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

January 5, 2006

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

SUBJECT: NRC INSPECTION REPORT 40-3392/2005-006 AND NOTICE OF VIOLATION

Dear Mr. Edwards:

This letter refers to the inspection conducted on December 5-9, 2005, at the Honeywell Specialty Chemicals facility. The purpose of this inspection was to perform a routine review of the implementation of the chemical safety program and to determine whether activities authorized by the license were conducted safely and in accordance with NRC requirements. At the conclusion of the inspection on December 9, 2005, 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 two Severity Level IV violations of NRC requirements occurred. The violations were evaluated in accordance with the NRC Enforcement Policy, which is included on the NRC's web site at http://www.nrc.gov/what-we-do/regulatory/enforcement.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. The first violation involves failures to insure control of control room procedures. The second violation involves failures to follow procedures for cylinder valve installations and performing a line break.

In addition to the violations, the NRC identified that your staff had concluded that the upgrade of the control room to improve its capability to serve as a "safe haven" was complete. Our inspection identified that, although the physical modifications were complete, other actions to assure the upgrades could be used by your staff, such as training staff on the new equipment, had not been completed. In a telephone call between you and me on January 5, 2006, we discussed the need for improved management oversight of upgrades to ensure all aspects of

the upgrade is complete prior to Honeywell management concluding that the upgrade is in fact complete. You stated that you had assigned one of your managers to oversee the completion of NRC-related plant improvements to assure they will function as intended before they are considered complete.

The NRC has concluded that information regarding the reason for violation B, the corrective actions taken and planned to correct the violation and prevent recurrence is already adequately addressed on the docket of this report. Therefore, you are not required to respond to this letter 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.

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.

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 redaction.

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

Sincerely,

/RA/

Douglas M. Collins, Director
Division of Fuel Facility Inspection

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

Enclosures: 1. Notice of Violation
2. NRC Inspection Report 40-3392/2005-006

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

Distribution w/encls: (See page 3)

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

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

ADAMS: X Yes ACCESSION NUMBER:_____

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI			
SIGNATURE	MC 1/5/06	OL 1/5/06	JP 1/5/06	JP 1/5/06			
NAME	MCrespo	OLopez	JPelchat	JHenson			
DATE	1/ /2006	1/ /2006	1/ /2006	1/ /2006	1/ /2006	1/ /2006	1/ /2006
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

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NOTICE OF VIOLATION

Honeywell Specialty Chemicals
Metropolis, Illinois

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

During an NRC inspection conducted on December 5-9, 2005, violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, 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."

Contrary to the above, the licensee failed to review, revise, approve, and implement plant written procedures in accordance with Plant Policy titled "Procedure Control Policy" as described in the following examples:

1. Procedure Control Policy, AD-7, issue date 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 4.24.16 of Procedure MTW-ADM-PRO-0103, Revision 9, requires that if the expiration date on the Temporary Procedure has passed, then cancel and replace the Temporary Procedure in the appropriate Procedure Manual.

   On December 8, 2005, NRC inspectors identified that the expiration date on a Temporary Procedure had passed, and the procedure had not been properly replaced in the appropriate Procedure Manual even though a permanent procedure had been issued.

2. 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.

   Step 4.1.3 of Procedure MTW-ADM-OPS-0110, "Operator Aids," requires that a permanent or temporary procedure exist if procedural steps are required in an operator aid.

On December 8, 2005, the inspectors identified that an operator aid that required procedural steps, "Instructions for UF_6 Release Control," had been posted in the Feeds Material Building control room without having a permanent or temporary procedure written. The operator aid was also out-of-date and could not be implemented as written.

The above two examples constitute 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 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.

Contrary to the above, the licensee failed to follow procedures as written and described in the following examples:

1. Step 10.2.6 of procedure MTW-QAM-UF6-0210, Valve Installation on Clean UF_6 Cylinders, requires that during the installation of an approved UF6 cylinder valve, the thread engagement must be a minimum of 7 and a maximum of 12 using a minimum of 200 ft-lb torque and a maximum of 400 ft-lb torque.

