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

November 1, 2006

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

SUBJECT: NRC INSPECTION REPORT NO. 40-3392/2006-008 AND NOTICE OF VIOLATION

Dear Mr. Edwards:

This letter refers to the inspection conducted from September 18-22, 2006, at the Honeywell Specialty Chemicals facility. This letter refers as well to the follow-up inspection activity conducted from August 21-24, and from September 18-22, 2006, concerning the uranium hexafluoride leak (UF_6) that took place in the Feed Materials Building on April 4, 2006. 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 September 22, 2006, the findings were discussed with those members of your staff identified in the enclosed report. During subsequent review of those findings, additional issues were identified concerning the transportation of licensed materials. Those issues were discussed by telephone on October 17, 2006, 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 three Severity Level IV violations of NRC requirements occurred. The first two violations involved: 1) the failure to post a radiation area; and, 2) the failure to wear appropriate protective clothing during a UF_6 line break.

This also refers to the investigation completed by the NRC Office of Investigations' (OI). The investigation involved a review to determine if records concerning the inspection certification and shipping documents were falsified for a damaged UF_6 cylinder that was subsequently shipped from Honeywell to the Paducah Gaseous Diffusion Plant (PGDP). OI determined that there was insufficient evidence to substantiate: 1) that a Honeywell employee willfully falsified the inspection certification/shipping paperwork for the UF_6 cylinder, or 2) that a second Honeywell employee willfully violated licensee procedures by not reporting the damaged cylinder to management. A copy of the synopsis to this OI report is included as Enclosure 3 to

this letter. Based on the results of this investigation and inspection, the NRC has determined that an additional Severity Level IV violation of regulatory requirements occurred concerning the failure to perform an adequate inspection of a UF_6 cylinder prior to shipping. Finally, a non-cited violation was identified involving a failure to adequately implement the sampling portion of the bioassay program.

The violations were evaluated in accordance with the NRC Enforcement Policy that may be found on the NRC's web site at http://www.nrc.gov/what-we-do/regulatory/enforcement/enforce-pol.html. The violations are cited in the enclosed Notice of Violation (Notice), and the circumstances surrounding the violations are described in the subject inspection report.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

Concerning the failure of Honeywell personnel to wear adequate protective clothing while performing the UF_6 line break on April 4, 2006, the NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence is already adequately addressed on the docket in this report. Therefore, in your response to this letter, you are not required to address violation A unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response 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. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redactions.

Should you have any questions concerning this inspection, 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

Enclosures: (See page 3)

Enclosures:
1. Notice of Violation
2. NRC Inspection Report 40-3392/2006-008
3. OI Synopsis

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. vonTill, NMSS
M. Raddatz, NMSS

*see previous concurrence

☐ PUBLICLY AVAILABLE ☐ NON-PUBLICLY AVAILABLE ☐ SENSITIVE ☐ NON-SENSITIVE

ADAMS: ☐ Yes ACCESSION NUMBER:_____

OFFICE	RII:DFFI	RII:DFFI	RII:EICS				
SIGNATURE	***/RA/***	**/RA/**	/***RA/***				
NAME	CTaylor*	JPelchat*	CEvans*				
DATE	10/30/2006	10/30/2006	10/30/2006	11/ /2006	11/ /2006	11/ /2006	11/ /2006
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: C:\FileNet\ML063050547.wpd

NOTICE OF VIOLATION

Honeywell Specialty Chemicals
Metropolis, Illinois

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

During an NRC inspection conducted on September 18-22, 2006, three violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violations are listed below.

A. License Condition 10 of NRC License No. SUB-526, Amendment No. 15, authorizes, in part, the use of licensed materials in accordance with the statements, representations, and conditions in Chapters 1 through 7 of the license application dated January 30, 2003.

Chapter 2, Section 2.6 of the license application, dated January 30, 2003, requires that "plant written procedures shall be reviewed, revised, approved, and implemented in accordance with Plant Policy titled "Procedure Control Policy."

Procedure Control Policy AD-7, states, in part, that procedures written after March 1, 2004 shall be reviewed, revised, approved, and implemented in accordance with Procedure MTW-ADM-PRO-0100, "Development and Implementation of Policies and Administrative Procedures." Step 4.11.2 of Procedure MTW-ADM-PRO-0100 requires that policies and procedures be followed as written.

Section 1.2 of the now-superceded procedure MTW-SAF-LS-0007, Rev. 4, *"Breaking Lines/Cleaning Blockages*," that was in effect on April 4, 2006, states that "All employees will treat breaking or working on any line, connected fitting, valve, pump or vessel, including clearing of blockages which have ever contained corrosive liquid or gas no matter how long ago," as "a Special Hazard." Section 4.2 of that same procedure further requires, in part, that licensee employees wear specified personal protective equipment while performing a break in a uranium hexafluoride (UF_6) line, including a chemical suit, chemical hood, and chemical gloves.

Contrary to the above, on April 4, 2006, licensee employees did not wear the specified personal protective equipment while performing a line break to clear a blockage in a utility air line that was known to contain uranium hexafluoride. Specifically, one individual performing the line break wore only the upper half of a chemical suit along with chemical gloves, and a hood, while the second individual participating in the line break was not wearing any part of a chemical suit and was only wearing a hard hat, leather gloves and fabric coveralls.

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

B. License Condition 10 of NRC License No. SUB-526, Amendment No. 15, authorizes, in part, the use of licensed materials in accordance with the statements, representations, and conditions in Chapters 1 through 7 of the license application dated January 30, 2003.

Chapter 3, Section 3.2.5 of the application, requires, in part, that process vessels be posted as "Caution - Radiation Area" if the exposure rate exceeds 5 milliroentgens per hour (mR/hr) at 30 centimeters from the source. In addition, magenta and yellow floor stripes are to be provided around the equipment to provide an additional buffer zone and warning device for employees.

