

VISTA

October 29, 1991

Mr. Wayne Anderson
North Air Emissions Section
Mississippi Department of Environmental Quality
Bureau of Pollution Control
P.O. Box 10385
Jackson, MS 39209-0385

Dear Mr. Anderson:

As required by 40 CFR Section 61.65 (a), this letter provides the details of a release of vinyl chloride monomer (VCM) from Vista Chemical Company's Aberdeen, Mississippi PVC plant.

The plant was shut down on Monday, October 21, 1991 for scheduled maintenance work and tie-in of the new distributed control system (a computer control system that controls the process). Before bringing the plant up the distributed control system was "rebooted". This returns all equipment such as motors and valves to a predetermined initial state such as off or on, open or closed.

On Tuesday, October 22, 1991 we began to bring up the plant and the first PVC reactor was charged Tuesday evening. At approximately 3:12 a.m. on October 23, 1991, an operator vented a PVC reactor to the vinyl chloride recovery system to reduce reactor pressure and purge some inerts from the reactor. The recovery system was in operation at the time of the reactor vent. It is common procedure to vent a reactor to the recovery system to purge inerts from the reactor and recover any VCM from the purged inerts.

During the "reboot" of the control system on Monday, October 21, the cooling water supply valve to the vinyl chloride recovery system condensers was returned to the initial failsafe position of closed. With no cooling water available during the reactor vent to the recovery system, the pressure in the recovery condensers rose until the rupture disks burst and the relief valves lifted on each of the two condensers releasing VCM to the

atmosphere.

The cooling water supply valve was opened following the release. Operators reported that one relief valve relieved for 10 minutes while the second valve relieved for 3 minutes.

Using a personal computer orifice calculation program, the total release was calculated at 790 pounds. This assumed the released material was 100% VCM. Although we believe the released material was not 100% VCM, this assumption allowed calculation of the largest possible release.

The National Response Center was notified of the release. Although there was no threat of exposure outside of plant boundaries due to the amount of the release, the Mississippi Emergency Management Agency was also notified.

To prevent future occurrences, the initial state of the cooling water supply valve was changed to "open" in the control system. An interlock was also added to the control system to prevent operation of the recovery system if the cooling water supply valve to the recovery system is not open.

If you need any further information concerning this matter please contact me at (601) 369-3637.

Sincerely,



Kenneth G. Akins
Environmental Coordinator

c: **RWS**, DCS, JEN
Houston: TGG, JCL, FGJ, LLZ