



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

June 23, 2005

Honeywell Specialty Chemicals
Mr. David Edwards
Plant Manager
P.O. Box 430
Metropolis, IL 62690

SUBJECT: NRC INSPECTION REPORT 40-3392/2005-002

Dear Mr. Edwards:

This letter refers to the inspection conducted on May 23 through 27, 2005, at the Honeywell Specialty Chemicals facility. The purpose of the inspection was to determine whether activities authorized by the license were conducted safely and in accordance with NRC requirements. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed report.

Areas examined during the inspection were maintenance and surveillance, and emergency preparedness. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, observation and evaluation of activities in progress, and the evaluation of the performance of the emergency organization in responding to a simulated accident.

Based on the results of this inspection, the NRC did not identify any violations or deviations.

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

Should you have any questions concerning this letter, please contact us.

Sincerely,
/RA/

Jay L. Henson, Chief
Fuel Facility Inspection Branch 2
Division of Fuel Facility Inspection

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

Enclosure: (See page 2)

Enclosure: NRC Inspection Report

cc w/encl:
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*see previous concurrence

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NAME	D.Hartland	NRivera*	AGooden	CTaylor			
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Enclosure

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 40-3392

License No.: SUB-526

Report No.: 40-3392/2005-002

Licensee: Honeywell International, Inc.

Facility: Metropolis Works

Location: P. O. Box 430
Metropolis, IL 62960

Dates: May 23 through 27, 2005

Inspectors: A. Gooden, Senior Fuel Facility Inspector
N. Rivera, Fuel Facility Inspector
C. Taylor, Health Physicist

Approved by: Jay L. Henson, Chief
Fuel Facility Inspection Branch 2
Division of Fuel Facility Inspection

Enclosure

EXECUTIVE SUMMARY

Honeywell International, Inc.
NRC Inspection Report 40-3392/2005-002

This routine, announced inspection was conducted in the areas of emergency preparedness, and maintenance and surveillance. The inspection involved observation of work activities, a review of selected records, interviews with plant personnel, and the observation and evaluation of an emergency preparedness exercise. The inspection identified the following aspects of the licensee programs as outlined below:

Emergency Preparedness

- The scenario details provided a realistic set of conditions for evaluating the onsite response capability and the state of readiness for responding to incidents. The plant emergency response organization successfully managed the simulated accident and demonstrated that previous response deficiencies identified during the uranium hexafluoride release on December 22, 2003, were resolved. One inspector followup item was identified regarding actions to be taken to address areas for improvement including decontamination operations and the timely issuance of a press release (Paragraph 2.a).

Maintenance and Surveillance

- The licensee was adequately implementing maintenance program improvements. The surveillance and calibration of equipment important to safety were in compliance with the license (Paragraph 3.a).
- Maintenance activities were conducted according to the work control procedures. Work packages were adequately reviewed and approved by management. No significant problems were noted during shutdown of the Nash pumps, reconfiguration of the cold traps, and restart of the fluorination system (Paragraph 3.b).

Attachment:

Partial List of Persons Contacted
Inspection Procedures Used
Items Opened, Closed, and Discussed
List of Acronyms Used

REPORT DETAILS

1. Summary of Plant Status

During the inspection period, routine operations were conducted in the Feeds Material Building (FMB).

2. Emergency Preparedness (Inspection Procedure (IP) 88050) (F3)

a. Drills and Exercises (F3.05)

(1) Scope and Observations

Section 7.3 of the Emergency Response Plan and Radiological Contingency Plan (ERP/RCP) required that a Site Area Emergency exercise be conducted annually. The exercise conducted on May 24, 2005, was in fulfillment of the ERP/RCP and the emergency plan implementing procedures (EPIPs). The licensee submitted the final details on the exercise scenario, scope, and objectives for NRC review in advance of the exercise date.

The exercise scenario simulated a release of uranium hexafluoride (UF_6) from a location within the FMB. The simulated release resulted from a ruptured isolation valve. The scenario was realistic and the simulated conditions were adequate for evaluating the licensee's ability to respond to an emergency. The scenario provided adequate challenges to evaluate the performance of the emergency response organization (ERO) in meeting the exercise objectives. For example, the use of real-time meteorology provided challenges to the Incident Commander (IC) and Crisis Manager (CM) to ensure that the incident command location and onsite protective actions were re-evaluated during changes in meteorological conditions.