Contrary to the above, as of September 21, 2006, the vicinity of the filter housing adjacent to the E–413 secondary cold trap on the 5th floor of the Feed Materials Building was not posted with a "Caution - Radiation Area" sign, an area where measured exposure rates were 7 mR/hr at a distance of 12 inches (30 centimeters). Also, contrary to the above, magenta and yellow floor stripes were not provided around the area to provide an additional buffer zone and warning for individuals present in the area.

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

C. License Condition 10 of NRC License No. SUB-526, Amendment No. 15, authorizes, in part, the use of licensed materials in accordance with the statements, representations, and conditions in Chapters 1 through 7 of the license application dated January 30, 2003.

Chapter 2, Section 2.6 of the license application, dated January 30, 2003, requires that plant written procedures shall be reviewed, revised, approved, and implemented in accordance with Plant Policy titled, "Procedure Control Policy."

Procedure Control Policy AD-7, states, in part, that procedures written after March 1, 2004 shall be reviewed, revised, approved, and implemented in accordance with Procedure MTW-ADM-PRO-0100, "Development and Implementation of Policies and Administrative Procedures." Step 4.11.2 of Procedure MTW-ADM-PRO-0100 requires that policies and procedures be followed as written.

Section 17.2.4, Cylinder Condition, of the procedure, "Uranium Hexafluoride (UF_6) Cylinder Shipping and Receiving Inspection," Revision 5, dated December 2005, states in part, that prior to shipment and receipt, each cylinder will be inspected for any physical damage including but not limited to dents, bulges, gouge and cuts.

Contrary to the above, on January 5, 2006, a UF_6 cylinder (serial number 172481) was not adequately inspected for physical damage prior to shipment. Specifically, the inspection of the cylinder failed to detect the presence of eight areas on the cylinder's exterior that exhibited dents and gouges prior to its shipment to another facility. The licensee's record of the pre-shipment inspection indicated that there was no damage, when in fact, there were dents and gouges on the exterior of the cylinder.

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 redactions. 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 1st day of November, 2006

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.:	40-3392
License No.:	SUB-526
Report No.:	40-3392/2006-008
Licensee:	Honeywell International, Inc.
Facility:	Metropolis Works
Location:	P. O. Box 430 Metropolis, IL 62960
Date:	September 18-22, 2006
Inspector:	Cynthia D. Taylor, Fuel Facility Inspector, Fuel Facility Inspection Branch 1
Accompanying Personnel:	Jay L. Henson, Chief, Fuel Facility Inspection Branch 2 (FFIB2) John M. Pelchat, Senior Fuel Facility Inspector, FFIB2
Approved by:	Jay L. Henson, Chief Fuel Facility Inspection Branch 2 Division of Fuel Facility Inspection

Enclosure 2

EXECUTIVE SUMMARY

Honeywell International, Inc.
NRC Inspection Report No. 40-3392/2006-008

This routine, announced inspection was conducted in the areas of radiation protection and transportation. The inspection involved observation of work activities, a review of selected records, and interviews with plant personnel. The inspection identified the following aspects of the licensee programs as outlined below:

Radiation Protection

- The external and internal exposure monitoring program was implemented in a manner to maintain doses as low as reasonably achievable (ALARA). Exposures were less than the occupational limits in 10 CFR 20.1201. A non-cited violation (NCV) was identified concerning the licensee's implementation of its bioassay program system (Paragraph 2.b).

- The issuance and maintenance of respiratory protection equipment met regulatory requirements. (Paragraph 2.c).

- Generally, radiological safety postings and radiation work permits were adequately utilized to communicate potential hazards and protective equipment requirements to workers. A violation was identified concerning the posting of a radiation area in the Feed Materials Building (FMB) (Paragraph 2.d).

- Routine and non-routine surveys were adequate in the identification of potential airborne and contaminated areas (Paragraph 2.e).

- Generally, the licensee's ALARA program was properly implemented. (Paragraph 2.f).

Transportation

- In general, the licensee's preparation of transportation packages met the requirements of the regulations. The hazardous material training program was acceptable and in accordance with requirements specified in Title 49, CFR Part 172. A violation was identified concerning the failure to adequately inspect a uranium hexafluoride (UF_6) cylinder prior to offering it for transportation (Paragraph 3.a).

- Management approved procedures were established and acceptable to carry out the various transportation activities at the facility (Paragraph 3.b).

Event Followup

- The licensee had completed a thorough root cause analysis of the events and circumstances regarding the UF_6 leak on April 4, 2006. On the basis of this root cause analysis, the licensee developed and implemented corrective actions that should prevent or reduce the consequences of a similar event. A violation for the failure of licensee employees to wear adequate protective clothing while performing a UF_6 line break was identified.

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

The Honeywell Speciality Chemicals (licensee) uranium conversion facility (known as the Metropolis Works or MTW) is located on a 1,100 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 (UF_6). The uranium conversion and cylinder filling processes occur in the Feeds Material Building (FMB). During the inspection period, no significant operational issues or unusual events occurred.

2. Radiation Protection (83822) (R1)

a. External and Internal Exposure Control (R1.04 and R.1.05)

(1) Scope and Observations

The inspectors interviewed licensee representatives, reviewed radiation protection procedures, and reviewed personnel exposure data, to determine if exposures were in compliance with 10 CFR Part 20.1201 limits.

Based on interviews, procedural reviews, and observations of plant personnel inside radiation control areas, the licensee's monitoring program for external and internal exposure was consistent with the requirements in 10 CFR Part 20. The program was adequate, based on the type of operations and work activity taking place at the site.

The inspectors reviewed dosimetry results from January 2005 to June 2006 and determined that the maximum assigned external exposure was well below the limits for occupational exposure in 10 CFR 20.1201. The licensee's dosimetry provider was certified by the National Voluntary Laboratory Accreditation Program. Table 1 below shows the maximum assigned exposure data for calender year (CY) 2005 as well as the first two quarters of CY 2006. All dosimetry results were well within regulatory and administrative limits. Calendar Year 2004 data was originally documented in NRC Inspection Report (IR) 40-3392/2005-005 and is included here for comparison only.

