



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

January 11, 2008

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

SUBJECT: NRC INSPECTION REPORT NO. 40-3392/2007-007 AND NOTICE OF VIOLATION

Dear Mr. Edwards:

This letter refers to the inspection conducted from December 10 - 14, 2007, at the Honeywell Specialty Chemicals facility in Metropolis, IL. The purpose of the inspection was to determine whether activities authorized under the license were conducted safely and in accordance with NRC requirements. At the conclusion of the inspection on December 14, 2007, the findings were discussed with those members of your staff identified in the enclosed report.

The inspection consisted of an examination of activities conducted under the license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of the license. Areas examined during the inspection are identified in the enclosed report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations of activities in progress, and interviews with personnel.

Based on the results of these inspections, the NRC has determined that a Severity Level IV violation of NRC requirements occurred. The violation was evaluated in accordance with the NRC Enforcement Policy that may be found on the NRC's web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The violation is cited in the enclosed Notice of Violation (Notice), and the circumstances surrounding the violation are described in the subject inspection report. The violation involves the failure to implement management measures to ensure the reliability of a cited safety control.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, and its enclosures 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>.

D. Edwards

2

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

Sincerely,

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

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

Enclosures: 1. Notice of Violation
2. NRC Inspection Report 40-3392/2007-007

cc w/encls:
Gary Wright
Emergency Management Agency
Division of Nuclear Safety
1035 Outer Park Dr., 5th Floor
Springfield, IL 62704

Distribution w/encls:
J. Henson, RII
J. Pelchat, RII
B. Smith, NMSS
M. Raddatz, NMSS

PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE

ADAMS: Yes No ACCESSION NUMBER:

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI			
SIGNATURE	/RA/	/RA/	/RA/	/RA/			
NAME	M Crespo	J Pelchat	M Thomas	O Lopez			
DATE	01/10/2008	01/10/2008	01/10/2008	01/10/2008			
E-MAIL COPY?	YES	YES	NO	YES	NO	YES	NO

OFFICIAL RECORD COPY

DOCUMENT NAME: C:\FileNet\ML080110659.wpd

NOTICE OF VIOLATION

Honeywell Specialty Chemicals
Metropolis, Illinois

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

During an NRC inspection conducted on December 10 - 14, 2007, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below.

License Condition 18 of NRC License No. SUB-526, Amendment No. 0, requires that licensed activities at the Honeywell Metropolis Works Facility be conducted in accordance with the statements, representations and conditions (or as revised by change and/or configuration management processes as described therein) in the Integrated Safety Analysis Report dated October 26, 2006.

License Condition 19 of NRC License No. SUB-526, Amendment No. 0, also states, that within 180 days of the issuance of the renewed license, all Plant Features and Procedures, to be designated PFAP, shall be developed and implemented within the ISA.

Table 9-1 of the ISA, designates manual shutdown in response to hydrogen analyzer failure or malfunction as PFAP 26 and 28.

Section 9.4.1 of the ISA, states, in part, that management measures will ensure that PFAP are designed, implemented, and maintained, as necessary, to be available and reliable to perform their safety function when needed.

Contrary to the above, prior to December 10, 2007, the licensee failed to implement management measures to ensure that PFAP were designed, implemented, and maintained, as necessary, to be available and reliable to perform their safety function when needed. Specifically, the licensee did not implement management measures for PFAP 26 and 28, which required manual shutdown in response to hydrogen analyzer failure or malfunction.

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Honeywell Speciality Chemicals is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified,

suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001.

Because your response will be made publically available, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made publically available without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld, and provide in detail the basis for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguard's information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 11th day of January, 2008

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 40-3392

License No.: SUB-526

Report No.: 40-3392/2007-007

Licensee: Honeywell International, Inc.

Facility: Metropolis Works

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

Dates: December 10 - 14, 2007

Inspectors: Manuel Crespo, Senior Fuel Facilities Inspector, NRC Region II
Mary Lynne Thomas, Senior Fuel Facilities Inspector, NRC Region II
Omar Lopez, Fuel Facilities Inspector, NRC Region II

Accompanying
Personnel: Chad Cramer, Nuclear Safety Professional Development Program

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

EXECUTIVE SUMMARY

Honeywell International, Inc.
NRC Inspection Report No. 40-3392/2007-007

This routine, announced inspection was conducted in the areas of operator training, maintenance and surveillance, management organization and controls, and permanent plant modifications. The inspections involved observations of work activities, reviews of selected records and procedures, and interviews with plant personnel. The inspection identified the following aspects of the program as outlined below:

Permanent Plant Modifications

- A violation was identified for the failure to implement management measures to ensure the availability and reliability of PFAP.

Maintenance and Surveillance

- A weakness related to the operational checks of the pressurized stairwell in the Feed Materials Building was identified.
- Maintenance activities were properly performed. Maintenance personnel implemented the proper authorizations and procedures. The personnel performing the work were qualified for their positions and tasks.

