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To: J. C. Ledvina - Houston

From: R. Bryan  
Date: August 13, 1984

Interoffice  
Communication

Subject: COMMENTS ON PROPOSED VCM STANDARD  
REVISIONS

VISTA

On July 20, 1984, the EPA issued draft revisions to NESHAP for vinyl chloride. Comments from the VCM Plant are given below.

- 1) On p.48, item 2 changing the standard from "all exhaust gases" to "each exhaust gas stream" is objected to for the following reasons:
  - a) Appears to serve no logical purpose.
  - b) If the incinerator is bypassed with the current regulation, then only one exceedance is noted. With the change, it seems that during a bypass we would be liable for each stream that vents to the vent headers. Thus each column vent, pump seal vent, tank farm vent, drum vent, etc. could be construed as a separate violation. To ensure compliance, we'd either have to 1) assume that each vent always exceeded 10 ppm ( and incur the legal liabilities or 2) continuously analyze the streams for VCM. Such an effort is unjustified and contradicts IPA's intention to "strike a balance between public health protection and the cost of that protection". (p.8)
- 2) On the same item, we support the 10 ppm definition as being an average of three consecutive 1-hr. periods. However, implementation will present logistic problems. The first is that we don't routinely analyze either the vent headers or the vent sources. To be useful, such analysis must be done by continuous GC's and then the data averaged by an on-line computer. A second problem is the method for obtaining the analysis. The existing GC's for the incinerator stack and VCM plant monitors are required by NESHAP to be calibrated at precise levels (10 ppm). Calibration of GC's in vent header service where the VCM level can vary by orders of magnitude makes their analysis always suspect. Thus even the use of GC's would allow little benefit to be derived from the change.

In summary, while the change appears helpful, the costs required to derive legal benefit might render the change useless. An obvious question to ask EPA is how they intend to enforce the change.

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- 3) On the revision to "allow" four relief valve discharges per year (Sec. 61.65) we have several comments. They are:
  - a) With recent administrative and equipment changes, the VCM Plant probably won't exceed four relief valve discharges per year.
  - b) The selection of four discharges is virtually arbitrary. The use of one EDC/VCM plant (selected by what criteria?) and the further judgement that four discharges were "preventable" offers a very limited data base on which to revise regulations that carry \$25M/day penalties. A more appropriate response would be to investigate a statistically significant number of plants and then to clearly elucidate why discharges were considered "preventable" or not. Only when such data is available can the regulated community make appropriate comments.
  - c) Generally, incinerator bypasses would not be covered under the RV discharge section because the vent headers are not in VC service. Even if the individual vent sources are considered to be the "bypass", most of these are less than 10% vinyl chloride. With only four discharges/year, including bypasses as an RV discharge is of limited benefit anyway. Also, including bypasses as RV discharges will require analysis of the individual vents to know if we've had an RV discharge or a 10 ppm exceedance.
  - d) EPA's intent to reduce our bookkeeping by reporting RV discharges on a quarterly vs. 10-day basis is good. However, actual implementation will cause bookkeeping to increase. The reason is because LESHAP will still require a 10-day letter and EPA a new quarterly letter. Even if the EPA quarterly letter is coincident with the LESHAP quarterly report, then double reporting still occurs because the discharges were previously reported to LESHAP under the 10-day provision. Besides this, a new quarterly report would be as time consuming as a 10-day letter. Requiring us to keep records for 3 years vs. 2 years nullifies any bookkeeping advantage gained.
- 4) Our copy of the revisions did not contain Subpart V which discusses the standards for the proposed changes in the leak detection plan. However, the inclusion of flanges and valves in the LDEP appears to have a limited

technological basis and should be strongly questioned. Our present LDEP checks moving parts such as control valves, pumps, etc. where leaks might reasonably be expected. The frequent checking of non-moving parts such as flanges where leaks are not expected to occur is excessive. An annual testing, for example, is more consistent with a balance between cost and benefit which is EPA's stated intention (p.8). A serious flange leak would be detected by the fixed monitors or operators.

The leak definition of 10,000 ppm (p.38) is meaningless unless a distance is included with it (included in Subpart V?). The additional recordkeeping, the initial preparation which alone would be costly (p.41), appears burdensome and is entirely inconsistent with the EPA's contention that "the proposed administrative revisions do not increase the cost of compliance with the standard" (p.43).

- 5) The chemical industry should request that a discrete number of incinerator bypasses be allowed. Throughout the preamble, EPA states that their intention is not to totally eliminate all emissions (p.6,8) but to "strike a balance between public health protection and the cost of that protection" (p.8). By not allowing a reasonable number of bypasses, EPA is, in effect, asking for zero emissions. This is also inconsistent with the fact that we can legally discharge 11 tons/year VCM from the incinerator stack and can't legally bypass any feed to the incinerator. A provision to allow a fixed weight of VCM that could be bypassed (in effect, a "permit") would be beneficial. Given this change, GC analysis of the vent headers might be justified.
- 6) The existence of LESHAP should be kept in mind. Unless LESHAP is changed (which it wouldn't have to be since the EPA regulation is less stringent), revising the EPA standards won't actually help much. Double standards will then exist such as no RV discharges under LESHAP (unless "emergency") and four under NESHAP, etc.
- 7) Summarizing the above comments, we would suggest that you submit to EPA the following comments:
  - a) The term "all exhaust gases" not be changed to "each exhaust gas stream". The EPA should fully explain the purpose and technical basis for the proposal.

b) The difficulties in determining compliance with a 3 hour averaged 10 ppm standard are numerous for bypasses. We should request that a discrete number of bypasses or a specific quantity of VCM be allowed. There are a number of ways that this can be done, all of which should be evaluated by EPA (based on plant experience and feasibility). They are:

- allow a fixed numerical quantity; e.g. 5% of our incinerator stack permit, to be discharged as bypasses. This would require a GC and flow measurement. (we currently have flow measurement)
- allow a discrete number of bypasses per year regardless of duration or quantity e.g. 20 bypasses/year.
- allow a certain duration of bypassing such as 0.5% of the year.

The issue now is not exactly how to make the allowances but to gain recognition by EPA that a zero emission standard is too stringent and grossly inconsistent with their own statements and our current permits. For perspective, our current incinerator stack permit allows an annual discharge of 22,000 lbs. VCM. All bypasses to date (for 1984) have discharged about 190 lbs. VCM.

- c) The setting of four allowable RV discharges should be based on a broader technical base and should include rationale for calling these four "preventable".
- d) The EPA should be more specific about whether incinerator bypasses can be construed as RV discharges.
- e) The modification to the LDEP to include flange monitoring should be strongly questioned. EPA should present data to show what a "typical" flange would leak with and without the program i.e. technical data on both the costs and benefits should be presented by EPA.

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