Table 1 - Maximum Annual Dose Data

Year	Deep Dose Equivalent (DDE)-rem	Shallow Dose Extremity (SDE)-rem	Total Effective Dose Equivalent (TEDE)-rem	Collective TEDE (person-rem)	Committed Effective Dose Equivalent (CEDE)-rem
2004†	0.770	2.266	1.253	143.8	0.831
2005	0.928	3.360	1.627	147.2	0.897
2006*	0.789	3.639	n/a	31.0	n/a

* - year to date. † - for comparison purposes only n/a - not available

b. Follow up on Previously Identified Issues (R1.12)

(Closed) Unresolved Item (URI) 40-3392/2005-05-03: Failure to adequately implement the sampling portion of the bioassay program.

After the licensee's discovery that bioassay samples were not being consistently submitted as required by the Materials License SUB-526, a bioassay program assessment was conducted at the request of the licensee by an outside contractor in July 2006. The license requires that routine bioassay samples be submitted twice monthly for hourly workers and once per month for salaried personnel. As a result of the licensee's ongoing internal investigation, this issue was captured as an URI in IR 40-3392/2005-005.

The inspectors determined from a review of personnel dose records and interviews with licensee staff that personnel had not exceeded the regulatory requirements nor had anyone been placed on work restriction during the time frame of the investigation. However, personnel dose corrections were applied to NRC Form 5 if the corrected dose differed from the original dose by 10 mRem or 10% of the annual dose. Three individuals for CY 2004 had corrections made to their NRC Form 5. There were no corrections for CY 2005. The inspectors also determined that the licensee's contractor performed a comprehensive review that identified the root cause as the failure to provide adequate management oversight in collection, control and analysis of samples in the bioassay program. The inspectors reviewed the licensee's root cause analysis and determined the corrective actions were appropriate and effective.

The inspectors verified the short-term corrective actions implemented by the licensee. These actions included the following:

1. Providing a health physics technician (HP) at designated sample collection times to improve ensure that samples are not lost or misplaced.

2. Establishment of a bioassay collection log to identify samples not submitted.

3. Daily tracking to be performed by HP technicians with daily e-mails sent to managers with delinquent employees.

4. Imposing a work restriction 24 hours after request for bioassay.

Licensee representatives indicated that they were further considering the following additional long-term corrective actions:

1. Revision of the Bioassay Procedure. (December 2007)

2. Implementation of work-restriction by the licensee's human resources department. (January 2007)

3. Implementation of bar-coding system to track bioassay samples. (January 2007)

4. Better management of cross-contamination issues. The licensee was considering purchasing a trailer to use as a bioassay laboratory and locating it outside of the restricted area to reduce the chances for cross-contaminating samples with licensed materials. (January 2007)

Review of bioassay results indicated that licensee personnel internal exposures were well below any regulatory limit. In addition, review of a representative sample of records indicated that the licensee effectively identified any result that exceeded an investigational limit and promptly followed up on the results by obtaining another sample.

The failure to adequately implement the sampling portion of the bioassay program was non-repetitive, licensee-identified and corrected and therefore was treated as a non-cited violation (NCV), consistent with Section VI.A.8 of the NRC Enforcement Policy (NCV 40-3392/2006-08-01).

(Closed) URI 2004-007-01: Failure to confine potentially contaminated protective clothing to the restricted area.

During a June 2004 NRC inspection (2004-007), a licensee employee was observed setting off a scaler alarm while performing a personal contamination survey at the exit point from the licensee's restricted area. The individual was wearing his protective clothing and shoes and had intended to retrieve an item from his personal vehicle in the employee parking lot.

During this inspection, interview of licensee representatives determined that the licensee had clarified its definition of the restricted area. The licensee determined that the area beyond the point where exit monitoring is performed in the administrative building was an unrestricted area. This determination was consistent with language in Section 3.2.1 of the application which states that the restricted area is exited after performing exit monitoring in the administrative building. Licensee representatives also stated that no one is permitted to wear protective clothing outside of the restricted area. Interviews of licensee personnel indicated that they had a consistent understanding of the boundaries of the restricted area and that they knew that they were not permitted to wear protective clothing outside of the restricted area. The inspectors did not observe any instances of licensee personnel wearing protective clothing outside of the restricted area.

(2) Conclusions

The external and internal exposure monitoring program was adequately implemented to facilitate ALARA goals and to ensure compliance with NRC requirements. Exposures were less than the occupational limits in 10 CFR 20.1201. An NCV was identified concerning the licensee's implementation of its bioassay program system.

c. Respiratory Protection (R1.06)

(1) Inspection Scope and Observations

Respiratory protection equipment issuance, storage, maintenance, and training were examined for adequacy to determine if respirators were properly maintained and only issued to certified users.

During several plant walk-downs, the inspectors observed plant operators wearing respirators as required while working. The inspectors observed activities at the respirator facility involving fit testing and issuance of equipment. One of the inspectors completed a respirator fit test to renew his site specific respirator qualification. The fit test was carried out in accordance with licensee procedures. Each licensee employee underwent respirator fit testing every 12 months during which the worker was fitted for half face and full face respirators. Names were also selected from specific plant activities requiring respiratory protection to verify that the workers' certifications were current and that the appropriate devices were issued. No examples were noted of unauthorized use of equipment by untrained personnel or by workers with expired training.

The inspectors also observed activities in the respirator refurbishment facility. Used respirators were disassembled, washed, dried, inspected and reassembled. The inspectors examined a sample of respirators in various stages of the refurbishment process and found that the respirators were properly reassembled, in good condition with no visible cracks, rot, and only minimal evidence of wear.

