

TO	K. C. Recko	FIELD POINT OR DEPT. & BLDG. NO.	DATE YOUR LETTER
FROM	Eugene Bujol	Manufacturing Manager - Plaquemine	DATE THIS LETTER
SUBJECT	PLAQUEMINE - MANUFACTURING DEPARTMENT	Shift Foreman - Plaquemine	2-13-84
TOXIC CHEMICAL RELEASE			
REPETITIVE ACCIDENT TYPE 10-A			

Summary:

On January 20, 1984 at 0805 batch 2B572 overpressured and vented vinyl chloride through the double rupture disc assembly. 37400 pounds of vinyl chloride was released to the atmosphere. There was no exposure to personnel and no damage to equipment.

Board of Review:
REDACTED

R. M. Sandfry	Plant Manager
K. C. Recko	Manufacturing Manager
C. D. Langlois	Safety Engineer
	Environmental
D. E. Bujol	Shift Foreman
J. W. Noto	Shift Foreman
	Reactor Area O.T.
	Board Operator O.T.
	Operator Specialist
	Manufacturing Superintendent
	Board Operator O.T.
	Reactor Area O.T.
	Operator Specialist
	Junior Operator Technician

Narrative:

On January 20, 1984 Reactor 2B reached reaction pressure at 0800 hours. The pressure continued to rise past the reaction pressure set point (115 psi). Board Operator, immediately instructed the reactor area operators to take emergency action. All cooling water control valves were checked and found in the open position. The continuous recovery line was checked and did have a flow. The nitric oxide system was pressure checked and lined up while the reactor control valves were being checked. The reactor pressure had now reached 132 psi. Boardman, ordered the operators to inject the nitric oxide. The first cylinder could not be injected immediately due to a gasket which had become dislodged from the N.O. cylinder outlet nozzle. The gasket plugged the N.O. injection line. The first cylinder was injected 2 minutes later at a reaction pressure of 180 psig. The second N.O. cylinder was injected when the pressure continued to rise. The pressure reached 225 psig at which time the dual rupture disc assembly relieved.

Facts Surrounding the Incident:

1. The batch in 2B had an excessive heat-up time. The slow heat up was due to ice pluggage at the steam mixer.
2. In the course of troubleshooting the heat-up problem the condenser control valve was closed. This was a violation of operating procedure.
3. The gasket blocking the N.O. bottle could not be found during leak check since the system is pressured up to the N.O. cylinder nozzle.
4. The N.O. injection procedure was followed. All checks were done according to procedure.
5. Communication between operators at shift change was not complete. There was miscommunication concerning the blocking in of the condenser control valve.

Conclusions & Findings:

Three problems occurring simultaneously resulted in the overpressured batch and release of vinyl chloride to the atmosphere.

1. Operating procedure was not followed. Due to the extreme cold an ice plug formed at the steam mixer to 2B. In the troubleshooting process the condenser control valve was blocked in, this violated operating procedure.
2. Communication at shift relief was poor. There was a miscommunication of information.
3. The overpressured batch may have been prevented if the first bottle of N.O. could have been injected immediately.

Management Systems Investigation

1. All pertinent procedures had been updated within the last two years. All employees had previously received these procedures.
2. Appropriate disciplinary action has been taken with the individuals involved in the incident.

Corrective Action:

1. This incident will be reviewed at all safety meetings.
2. All N.O. cylinders in the plant were checked. The N.O. system pressure check procedure will be reviewed and revised.

3. All operators will review procedures in their respective areas. All operators were instructed that understanding and following procedures is a job requirement.

Eugene Bujol KCR
Eugene Bujol

EB/col

pc: D. Larson
D. Langlois
D. DiRienzo
T. Neff
K. Recko
R. Sandfry
Area Superintendent
Supervision
Bulletin Boards
Safety Committee

00492701

** BFG IMS/VS ----- MESSAGE SWITCHING **

PVC

DEST: CLEVP

ORIG: PL002

DATE: 01/27/84

TIME: 13:54:58

REF ID: A00227

H. WALTERS - CLEVELAND

R A KRUEGER/G F LEFEBVRE - CLEVELAND

R C KAMINSKI/ J F MALONE/ J L HUBEY - CLEVELAND

R D HARDESTY/ S C ALTEN - ALTC AVON LAKE

R M. KREAGER/ G E THOMPSON - ATLTC AVON ALKE

G A KASWELL/ D E. PREY - PEDRICKTOWN

R G SCOTT/ P W SHORE - LONG BEACH

L J MATHEWS/ D T BOWMANS - PORT NECHES

J P GRIFFIN/ R J. GRAHEK - HENRY

R L MARTIN/ EL BEELER - LOUISVILLE

R A ACCARINO/ W E HORTON - ALGC AVON LAKE

G MORLEY/ C MEHL - ALTONA VIA CLEVELAND SAFETY

M S FOX/ W D MORSE - CALVERT CITY

R A KELLEY - AKRON

J D KROMHOLTZ/ A J GULA/ H E PHELPS - AKRON CHEMICAL

T M JONES/ J D CARONA-CONVENT

E. L PAYNE/ W C FULTZ - DEER PARK

J NADY/ C C LEE - NIAGARA FALLS ONTARIO CANADA

S BROUILLARD/ L V GOODE - LAPORTE, TEXAS

REPETITIVE INCIDENT TYPE 8 - CHEMICAL FIRE

REPETITIVE INCIDENT TYPE 8 - CHEMICAL FIRE

AT APPROXIMATELY 1500 ON 1-26-84 A SMALL FLASH FIRE OCCURRED ON
3K-2 DEGASSING COMPRESSOR NEAR THE COMPRESSOR SHAFT. THE FLASH
FIRE OCCURRED DURING THE COMPRESSOR STARTUP WHEN THE MOTOR SHORTED
OUT IGNITING AN APPARENT PACKING LEAK AT THE SHAFT. THERE WERE NO
INJURIES TO EMPLOYEES OR EQUIPMENT DAMAGE DUE TO THIS FLASH FIRE.

FULL REPORT TO FOLLOW.

DAN LANGLOIS

NGC 16195