



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931**

January 11, 2005

Mr. Rory O'Kane
Plant Manager
Honeywell Specialty Chemicals
P.O. Box 430
Metropolis, IL 62690

**SUBJECT: LICENSEE PERFORMANCE REVIEW (LPR) OF LICENSED ACTIVITIES
FOR HONEYWELL SPECIALITY CHEMICALS, DOCKET NUMBER 40-3392**

Dear Mr. O'Kane:

Managers and staff in our Region II office in Atlanta, Georgia, and the Office of Nuclear Material Safety and Safeguards (ONMSS) in Rockville, Maryland, completed a review of your performance in conducting NRC-licensed activities at the Honeywell Metropolis Plant. The review evaluated your performance during the period beginning February 1, 2003, and ending November 20, 2004. Honeywell's performance was evaluated in four major areas: Safety Operations, Radiological Controls, Facility Support, and Special Topics. This letter and the enclosure provide to you the results of our review, and will be used as a basis for establishing the NRC oversight program for your conduct of licensed activities during the next 12 months.

Honeywell ensured that licensed activities were conducted safely during the review period, which included extended plant outages to address deficiencies identified during followup to chemical and uranium hexafluoride leaks in September 2003 and the Site Area Emergency on December 22, 2003. During our review, adherence to, and quality of, procedures and control room conduct of operations were identified as key areas needing improvement. Other areas needing improvement were identified regarding implementation of radiation protection, emergency preparedness, corrective action, and other license program requirements.

We recognize that you have implemented significant actions beyond those required by your license application to ensure safe operations in the short-term following the December 22, 2003, Site Area Emergency. However, continued focus on implementation of those short-term actions is warranted, particularly with regard to development of, and adherence to, plant procedures. In addition, management attention is warranted for ensuring that lessons learned are captured and implemented in your long-term performance improvement plan for continued safe operations in the future.

The results of our review will be discussed with you at your facility during a meeting open to the public on February 7, 2005. Areas needing improvement are summarized in the enclosure to this letter. During that meeting, we expect you to discuss your view of your performance in the same major areas that the NRC evaluated. We ask you to specifically discuss why actions for ensuring that license requirements are implemented through procedures and programs, an area identified during the previous LPR period, have not been fully effective. In addition, please

present how you will improve those practices in the future and how you will monitor the effectiveness of the actions to be implemented, given the shortcomings of those taken previously to address these issues.

As a result of our review of your performance, the NRC will continue heightened oversight of your licensed operations through inspections beyond those specified by the NRC's core inspection program. These supplemental inspections will be primarily in the areas of plant operations, emergency preparedness, and management organization and controls. We will also monitor your progress in implementing your long-term performance improvement plan.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please note that on October 25, 2004, the NRC terminated public access to ADAMS and initiated an additional security review of publicly available documents to ensure that potentially sensitive information is removed from the ADAMS database accessible through the NRC's web site. Interested members of the public may obtain copies of the referenced documents for review and/or copying by contacting the Public Document Room pending resumption of public access to ADAMS. The NRC Public Documents Room is located at NRC Headquarters in Rockville, MD, and can be contacted at (800) 397-4209.

Questions and comments about NRC's review of Honeywell's performance should be referred to Mr. Jay Henson, who can be reached by telephone at 404-562-4731.

Sincerely,

/RA/

Douglas M. Collins, Director
Division of Fuel Facility Inspection

Docket No. 40-3392
License No. SUB-526

Enclosure: Licensee Performance Review
- Summary Outline

cc w/encl:
Gary Wright,
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Honeywell

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**LICENSEE PERFORMANCE REVIEW FOR HONEYWELL
PERFORMANCE PERIOD: FEBRUARY 1, 2003 TO NOVEMBER 20, 2004
SUMMARY OUTLINE**

The following is a summary of the performance of Honeywell Specialty Chemicals in the conduct of NRC-licensed activities.

PERFORMANCE AREA: SAFETY OPERATIONS

This area comprises chemical safety, plant operations, and fire safety.

Program Areas Needing Improvement

- Adherence to, and quality of, procedures related to the conduct of operations:
 - The inspectors identified a failure to have a written procedure to address inoperative control room alarms and instrumentation. (Inspection Report (IR) 2004-010, Severity Level (SL) IV violation)
 - The inspectors identified that operators cross-tied the Nash pumps in a configuration that was not addressed in written procedures. (IR 2004-008, SL IV violation)
 - The inspectors identified that operators used an inadequate procedure for cleaning a low boiler condenser. (IR 2004-008, SL IV violation)
 - The inspectors identified a failure to have a procedure for the evolution of bringing two fluorinators online for dual operation. (IR 2004-003, SL III violation, no civil penalty (CP))
 - The inspectors identified that an operation to remove blockage from the distillation production unit was conducted without detailed instructions provided from written "Standard Operating Procedure Manuals." (IR 2003-007, SL IV violation)
 - The inspectors identified that a failure to perform valving operations as required by a written "Standard Operating Procedure Manual" resulted in a small uranium hexafluoride release from a loose pigtail at a cylinder fill station. (IR 2003-007, SL IV violation)
 - The inspectors identified that licensee staff was not following procedural requirements to use steam to dry excess water from washed cylinders. (IR 2003-003, minor violation)

Enclosure

- Control room conduct of operations:
 - An operator was observed not clearing an alarm when it was first received and allowing a normal operating limit to be exceeded. (IR 2004-007)
 - Several contributing factors were identified regarding conduct of operations in the Feeds Material Building control room during followup to the December 22, 2003, Site Area Emergency. (IR 2004-001):

Although the reconfiguration of the fluorination system to operate two trains in parallel was an infrequently performed evolution, there was no supervisory review or check to ensure the valves were properly configured.

