MCC 910920

Monsanto

FROM (NAME & LOCATION) J. T. Payne, (SS-18), Texas City, Texas

DATE October 18, 1984 cc G. L. Tromblee O-10

SUBJECT SHAC MINUTES - 10/17/84

REFERENCE

TO :

SHAC Members:

E. P. Bailey	2Z
S. W. Moncla	513D
J. D. Richards	1Z
J. A. Stal, Jr.	OA-11
c: R. T. Hammann	O-22

These are the minutes of the October 17, 1984, SHAC committee meeting.

Future SHAC Meetings

SHAC meetings have been scheduled for the VIP Conference Room at 1:00 p.m. for the following dates:
October 24
October 31 - Conf. Room 7 in Office Annex

EPP Drill

The first draft of the Emergency Procedure Plan Drill is attached. Timing and conflicts with the blood drive are being investigated.

PMSB Notes

Monsanto's Legal Department is evaluating Monsanto's legal position on urine testing for drugs. Mark Riddle is on the Texas Chemical Council Drug Committee and will keep Gene L. Tromblee and us abreast of what other businesses are doing.

Safety Shower Freeze Protection

A plant procedure for safety shower freeze protection was approved by SHAC members and will be further circulated for approval.

STOP Card Analysis

An increase in lift/push/pull incidents, temperature extreme incidents, and rig incidents has been seen in the safety statistics. Individuals around the plant should try to increase their STOP observations in these areas. J. Stal will write an article (with the aid of Mark Riddle) for the plant news on the above and also good STOP observations.

J. T. Payne

JTP:sr
Attachment

SCENARIO

INCIDENT All units are operating on this normal weekday at the Texas City plant. Weather conditions will be the actual wind, temperature and humidity on November 15, 1984, the day of the drill.

The ammonia tank decontamination is proceeding on schedule. The tank is being purged with air to remove N_2 in preparation for tank entry. Ammonia is being pumped from a barge at Dock #4 through the ammonia transfer pumps to the ammonia users at the Texas City and Chocolate Bayou plants. The tank contractor is moving scaffolding in the area to scaffold the inside of the tank when it is ready for entry. One operator and one supervisor are in the area of the ammonia pumps reviewing the valve line-up for the next phase of the decontamination procedure. Two contract carpenters are taking scaffolding off of a truck and stacking it around the tank.

Without warning or alarm of any kind, the valve in the ammonia line at the exchangers fails closed. None of the shutdown devices work at the ammonia transfer pumps. Relief valves blow and put liquid ammonia to the flare (it goes out). A pump seal and a section of tubing blow out and spray liquid ammonia on the pad. The operator, the supervisor, and the two contract carpenters are overcome by ammonia vapors.

PHASE I -- IMMEDIATE POST INCIDENT

The first sign of a problem is the ammonia vapor alarm sounding for pump number 2 in the Department 513 control room. An operator starts towards the ammonia tank and sees the ammonia cloud at the pumps and

coming out the flare. He calls into the chief by radio and the chief calls in a 4-2-1 alarm. Approximately three minutes have elapsed since the beginning of the ammonia release when the alarm is sounded.

The normal spill/fire code is responded to by the Fire Department, the Plant Manager and his staff, and Department 513. Department 513 sends personnel over to the ammonia tank to investigate. Department 513 personnel shut down all ammonia transfer and allow the system to depressure.

PHASE II -- POST INCIDENT

A strong ammonia odor is carried downwind and the affected areas inside Monsanto call the Control Center for assistance and information. Residences, local government and local business interests downwind of the release swamp the Monsanto switchboard with calls for information and assistance.

(If the wind direction is correct, the breathing air system is contaminated.)

(At this point it is anticipated that the Plant Manager will send Industrial Hygiene out to monitor for ammonia in areas downwind and outside of the plant boundaries.)

Downwind of the incident the ammonia concentration is as follows:

¼ mile - 100 ppm

½ mile - 50 ppm

1 mile - 25 ppm

See the attached drawing which shows downwind concentration using a wind out of the south at 15 miles per hour.

The fire crew finds the four people, one operator, one supervisor, and two contract carpenters, lying on the ground unconscious but breathing in the ammonia vapor cloud. A Department 513 operator in a Scott air pack is in the area investigating the problem.

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EMERGENCY PROCEDURE EVALUATION
1984 #2
SEQUENCED EVENTS

TIME	EVENT	WHO	TO WHOM	EXERCISE OBJECTIVE
Phase I				
A=1330 Hrs 11/15/84	Turn in 4-2-1 alarm	Dept. 513 chief	Guard House	Set scenario
A+1	Wind direction and speed	Main Gate	All FD frequencies	
A+5	Describe situation at ammonia tank. Have ammonia transfer stopped	Fire Department	Dept. 513 chief operator	
A+8	Call for ambulance and medical help, with warning to route around scene	Fire Department	Control Center	
A+9	Brief description of the scene at the ammonia tank	Fire Chief	Control Center	
Phase II				
A+11	General description of incident, explaining what happened and magnitude of problem	Fire Department	Control Center	Set scenario, test recognition of potential ex-batter problems/complaints
A+15	Rescue attempt by Fire Crew	Fire Department	Control Center	