

GENERAL EMISSION CONCENTRATIONS

Throughout the revised draft standard, there is the requirement that exhaust gases to the atmosphere be controlled to a maximum vinyl chloride concentration of 10 ppm. See, for example 61.32 (a)(1), (a)(3)(iii), (a)(4)(iv)(B), (a)(4)(vi)(B), (b)(1), (b)(3)(i)(A)(2), (b)(3)(i)(B), (b)(3)(iv), (b)(3)(v), (b)(3)(viii)(B), (c)(1), (c)(2), (c)(3), (c)(4), (c)(5), (c)(9)(i)(A)(2), (c)(3), (c)(4), (c)(5), (c)(9)(i)(A)(2), (c)(9)(i)(B), (c)(9)(iv), (c)(9)(v)(B), and (c)(9)(viii)(B).

The Industry Presentation before NAPTAC on 25 March 1975 stated that there was no proven technology which can produce this result, and this position has not changed. Indeed, it is sustained by the EPA Support Document.

The statements on pages 18 and 19 of the revised document clearly show the developmental nature of the art here, and the speculative nature of the judgment made that these technologies can be developed, engineered, purchased, installed and brought to operational conditions within two years.

Promulgation of such a stringent standard that has such farreaching effects on a national industry, on the hours of "a source test on one incinerator" (concentrations and flow rates unspecified), "Pilot studies for carbon adsorption" and a "solvent absorption unit which was not designed specifically for vinyl chloride" are all too reminiscent of past actions by their agency which have proven unwise in the light of subsequent developments.

The original draft of the Standard Support Document stated that incineration was not considered suitable for this application. It also states, Chapter 5, page 21, that dilute streams are better controlled by means other than solvent absorption. It is concluded on page 5 of Chapter 5 that carbon absorption is not feasible for dilute streams. No new supporting data are available now that were not available then to sustain a claim that any of these methods can be applied to the broad spectrum of sources cited above. We refer you to the presentation of Mr. Madden, pages 36 - 42, of the referenced presentation before NAPTAC, for more details.

It may be possible that carbon absorption can be developed for use with concentrated streams such as the recovery vent in PVC plants, but this must await the results from the single commercial unit which has been in operation for less than three months. As recommended to you before, proper work practices and the best available technology can reduce the other streams to a suitably lower level. No justification can be shown for more stringent requirements on the basis of health or environmental effects.

We urge that these requirements be eliminated.

MATERIAL BALANCES

Section 61.64 (a) (4) requires that monthly material balances be submitted that "quantify all point and fugative source emissions."

During the February visit of industry representatives to the EPA offices in Durham, this point was discussed, and it was stated by EPA officials that they too agreed that short term material balances were not sufficiently accurate to be of value. Their conclusion was repeated in the original Standard Support Document draft.

We are, therefore, very surprised to find this requirement reappearing at this time. It is no more valuable now than it was three months ago. A substantial "unaccounted" segment will vary from month to month as inventory corrections are made. The only purpose that will be served is that critical economic data for a manufacturer will be spread on the public record for his competition to view.

We recommend that EPA abide by its earlier decision to eliminate this requirement.

MANUAL VENTING

The proposed standard requires that all manually vented gases be sent to a control device, (61.62 (a) (4) (iii), and (c) (9) (iv), Earlier statements have commented on the 10 ppm requirement of this device. This section deals with the need for direct venting to atmosphere under emergency conditions.

It is proper that all venting should, whenever possible, be taken to a recovery system, gasholder, empty vessel, or otherwise confined. This is the practice of the industry now, and will continue to be. There are infrequent but critical times, however, when the manual venting of a small quantity of gas to the atmosphere can prevent the later release, perhaps disastrously, of larger quantities. One example is in the event of a major power outage, as from a hurricane, when all available contained vent capacity is already utilized, and it is necessary to provide agitation to mix in shortstop to prevent a runaway reaction. EPA has recognized in the section on relief valves that there can never be 100% assurance that the safety devices will never be called upon to perform the duty for which they were designed.

Further, venting under emergency conditions through a control device would well negate the purpose of the safety action because of the pressure drop through this device, as well as destroying the device, for example by blowing all of the carbon out of an absorption bed.

Therefore, we recommend that these sections be revised to permit manual venting to atmosphere in the event of emergency conditions that so require, and that those ventings be reported within ten days to the Area Director. We believe that the Area Director, rather than the Administrator, is the more appropriate person to notify in both these cases.

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AVERAGING OF RESIDUAL MONOMER

BY GRADE

The proposed standard requires that reports on residual monomer be made for each grade 61.64 (a) (1) (iv). It also considers all sources downstream of the stripper in compliance if the residual monomer at that point is below 400 ppm for suspension resins and 2000 ppm for dispersion resins (c) (6).

We request that grade averaging be permitted to determine compliance. There are still some materials which industry has not been able to reduce to these concentrations, despite serious effort. These include certain vinylacetate copolymer, and very low molecular weight homopolymer, for example. Obviously, if an entire plant running at an emission rate of 400 ppm is acceptable, it makes no difference if this comes from two products at 400 ppm each or equal parts of resins at 500 and 300 ppm.

This change will provide the incentive for producers to try to improve beyond the prescribed limits, and protect a small but important segment of the industry for which the needed technology has not yet been developed.

EFFLUENT

The proposed standard requires that the effluent from ethylene dichloride plants be held to no more than 5 ppm (a) (4) (vi), to 5 ppm in vinyl chloride plants (b) (3) (viii), and to 6 ppm in PVC plants (c) (9) (viii). (The reason for these differences is not clear.)

We assume that this means the aqueous effluent stream, although it is not so stated. We also assume that the centrifuge effluent is exempt if the stripped resin is below 400 ppm, although section (c) (6) is not adequately clear on this point. If this is not true, there is again double abatement of the same stream.

The reason for the choice of these concentrations is not given, nor has EPA reported on any commercial application of this technology. We request clarification of the assumptions listed above, and demonstration of proven technology to reach the prescribed concentrations. We also wish an explanation of the rationale for the choice of the concentrations proposed.

ENVIRONMENTAL PROTECTION AGENCY STANDARD COST BENEFIT STUDY

Item	Invest- ment M \$	Cost/Yr M \$	Emissions		Comments
			Before lbs/ 100 lbs	After lbs/ 100 lbs	
<u>Fugitive Emissions</u>					
Purge Unloading Hose to Control Device					
Tank Car Liquid Level Detectors					
Canned Pumps, Etc.					
Rupture Disks on Safety Valves					
Flare Stacks on Safety Valves					
Equipment Maintenance Purging					
Sampling Systems					
Area Monitoring					
Portable Monitoring					
Vacuum Pump Exhausts					
Process Water Stripping					
In-Line Delumpers					
Reactor Entry Purge					
Reactor Short-Stop Safety Valves					
Vent Condenser					
Slurry Blend Tank & Centrifuge Vent					
Stripping (Level ppm)					
Other					
TOTAL					

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