There was no feedback between the Assistant Fluorination Operator (AFO), the Lead Fluorination Operator, and the Fluorination Supervisor as to what actions needed to be accomplished or had been accomplished to reconfigure the system.

The Distillation Operator and assistants were unaware that the reconfiguration of the vacuum pumps was taking place and that the source of vacuum to their system would be lost for some time.

Operator log entries varied in content and completeness.

Fatigue could have been a contributing cause as the AFO was on an overtime status.

PERFORMANCE AREA: RADIOLOGICAL CONTROLS

This area comprises radiation protection, environmental protection, waste management and transportation.

Program Areas Needing Improvement

- More rigorous implementation of radiation protection controls and practices:
 - The inspectors identified that licensee staff failed to make or cause to be made surveys that were necessary to comply with the requirements of 10 CFR 20.1501. (IR 2004-008, SL IV violation)
 - Poor housekeeping was observed in the Feeds Material Building. (IR 2004-007)
 - The inspectors identified an issue regarding how the restricted area of the plant was defined, as well as the licensee's practice of allowing plant personnel to wear their personnel protective clothing outside of the controlled area. (IR 2004-007)

- The inspectors identified a poor radiological work practice by the operators, who opened doors to high airborne radioactivity areas, blocking the posted signs from observation by plant personnel. (IR 2004-007)
- The inspectors identified that radiological work practices for individuals entering the control room needed to improve to minimize introduction of contamination. (IR 2004-007)
- Contamination control was an area for improvement as evidenced by uncovered equipment and containers with visible green salt. (IR 2004-004)
- The inspector identified a lack of effectiveness in the implementation of the As-Low-As-Reasonably-Achievable principle in identifying significant radiation sources and minimizing whole body exposure to personnel. (IR 2003-001)
- The inspector identified an issue regarding the effectiveness of controls for alerting personnel prior to entering areas requiring respirators, as well as a need for the licensee to implement such controls prior to initiating activities having a high potential for causing positive air samples. (IR 2003-001)
- The inspector identified that the licensee's calibration methodology for portable survey instruments was not consistent with industry standards. (IR 2003-001)

PERFORMANCE AREA: FACILITY SUPPORT

This area comprises maintenance/surveillance, training, emergency preparedness, and management organization and controls.

Program Areas Needing Improvement

- Implementation of the Emergency Response Plan and Radiological Contingency Plan (ERP/RCP):
 - The inspectors identified a failure to maintain current letters of agreement with offsite emergency response organizations as required by Section 7.6 of the Radiological Contingency Plan. (IR 2004-004, SL IV violation)
 - The inspectors identified an inconsistency in the frequency for performing the siren operability test between the ERP/RCP (quarterly) and the siren manufacturer's manual (monthly). In addition, the inspectors determined that no formalized procedure governing the activation, maintenance, testing, and response to spurious siren activations had been developed. (IR 2004-004)
 - The inspectors identified a failure to implement multiple aspects of the ERP/RCP, which resulted in the failure to implement an emergency planning standard involving assessment and notification. Due to these failures, communications with local emergency responders were not adequately

maintained and did not provide sufficient, additional information that would have assisted the local authorities in their response decisions. (IR 2004-003, SL III violation, no CP)

- Implementation of an effective corrective action program:
 - There was no tracking mechanism in place to revise the procedure for cleaning low boiler condensers to ensure the required relief protection was provided. There were also a large number of overdue actions in the licensee's corrective action system. (IR 2004-007)
 - Enhanced expectations regarding adherence to procedures that were implemented in response to previous events were not followed. Activities related to dual train fluorinator operation were not covered by a procedure, and operators did not stop work and have the procedure revised as required. (IR 2004-001)
 - The inspectors noted similarities between issues identified during followup to events involving chemical releases in September 2003 and an event that occurred in 1998. In both cases, the inspectors identified that the licensee's initial investigation did not identify that management expectations regarding procedural adherence were not clear and had eroded through acceptance of site practices that contradicted procedural directions. The inspectors noted that the implementation of corrective actions to the 1998 event was short-lived due to an apparent lack of senior management continuity. (IR 2003-007)
 - The inspectors reviewed three event notifications related to fire water piping failures and determined that there was a delay in the licensee's determining the root cause, and implementing appropriate corrective actions. (IR 2003-004)
- Assurance that license requirements are implemented through procedures and programs:
 - The inspectors identified that license requirements were not properly flowed down into plant procedures. (IR 2004-004)
 - The inspectors identified the licensee's failure to comply with its Waste Management Manual. (IR 2003-004, SL IV violation)
 - The inspector identified that a required annual radiation protection program audit was not conducted by an individual from outside the plant staff in calendar year 2002. (IR 2003-001, SL IV violation)

PERFORMANCE AREA: SPECIAL TOPICS

This area comprises safety licensing.

Program Areas Needing Improvement

- No specific areas needing improvement were identified for Special Topics.