(2) Conclusions

The issuance of respiratory protection equipment met regulatory requirements. No negative observations or findings were noted.

d. Postings, Labeling and Control (R1.07)

(1) Inspection Scope and Observations

The inspectors reviewed the licensee's program for postings as required by 10 CFR 19.11 to determine if documents were posted in sufficient places to permit individuals engaged in licensed activities to observe them. Several work locations were examined to determine if radioactive containers were properly labeled and to assess the adequacy of contamination control barriers and posting of radiation areas as required by 10 CFR 20.1902. Radiation work permits (RWPs) and work procedures were reviewed to determine the adequacy of the requirements posted for worker protection and the degree to which those requirements were implemented.

Interviews and review of records indicated that the licensee has completed comprehensive radiation surveys of restricted and unrestricted areas. The inspectors performed both independent and confirmatory surveys of selected areas within the licensee's restricted area with a Ludlum 2401-EC Geiger-Mueller instrument (serial no. 188816, calibration due April 19, 2007).

The inspectors and the licensee's health physics supervisor performed a series of comparative direct radiation surveys in the FMB. Surveys in the vicinity of the filter housing adjacent to the E–413 secondary cold trap on the 5th floor of the FMB measured an area of 7 mR/hr at a distance of 12 inches (30 centimeters). This area was not posted with a "Caution - Radiation Area" sign nor were magenta and yellow floor stripes provided around the area to provide an additional buffer zone and warning for individuals present in the area. License Condition 10 of NRC License No. SUB-526, Amendment No.16, authorizes, in part, the use of licensed materials in accordance with the statements, representations, and conditions in Chapters 1 through 7 of the license application dated January 30, 2003. Chapter 3, Section 3.2.5 of the application, states in part, that process vessels are posted "Caution - Radiation Area" if the exposure rate exceeds 5 milliroentgens per hour (mR/hr) at 30 centimeters from the source. In addition, magenta and yellow floor stripes are provided around the equipment to provide an additional buffer zone and warning device for employees. This was identified as a violation (VIO 2006-008-02) for the failure to post a radiation area.

The inspectors observed that other radiation areas within the licensee's restricted area that contained radioactive material or potentially contaminated material were adequately posted. However, the inspectors did note that the magenta and yellow floor stripes in several areas in the FMB showed significant evidence of aging and wear. Interviews of licensee health physics staff and review of ALARA committee meeting minutes verified that the licensee had previously identified the worn floor striping and the issue had been added to the licensee's action tracking system for resolution. Bulletin boards were located in designated areas so that workers could examine documents or obtain details as to where documents could be examined as required by 10 CFR 19.11.

The inspectors determined through direct observation and from discussions with the licensee, that the licensee used a remote annunciator system in the health physics lab and in the FMB control room to monitor the status of flashing lights on each floor of the FMB. These lights are illuminated to indicate the existence of, or potential for elevated levels of airborne radioactive materials that would necessitate the use of respiratory protection. The inspectors verified the proper operation of the annunciator system by performing walk-downs of the Feed Materials Building (FMB), reviewing log books and interviewing operators in the control room. There were no additional problems noted.

(2) Conclusions

Generally, radiological safety postings and warning lights were properly utilized to communicate potential hazards and protective equipment requirements to workers. A violation was identified for the failure to post a radiation area.

e. Surveys (R1.08)

(1) Inspection Scope Observations

The licensee's HP survey program was reviewed to determine if surveys were effective in the identification of radiological conditions within the facility and were performed in accordance with licensee requirements. The inspectors performed both independent and confirmatory surveys of selected areas within the licensee's restricted area. The

inspectors also performed comparative surveys with licensee personnel. Comparison of the results of the comparative and confirmatory surveys showed excellent agreement between NRC and licensee measurements. In addition, the inspectors accompanied a HP technician during the collection of air sample filters.

Interviews and review of records indicated that the licensee has completed comprehensive radiation surveys of restricted and unrestricted areas. These surveys included weekly contamination surveys of areas within the restricted area in which licensee personnel are permitted by the license to eat and drink, such as the lunch room and the FMB control room.

The inspectors observed that the licensee had installed a number of Ludlum 4901 Hand and Shoe Monitors at the exit points where personnel leave the licensee's restricted area. Each of these devices was equipped with an array of 22 pancake Geiger-Mueller detectors to detect the presence of radioactive contamination of the hands and feet of personnel. These systems were intended to replace scalers equipped with a single handheld pancake Geiger-Mueller detector that personnel used to manually frisk their hands and feet. The inspectors reviewed licensee documentation detailing the commissioning of these devices. The licensee used a dedicated source provided by the manufacturer to verify the functionality of each system and performed calculations that demonstrated that the systems were sufficiently sensitive to detect the presence of 1,000 disintegrations per minute of activity that is specified as an action limit in the license.

While in the respirator refurbishment facility, the inspectors noted that water had apparently overflowed from the machines used to wash the respirators and flowed along the floor to a floor drain. An independent survey performed with a Ludlum Model 2401P pancake Geiger-Mueller instrument (serial no. 142732, calibration due April 21, 2007) found elevated radioactive contamination levels of 15,000 counts per minute (cpm) on the exterior of the washing machine and 10,000 cpm on the floor where the water had flowed. Additional surveys indicated that the elevated contamination levels were confined to the areas noted and there was not evidence suggesting the spread of contamination in the respirator refurbishment area or the rest of the facility.
Review of facility drawings indicated that the drain led to a sewer that directed the water to the licensee's environmental protection facility for treatment and release. Review of licensee survey records demonstrated that these elevated areas had been documented in licensee surveys.

(2) Conclusions

Generally, routine and non-routine surveys were adequate in the identification of potential airborne and contaminated areas.

f. Implementation of ALARA Program (R1.10)

(1) Inspection Scope and Observations

The licensee's program to keep doses ALARA was reviewed to determine if the program and its ALARA goals were developed and implemented in accordance with the license. In addition, the program for reinforcing the ALARA concept among employees was assessed.