Management Organization and Controls

- The licensee's procedure control process and safety committees were implemented in accordance with the license requirements.

Operator Training

- Operators, maintenance personnel, and management were properly trained in accordance with regulatory requirements.

Attachment:

Partial List of Persons Contacted

Inspection Procedures Used

Items Opened

List of Acronyms Used

REPORT DETAILS

1. Summary of Plant Status

The Honeywell Speciality Chemicals (licensee) uranium conversion facility (known as the Metropolis Works or MTW) is located on a 1100 acre site (60 acres within the fence line). The licensee is authorized to possess 150 million pounds of natural uranium ore and to convert this material to uranium hexafluoride (UF₆). The uranium conversion process occurs in the Feeds Material Building (FMB).

2. Permanent Plant Modifications (IP 88070)

a. Scope and Observations

The inspectors reviewed several modifications that occurred over the year. The reviews included the ore agglomerator system, the new primary cold trap unit, and the new fluorination filter modifications. The inspectors verified that any affected plant features and procedures (PFAP) were properly implemented. The inspectors also verified that the modifications were preceded by a process hazard analysis. No issues were noted in the review of these systems.

The inspectors reviewed the implementation of PFAP 26 and 28, which require manual shutdown in response to hydrogen analyzer failure or malfunction. The inspectors interviewed operators in the control room. The inspectors noted that the operators did not have any knowledge of these PFAP and the required manual actions. The inspectors reviewed operating and alarm response procedures and noted the procedures did not address these PFAP. The inspectors also reviewed functional test records for the hydrogen detectors and noted that the functional test did not address the different failure modes that could cause a malfunction in a detector. Further evaluation revealed that the licensee had not implemented any management measures to ensure the reliability of these PFAP.

Table 9-1 of the integrated safety analysis (ISA), designates manual shutdown in response to hydrogen analyzer failure or malfunction as PFAP. Section 9.4.1 of the ISA, states, in part, that management measures will ensure that PFAP are designed, implemented, and maintained, as necessary, to be available and reliable to perform their safety function when needed.

Contrary to the above, prior to December 10, 2007, the licensee failed to implement management measures to ensure that PFAP 26 and 28 were implemented, and maintained, as necessary, to be available and reliable to perform their safety function when needed. Specifically, the licensee did not implement management measures for PFAP 26 and 28, which required manual shutdown in response to hydrogen analyzer failure or malfunction. (VIO 040-3392/2007-007-01).

The inspectors reviewed the licensee's implementation of management measure for PFAP 35, which involved the automatic shutoff of the ammonia inlet valves should the incinerator burners fail. The inspectors noted a weakness in the preventative

maintenance (PM) of the control. The PM instructions for verifying the operability of the PFAP was limited to “verify all controls” on a drawing reference. No criteria or listing of specific controllers for verification were outlined. When the inspectors communicated this weakness to the management, they recognized the weakness of the instructions and committed to providing more detail. The additional detailed instructions in the PM for PFAP 35 will be tracked as inspector follow-up item (IFI) 40-3392/2007-007-02.

b. Conclusions

A violation was identified for the failure to implement management measures to ensure the availability and reliability of PFAP.

3. Maintenance and Surveillance of Safety Controls (IP 88025)

a. Scope and Observations

The inspectors reviewed the maintenance related to the pressurized stairwell in the FMB. The inspectors walked down the stairwell and discussed with the licensee the operations and maintenance of the pressurization system. The inspectors noted that the emergency plan required a monthly operational check of the system. The inspectors verified that the licensee performed the monthly checks. However, the inspectors noted a weakness in the licensee acceptance criteria for the test. The licensee used as a acceptance criteria the verification of having only a positive pressure with no minimum pressure differential requirement. In addition, the licensee was using a manometer that was last calibrated in 1998 and it was not in a routine calibration schedule. The inspectors brought the issue to the licensee’s attention and they agreed to evaluate the issue and improve the test procedure. The licensee entered the issue into the corrective action program (IR-07-2416).

The inspectors reviewed the licensee’s conduct of maintenance, including the use of procedures and the process to obtain work authorizations, to ensure that maintenance work did not adversely impact the safety of plant operations or the workers. The inspectors observed maintenance jobs performed in the plant to ensure that the workers knew the requirements for the jobs.

b. Conclusion

The inspectors identified a weakness related to the operational checks of the pressurized stairwell in the FMB.

4. Management Organization and Controls (Inspection Procedure (IP) 88005)

a. Scope and Observations

The inspectors reviewed safety committee meeting minutes. The committee rosters met the licensee’s requirements for manager attendance. The minutes showed an adequate selection of safety topics for discussions, with emphasis on the corrective actions from recently identified issues. No issues were identified.

