

July 27, 2011

**PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE** PNO-II-11-004

This 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:**

Paducah Gaseous Diffusion Plant  
United States Enrichment Corporation  
Paducah, KY  
Docket/Certificate: 70-7001/GDP-1

**Licensee Emergency Classification:**

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

SUBJECT: CHLORINE TRIFLUORIDE RELEASE AT THE PADUCAH GASEOUS DIFFUSION PLANT

On July 27, 2011, at 4:15 a.m., CDT, the licensee declared an Alert and activated its emergency operations center after release of non-radiological chlorine trifluoride gas occurred while an operator was connecting a cylinder containing the hazardous gas to a holding tank. The operator immediately evacuated the building and personnel in nearby facilities were directed to shelter-in-place. The licensee terminated the Alert declaration at approximately 6:32 a.m., CDT, after emergency responders isolated the leak and air samples confirmed that the leak had been stopped.

One responder was treated at the on-site medical facility for a pulled arm muscle. Due to the limited volume of gas available for release, there was no risk of exposure to the public. The licensee issued a press release and is conducting an investigation into the cause of this event. The NRC's resident inspectors responded to the emergency and monitored the licensee's response.

The information presented herein has been discussed with the licensee and the State of Kentucky and is current as of 11:00 a.m. on July 27, 2011.

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