The inspectors interviewed the HP supervisor assigned responsibility for the ALARA evaluations and assessments associated with external and internal exposures. On a quarterly basis, the licensee conducted ALARA Committee meetings that reviewed ALARA goals and exposure summaries to identify undesirable trends. In those cases where exposures were elevated, consideration was given to ways for reducing exposures. Several workers were interviewed regarding the licensee's implementation of its ALARA program. Licensee staff demonstrated an adequate knowledge and/or understanding of ALARA concepts. During walk-downs of the FMB and other plant areas, the inspectors observed that generally licensee personnel were using good radiation safety practices.

The licensee has identified several areas for improvement in training, radiation protection and management oversight for improvement. These areas were documented and tracked by the licensee using the electronic corrective action system (E-CATS). E-CATS was designed to monitor trends in the radiation safety program and other safety-related areas. Review of ALARA committee meeting minutes indicated that the licensee evaluated issues that were identified, and took the needed actions to further reduce occupational exposures.

The inspectors observed several line breaks that the licensee conducted during the inspection to clean process lines in the FMB. Licensee personnel were observed to be very knowledgeable of, and complying with the licensee's revised line break procedures. The inspectors further observed that licensee personnel were properly prepared with required tools and the necessary safety equipment to complete the line break safety. However, the inspectors observed that a several-inch long section of piping removed during the line break was set on the bare floor adjacent to where the break had been made. The removed pipe section was lined with an accumulation of uranyl fluoride and that the floor it was placed upon was rough and irregular. A visible quantity of uranyl fluoride had become dislodged from the pipe contaminating the floor, which because of its irregular finish, would be difficult to decontaminate. This was observed to happen again a second time during the same line break when the removed section of pipe was moved to another nearby location on the floor, creating a second area of radioactive contamination. The inspectors discussed these contamination control-related findings with licensee personnel and how the licensee's ALARA program applies to contamination control.

Review of records and interviews of licensee employees indicated that the licensee had with the assistance of a contractor, completed a comprehensive survey of the entire plant. Information from this survey was being used as part of the basis for the licensee's footprint reduction plan. Part of this footprint reduction plan included the

repackaging and shipment for disposal, of 8 million pounds of material (including approximately 70,000 drums) before the end of December 2006. This repackaging and shipment project had just begun at the time of the inspection. The activities were being conducted under Honeywell's NRC materials license. The specific radiological protection procedures and controls that were used during this project were specified in a formal agreement between the licensee and the contractor carrying out the work.

(2) Conclusions

Based on review of records and interviews, the inspectors concluded that the licensee's ALARA program was properly implemented.

3. Transportation (IP 86740) (R4)

a. Preparation of Packages for Shipment and Delivery of Completed Packages to Carriers (F.4.01/4.02)

(1) Inspection Scope and Observations

Records related to the preparation and delivery of completed packages for shipment of source material were reviewed in order to verify proper shipping requirements. The inspectors reviewed the licensee's program for routine cylinder shipments to determine whether the licensee had established and was maintaining an effective program to ensure radiological safety in the packaging and delivery of licensed radioactive materials, and to determine whether transportation activities were in compliance with the transportation requirements in 10 CFR, Part 71, and in 49 CFR, Parts 171 - 178. The inspectors focused on the licensee's transportation activities associated with UF_6 cylinders, including procedural guidance, quality control activities, and maintenance of required records.

The inspectors reviewed the documentation used for source material shipments of UF_6 cylinders to customers and determined that on January 6, 2006, the licensee shipped a filled UF_6 cylinder (serial number 172481) with small dents and gouges in eight areas to a customer facility. The damage was identified upon receipt at the receiving facility. Further evaluation showed four additional areas had sharp edge gouges, the cylinder was rejected in accordance with the receiver's procedures, and the receiver notified the licensee. The licensee dispatched a team to the receiver's facility to examine the cylinder. It was subsequently determined that the extent of the damage did not exceed the limits specified in ANSI Standard –14.1 - 2001, "Packaging of Uranium Hexafluoride for Transport" but was identified as a violation, (VIO-2006-008-002), of the licensee's cylinder transport procedures, "UF_6 Cylinder Shipping and Receiving Procedure."

(2) Conclusions

A violation was identified concerning the failure to adequately inspect a UF_6 cylinder prior to offering it for transportation (Paragraph 3.a).

b. Preliminary Determinations and Procurement of Packaging

(1) Observations and Findings

The inspectors reviewed the licensee's procurement and acceptance testing process for Model No. 48Y UF6 cylinders, Competent Authority Certificate (CAC) USA/0411/AF, Revision 9, that had been purchased during the last 12 months.

The licensee purchased 300 cylinders adding to the fleet of 1600. The licensee had selected one vendor to manufacture the cylinders. The inspectors verified that the vendor was on the licensee's approved supplier list (ASL).

The inspectors selected several cylinders that the licensee had purchased between May and June 2006. The inspector reviewed the licensee's process for the acceptance testing of the 48Y cylinders to assure that required quality assurance (QA) measures were performed before initial use of the cylinders per American National Standards Institute (ANSI) N14.1 were followed. Condition 2. of the certificate specified that each cylinder must be periodically inspected, tested, marked, repaired, and modified in accordance with the standard in effect at the time of the action. The inspectors verified that the licensee had established a process to perform inspections for each of the cylinders before the first use as required by ANSI N14.1.

The inspectors reviewed the licensee's QA procedure, "UF_6 Cylinder Quality Assurance Program," dated January 1, 2003 which consisted of a compilation of Honeywell approved (QA) and quality control (QC) procedures for the cylinders, cylinder specifications, purchase order and contract, contractor QA Plan, measuring and test equipment procedures. From discussions with quality engineering personnel, it was evident that the licensee was closely involved with the manufacturing of the cylinders and provided direct oversight of the vendor by making frequent audits and inspections to ensure that the packages were constructed in accordance with the container specifications and ANSI N14.1.