   On July 15, 2005, during a review of quality records for Uranium Hexafluoride cylinders valves installation conducted by USEC, it was determined that the licensee was not ensuring that cylinder valves were installed with a minimum of 200 ft-lb torque and a maximum of 400 ft-lb torque.

2. Procedure MTW-QAM-UF6-0210, Valve Installation on Clean UF_6 Cylinders, does not authorize the use of any thread lubricant to facilitate installation of cylinder valves.

   Prior to October 26, 2005, the licensee used a thread lubricant to facilitate installation of cylinder valves when none was authorized in the applicable procedure. Specifically, maintenance mechanics used Teflon spray when replacing some cylinder valves.

3. Step 4.1.9 of procedure MTW-SAF-LS-0007 requires that the assistant operator judge wether valves and isolation equipment are in the appropriate position.

On November 15, 2005, during routine maintenance to replace a valve on a UF_6 vaporizer, the assistant operator failed to adequately judge wether valves and isolation equipment were in the appropriate position. As a result, a minor release of UF_6 occurred. The UF_6 release was confined within the Feed Materials Building.

The above three examples constitute a Severity Level IV violation (Supplement VI).

The NRC has concluded from the information regarding the reason for violation B examples 1 and 2, that the corrective actions taken and planned to correct the violation and prevent recurrence and the date when full compliance was achieved are already adequately addressed on the docket in this inspection report. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 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).

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 Violations A and B example 3, or, if contested, the basis for disputing the violations or severity level, (2) the corrective steps that have been taken and the results achieved for Violations A and B example 3, (3) the corrective steps that will be taken to avoid further violations for A and B example 3, and (4) the date when full compliance will be achieved for Violations A and B example 3. 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 5th day of January, 2006.

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.:	40-3392
License No.:	SUB-526
Report No.:	40-3392/2005-006
Licensee:	Honeywell International, Inc.
Facility:	Metropolis Works
Location:	P. O. Box 430 Metropolis, IL 62960
Date:	December 5-9, 2005
Inspectors:	Manuel G. Crespo, Fuel Facility Inspector Omar R. Lopez, Fuel Facility Inspector John M. Pelchat, Senior Health Physicist Steven G. Subosits, Fuel Facility Inspector in Training
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 40-3392/2005-006

The purpose of this inspection was to perform a routine review of the implementation of the chemical safety program. 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 program as outlined below:

Chemical Safety

- The licensee's Integrated Safety Analysis adequately reflected the existing plant configuration (Paragraph 2.a).

- The licensee adequately performed maintenance activities in accordance with approved site-wide safety procedures (Paragraph 2.a).

- The licensee's implementation of chemical safety training aspects into the operator training program was adequate to ensure chemical operations were conducted safely (Paragraph 2.b).

- The licensee was adequately controlling and performing preventative maintenance and inspection activities on critical equipment at the appropriate frequency. An inspector follow-up item was opened to track the modifications of the hydrogen analyzer procedure to more accurately reflect the maintenance performed by the technicians (Paragraph 2.c).

- The licensee's management of change process was adequate to ensure that safety significant plant modifications undergo thorough preparation and review prior to approval and implementation (Paragraph 2.d).

- Audits and inspections were documented and conveyed to management, and audit findings were resolved in a timely manner (Paragraph 2.e).

- One violation, with three examples, was identified for failure to follow procedures. One violation with two examples was identified for the failure to control procedures in the Feeds Material Building control room (Paragraph 2.f).

- The licensee's corrective actions program was noted to have a weakness in the management and evaluation of corrective actions, resulting in incorrect status indicators regarding the completion of upgrades (Paragraph 2.g).

Attachment:
Partial List of Persons Contacted
Inspection Procedures Used
Items Opened
List of Acronyms Used

REPORT DETAILS

1. Summary of Plant Status

During the inspection period, routine operations were conducted in the Feeds Material Building (FMB) without incident.

2. Chemical Safety (Inspection Procedures (IPs) 88056-88066)

a. Process Safety Information (IP 88056)
Hazard Identification and Assessment (IP 88057)
Site-Wide Safety Procedures (IP 88059)

(1) Scope and Observations

The inspectors reviewed selected portions of the licensee's recently submitted Integrated Safety Analysis (ISA) for the FMB, dated October 21, 2005, to ensure that it accurately reflected the controls present in the plant. The inspectors noted no significant differences between the controls stated in the ISA and those present in the actual plant. The ISA will continue to be reviewed by the NRC as part of the license renewal process.

