

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

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 basically 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. The plant is currently shut down. No injuries were reported.

Honeywell's initial assessment of the event determined that no NRC emergency classification thresholds were exceeded.

NRC inspectors have been on-site since October 27 and have completed their initial inspection of Honeywell's response to the event. 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 Number 50594]. The NRC has concluded no detectable radioactive material was released from the FMB. 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 plans to review Honeywell's calculations on the amount of HF released, their subsequent plume estimate, and the results of their off-site vegetation samples for HF.

The NRC will confirm the adequacy of Honeywell's corrective actions to ensure effective implementation of their emergency plan prior to resuming operations.

The information presented herein has been discussed with the licensee, the State of Illinois, and local officials, and is current as of 7:30 a.m. EST on November 6.

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