The performance of the ERO in responding to the simulated emergency and the critique to self-identify areas for improvement were evaluated. The inspectors observed the incident command organization, crisis management organization, decontamination operations, and the response by the emergency teams referred to as the "red hats." Observations were made from the incident scene, the incident command post, and the crisis management center (CMC). Offsite exercise participants included Massac County, State of Illinois, US Environmental Protection Agency, and the Nuclear Regulatory Commission.

The licensee's response in managing the postulated accident was considered successful. The emergency classification was timely, notifications to offsite authorities were completed within the required time limits, the appropriate protective action recommendations were made, and frequent discussions were observed between the IC and the CM.

However, the inspectors identified two aspects of the licensee's performance as inadequate: (1) the press release was not issued in a timely manner as evidenced that more than two hours elapsed following the emergency declaration before the press release was reviewed, approved, and available for issuance; and, (2) decontamination operations were not performed in a manner to assure that the spread of contamination to personnel and/or equipment was prevented as evidenced by improper survey techniques, the lack of equipment surveys to determine the effectiveness of decontamination before the removal of equipment to the clean area, and the inadequate number of technicians available to perform contamination surveys. Other items such as the field teams delay in providing environmental results and infrequent updates by the CMC to the Massac County authorities were also discussed with the licensee as improvement opportunities.

The licensee conducted a critique following the exercise which afforded players, controllers, evaluators, and observers an opportunity to provide comments. The critique was a detailed and critical assessment of the response, and items identified by the licensee for program improvement or corrective actions were similar to those noted by the inspectors. Subsequent to the exercise and onsite critique, licensee staff met with the local agencies participating in the exercise to critique the exercise and discuss areas for improvement.

The licensee indicated that the items identified during the critiques and those identified by the inspectors would be entered into the corrective action system (e-CATS). The licensee was informed that the corrective actions taken in response to critique comments would be reviewed during a subsequent inspection and tracked as an inspector followup item (IFI 40-3392/2005-02-01: Review and verify that appropriate actions are taken in response to critique items, including improvements to decontamination operations and the timely issuance of a press release).

(2) Conclusion

The scenario details provided a realistic set of conditions for evaluating the onsite response capability and the state of readiness for responding to incidents. The plant emergency response organization successfully managed the simulated accident and demonstrated that previous response deficiencies identified during the UF₆ release on December 22, 2003, were resolved. One inspector followup item was identified regarding actions to be taken to address areas for improvement including decontamination operations and the timely issuance of a press release.

b. Follow up on Previously Identified Issues (F3.07)

(Closed) Violation (VIO) 40-3392/2004-03-02: Failure to properly maintain and implement aspects of the ERP/RCP during the Site Area Emergency on December 22, 2003. The inspectors reviewed many of the program enhancements, both to equipment and procedures, made by the licensee during inspections conducted February 23, through April 30, 2004.

In addition, the inspectors observed classroom training conducted for key onsite emergency response and offsite fire fighting personnel. Following the classroom training provided to onsite emergency personnel, the instructor presented a postulated accident scenario to class participants for role playing. The combination of the lecture and table top discussions of the postulated accident was an effective method of reinforcing the training and making further enhancements to the EIPs. The details regarding the program enhancements and training were discussed in Inspection Report No. 40-3392/2004-04.

The licensee conducted a table top drill observed by the NRC on March 11, 2004, to determine if previous weaknesses as noted in the violation were addressed. The inspectors determined that numerous improvements had been made, as the response to the simulated accident was adequate. As discussed in Paragraph 2.a above, the licensee's performance during the recent graded exercise was considered a successful demonstration of a trained ERO familiar with procedures for the activation/implementation of the ERP/RCP. The inspectors have no further issues, and this item is closed.

3. Maintenance and Surveillance (IP 88025) (F1)

- a. Conduct of Maintenance (F1.01)
Surveillance Testing (F1.06)
Calibration of Equipment (F1.07)

(1) Scope and Observations

The inspectors reviewed the status of the improvements to the maintenance program, the surveillance and calibration records of equipment important to safety, and the tracking system for required tests and calibrations to determine compliance with the license. The inspectors reviewed the licensee's computer tracking system for scheduling routine safety significant corrective and preventive maintenance (PM) activities.