The inspectors discussed the chemical safety program with the licensee and determined that there were no major changes in the program since the previous chemical safety inspection. The information that comprised the chemical safety plan was reviewed. The inspectors observed job safety in the plant, including the use of a special work permits, confined space entry permits, lock-out/tag-out, and hot work permits for welding which included a fire watch. No safety issues were identified. The inspectors also noted that safety showers and eye wash stations were generally in satisfactory condition.

The inspectors observed maintenance activities to ensure that they were performed in accordance with approved written procedures. The inspectors determined that maintenance personnel wore the required personnel protective equipment.

(2) Conclusions

The licensee's ISA adequately reflected the existing plant configuration. The licensee adequately performed maintenance activities in accordance with approved site-wide safety procedures.

b. Chemical Safety Training (IP 88061)

(1) Scope and Observations

The inspectors reviewed the basic chemical operator and green salt process lesson plans for coverage of chemical safety training topics such as operating procedures, personal protective equipment, and process hazards. The inspectors reviewed two plant operator training files to verify the implementation of the operator training and qualification process. Review of these records showed that general safety training such

as HAZWOPER, lockout/tagout, and radiological safety, as well as specific chemical process operations training, was completed as part of the operator training and qualification process.

(2) Conclusions

The licensee's implementation of chemical safety training aspects into the operator training program was adequate to ensure chemical operations were conducted safely.

c. Detection and Monitoring (IP 88060)
Maintenance and Inspection (IP 88062)

(3) Scope and Observations

The inspectors examined preventive maintenance (PM) and functional test records for selected safety significant controls to verify that the PM program was implemented adequately. The inspectors reviewed selected pressure vessel inspections for the distillation area and found no overdue inspections. The inspectors also reviewed PM records for selected critical equipment from the ISA, specifically the hydrogen analyzers. Upon review of the records, the inspectors noted that the procedure for the PM did not include testing the safety interlock mechanism. When this observation was brought to the licensee's attention, the licensee stated that the interlock was tested with the PM and that the procedure for the PM will be modified to properly reflect the adequate performance of this task. Inspector follow-up item (IFI) 2005-06-01: Hydrogen Analyzer Interlock Testing will be opened to track the completion of this task.

(2) Conclusions

The licensee was adequately controlling and performing preventative maintenance and inspection activities on critical equipment at the appropriate frequency. An IFI was opened to track the modifications of the hydrogen analyzer procedure to more accurately reflect the maintenance performed by the technicians.

d. Management of Change (IP 88063)

(1) Scope and Observations

The inspectors interviewed the management of change coordinator regarding the licensee's management of change process to verify that safety significant modifications were reviewed, approved, and documented according to the applicable licensee management control procedures. The inspectors walked down one plant modification in the field with a plant design engineer and verified the as-built configuration versus the modification package for a recent change in the distillation process area. No issues were noted. The inspectors also confirmed that the changes to process controls were incorporated in the affected operating procedures.

(2) Conclusions

The licensee's management of change process was adequate to ensure that safety significant plant modifications undergo thorough preparation and review prior to approval and implementation.

e. Audit and Inspection (IP 88066)

(1) Scope and Observations

The inspectors reviewed the licensee's audit and inspection program to verify that audits and inspections were performed, the results documented and conveyed to management, and that audit findings were resolved in a timely manner. The results of selected portions of several quarterly and monthly audits and inspections were reviewed. The inspectors noted that the audits were documented, assigned, and tracked to completion or follow-up. The inspectors verified that proper notification and follow-up actions were taken as appropriate. There were no issues noted in this area.

