

~~Consanto Chemical Company~~
Texas City, Texas

ROUGH DRAFT
6-19-53

To: H. G. Schleicher

Subject: Report on Spill at VCM Unit (June 16, 1953 at 1700)

SUMMARY:

At about 4:53 PM, Tuesday, June 16 a corrosion test plug at the liquid level of 10th tray of the Cracked Gas Absorber(22D5) blew out and caused a spray of HCl-VCM-EDC mixture to blow out over the Distillation Area.

The spill alarm was sounded, the unit shut down, depressured, repaired and put back on stream.

Approximately 8 hours production^{time}/was lost.

No one was injured.

There was a hazard of fire during the spill period. The use of water hoses (spray and fog nozzles) minimized the hazard.

CBY 1017879

RSV0030908

June 19, 1953

Details

The spill was discovered by Andy Mizisin. When on the second floor of the Distillation Unit he smelled strong HCl fumes, and began investigating. When he reached the third deck, he found liquid spraying from a hole in the north west side of the 22D5 column at the 10th tray level. He went to the control room and notified Charles Fullerton and Marvin Morris of the situation. The group went to the Control House north door. Seeing the size of the spray, Fullerton ordered the unit shut down and told Morris to phone in the spill alarm.

The cracking operator, L. J. Donoho, who had gone to the door with the group, went immediately to the cracking area and manually cut off fires at the furnaces (two were on stream and _____ were on standby).

He next cut the feed of the crackers to about 50% to reduce flow to 22D5. As soon as the cracked gas temperature was below 400°C., he stopped feed, started purge gas through the furnaces and cut cracked gases from 22D5 to flare. About 6-7 minutes elapsed.

CBY 1017880

The distillation operators, W. D. Beene and C. M. Goldenschue, first cut steam off 22D6 reboiler to reduce the volume of vapor going back to 22D5. Next steam was cut off 22D7 and 22D8 columns. (22D9 was down for maintenance and 22D10 was on 100% recycle.)

June 19, 1953

Details (Continued)

They tried to cut the liquid 22D6 and 22D7 bottoms back into 22T11 but the fumes were too heavy to get to the valves (22D5 bottoms was already going to 22T11's). Breakers in the switch room were pulled on cracking feed, 22D6 bottoms and 22D7 bottoms pumps and the lean oil to the top of 22D5 column was cut off (by this time the furnaces had been cut to flare). The 22D6 OH vapor line back to 22D5 was blocked in as soon as the 22D6 OH pressure dropped below 15 psig (its PRC setting). Also as soon as the cracked gases were cut to flare the cracked gas feed line to 22D5 was blocked in.

To empty the 22D5 column of liquids, which would continue to vaporize, Chemox masks were put on and the intercooler system and tower sump were pumped out to 22T11.

The Dept. 23 flare was cut off by a Dept. 23 operator shortly after the cracking furnace fires were cut off.

CBY 1017881

Before and during the spill the 22D5 OH gases had been going to Dept. 21 absorbing unit. This was continued until the column had depressured to $\frac{1}{2}$ psig. Time-wise when the plug blew out the column was at 6.5 psig. In three minutes, the spill was discovered and the shutdown began; in seven minutes

Details (Continued)

(from beginning of spill) the pressure was down to 3.5 psig; at 12 minutes this rose to 4.0 when 22D6 and cracking were being depressured through 22D5; at 17 minutes the pressure was back up to 5.2 psig. Depressuring was discontinued and at 20 minutes the column was at 1.0 psig. Over the spill period (20 minutes) the 22D6 pressure dropped from 15.5 psig to 5 psig.

CBY 1017882

RSV0030911