I N T E R O F F I C E M E M O R A N D U M

Date: 12-Jan-1996 07:50pm EDT
From: OKEEFED
OKEEFED@PED26@MRGATE@CLE
Dept:
Tel No:

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Subject: PEDRICKTOWN NARRATIVE REPORT

Subj: NARRATIVE REPORT FOR 1/5/96

Incident of Experience Value
VCM Release
The Geon Company
Pedricktown Plant

Summary and Cause:

On January 5, 1996, at 15:58 pm, a leak occurred at a partially open 1" ball valve that serves as a bleed valve on the access door for the chip catcher on Poly 6E pumpout pump. Approximately 2.56 pounds of VCM was released over a 10 minute period. The local LEL monitoring system activated the deluge system, which in turn sounded the fire alarm.

The leak was isolated and there were no injuries or personnel exposures. The Fire Brigade responded to the incident swiftly and properly. Emergency Response communications with all appropriate external agencies and company personnel was conducted as required. The All Clear was sounded at 16:40 pm.

Board of Review:

A board of review was held on January 5, 1996, immediately after the incident with the following in attendance:

Cil Knutsen	Plant Manager
Dennis O'Keefe	Safety/HR Manager
Carl Stolfo	Manufacturing Manager
Jim DiRienzo	Process Engineer
Lance Herrman	Console Technician

Corrective Action:
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1. Provide pipe plugs/caps that are tethered to all bleed/vent valves in VCM service. W.Burl/J.Cusick/R.Bacon by 2/1/96.
2. Update WPS Procedures to make certain that removal/replacement of all pipe plugs/line blanks are required at all bleed/vent valves in VCM service. R.Bacon by 2/1/96.
3. Establish routine auditing of all bleed valves in VCM service for proper compliance. J.Kiel by 1/15/96.

REDACTED

NGC 13594

4. Perform complete physical audit of plant hardware to ensure compliance with plant practices. J. Kiel by 1/30/96.

Narrative:

On January 5, 1996, at 15:58 pm, a 25% LEL alarm sounded in the Suspension resin control room for the sensor on the 1st floor in Poly 5-6 building annex. was the console operator at the time. Almost immediately there was a 50% LEL alarm at the same sensor, which initiated the deluge system and the fire alarm. The fire alarm alerted Willie Burl, suspension lead tech, Lance Herrman, the outside console tech, and initiated fire brigade activities.

Burl and Herrman looked into Poly 5-6 annex on the first floor, but could not see any leak due to the poor visibility created by the deluge system. The control room reported several high GC readings in the Poly 5-6 annex and low levels throughout the Poly 1-4 first floor area. The fire brigade responded and started stretching hoses to cover the area once the deluge was shut down to locate the leak.

Burl shut the deluge block valve to the Poly 5-6 annex. Burl and Herrman donned Scott air packs and entered poly 5-6 to look for the leak. All GC readings were dropping during this time. Burl and Herrman did not find any obvious leak and exited the building. They went to the control room and obtained HNU sensors and returned to the building for a more accurate investigation. Herrman entered the 1st floor and Burl went to the top floor. Herrman saw a small amount of VCM vapor leaking from a 1/2" pipe nipple on the discharge of a 1" ball valve at the chip catcher access door on Poly 6 pumpout pump. Herrman shut the partially opened valve and the leak stopped. All GC readings returned to less than 1 PPM before the ALL CLEAR was sounded at 16:40 pm.

Facts Surrounding the Incident:
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* There were no ambient VCL readings above 1 ppm in the Poly 5-6 annex prior to the 25% LEL alarm.
* Poly 6 had been previously opened and HRC'd earlier in the day. The chip catcher was not opened at this time.
* Poly 6 was completing the last VCM recovery break prior to charging. The condensate from the steam heating had been pumping for 3-4 minutes prior to the initial LEL alarm.
* Poly 6 pressure reading was 7 psig and was on low pressure recovery.
* Poly 5 was closed and at 0 psig and waiting to be pulled down to a vacuum.
* There was no plug or cap on the discharge nipple as required by standard plant practice.
* The valve handle was not on the stem of the valve involved in this incident.
* Pump cavitation occurs routinely during normal operation of this equipment and causes noticeable vibration.

Management Systems Investigation:
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* All safety systems operated as designed. The LEL, GC, deluge and fire

alarm functioned normally.

* The personnel responding to the incident used proper personnel protective equipment.
* All fire brigade interaction and communications with State agencies were made as required.
* Bleed valves are used on avg. once/week to break vacuum when opening poly chip catchers.
* An inspection of the other polys revealed two other bleed valves that were not plugged or capped.
* Pipe plugs tethered to all bleed valves in VCM service are not part of the current process flow diagrams.
* Current WPS operating procedures do not indicate the requirement for putting pipe plugs on bleed valves in VCM service.
* This incident has been categorized as a fugitive emission and will not cause the plant to exceed our annual permit limitation of 9048 lbs.

Conclusion:

Pump cavitation vibration caused the chip catcher access door bleed valve to partially open causing the VCL leak. Operator misoperation was not a direct cause of the incident. Management systems were inadequate to prevent the occurrence.