(2) Conclusions

Audits and inspections were documented and conveyed to management, and audit findings were resolved in a timely manner.

f. Standard Operating Procedures (IP 88058)
Emergency Procedures (IP 88064)
Incident Investigation (IP 88065)

(1) Scope and Observations

The inspectors reviewed standard operating procedures (SOPs) for the FMB to verify procedures were developed and being used for routine operations. Interviews conducted with plant operations personnel confirmed that operating procedures were being used by operators in the field in conjunction with administrative requirements for procedure use in process operations. The reviewed procedure manuals contained information on plant startup, routine operations, and shutdown (emergency and normal). The inspectors verified that operators were trained on new and revised SOPs. Based on interviews with plant operations personnel, training personnel, and the document control administrator, the inspector confirmed that in general operators were being trained on new and revised procedures prior to use in the field.

During the review of the procedure manuals, the inspectors identified an expired temporary procedure in a procedure manual in the control room. Step 4.24.16 of Procedure MTW-ADM-PRO-0103, Revision 9, required that if the expiration date on a temporary procedure passed, then it should be canceled and replaced in the appropriate procedure manual. Upon further review, the inspectors noted that the temporary procedure had already been made permanent and had been issued. The licensee speculated that an error was made and that portions of the procedure were improperly reinserted, after being properly removed from the manual by the Document Management System Administrator. This issue was similar to violation (VIO) 40-

3392/2005-003-01, in which expired temporary procedures were found in the procedure manual and not placed into the appropriate review cycle. Upon notification, the licensee removed the expired procedure. The failure to insure procedure control in the FMB control room was identified as a violation of NRC requirements, VIO 40-3392/2005-006-02.

The inspectors observed a shift change in the FMB control room. The inspectors discussed with fluorination and distillation operators the procedures to be used for the existing operating conditions at the time of the shift change. The inspectors noted that operators were knowledgeable of the operating procedures.

On July 15, 2005, during a review of quality records, performed by United States Enrichment Corporation (USEC), for installation of valves in uranium hexafluoride (UF_6) cylinders, it was determined that the licensee was not following procedure MTW-QAM-UF6-0210, Valve Installation on Clean UF_6 Cylinders. Specifically, step 10.2.6 of procedure MTW-QAM-UF6-0210, Valve Installation on Clean UF_6 Cylinders, requires that during the installation of an approved UF6 cylinder valve, the thread engagement must be a minimum of 7 and a maximum of 12 using a minimum of 200 ft-lb torque and a maximum of 400 ft-lb torque. The licensee personnel were not using a certified torque wrench and they were not recording the torque during valve installation, resulting in cylinder valves being installed without verifying the torque values to ensure a minimum of 200 ft-lb torque and a maximum of 400 ft-lb torque. Step 4.11.2 of Procedure MTW-ADM-PRO-0100 requires that policies and procedures be followed as written. The failure to follow procedure MTW-QAM-UF6-0210, Valve Installation on Clean UF_6 Cylinders, was identified as a violation of NRC requirements, VIO 40-3392/2005-006-03.

Upon identification of the issue, the licensee suspended all cylinder shipments with Honeywell valve installations and notified of all recipients of cylinders with valve installations not in compliance. The licensee re-trained authorized personnel that perform valve installations to ensure their understanding of applicable SOPs and devices to be used. The licensee also established a preventive maintenance and integrity program of the torque devices to ensure compliance with SOPs. The licensee conducted several audits of the installation of cylinder valves on clean and cylinders containing UF_6 heel to ensure procedure compliance. The inspectors reviewed the corrective actions and did not find any problems. This example of the violation is considered closed.

A second example of VIO 40-3392/2005-06-03 was identified when licensee personnel used Teflon spray to facilitate the installation of cylinder valves. This issue was discovered when USEC inspectors noted white residue around cylinder valves previously replaced by the licensee when those valves were later replaced by the cylinder manufacturer. Interviews with maintenance personnel disclosed that Teflon had been used when replacing some cylinder valves. Procedure MTW-QAM-UF6-0210, Valve Installation on Clean UF_6 Cylinders, does not authorize the use of any thread lubricant to facilitate installation of cylinder valves. Step 4.11.2 of Procedure MTW-ADM-PRO-0100 requires that policies and procedures be followed as written. Contrary to the above, the licensee used an unauthorized thread lubricant (Teflon spray) to facilitate installation of cylinder valves.

