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Interoffice Communication

To R. D. Gamblin

From Frank Willson

Date July 3, 1975

Subject VCM EMERGENCY, JUNE 30, 1975

I. STORY

At approximately 08:00 June 30, 1975, four mechanics were pulling the large reactor vacuum pump "A" for repairs. A work permit had been issued by J. Eastman, temporary shift supervisor. D-600 was being recovered and when its pressure reached 5-8 psig the automatic air operated valve on the vacuum pump's inlet opened. Flush water followed by VCM escaped from an open flange.

Operators activated large reactor and V-11's deluge systems and sounded the vapor release alarm. They tried, but failed, to manually close the automatic valve. The air line was then disconnected and this prevented the valve from being closed at the control board. After the line was cleared the area was OVA checked for VCM and the all clear sounded at about 08:20.

II. PERSONNEL EXPOSURE

A light (2-3 mph) northeast wind was insufficient to cause rapid dissapation. The VCM cloud first drifted south falling to ground around D-500. It then spread through the area.

The Large Reactor Honeywell read:

Stream #	Time 08:05	Time 08:15	Time 08:25	Location
1	ND	15.0	ND	Control Room
2	ND	ND	ND	401 Receiver
3	ND	Full scale	ND	V-11 1st floor at H-5
4	0.5	39.0	ND	V-11 2nd floor
5	ND	48.0	ND	Sweco
6	ND	44.0	ND	1st floor at D-300/400
7	Full scale	16.0	ND	Top of D-300
8	Full scale	ND	ND	1st floor at D-500
9	Full scale	ND	ND	Top of D-600
10	ND	ND	ND	Breathing Air

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II. PERSONNEL EXPOSURE (Con't)

Our estimates of exposures are:

Mechanics Pulling Pump

J. Gann - 500 - 1000 ppm for very brief period. Hit by flush water, claimed he smelled VCM as he moved out of area.

L. Kennedy - 0.0 ppm. Mechanic heard valve open and evacuated before VC escaped.

D. Nolen - 500 - 1000 ppm for very brief period. Not hit by water, nor smelled VCM but was in area as long as J. Gann.

P. Gillespie - 500 - 1000 ppm for very brief period. Hit by flush water smelled VCM as he evacuated area.

Mechanic Below Pump

G. Reynolds - 500 - 1000 ppm for very brief period. Smelled VC as he evacuated.

Operators

L. Munn - 500 - 1000 ppm for very brief period. Operator was working on the air valve.

J. Eastman - 500 - 1000 ppm for very brief period.

D. Johnson - 75 - 100 ppm. Supervising activities from ground.

R. Seymour - 25 - 100 ppm. Entered area as VC disipated.

K. Egger - 15 ppm, was in control room.

III. Special problem which developed during the emergency and corrective action taken:

1. No one wore breathing protection, even though the Honeywell's 25 ppm alarm sounded and the equipment was readily available

   The Vinyl Department will hold special training session to insure all people directly involved in a VCM emergency wear breathing protection.

2. By not removing the pump's inlet valve air signal line operations failed to make the pump safe to work on.

   The Vinyl Department will set up formal training session for instructing supervisors and operators on making equipment safe for mechanical work.

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III. Special problem which developed during the emergency and corrective action taken: (Con't)

3. Several people did not hear the vapor release alarm, including: contractors working on the new office, the project engineer in charge of supervising contractors, and two vehicle drivers.

~~An air horn is the best solution to this problem.~~

4. Several Safety Department personnel standing by to help and observing the emergency exposed themselves to potential injury from vapor ignition. They have been advised to stand by or observed from a protected spot.

5. No mechanic responded to the fire pump house. The VCM Emergency Plan will be amended to have the Vinyl Shift Mechanic respond to the pump house on a vapor release alarm.

6. Although this emergency occured during daylight we have been told that the wind sock is often invisible at night. J. Uptain has written a work order to provide more light to the sock.

IV. MEDICAL SURVIELLANCE

F. Willson contacted Dr. Whetstone, Ponca City, and described the emergency. D. L. Whetstone advised no special medical surviellance was necessary.

V. OSHA AREA DIRECTOR NOTIFICATION

The incident was reported to Mr. J. E. Blount, OSHA Area Director. The emergency was described to Mr. Blount and C. Crowe. They have requested a written report with emphasis on what corrective action we are taking.

Frank Willson

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cc: JWP, Dept. Heads, Safety Department Staff

an independently powered air horn will be installed that is audible in all plant areas