

CHEMICALS

Letter, F.Y. I
INTEROFFICE / LAKE CHARLES *f/s return*
Ben

TO J. A. Hart DATE May 29, 1981
FROM W. E. Sonnier *WES* SUBJECT VCM Release

On Thursday, May 28, a vinyl chloride release occurred beginning at approximately 2:15 p.m. The release was first discovered at 2:40 p.m. when Maintenance personnel noticed material venting from the top of the vent stack at the day tank/sphere area. I was notified of this and upon investigation, found liquid vinyl approximately seven feet up from the base of the stack. (This was apparent from the ice formation on the stack's exterior.)

Further investigation by Operations personnel led to the discovery of the release source. The east SRV (46-2460) on the six-inch VCM transfer line from VCM II to high pressure storage spheres S-1 and S-2 was found to be relieving into the three-inch vent line to the stack. At the time, this transfer line was blocked off to the spheres and the transfer pump was running at VCM II with the recirculation line open to a shift bullet (this was in preparation for a transfer to S-1). The discharge pressure on the pump was 120 lbs. When the relieving SRV was discovered, the transfer line was opened to S-1 in order to allow it to depressurize. This action seated the SRV, at approximately 3:00 p.m. The east SRV was taken out of service and the west relief valve was placed in service.

Although the SRV was relieving, the apparent line pressure was not excessive. The SRV's for this service are to have a 200 lb. set pressure, with a 50 lb. back pressure. This particular SRV was stamped with a 100 lb. set pressure, meaning it was set at the incorrect pressure for this service. This SRV was removed on May 29 for repair. Additionally, these SRV's should not be designed for back pressure since they discharge to an atmospheric vent. Ben Reynolds is following up on this aspect.

It is estimated that approximately 1,750 pounds of vinyl were released and flashed to the atmosphere. This assumes that the bottom seven feet of the stack was filled with vinyl and forty feet of the vent line contained liquid vinyl, as indicated by icing.

It is believed that a similar incident could have occurred on Saturday, May 23. At 7:10 a.m. on this day, it was noticed that the vent stack was iced up approximately eight to ten feet up from the base. The operators were not able to determine the source of the material in the stack, nor were they able to determine if the material was ethyl chloride or vinyl chloride since the drain line from the stack was plugged. There was a transfer made, however, from VCM II to S-2 on Friday evening using the six-inch transfer line. The SRV on this line could have relieved at that time, if conditions were right.

SL 088773

J. A. Hart

-2-

May 29, 1981

There is no evidence that this SRV did discharge prior to these two incidents, although other transfers were made.

cg

cc: C. A. Burns
L. W. Carter
B. D. Reynolds ✓
R. E. Sanders
T. G. Taylor

SL 088774