(2) Conclusions

The licensee's QA procedures for vendor preparation and delivery of UF_6 cylinders was adequate.

4. Event Followup (IP 88002)

(Open) URI 40-3392/2006-007-01: Followup on April 4, 2006,UF_6/HF Release

a. Background:

On April 4, 2006, the licensee experienced a leak, estimated to be 8 grams of UF_6, into the FMB. The leak occurred while distillation operators were removing a defective pressure gauge from a utility air line. The air pressure in the line expelled the UF_6 that had inadvertently leaked into the line. When released to the atmosphere, the UF_6

reacted with moisture in the air and produced hydrofluoric acid (HF) vapor which is corrosive and toxic, and uranyl fluoride (UO_2F_2), a yellow solid. The resultant HF vapor filled the room and totally obscured the vision of the licensee personnel that were present in the area.

There was no indication that UF_6 or HF was released outside the FMB. The licensee's emergency response organization properly characterized the release and carried out mitigative actions in accordance with licensee procedures.

On April 6-10, 2006, an NRC Special Inspection Team (SIT) carried out the following activities: (1) reviewed the facts surrounding the UF_6 leak in the FMB on April 4, 2006; (2) assessed the licensee's safety planning and controls, with particular consideration of the corrective actions that were to be implemented by the licensee as a result of previous events and performance improvements; (3) assessed the licensee's response and investigation into the event; (4) assessed the safety significance of the event; (5) conducted an independent review of the licensee's extent of condition review; and, (6) examined these findings to identify any potential generic issues associated with the event. The findings of that inspection were detailed in NRC IR 40-3392/2006-003.

b. Scope and Observations

During this inspection as well as the inspection conducted on August 21-24, 2006, the inspectors conducted a followup inspection of the licensee's activities as a result of the UF_6/HF leak that occurred on April 4, 2006. The inspectors examined the licensee's investigation of the event, and reviewed the corrective actions taken by the licensee including the revision of procedures and the training of licensee personnel.

Immediately after the UF_6 leak on April 4, 2006, the licensee initiated an "Apollo Incident Investigation" to determine the root causes, and the appropriate corrective actions for the event. The inspectors reviewed the results of the investigation and examined the activities taken by the licensee concerning the results of its conclusions. The licensee's investigation concluded that the leak on April 4, 2006, had the following root causes:

(1) The failure of licensee personnel to believe instrumentation until it was proven to be unreliable;

(2) The failure of licensee personnel to stop work when unexpected conditions occurred while performing the planned work; and,

(3) The existence of inadequate guidance for licensee employees performing work at or near the boundaries and interfaces of utility and process systems.

These root causes are materially the same as the root causes that were identified by the NRC's SIT.

To address the first two root causes, the licensee developed and delivered small group training to operations and maintenance personnel regarding conduct of operations. This training was conducted by senior plant managers, typically the Production Manager. Interviews of license personnel and review of materials prepared for the training

indicated that the training emphasized the use of human performance tools such as the "Stop Work" Concept and the STAR (Stop, Think, Act, Review) process. The training included the specific example of how the presence of unexpected, albeit minor amounts of UF_6 vapor (smoke) in a utility line should have triggered a cessation of work to ask why UF_6 was present and to reassess the potential hazards. The training also reviewed the results of the Apollo Incident Investigation, and included statements of management's specific expectations concerning the use of conservative assumptions to assure work safety and the use of other plant resources to help solve problems. The training cautioned against the over-application of the buddy system and emphasized that each individual had a primary responsibility to protect themselves as well.

The SIT documented the lack of a consistent understanding on the part of the licensee personnel of when to "see and flee" in the event of a UF_6/HF release. Review of the training materials and interviews of the operations manager indicated that in the small group training, employees were told if they had the appropriate Personnel Protective Equipment (PPE), they could make one attempt to correct an issue, lasting not more than 2 - 3 minutes. If not successful, personnel were told to withdraw and allow the Emergency Response Team to mitigate the hazard wearing full PPE. Licensee employees were instructed that a half-face respirator was only intended to allow an individual to flee safely, while a full face respirator would allow an individual to investigate a problem, and that a Self Contained Breathing Apparatus (SCBA) would be required to mitigate a problem.

The licensee's efforts to address the third root cause concerning inadequate procedures are detailed below.

(I) Line Breaking Procedures

At the time of the SIT, licensee representatives stated that no specific procedures existed to guide the distillation operations staff through the diagnosis and repair of components in the utility air line. On April 10, 2006, prior to the conclusion of the SIT inspection, the licensee plant manager issued a "Standing Order" that specifically required that any non-routine line break of a system containing a hazardous material be approved by the plant manager or operations manager

Review by the inspectors and interviews of licensee personnel during this inspection indicated that in April 2006, the licensee had a line breaking procedure, MTW-SAF-LS-007, "*Line Breaking*," Rev. 0, that had been prepared and was partially approved in February 2006, prior to the April 4 event. Inspector review further revealed while the licensee had designated MTW-SAF-LS-0007, Rev. 0, "*Line Breaking*," dated May 9, 2006, as a new procedure, it had, in fact, superceded an earlier procedure entitled MTW-SAF-LS-0007, Rev. 4, *"Breaking Lines/Cleaning Blockages*" (approved October 11, 2005).

License Condition 10 of NRC License No. SUB-526, Amendment No. 16, authorizes, in part, the use of licensed materials in accordance with the statements, representations, and conditions in Chapters 1 through 7 of the license application dated January 30, 2003. Chapter 2, Section 2.6 of the license application, dated January 30, 2003, requires that "plant written procedures shall be reviewed, revised, approved, and

implemented in accordance with Plant Policy titled "*Procedure Control Policy*." Procedure Control Policy, AD-7, dated October 11, 2004, states, in part, that procedures written after March 1, 2004, shall be reviewed, revised, approved, and implemented in accordance with Procedure MTW-ADM-PRO-0103, *"Development and Implementation of Plant Technical Procedures*."

