ACCIDENT/INCIDENT REPORT

South Charleston Plant
(See Safety/Health Procedure #2)

cc for KGH WW-0204 #15

106 Dept. No.

Report No. 106-069-87

IMMEDIATE SUPERVISOR

Department: Polyols | Date Reported: 5/21/87

Location: 643-644 tanks - N.W. 103 | Date of Occurrence: 5/21/87 | Time: Approx. 0500

Description of Accident/Incident: #1 Rx was dumping to 643 tank which was covered in plastic for Asbestos insulation removal. Contractors were checking the job prior to working and smelled a strong odor.

Result: Check Applicable Squares

- ☐ Injury
- ☐ Fire/Explosion
- ☐ Equipment Damage
- ☐ Spill/Emission
- ☐ Product Contamination
- ☐ Production Loss
- ☐ OH Exposure (OSHA Reg. Substance)
- ☐ Other OH related Incident (See back of report)
- ☒ Incident (Near-Miss)
- ☐ Other _____

Basic Cause: Check Applicable Squares

Performance Error
- ☐ Knowledge/Skill
- ☐ Execution/Motivation
- ☐ Physical/Mental

Procedure Error
- ☒ Lack of/Inadequate

Equipment/Material/Facility Error
- ☐ Improper Design
- ☐ Inadequate Maintenance
- ☐ Normal Wear & Tear

Immediate Action Taken & Suggestions to Prevent Recurrence:

Activated sprinkler system on N.W. end of 103 and monitored. Informed Emergency Director and set up road barricades. Isolate tanks from use when needing to be covered with plastic for asbestos removal.

Signature: T. A. Stinespring Date: 5/21/87

DEPARTMENT HEAD

Loss Analysis: ESTIMATED $ LOSS (If Material Loss Occurred, Check Applicable Squares)

A. $ _____ Material Loss _____ Lbs.
B. $ _____ Product Contamination (Mixup, Rerun, Devaluation, etc. _____ Lbs.
C. $ _____ Fire/Explosion Loss
D. $ _____ Equipment Damage Loss
E. $ _____ Production Loss-Business Interruption ($ Gross Margin Loss)
F. $ _____ TOTAL VALUE OF LOSS

Lost To:
- ☐ Air
- ☐ Landfill
- ☐ Ground
- ☐ Process Sewer
- ☐ Cooling Water Sewer
- ☐ Powerhouse

Resulted In:
- ☐ SCWTW Upset/Diversion
- ☐ Permit Violation
- ☐ Community/Agency Contact

Loss Severity Potential:
- ☐ Critical
- ☐ Serious
- ☐ Minor

Probable Recurrence:
- ☐ Frequent
- ☐ Occasional
- ☐ Rare

Composition of Material Loss _____

MAJOR LOSS AREA:
- ☐ Runaway Reaction
- ☐ Fuel-Oxidizer Present
- ☐ Vapor Cloud
- ☐ Start-up or Shut-down Activity
- ☐ Boiler Control Failure

Additional Action: What additional action is planned to avoid this type occurrence in the future? Include both immediate and long range plans, studies, assignments, etc. Responsibilities? Completion dates? Attach additional sheet if necessary.	Accountability	Target Date For Completion
Refer to attached.		
Copy Also J.R. Dement		

PLAINTIFF'S EXHIBIT
UC-2147

☐ Check square if a Review Board will convene Signature: _____ Date: 6/1/87

Consider-is this a confined space?

SAFE UCC 006699

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UNION CARBIDE CORPORATION
SOUTH CHARLESTON PLANT (514)

"Informal"
REVIEW BOARD ANALYSIS

Please route and review as shown. Signify your U/A by initialing:

DEPARTMENT HEADS	MANAGERS DEPARTMENT	SAFETY DEPARTMENT (Last)

A/I Report No. 106-069-87 Description _____

Accountable Dept. Polyols Building 103 Date of Incident 5/21/87

Potential Loss Severity: Critical ____ Serious X Minor ____

Actual Loss Severity: Critical ____ Serious ____ Minor X

Probability of Recurrence: Frequent ____ Occasionally ____ Rarely X

LOSS ANALYSIS:

$	Material Loss
+$	Extra Utilities
+$	Missed Sales (Var. Margin)
+$	Equipment Damage (Replace/Repair)
+$	Cleanup Costs
=$ 0	TOTAL LOSS

ATTACH SKETCH OR PICTURE, IF POSSIBLE

INCIDENT SUMMARY

A plastic enclosure around tank 643/644, installed for asbestos removal, filled with a vapor mixture of nitrogen with a low level of Propylene Oxide present. The vapor occurred while transferring the reactor contents (crude flex polyol) to the lower tank (Tank 643).

INVESTIGATION/SEQUENCE OF EVENTS

Military Time	Event
5/18/87	Vents on tanks were found to be enclosed.
5/20/87	Contractor adjusts plastic enclosure to not contain the vents, but only clears top tank (Tank 644) vent.
5/21/87 a.m.	Operator transfer 1 Rx to Tank 643 (bottom).
5/21/87, 0430	Contractor arrives at unit to begin removal work. While awaiting initiation of "B" HWP and upon job inspection on site, contractors notice oxide odor at the tank.
5/21/87, 0600	Shift group uses fire water/sprinkler until space under the plastic enclosure weathers off.

UCC 006700

PRIMARY CAUSE

Material was transferred into a tank that vented inside the plastic enclosure. Preparation was not adequate and the vents were not checked.

CONTRIBUTING FACTORS (if any)

1. Communication from and within the Polyols staff was not adequate enough to control hazards that could arise with the asbestos removal job and the enclosed area.
2. A confined space viewpoint was not applied.

ACTION TO PREVENT RECURRENCE

Action	Resp.	Completion Date
1. Discuss what constitutes adequate communications and coordination.	DHO	Complete 5/4/87
2. Arrange meeting with Maintenance Department, Safety Department and Operations to discuss and define plastic enclosure around vessel as it pertains to confined space procedures.	DHO	Complete 5/22/87

REVIEWED BY:
REVIEW BOARD

Chairman D. H. Ott Date of Investigation 5/21/87

Member T.A. Stinespring Member F. L. McCarty Member _____

Member E. G. Novakoski Member R. G. Hull Member _____

Member J. G. Givens Member _____ Member _____

5/13/85
3109W

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