The inspectors noted that the licensee used a spreadsheet at the daily planning meeting to track scheduled maintenance. The spreadsheet was programed with the frequency of each piece of equipment on the PM list to provide a due date for each activity. The spreadsheet generated PM schedules for the maintenance department for specific date ranges. Once each PM was completed, the licensee entered the information into the system and a new date was generated. The inspectors verified equipment impacted by PMs that were overdue was tagged out of service until the activities were completed.

The inspectors attended the daily maintenance meetings and observed the licensee planning, scheduling, executing, and closing out maintenance activities. No issues were noted. The inspectors also observed that maintenance work requiring immediate scheduling received the proper approvals before the work was performed.

The inspectors also observed how the maintenance activities were categorized and prioritized in accordance with guidance provided by the Maintenance Management

Excellence Program. Through this program, the licensee was developing new procedures for enhancing the maintenance program, one of which was the scheduling of PM activities a month in advance. No significant problems were identified.

(2) Conclusion

The licensee was adequately implementing maintenance program improvements. The surveillance and calibration of equipment important to safety were in compliance with the license.

b. Work Control Procedures (F1.02)
Work Control Authorizations (F1.03)

(1) Scope and Observations

The inspectors reviewed work control procedures to verify that requirements were in place for maintenance personnel to obtain approval prior to performing maintenance activities. The inspectors verified that required instructions and proper communications between maintenance and operations personnel were adequate for the performance of maintenance activities.

The inspectors reviewed selected work packages related to surveillance, PM, and corrective maintenance activities for several pieces of equipment on the critical equipment list. The maintenance work packages examined were reviewed and approved by management. No significant problems were noted.

The inspectors observed corrective maintenance activities in the FMB involving the shutdown of the Nash pumps and reconfiguration of the cold traps for the fluorination system. The observations included communications between maintenance and operations personnel, pre-job briefing, the use of adequate personal protective equipment, and verification of successful completion the maintenance work prior to start-up of the fluorination system. No significant problems were observed.

However, the inspectors noted that a temporary procedure used to shutdown the Nash pumps was originally approved in August 2004 and had been reissued on multiple occasions since then. The inspectors noted the intent of a temporary procedure was to address a unique operation on a short-term basis. The inspectors discussed the issue with licensee management, who agreed and indicated that the temporary procedure would be incorporated into a permanent one.

(2) Conclusion

Maintenance activities were conducted according to the work control procedures. Work packages were adequately reviewed and approved by management. No significant problems were noted during shutdown of the Nash pumps, reconfiguration of the cold traps, and restart of the fluorination system.

4. Exit Meeting Summary

The inspectors presented the inspection results to members of the plant staff and management at the conclusion of the inspection on May 25 and 27, 2005. The plant staff acknowledged the findings presented. Although proprietary documents may have been reviewed during this inspection, the proprietary nature of these documents is not included in this report. No dissenting comments were received from the licensee.

ATTACHMENT

3. PARTIAL LIST OF PERSONS CONTACTED

#*D. Edwards, Plant Manager
#*D. Mays, Manager, Health, Safety and Regulatory Affairs
*S. Patterson, Health Physics Specialist
#*J. Riley, Interim Manager, Regulatory Affairs
#M. Ginzel, Health Physics Supervisor

Other licensee employees contacted included engineers, technicians, production staff, security, and office personnel.

*Denotes those attending the exit meeting on May 25, 2005

#Denotes those attending the exit meeting on May 27, 2005

4. INSPECTION PROCEDURES (IPs) USED

IP 88025 Maintenance and Surveillance
IP 88050 Emergency Preparedness

5. ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Item Number</u>	<u>Status</u>	<u>Description</u>
40-3392/2005-02-01	Open	IFI - Review and verify that appropriate actions were taken in response to critique items including improvements to decontamination operations, and the timely issuance of press release (Paragraph 2.a).
40-3392/2004-03-02	Closed	VIO - One example of licensee's failure to maintain the RCP and two examples of failure to implement it (Paragraph 2.b).

6. LIST OF ACRONYMS USED

ADAMS	Agency Document Access and Management System
CFR	Code of Federal Regulations
CM	Crisis Manager
CMC	Crisis Management Center
EPIP	Emergency Plan Implementing Procedure
ERO	Emergency Response Organization
ERP/RCP	Emergency Response Plan and Radiological Contingency Plan
FMB	Feed Materials Building
IC	Incident Commander
IFI	Inspector Follow up Item
IP	Inspection Procedure
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
PM	Preventive Maintenance
UF ₆	Uranium Hexafluoride
VIO	Violation