Step 4.15.1 of Procedure MTW-ADM-PRO-0103, Rev. 9, requires that concurrence of reviewers of the procedure are obtained prior to approval using the MTW-FRM-PRO-0001, *"MTW Policy and Procedure Review and Approval"* form. Step 4.15.2 of Procedure MTW-ADM-PRO-0103, Rev.9, further requires that the Document Owner/Department Manager Approve the procedure using the MTW-FRM-PRO-0001, *"MTW Policy and Procedure Review and Approval"* form that documents the procedure development and approval process. The form attached to Rev. 0 of the new line break procedure indicated that the required technical and management reviews were completed on February 28, 2006. However, the Safety Office had not reviewed and approved the proposed procedure revision until May 9, 2006, after the February 28, 2006 approval date.

This failure to make procedural revisions in compliance with license-required procedures is essentially the same as the examples cited as a violation in NRC IR 40-3392/2006-005 (VIO 2006-005-01). NRC IR 40-3392/2006-005 was conducted May 1-12, 2006, and the report detailing the findings of this inspection including a Notice of Violation (NOV) was issued on July 5, 2006. In a letter dated August 3, 2006, the licensee acknowledged the violation concerning the failure to properly amend procedures and described the actions taken to correct the violation and ensure that the violation did not recur.

Since the licensee has already acknowledged the failure to properly implement its procedure control procedures and the NRC already has sufficient information regarding the actions the licensee has taken to correct the issue and prevent the recurrence, this specific example will not be cited as a violation. The NRC will continue to review the licensee's activities in this area during future inspections under the current open item (VIO 2006-005-01)

Comparison of the newer procedure with the superceded document indicated the new procedure was more explicit concerning the precautions to be taken while breaking lines, and the measures to be followed in the event of an unexpected occurrence during a line break. The new procedure contained specific guidance to ensure that zero energy remained in a line prior to breaking and more completely detailed the required steps to verify that any hazardous materials were properly purged from the line before opening. In addition, the revised procedures more clearly defined what line breaks were potentially hazardous, including those lines that are near process line/utility line boundaries and interfaces.

Licensee employees demonstrated the Line/Equipment Breaking Permit and the Task Hazard Analysis Card that had been developed as part of the procedural improvement effort. The card had a distinct bright color to make it easy to find and review. Both documents were intended to be completed before a line break to document the task to be performed, the date and location of the work, and the determination of whether the

work was covered by existing operating procedures or if it required the development of specific task instructions. The card also documented the assessment of mechanical, ergonomic, and environmental hazards as well as the determination of what tools, permits (such as hot work permits, confined space entry, etc.), required PPE and other special safety requirements would be needed to safely accomplish the work.

Interviews of licensee training personnel and reviews of training materials indicated that the revised line break procedure had been incorporated into the licensee's training curriculum. Several independent interviews of operations and maintenance personnel verified that they had been trained in the revised procedures and that they had a working knowledge of its requirements.

As noted above, inspectors observed licensee personnel conduct UF_6 line break activities on several occasions after the licensee had implemented its revised procedures. In each case licensee employees were properly equipped with the needed tools as well as with adequate PPE and respiratory protection. The required "Line/Equipment Breaking Permits" and "Task Hazard Analysis" cards had been properly completed documenting the review of safety conditions and the determination of what PPE was required to perform the work safely. Licensee staff was observed conducting pre-job briefings that discussed in detail the work to be done. These briefings also reviewed various types of unexpected conditions that might arise during the course of work and the actions to taken in the event an unexpected condition was to occur. Interviews of the licensee personnel performing and supervising the work indicated that they were very knowledgeable regarding the potential work hazards that the job entailed, of the measures that had been taken to ensure that the line had been purged of any hazardous material and that line about to be broken did not contain any residual pressure.

(ii) Use of Personal Protective Equipment

The SIT determined that the distillation operators who removed the gauge were not wearing adequate PPE for a UF_6 line break. Section 1.2 of the licensee's procedure MTW-SAF-LS-0007, Rev. 4, *"Breaking Lines/Cleaning Blockages*," that was in effect on April 4, 2006, states that "All employees will treat breaking or working on any line, connected fitting, valve, pump or vessel, including clearing of blockages which have ever contained corrosive liquid or gas no matter how long ago," as "a Special Hazard." While the utility air line was nominally considered a utility line, it was known to licensee employees to be blocked, most likely with UO_2F_2, indicating that the utility air line contained UF_6, or had sometime in the past contained UF_6. Section 2.3 of that same procedure states that "Regardless of the checking done and the instruments employed, it can never be assumed that at the end point where the line is broken, there is no product or gas that will be released."

MTW-SAF-LS-0007, Rev. 4, *"Breaking Lines/Cleaning Blockages*," lists the following required PPE for line breaks or cleaning blockages:

- Chemical hood over safety glasses;
- Complete acid resistant suit;
- Gauntlet type gloves taped to the sleeve or use of sleeve protectors;
- Chemical protective boots; and,
- Appropriate respiratory protection.

The SIT determined that the first of the two employees performing the line break on April 4, 2006, was wearing the upper half of a chemical suit along with chemical gloves, hood and a full face respirator. The second licensee employee participating in the line break was not wearing any part of a chemical suit and was wearing hard hat, leather gloves and fabric coveralls. The SIT further determined that licensee personnel did not have a consistent understanding of what conditions defined a UF_6 line break and as a result, inadequate precautions, including the selection of proper PPE, were taken prior to the gauge removal. This was identified as a violation (VIO 2006-008-01) for the failure to wear adequate protective clothing while performing a UF_6 line break.

