

Performance Materials and Technologies

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ATTN: Document Control Desk
Director, Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

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

RE: REPLY TO A NOTICE OF VIOLATION
NRC INSPECTION REPORT 40-3392/2012-003 AND NOTICE OF VIOLATION

This letter is Honeywell Metropolis Works' response to NRC Inspection Report 40-3392/2012-003 and Notice of Violation dated July 30, 2012.

During the NRC inspections conducted from April 1, 2012, through June 30, 2012, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

License Condition 18 of the License, Amendment 8, dated February 28, 2011, states, in part, that the licensee shall conduct authorized activities in accordance with the statements, representations, and conditions in License Application dated May 12, 2006, and supplements thereto.

Section 2.6.1, Operating Procedures, of the License Application, states, Honeywell shall establish a process to identify those process operations that require procedural guidance to ensure proper execution and require that these process operations be conducted in accordance with approved procedures. The section further states that written procedures shall govern the procedure control process. These procedures shall address operating procedure preparation, review, revision, approval, and implementation.

Section 2.6.2.4, Procedural Adherence, of the License Application, states, in part, that Honeywell shall establish procedures governing use of and adherence to written procedures.

Contrary to the above, on May 14 and on May 30, 2012, the licensee failed to govern the use of and adherence to written procedures. On May 14, an operator failed to adhere to the requirements of written procedure MTW-SOP-CYL-0701, "Washing UF6 Cylinders," which resulted in a UF6 release in the area of the cylinder wash facility. On May 30, the licensee failed to adhere to the requirements of written procedure MTW-SOP-DIS-0203, Sampling Suspect Cylinders and Maintaining the Sample Vacuum System," which resulted in a UF6 release in the distillation area of the Feed Materials Building. Specifically, the licensee failed to

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ensure that the Secondary Cold Trap was less than 50 degrees Fahrenheit prior to establishing a vacuum at the sample inlet valve using a Kinney pump in distillation.

This is a Severity Level IV violation (Section 6.2.d.).

UF₆ Release in the Cylinder Wash Area

Reason for the Violation:

The Root Cause Analysis revealed the following major reasons for failure to adhere to the requirements of written procedure MTW-SOP-CYL-0701, "Washing UF₆ Cylinders," which resulted in a UF₆ release in the area of the Cylinder Wash facility:

- Insufficient experience in handling a broken valve on a cylinder.
- Failure to recognize the degree of potential hazard of a cylinder exhibiting signs of building pressure.
- The cylinder valve broke when being loosened. The cylinder would not have begun to build pressure if the cylinder valve had not cracked while being loosened and was subsequently broken off.
- The cylinder with the broken valve/wood plug was allowed to sit and build pressure. After the cylinder valve had been broken off and was replaced with a wood plug, the cylinder had been placed on the tilter and left for a period of about 7 hours.

UF₆ Release in the Distillation Area of the Feed Materials Building (FMB)

Reason for the Violation:

The Root Cause Analysis revealed the following major reasons for failure to adhere to the requirements of procedure MTW-SOP-DIS-0203, "Sampling Suspect Cylinders and Maintaining the Sample Vacuum System," which resulted in a UF₆ release in the Distillation area of the FMB:

- Operation personnel did not recognize the hazard of using the Kinney pump as an alternate minus source when valving through a warm Secondary Sample Cold Trap (SSCT). During normal operations the SSCT would have had a continuous supply of refrigerant and would have therefore been cold enough to prevent this incident from taking place. With the G-134a refrigeration system undergoing a preventive maintenance evolution, the trap had been allowed to warm up to ambient temperature. This condition had been allowed to develop over a long period of time without being monitored.
- The Kinney system was being used in a non-routine mode. The Kinney pump has adequate procedures to be used to provide minus during routine sampling. It does not have procedures that govern its use to provide minus for line breaks or evacuating any portions of the system.
- Status of the 134a refrigeration system in the Distillation process was not

communicated effectively.

UF₆ Release in the Cylinder Wash Area

Corrective Steps that Have Been Taken and the Results Achieved:

The Root Cause Analysis on the UF₆ release in the Cylinder Wash area was performed to determine the reason for this incident, identify causes and recommend corrective actions. Completed: 06/04/2012.

Corrective Steps that Will Be Taken to Avoid Further Violations:

- Perform the following modifications of the cylinder wash operating procedure(s) (Target date: 10/30/2012):
 - a. Review and modify the heating process, particularly on the valve end of the cylinder. (Job Safety Analysis and revised procedures that are currently in draft form eliminate this practice.)
 - b. Include a clear description of how to remove the valve (possibly using a torque multiplier without heat).
 - c. Clearly define and include the optimum sequence of events based on information gathered from individuals with prior experience in the unit, consider the use of an In-hand checklist to ensure that that sequence is followed.
 - d. Develop and document an abnormal operations process for responding to a broken valve.
 - e. Ensure that the updated procedure includes steps to require cylinders with broken valves to be neutralized immediately.
 - f. Ensure that the updated procedure includes steps to apply cooling water on a cylinder suspected to contain pressure.
 - g. Ensure that the updated procedure includes steps to take if a cylinder is suspected to contain pressure.
 - h. Ensure that the modified procedure includes a proper step sequence as determined by best practices.
- Update training and procedures to address the removal of cylinder valves and incorporate lessons learned, Task Hazard Analysis action items, and best practices. Target date: 10/30/2012.

UF₆ Release in the Distillation Area of the Feed Materials Building

Corrective Steps that Have Been Taken and the Results Achieved:

- The Root Cause Analysis on the UF₆ release in the FMB Distillation Area was performed to determine the reason for this incident, identify causes and recommend

corrective actions. Completed: 06/22/2012.

- Training Department developed a qualification program to train supervisors during their transition between operating areas. In response to this violation all supervisors that are changing jobs, i.e. experiencing a lateral move, will undergo an Oral Board evaluation by Subject Matter Experts (SMEs). In this case, the supervisor will complete Supervisor Training Guides in Fluorination and Distillation and will be evaluated by the Oral Board to ensure understanding in the new areas. Completed: 07/24/2012.
- Training Department evaluated the need to provide a dedicated trainer for supervisors as they progress through the training period. Training Department assigned a trainer to each supervisor who is qualifying. This training covers several subject areas to determine if an individual can function properly as a supervisor. The instructor prepares all new supervisors for the Oral Board evaluation by SMEs. Completed: 07/27/2012.

Corrective Steps that Will Be Taken to Avoid Further Violations:

- Arrange the following training sessions:
 - a. Operation personnel training on lessons learned and potential hazards of using the Kinney pump for purposes as of its intended use in this event. Target date: 10/30/2012.
 - b. Operator and supervisor training on the Kinney system and its limitations through Continuous Process Training (or some other training program). Target date: 06/30/2013.
- Require the G-134a refrigeration system status be documented in a Distillation log sheet or log books. Target date: 06/30/2013.
- Develop a system that will require readings to be performed during downtime periods. Require operators to conduct routine readings on vessels that contain UF₆ during the downtime periods such as an annual shutdown. Target date: 10/30/2012.

Date When Full Compliance Will Be Achieved:

Honeywell is currently in full compliance with License Condition 18 of the License SUB-526, Section 2.6.1, Operating Procedures, and Section 2.6.2.4, Procedural Adherence, of the License Application.

If you have questions, need additional information, or wish to discuss this matter, please contact Bob Stokes, Regulatory Affairs and Radiation Protection Manager, at (618) 524-6341.

Sincerely,

Larry A. Smith
Plant Manager

cc: Region II, US Nuclear Regulatory Commission
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