Since the identification of the issue the licensee stopped the shipping of any full cylinder that could be contaminated with Teflon. The licensee stopped the practice of utilizing thread sealant/lubricant other than the ANSI N14.1 required thread tinning. The licensee committed to modify applicable SOPs to include the prohibition of the use of thread sealants/lubricants. The inspectors reviewed the corrective actions and did not identify any problem. Example two of the violation is also considered closed.

The inspectors reviewed a minor UF_6 release that occurred on November 15, 2005. The release occurred while maintenance personnel were performing maintenance on a valve on a flush pot line for a UF_6 vaporizer. To mitigate the release the licensee declared a plant emergency (the lowest status of the plant emergency response plan) and maintenance personnel re-tightened the valve bonnet, which isolated the release. The valve was later replaced and pressure checked to ensure proper operation. The release was confined within the FMB. Further investigations revealed that the assistant operator had attempted to open a valve to relieve pressure on the line, but had not fully opened the valve. The operator misjudged the position of the valve and thought that the valve was fully open, when the valve was not. Step 4.1.9 of procedure MTW-SAF-LS-0007 requires that the assistant operator judge whether valves and isolation equipment are in the appropriate position. Failure of the assistant operator to adequately judge whether valves and isolation equipment were in the appropriate position was identified as example three of VIO 40-3392/2005-006-03.

As part of the licensee's corrective actions in response to the November 15, 2005 event, the licensee reissued an operator aid, "Instructions for UF_6 Release Control." However, step 4.1.3 of procedure MTW-ADM-OPS-0110, "Operator Aids," required that a permanent or temporary procedure exist if procedural steps are required in an operator aid such as this one. The inspectors discovered no procedure existed that possessed the procedural steps in the operator aid. Therefore, the operator aid was improperly issued. Upon closer review, the inspectors also discovered that it was out-of-date and could not be implemented as written. This finding was identified as a second example of the failure to insure procedure control in the FMB control room, VIO 40-3392/2005-006-02. Upon notification of the finding, the licensee removed the operator aid.

During the review of the event, the NRC inspectors noted that the process and instrument diagrams (P&IDs) for the area in question lacked valve numbers. While valve tags had been placed on some of the valves in the process area, the P&IDs lacked these identifiers. When this was brought to the licensee's attention, the licensee committed to incorporating the valve numbers into the P&ID's. This corrective actions will be tracked as IFI 40-3392/2005-06-05: Valve Numbers for P&IDs.

(2) Conclusions

One violation, with three examples, was identified for failure to follow procedures. One violation with two examples was identified for the failure to control procedures in the FMB control room.

g. Follow-up on Licensee's Continuing Corrective Actions Matrix

(1) Scope and Observations

The inspectors reviewed a selective sample of the licensee's activities to improve the material condition of facilities in which licensed materials were handled. These improvements were a subset of plant wide enhancements that the licensee committed to the NRC that it would complete. The commitments were captured in the Honeywell Matrix Table in Inspection Report 40-3392/2005-05.

In the Honeywell Matrix Table, the licensee had committed to implementing "safe haven" improvements to the second floor control room in the FMB. These improvements were designed to allow control room personnel to remain at their stations in the event of a hydrofluoric acid or UF_6 release to carry out mitigating or corrective actions to control the release, or carry out a safe shut down of the plant before evacuating the control room. These improvements included installation of a closed air supply system to allow control room personnel to continue to breath safely. In a public meeting conducted at the NRC Region II office in Atlanta, GA, on September 20, 2005, the licensee provided documents that indicated that the control room "safe haven" improvements were complete.

In reviewing this issue, the inspectors verified that the necessary equipment had been installed. However, interviews of control room personnel indicated that the control room staff had not received any training or procedures regarding the use of the new air system. Specifically, licensee personnel had not been trained when to don the new equipment, how to use it, or when it would be appropriate to remove it. Furthermore, the inspectors observed more than five licensee employees in the control room when only five air line supplied respirators were available. Control room personnel indicated that only 2 to 3 persons were needed to carry out a safe plant shut down, but they did not have a clear understanding of which individuals were expected to evacuate to feed materials building immediately and which were expected to remain in the control room to control the release, or carry out a safe shut down of the plant.