(c) Conclusions

The inspectors concluded that the licensee had completed a thorough root cause analysis of the events and circumstances regarding the UF_6 leak on April 4, 2006. On the basis of this root cause analysis, the licensee developed and implemented corrective actions that should prevent or reduce the consequences of a similar event. A violation (VIO 2006-008-03) for the failure of licensee employees to wear adequate protective clothing while performing a UF_6 line break was identified (Paragraph 4.b.ii).

5. Temporary Instruction 2600-012

The following Temporary Instruction (TI) 2600/012 items were reviewed:

Information Notice (IN)-89-003, "Potential Electrical Equipment Problems:" Licensee staff described the licensee's acquisition program. The program verified that any equipment or parts purchased for the facility met the manufacturers' and safety standards established in the procedure. Examples reviewed and interviews conducted confirmed the adequacy of the program. This IN is considered closed.

IN-87-033, "Applicability of 10 CFR Part 21 to Non-Licensees:" The inspectors interviewed the licensee's personnel in charge of contracting services and/or products from vendors. The inspectors also reviewed the licensee's policy for contractors. The information gathered from the licensee verified the fact that the licensee was in compliance with requirements of 10 CFR Part 21. This IN is considered closed.

IN-86-077, "Computer Program Error Report Handling:" The licensee does not possess or handle enriched uranium at this facility and does not possess or use criticality equipment or associated software. Interviews with licensee staff and a review of the procurement process indicated that the licensee had adequately responded to issues associated with equipment used in the FMB control room for production process control. This IN is considered closed.

IN-95-051, "Recent Incidents Involving Potential Loss of Control of Licensed Material:" The licensee controlled and accounted for sealed sources inside the controlled area. This area is under surveillance of contractor ground force. The licensee maintained an adequate number of calibrated survey instruments in conformance with the requirements of the license. The licensee had an approved bioassay program in accordance with its license application. Interviews of licensee personnel indicated that they have never suspected deliberate misuse of licensed material.

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 September 22, 2006. The plant staff acknowledged the findings presented. Although proprietary documents may have been reviewed during this inspection, the proprietary nature of these documents are 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. Erickson, Operations Manager
K. Babcock, Fluorine Products Leader
J. Cybulski, Supply Chain Leader
C. DeLand, Maintenance/Reliability Manager
J. Johnson, Safety Supervisor
L. Litinski, Health Physics Specialist
B. Muiter, Training
E. Murphy, Information Technology Manager
S. Patterson, Health Physics Supervisor
J. Riley, Nuclear Regulatory Affairs Manager
N. Rodgers, Health Physics Specialist
G. Stegman, Maintenance Representative
B. Stokes, Health Physics Specialist
G. Wood, Project Manager, Security

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

2. INSPECTION PROCEDURES (IPs) USED

IP 83822	Radiation Protection
IP 86740	Transportation
IP 88075	Event Follow-Up

3. ITEMS OPENED, CLOSED, AND DISCUSSED

Item Number	Status	Description
2005-05-03	Closed	URI - Ongoing internal investigation of the licensee's bioassay tracking system (Paragraph 2.a)
2006-05-01	Open	VIO - Failure to follow the implementation and development of plant technical procedures (Paragraph 4.b.i)
2006-007-01	Closed	URI - Followup on April 4, 2006,UF_6/HF Release (Paragraph 4)

2006-08-01	Open	VIO - Failure of to wear adequate protective clothing while performing a UF_6 line break (Paragraph 4.b.ii)
2006-08-02	Open	VIO - Failure to post radiation area (Paragraph 2.d)
2006-08-03	Open	VIO - Failure to perform adequate inspection of a UF_6 cylinder prior to shipment (Paragraph 3.a)

4. LIST OF ACRONYMS USED

ADAMS	Agency Document Access and Management System
ALARA	as low as reasonably achievable
CEDE	Committed Effective Dose Equivalent
CFR	Code of Federal Regulations
cpm	counts per minute
CY	calendar year
DDE	Deep Dose Equivalent
dpm	disentegrations per minute
E- CATS	Electronic Corrective Action System
FMB	Feed Materials Building
HF	Hydrofluoric Acid
HP	health physics
IFI	Inspector Follow Up Item
IN	Information Notice
IR	inspection report
mR/hr	milliroentgens per hour
MTW	Metropolis Works
NCV	non-cited violation
NOV	Notice of Violation
NRC	United States Nuclear Regulatory Commission
OI	NRC Office of Investigations
PARS	Publicly Available Records
PPE	Personal Protective Equipment
Rev.	Revision
RWP	Radiation Work Permit
SCBA	Self Contained Breathing Apparatus
SDE	Shallow Dose Extremity
SIT	Special Inspection Team
TEDE	Total Effective Dose Equivalent
TI	Temporary Instruction
URI	Unresolved Item
UF_6	Uranium Hexafluoride
VIO	violation

Office of Investigations Synopsis

Case No. 2-2006-010

Enclosure 3

Official Use Only - OI Investigation Information

SYNOPSIS

This investigation was initiated by the U.S. Nuclear Regulatory Commission (NRC), Office of Investigations (OI), Region II (RII) on January 23, 2006, to determine whether the inspection certification and shipping paperwork for a UF6 cylinder was falsified by Honeywell International Inc., (Honeywell) employees to indicate that the cylinder was undamaged when it was shipped from Honeywell to the Paducah Gaseous Diffusion Plant (PGDP). Upon receipt of the cylinder, PGDP rejected the cylinder due to damage.

Based on the investigation, OI did not substantiate that a Honeywell employee willfully falsified the inspection certification/shipping paperwork for the UF6 cylinder. Additionally, OI did not substantiate that a second Honeywell employee willfully violated licensee procedures by not reporting the damaged cylinder to management.

Approved for release on 10/12/06 cfe

OFFICIAL USE ONLY - OI INVESTIGATION INFORMATION

Case No. 2-2006-010