Heart/H
Reynolds

PPG INDUSTRIES

PPG INDUSTRIES, INC. INDUSTRIAL CHEMICAL DIVISION P. O. BOX 1000 LAKE CHARLES, LA. 70602

March 14, 1984

Mr. William H. Davis
Department of Environmental Quality
Office of Environmental Affairs
Air Quality Division
P. O. Box 44066, Capitol Station
Baton Rouge, LA 70804

Dear Mr. Davis:

The response to your February 24, 1984, letter regarding a safety relief valve discharge of VCM on February 9, 1984, at PPG is as follows:

(1) Set pressure - 100 psig, Q orifice (11.05 in^2).

(2) High pressure alarm point - 75 psig. The high presssure alarm was tested the day after the incident and found to be set properly. The purpose of the high pressure alarm is to warn of rising pressure prior to overpressure. In this case the composition of the vapor space was mostly VCM so the pressure rose only slightly as the level rose until the vessel was nearly full. The small amount of N_2 present was then compressed.

(3) The S-1 level transmitter had been recently calibrated - January 26, 1984. Our records indicate the previous calibration was on March 9, 1983.

(4) The primary level device on the sphere is an internal Varec level gauge. This device failed on December 2, 1983, (broken tape) and we had to use the back-up (dp cell). There are high and low level alarms on the level transmitter (dp cell), which operate independently from the Varec. The sphere was to have been cleared this month for repairs to the Varec as we had to wait until repairs were completed on S-2, the adjacent sphere, for a similar problem. In this particular case the level transmitter on S-1 was found to be off-zero and therefore the alarms were also off.

(5) No. The release was a VCM/N_2 gas mixture with some entrained liquid.

(6) The transfer into the spheres is controlled by the amount of recirculation used on the transfer pump. We recirculate back into the tank from which we are pumping.

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(7) There are several different areas from which we pump to the spheres. In this incident we were pumping from VCM II. The pump curve is attached. Suction pressure normally ranges from 20-60 psig. On February 9 it was about 25 psig.

(8) The two minute release time was estimated as the time it took from the moment we received the call from VC I until the pump was shut down and the SRV reseated. An observer at the site of the release estimated 2-3 minutes, also.

(9) The calculation which was apparently inadvertently omitted from the original report is attached. The 85.3% VCM concentration was relative to the vapor space of the sphere.

Please let me know if you have further questions.

Very truly yours,

James E. Wyche III

James E. Wyche, III
Coordinator, Environmental Systems

JEW/bh

cc: Joe Withers

bcc: File #104.3.04
D. Cannon (w/attachments)
E. J. Tullier/J. E. Fike (w/attachments)
R. P. Byars/J. A. Hart/B. Reynolds (w/attachments)

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