



VCM NESHAPS
FILE

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UNION CARBIDE CORPORATION P. O. BOX 471, TEXAS CITY, TEXAS 77590

September 19, 1984

Mr. Bill Smalling, Chief
Technical Section
Texas Air Control Board, Reg. 7
5555 West Loop, Suite 300
Bellaire, TX 77401

Subject: Vinyl Chloride Monomer (VCM) Emissions Control System,
Account No. GB-0076-J

Dear Mr. Smalling:

This is in response to your letter of August 21, 1984 requesting information about the vent stream from our vinyl chloride recovery system at the Solution Vinyl Resins Unit at this plant.

As I explained to Ms. Victoria Wang in earlier telephone conversations, the VCM analyzer sample point for the exhaust stream from the VCM recovery system had been disconnected because it had experienced plugging problems and we were not aware of the need to monitor this stream, except for our own information in keeping track of the monomer recovery system operations. Since this stream was directed into the flare header along with numerous other flammable vent gas streams from other processes in the plant, we felt confident that any small amounts of vinyl chloride that might pass thru the recovery system would be adequately consumed in the flare. Normally, our experience with monitoring this stream before the sample line was disconnected showed the vent stream to be well below 10 ppm most of the time.

Section 61.68 of the VCM NESHAPS regulation does not specify that the monitoring of monomer recovery system vents (§61.64d) must be done if the vent does not go to the air. In our case, the vent stream goes into the flare header which affords the additional opportunity for destruction in the flare flame. There is no mention of this combination whatsoever anywhere in the regulation, and we feel you have extended your inquiry beyond the requirements of the existing regulation.

Your request to provide data on the VCM concentration in the exhaust gases from the flare somewhat surprises me, since I think both of us know that there is no practical way to obtain this information in any safe or meaningful manner. I would suggest that if a flare was operating within the velocity and BTU content ranges specified in the recently proposed NSPS for flares for Fugitive Emissions, we would thereby demonstrate the necessary destruction of any small amounts of vinyl chloride that might be in this vent stream. The proposed NSPS limitations were: 0 to 60 ft/sec tip velocity with minimum heat content of 300 BTU/cu ft, plus a 60 to 400 ft/sec tip velocity with minimum heat content of 1000 BTU/cu ft.

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Mr. Bill Smalling
September 19, 1984
Page 2

At present, there are so many sources feeding this flare that we would have to perform an extensive analysis over some period of time to determine the range of our flare operation.

However, now that we have reconnected the sample line and VCM monitor to this vent stream, we will be able to provide the VCM concentration information you requested on the recovery system vent in a few weeks. This will enable us to determine whether we actually have a problem here, and if so, what we may determine to solve it.

Very truly yours,


J. F. Erdmann, P.E.
Environmental
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Coordinator
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