Review of the licensee documents that indicated that the control room "safe haven" improvements were complete along with interviews of the Nuclear Regulatory Affairs Manager indicated that the Maintenance Manager was responsible for the upgrade. Interview of the Maintenance Manager verified that he did report the project as completed upon procurement and installation of the air supply system. Further discussions with licensee personnel indicated that the Safety Supervisor was responsible for the development of the implementing procedures and the training of control room personnel in those procedures. Based on interviews of the Safety Manager and other plant personnel, the inspectors found that the procedures were in development but that the licensee was awaiting additional information regarding storage of the masks before completion and implementation of the procedures.

Interviews of the Nuclear Regulatory Affairs Manager, Safety Supervisor and the Maintenance Manager revealed that no individual at the licensee's facility had been designated in an oversight role of the control room "safe haven" improvements to ensure that all required elements of the upgrade, including establishment of implementing

procedures and training, had been completed before designating the commitment as complete. Further interviews indicated that no one at the licensee facility had specific responsibility to verify that all essential components of each of upgrade was completed before the licensee closed the action. Discussions with licensee personnel indicated that the licensee's overall corrective action program lacked the designation of an individual responsible for ensuring any corrective action was fully completed, especially those that required interdisciplinary effort by more than one licensee organization. The inspectors concluded that this issue was symptomatic of a weakness in the licensee's corrective action program.

(2) Conclusions

The licensee's corrective actions program was noted to have a weakness in the management and evaluation of corrective actions, resulting in incorrect status indicators regarding the completion of upgrades.

h. Follow-up on Previously Identified Issues and Events

(1) (Closed) VIO 40-3392/2004-003-01: Failure to have a procedure for dual-train fluorination operations. As corrective action, the licensee performed a detailed job/task analysis and developed standard, abnormal, emergency, and alarm response procedures. The licensee's continuing efforts to develop and enhance plant procedures are being monitored under its ongoing performance improvement plan. The inspectors have no further issues and this item is closed.

(2) (Closed) IFI 40-3392/2004-004-03: Testing fluorination/distillation equipment with interlocks in place. The licensee developed a method to leak-test the system which did not require the manipulation of the interlock software. The licensee indicated that the management of change process would be implemented in the event that disabling and restoration of safety features for maintenance and testing during operations was required. The inspectors have no further issues and this item is closed.

(3) (Closed) VIO 40-3392/2004-008-02: Two examples of conduct of operations that were not specifically addressed or described in detail in written operating procedures. The licensee revised applicable procedures to include instructions for shutting down Nash pumps for reconfiguration and the switching of low boiler condensers during normal operations. The licensee also intended to install relief protection on each low boiler condenser to avoid having to rely on an adjacent column for a relief path. The inspectors have no further issues and this item is closed.

(4) (Closed) VIO 40-3392/2005-003-01: Several standard operating procedures were not removed from service and immediately placed into the periodic review cycle after an extension for their periodic review expired. The inspectors reviewed the corrective actions taken by the licensee, mostly involving the finalization of the temporary procedures, and found them to be adequate. All issued temporary procedures had been finalized into permanent procedures.

(5) (Open) VIO 40-3392/2005-004-01: Failure to implement the procedural requirements for an inoperative control room alarm. As part of the corrective actions the licensee re-trained the operators and supervisors to ensure compliance with the applicable procedure. The licensee issued a standing order to specifically require the UF_6 production supervisor and the process engineers to review unit log sheets, logbooks, and the inoperative alarm and instrument log. In addition, the licensee plans to incorporate the standing order requirements in to the applicable procedures and an overall alarm response and improvement project. This violation remains open until corrective actions are completed.

(6) (Open) NRC Event Number 41879: Unplanned Contamination Event Due to Filter Failure. Licensee corrective actions to prevent the recurrence of a similar event included the installation and training on instrumentation to detect pressure differences that would indicate a filter bypass. Interviews of licensee maintenance staff and review of records verified that this instrumentation had been incorporated into the licensee's automated maintenance tracking system to ensure that it was inspected on a periodic basis.

