



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

March 22, 2004

Mr. Rory J. O'Kane
Plant Manager
Honeywell Specialty Chemicals
P.O. Box 430
Metropolis, IL 62960

SUBJECT: NRC INSPECTION REPORT 40-3392/2004-002 (DFFI)

Dear Mr. O'Kane:

On March 2, 2004, the NRC completed an inspection 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 on March 2, 2004, the NRC inspector discussed the findings with members of your staff.

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 this inspection, the NRC did not identify any violations.

This also refers to your February 14, 2004, response to the Notice of Violation transmitted to you by our letter dated December 17, 2003, with Inspection Report 40-3392/2003-007 (DFFI). We have reviewed your corrective actions for the violation and have no further questions at this time. Your corrective actions will be examined during future inspections.

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>.

We will gladly discuss any questions you have concerning this inspection.

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: Inspection Report 40-3392/2004-002

cc w/encl:
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OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:NMSS	RII:DNMS		
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DATE	3/15/04						
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO
PUBLIC DOCUMENT	YES NO						

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No. 40-3392

License No. SUB-526

Report No. 40-3392/2004-002 (DFFI)

Licensee: Honeywell International, Inc.

Facility: Metropolis Works

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

Dates: February 8, through March 2, 2004

Inspector: Bruce L. Bartlett, Senior Resident Inspector,
Paducah Gaseous Diffusion Plant, Region II

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 40-3392/2004-002 (DFFI)

The purpose of the inspection was to observe drain-down of the distillation system during the extended outage following the December 22, 2003, uranium hexafluoride release.

- The inspector observed that prior to performing activities in the field the operators reviewed the applicable procedures and that pre-job briefings were conducted. The inspector observed that operators used the procedures in the field and raised issues to their supervision as appropriate.

The work activities observed by the inspector were performed safely and in accordance with management expectations. The inspector noted that procedure quality and adherence was being improved, but that much procedure revision and training remained to be completed in preparation for plant restart.

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, the plant continued to be maintained in an extended outage following the December 22, 2003, uranium hexafluoride (UF₆) release. Maintenance activities and plant processes were conducted without incident or unusual occurrences.

2. Observation of Operational Activities

a. Draining of Distillation Vessels

(1) Inspection Scope (TI 2600/003)

The inspector conducted interviews with plant personnel and observed operational activities during the draining of UF₆ from the distillation process into product cylinders.

(2) Observations and Findings

The inspector observed that prior to performing activities in the field the operators reviewed the applicable procedures and that pre-job briefings were conducted. The inspector observed that the operators used the procedures in the field and raised issues to their supervision as appropriate.

Even though the quarterly surveillance test on the emergency closure of certain valves in the distillation process was not due, licensee personnel decided that as a good practice they would perform the test prior to the transfer of material. The inspector verified that the operators were using the current copy of the procedure and checklist.

The Distillation Operator verified that the valves were open and then pushed the distillation emergency shutdown button as required by the procedure. The Assistant Distillation Operator observed the valves locally to verify that they closed as required. The inspectors noted that the test was repeated several times, as the valves were located on different floors in the Feed Material Building. The inspector questioned the cycling of the valves repeatedly as part of the surveillance testing, as the procedure did not address the practice. In addition, the inspectors were concerned that the repeated cycling may have pre-conditioned the valves and prevented the operators from obtaining true "as-found" data.

Upon further review, the inspector noted that the procedure required that the operators verify the valves "go closed", and due to the short stroke of the valves it was difficult to just look at the valves and verify that they went closed. The inspector also noted that there was no specific time requirement for the valves to go closed and, if a valve had degraded to the point that it would no longer close on demand, it would be discovered during the surveillance and repaired.

When the operators attempted to start filling the first cylinder, they found that they were unable to equalize the three still feed tanks. In accordance with the procedure, they used a combination of nitrogen pressure pulses and vacuum to clear the blockage. The

procedure authorized operators to perform multiple valve manipulations, as needed, in and around the valve "hot box" on the first floor. Once the blockage was clear, the Assistant Distillation Operator was given a checklist and instructed to perform the valve lineup for the cylinder fill.

When he got to the hot box on the first floor, he checked the position of a valve that was not on the checklist and noted it was in the wrong position. The operator determined that the valve was not returned to its original position following the previously performed activity to clear the blockage and repositioned the valve to the required position. Upon further review and discussion with licensee management, the inspector determined that the operator's actions were within the scope of the procedure used to remove the blockage.

During the valve lineup activities, the Assistant Operations Supervisor determined that a valve that had been recently repaired needed some additional post maintenance testing (PMT). The supervisor stated that the initial PMT was performed using nitrogen to pressurize the valve to check for leaks. The supervisor directed, during the blockage clearing activities performed previously, that the valve also be leak tested with UF₆ vapor prior to processing material in the liquid phase. The supervisor stated that this would minimize any release of UF₆ in the event that the valve was leaking. The additional PMT was performed successfully. The inspector noted that the additional testing was not required by the maintenance work order but was performed within the scope of the operations procedure.

(3) Conclusions

The inspector observed that prior to performing activities in the field the operators reviewed the applicable procedures and that pre-job briefings were conducted. The inspector observed that operators utilized the procedures in the field and raised issues to their supervision as appropriate.

The work activities observed by the inspector were performed safely and in accordance with management expectations. The inspector noted that procedure quality and adherence was being improved, but that much procedure revision and training remained to be completed as preparation for plant restart.

3. Exit Meeting Summary

The inspector presented the inspection results to members of the plant staff and management at the conclusion of the inspection on March 2, 2004. The plant staff acknowledged the findings presented. The inspector asked the plant staff whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT

1. PARTIAL LIST OF PERSONS CONTACTED

Honeywell Specialty Chemicals

R. O'Kane, Plant Manager
P. Bryan, Operations Manager
M. Ginzel, Health Physics Manager
J. Malanowski, Engineering Manager
*D. Mays, Environmental and Regulatory Affairs Manager

* Denotes those present at the exit meeting on March 2, 2004

2. INSPECTION PROCEDURES USED

TI 2600/003 Operations

3. ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Item Number</u>	<u>Status</u>	<u>Description</u>
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None

4. LIST OF ACRONYMS USED

ADAMS	Agency Document Access and Management System
CFR	Code of Federal Regulations
DFFI	Division of Fuel Facility Inspection
IP	Inspection Procedure
No.	Number
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
PMT	Post Maintenance Testing
TI	Temporary Instruction
UF ₆	Uranium Hexafluoride