of one property on which the owner has refused to grant access. The U. S. Environmental Protection Agency has not forced the issue.

The Reed Kepler Park remediation is complete. Tronox's contractor is continuing to run a groundwater monitoring program at the park. The Sewage Treatment Plant remediation was completed as a preliminary phase of the ongoing Kress Creek remediation which is expected to continue through 2009.

#### Sealed Sources and Devices (SS&D)

The SS&D workload in Illinois has decreased significantly, as two major manufacturers moved operations to different States. Approximately eight SS&D amendments are issued annually.

ATTACHMENT

June 30, 2006 Letter from Gary N. Wright  
Illinois' Response to Draft IMPEP Report

ADAMS Accession No.: ML061990250