The inspectors reviewed the licensee's procedure control program to verify that it complied with licensee requirements. The inspectors reviewed operating procedures for the FMB to verify that the procedures were current, available as required, received proper management reviews, and that procedure changes were implemented using the established procedure change review process. Through plant tours and interviews with licensee personnel, the inspectors verified that the operators were knowledgeable about the procedures and that the procedures matched the plant configuration.

b. Conclusion

The licensee's procedure control process and safety committees were implemented in accordance with the license requirements.

5. **Operator Training/Retraining (88010)**

a. Scope and Observations

The inspectors reviewed training materials and records and discussed general, process specific, and on-the-job training requirements with control room operators, maintenance, and management. Employees had sufficient training in regards to the availability and reliability of PFAP, with the exception of PFAP 26 and 28 which was identified as a violation above. General employee and contractor safety as well as annual radiation worker refresher training were adequate in scope and detail. Through a review of records and discussion with operators, it was determined that an adequate system is in place to make changes to the training program, as necessary.

b. Conclusions

Operators, maintenance personnel, and management were properly trained in accordance with regulatory requirements.

6. **Follow-up on Previously Identified Issues**

(Discussed) IFI 40-3392/2007-001-01: Implementation of the corrective action program (CAP). The inspectors examined a sample of licensee corrective action issues to assess the overall performance of the licensee's corrective actions program. The inspectors noted that reviewed issues were properly categorized and adequate corrective actions were implemented. The inspectors also noted that the licensee is tracking safety committees issues using only one CAP and that the threshold to enter issues in the program was lowered. The licensee continued gathering operational data to trend potential safety issues and planned to perform an assessment of the CAP effectiveness early next year. The inspector follow up item will remain open to keep tracking the licensee progress and implementation of the CAP.

(Closed) IFI 40-3392/2007-005-01: Track corrective actions for implementation of PFAP following November 7, 2007. The inspectors reviewed the licensee's implementation of management measures for the sole PFAP identified in the ISA, specifically PFAP 55 and 48. The inspectors were able to verify that the operators in the control room were

adequately trained in the appropriate response to the alarm of PFAP 55, which involved detection of a potential low oxygen environment. The inspectors were also able to verify that the appropriate procedures and training were in place for PFAP 48, which involved degreasing of vessels. Based on these actions, this item is considered addressed.

(Closed) IFI 40-3392/2007-005-02: Providing appropriate documentation for the ISA.

The inspectors reviewed the licensee's newly implemented procedure that incorporated most of the required information for PFAP identified in the ISA. The "Management of Plant Features and Procedures" procedure properly addressed the document deficiency that was previously identified. Based on this finding, this item is considered close.

(Closed) IFI 40-3392/2007-005-03: Evaluate to determine what indications would be provided to operators to indicate a failure of the hydrogen analyzers. The inspectors reviewed the licensee's implementation of the series of PFAP involving the hydrogen analyzer. As cited in paragraph 2 above, the implementation was not adequate. This item will be closed based on the above-documented violation opened in above.

6. Exit Meeting Summary

The inspectors presented the inspection results to members of the plant staff and management at the conclusion of the inspection on December 14, 2007. Plant management 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

1. **PARTIAL LIST OF PERSONS CONTACTED OR ATTENDED EXIT MEETING**

Licensee

D. Edwards, Plant Manager
R. Finzel, Director Integrated Supply Chain
C. DeLand, Maintenance/Reliability Manager
R. Erickson, Operations Manager
M. Greeno, Regulatory Affairs
J. Johnson, Safety Supervisor
M. Millman, Engineering Manager
S. Patterson, Health Physics Supervisor
L. Parscale, Nuclear Regulatory Affairs Manager
B. Stokes, Health Physics Specialist
D. Mays, Health, Safety and Environmental Manager
B. Stephenson, Safety Specialist

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

2. **INSPECTION PROCEDURES USED**

88005	Management Organization and Controls
88010	Operator Training/Retraining
88025	Maintenance and Surveillance of Safety Controls
88070	Permanent Plant Modifications

3. **ITEMS OPENED, CLOSED, AND DISCUSSED**

<u>Item Number</u>	<u>Status</u>	<u>Description</u>
VIO 40-3392/2007-007-01	Opened	Failure to implement management measures for PFAP
IFI 40-3392/2007-007-02	Opened	Additional detail in PM for PFAP 35
IFI 40-3392/2007-005-01	Closed	Track corrective actions for implementation of PFAP following November 7, 2007
IFI 40-3392/2007-005-02	Closed	Providing appropriate documentation for the ISA

IFI 40-3392/2007-005-03	Discussed	Evaluate to determine what indications would be provided to operators to indicate a failure of the hydrogen analyzers
-------------------------	-----------	---

4. **LIST OF ACRONYMS USED**

ADAMS	Agency Document Access and Management System
CAP	Corrective Action Program
FMB	Feed Materials Building
IFI	Inspector Follow-up Item
IP	Inspection Procedure
ISA	Integrated Safety Analysis
MTW	Metropolis Works
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
PFAP	Plant Features and Procedures
PM	Preventative Maintenance
VIO	Violation