The licensee's report dated August 24, 2005, indicated that an investigation found that three of seven filter cartridges in the Ash Vacuum System had deformed gaskets that permitted dust and other materials to bypass the filters. Interviews of licensee staff indicated that as, of the date of the inspection, licensee personnel had not yet determined the cause of the cartridge gasket failure in the Ash Vacuum System and that investigation was still open. Another planned licensee corrective action was the separation of the discharge stack for the Ash Vacuum System from the inlet plenum for the FMB fresh air ventilation system to prevent entrainment of any future releases into the ventilation system. The licensee's report stated that this action would be completed during the next scheduled plant outage in the second calender quarter of 2006. Review of licensee tracking systems and interviews of licensee staff indicated that responsibility for completing the design and ensuring that the system change was incorporated into the outage planning had not yet been assigned.

This item will remain open pending the licensee's completion of the gasket failure analysis and incorporation of the needed plant changes into the licensee's outage plans.

(7) (Closed) NRC Event Number 41435: The inspectors reviewed the licensee's corrective actions for the issue involving incorrectly torqued valves on cylinders received from another facility. No issues were noted in the corrective actions, therefore the item is considered closed.

(8) (Open) NRC Event Number 41977: The inspectors reviewed the licensee's corrective actions for the event that resulted in elevated concentrations of airborne radioactive materials that occurred on September 9, 2005 on the second floor of the FMB. The corrective actions were not yet complete, therefore this item will remain open.

3. 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 9, 2005. The plant staff acknowledged the findings presented.

ATTACHMENT

1. PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Allshouse, Management Assurance Supervisor
D. Edwards, Plant Manager
J. Johnson, Safety Supervisor
D. Mays, Health, Safety and Regulatory Affairs Manager
S. Patterson, Health Physics Supervisor
J. Tennison, Maintenance Manager
J. Tortorelli, Regulatory Affairs Manager
B. Vandermeulen, Quality Assurance Manager

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

2. INSPECTION PROCEDURES USED

IP 88056	Process Safety Information
IP 88057	Hazard Identification and Assessment
IP 88058	Standard Operating Procedures
IP 88059	Site-Wide Safety Procedures
IP 88060	Detection and Monitoring
IP 88061	Chemical Safety Training
IP 88062	Maintenance and Inspection
IP 88063	Management of Change
IP 88064	Emergency Procedures
IP 88065	Incident Investigation
IP 88066	Audits and Inspection

3. ITEMS OPENED, CLOSED, AND DISCUSSED

Item	Status	Description
VIO 40-3392/2004-003-01	Closed	Failure to have a procedure for dual-train fluorination operations (Paragraph 2.h).
IFI 40-3392/2004-004-03	Closed	Testing fluorination/distillation equipment with interlocks in place (Paragraph 2.h).
VIO 40-3392/2004-008-02	Closed	Two examples of conduct of operations that were not specifically addressed or described in detail in written operating procedures (Paragraph 2.h).

VIO 40-3392/2005-003-01	Closed	Several standard operating procedures were not removed from service and immediately placed into the periodic review cycle after an extension for their periodic review expired (Paragraph 2.h).
VIO 40-3392/2005-004-01	Open	Failure to implement the procedural requirements for an inoperative control room alarm (Paragraph 2.h)
IFI 40-3392/2005-006-01	Open	Hydrogen Analyzer Interlock Testing (Paragraph 2.c)
VIO 40-3392/2005-006-02	Open	Failure to insure control of control room procedures (Paragraph 2.f).
VIO 40-3392/2005-006-03	Open	Failure to follow valve installation procedure and failure to follow line break procedure (Paragraph 2.f).
IFI 40-3392/2005-006-05	Open	Valve Numbers for P&IDs (Paragraph 2.f).

4. LIST OF ACRONYMS USED

ADAMS	Agency Document Access and Management System
CFR	Code of Federal Regulations
FMB	Feeds Material Building
IFI	Inspector Follow-up Item
IP	Inspection Procedure
ISA	Integrated Safety Analysis
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
PHA	Process Hazard Analysis
PM	Preventive Maintenance
P&ID	Process and Instrument Diagram
QA	Quality Assurance
SOP	Standard Operating Procedures
UF_6	Uranium Hexafluoride
USEC	United States Enrichment Corporation
VIO	Violation