

**PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-II-14-008C**

This supplemental preliminary notification constitutes EARLY notice of events of possible safety or public interest significance. The information is as initially received without verification or evaluation, and is all that is known by Region II staff (Atlanta, Georgia) on this date.

**Facility:**

Honeywell International, Inc.  
 Honeywell Specialty Chemicals  
 Metropolis, IL  
 Dockets/License: 40-3392/SUB-526

**Licensee Emergency Classification:**

- Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

**SUBJECT: UPDATE - HONEYWELL METROPOLIS WORKS SHUT DOWN DUE TO UF<sub>6</sub> LEAK**

On October 26, at 8:24 p.m. EDT, Honeywell Metropolis Works experienced a leak of Uranium Hexafluoride (UF<sub>6</sub>) from a cold trap inside the Feed Materials Building (FMB). A cold trap is a large tank where UF<sub>6</sub> accumulates and is cooled and solidified which can be later heated and drained during normal plant operations. The cold trap was heated and was being drained when it leaked. The UF<sub>6</sub> vaporized and interacted with moisture in the FMB allowing it to convert to UO<sub>2</sub>F<sub>2</sub> (a solid form of uranyl fluoride which is a yellow powder) and HF (hydrogen fluoride gas). Honeywell operators shut down the plant and evacuated the FMB. Emergency responders reentered the FMB and stopped the leak. Honeywell declared an "All Clear" at 3:16 a.m. EDT on October 27. No injuries were reported.

Through a detailed review of numerous records and interviews of both on-site and off-site personnel who were present during the event, the NRC inspection found that Honeywell did not recognize that the HF released from the FMB warranted an emergency classification of ALERT. Honeywell agreed with the NRC findings and subsequently reported their failure to properly classify the October 26 event to the NRC at 2:04 p.m. EST on November 5 [NRC Event Notification 50594].

Honeywell has determined that if any HF travelled beyond their property it would have been of such low concentration as to pose no public safety hazard. The NRC has reviewed Honeywell's calculations on the amount of HF released and their subsequent plume estimate. The NRC has concluded Honeywell's assessment of the release was reasonable. Additionally, the NRC has reviewed weekly radioactive air monitoring reports for the fence line and nearest residence, and found that the activity results were within the Honeywell license limits.

The NRC issued a Confirmatory Action Letter dated November 7 (ML14311A670) which detailed the corrective actions Honeywell was required to complete prior to restarting the facility.

The NRC has completed inspecting Honeywell's corrective actions covered by the Confirmatory Action Letters. The NRC has concluded the implemented actions provide high confidence Honeywell will properly assess any future events in accordance with the requirements of the emergency plan and has authorized restart of the Honeywell facility.

The information presented herein has been discussed with the licensee, the State of Illinois, and local officials, and is current as of 11:30 a.m. EST on November 13.

**ADAMS Accession Number: ML14317A553**

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