



ETHYL CORPORATION
PETROLEUM CHEMICALS GROUP
BATON ROUGE PLANT
October 11, 1983

bcc: Ms. K. A. Boudr.
Mr. H. O. Bourqu
Mr. O. M. Brown
Mr. D. F. Couvil
Mr. F. H. Curri
Mr. M. R. Dupuy
Mr. J. L. Griffi
Mr. J. L. Guillo
Mr. D. M. Kirk
Mr. R. M. Lavers
Mr. B. J. Lentz
Mr. L. A. Mitch
Mr. H. G. Olson
Mr. D. E. Park
Mr. E. O. Ponti
Mr. J. D. Spearm

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Gustave Von Bodungen
Program Administrator
Air Quality Division
Office of Environmental Affairs
Department of Natural Resources
P. O. Box 44066
Baton Rouge, Louisiana 70804

Dear Mr. Von Bodungen:

Attached is the report required under Section 76.18(b) of the Louisiana Emission Standards for Hazardous Air Pollutants, Standard for Vinyl Chloride concerning an emergency VCM discharge at Ethyl Corporation's Baton Rouge VCM Plant on October 5, 1983.

Very truly yours,

M. M. Koenecke
Plant Manager

MMK:jht

cc: Mr. Martin Brittain

Report of Emergency VCM Release

1. Date and Time: October 5, 1983, at 2:20 p.m.
2. Location of VCM Discharge: The vinyl chloride was released to a flare through a safety valve on the north VCM product scrubber.
3. Cause of Venting: During recent VCM plant downtime, a 100 psig nitrogen pad was maintained on the product column, C-8. After plant startup, this nitrogen worked its way to the product rundown tanks where the inerts are normally vented to the incinerator. Compression of the inerts in the rundown tank by the rising liquid caused the pressure in the rundown tank to rise. Operating personnel failed to notice the high pressure in the rundown tank which indicates when venting to the incinerator is necessary. Excessive backpressure on the product scrubber, which is upstream from the rundown tank, caused the scrubber disc to rupture. This released VCM liquid to the flare through a safety valve located downstream of the disc.
4. Approximate Weight of VCM Vented:
 - a. During a telephone conversation in July, 1978, between Mr. N. E. Garland of Ethyl and Mr. Martin Brittain of EPA Region VI Headquarters, Mr. Brittain said that the agency presumes that a flare is 90% efficient in destroying the VCM content of the vent gas burned in it. On this basis, the amount of VCM released to the atmosphere through the flare was 200 pounds.
 - b. Recent data published by K. D. Siegel of the University of Karlsruhe in West Germany indicates that a flare is at least 99% efficient in destroying VCM. On this basis, the amount of VCM released to the atmosphere through the flare was 20 pounds.
 - c. Based on flare test data obtained by Ethyl Corporation in 1977, we believe that a flare reduces the VCM content of vent gas burned in it to less than 10 ppm. On this basis, there was less than 10 ppm VCM in the vent gas to the atmosphere.
5. Basis for Determining Vent Loss: The liquid VCM flowing from the product column would have taken the path of least resistance, to the flare. When the source of the release was determined, the safety valve was blocked out and product flow was switched to another rundown tank. The amount of

VCM vented to the flare was assumed to be the total production rate of the VCM plant for the estimated 6.5 minute duration of the release. The recorded production rate at 2:00 p.m. was 18,620 lb/hr. This corresponds to approximately 2,000 lbs of VCM vented to the flare during the 6.5 minute release.

6. Action Taken to Prevent the Discharge: Operating procedure requires that the pressure in the rundown tanks be maintained below 100 psig by venting inerts to the incinerator when necessary. The normal pressure of the rundown tanks is below 60 psig. Inattentiveness of operating personnel in the area allowed the pressure to rise above 100 psig and exceed safety device pressure settings. When the release was noticed, the safety valve was blocked off to stop VCl flow to the flare, and the block valve in the vent line from the rundown tank to the incinerator was opened to lower tank pressure.
7. Measures Adopted to Prevent Future Discharges: Since adherence to current operating procedures would have prevented this release, future discharges of this type should be prevented by again emphasizing proper operating procedures. This has been done.