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Congress of the United States
House of Representatives
Washington, D.C. 20515

RECEIVED
ENVIRONMENTAL PROTECTION-
AGENCY

MAR 29 1985

IN RE: CENTRAL DOCKET
SECTION

NATIONAL EMISSION STANDARD FOR VINYL CHLORIDE

COMMENTS ON THE PROPOSED AMENDMENTS

50 FED. REG. 1182

JANUARY 9, 1985

RECEIVED
ENVIRONMENTAL PROTECTION
AGENCY

MAR 28 1985

CENTRAL DOCKET
SECTION

THE HONORABLE THOMAS R. CARPER

Findings

On January 9, 1985, the United States Environmental Protection Agency published a proposed rule to amend the 1976 national emission standard for vinyl chloride. It is my finding that these proposed changes, which primarily affect relief valve discharges, weaken the current standard, and contradict the intent of Congress as expressed in Section 112 of the Clean Air Act. For these reasons, I oppose the revisions, and strongly recommend publication and consideration of the 1977 regulations proposed pursuant to the settlement agreement in Environmental Defense Fund v. Train or equally substantive amendments.

The Delaware example

The issue of vinyl chloride regulation is very important in Delaware, home for a variety of chemical facilities including producers of polyvinyl chloride.

Of particular concern is the recent public revelation that substantial quantities of vinyl chloride monomer, a potent carcinogen, have been released into the atmosphere by the Formosa Plastics Corporation plant in Delaware City, Delaware. The State of Delaware filed suit in the State Superior Court alleging unlawful discharge of vinyl chloride in 31 separate incidents between May 18, 1981 and September 30, 1984. As much as 28,006 pounds of vinyl chloride were discharged at a given time, and a total of over 83,000 pounds was released during that period.

On March 13, 1985, the State of Delaware Attorney General's office and Formosa representatives signed a consent agreement which included a civil penalty of \$100,000 and a commitment by the company to construct a vinyl chloride monomer containment system to minimize discharges into the atmosphere.

The Delaware experience has raised our interest in vinyl chloride regulation, and has given us an instructive basis from which to evaluate the proposed EPA rule.

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Need for amended regulation

It is clear that the existing regulation is grossly inadequate. Presumably because so little was known about the industry at the time of the regulation's development, the current rule is particularly lax in defining what constitutes an allowable relief valve discharge (i.e., an emergency release). The resulting ambiguity has been a major problem for both Delaware State officials and industry representatives. I suspect the EPA shares this view and was, accordingly, motivated to amend the rule.

Inconsistencies in the proposed regulation

The consent agreement reached in the Formosa case is also illuminating as a demonstration that technology capable of minimizing, if not eliminating, vinyl chloride discharges to the atmosphere is available and can be employed by the industry. Furthermore, this agreement shows that Formosa, despite arguments that its operation was marginally profitable, could, when pressured, absorb an approximate \$1 million investment for containment technology at the Delaware plant.

In achieving that consent agreement, the United States Environmental Protection Agency, the U.S. Justice Department and the State of Delaware prevailed on the Formosa Corporation to accept a vinyl chloride containment system to prevent chronic atmospheric discharges. Unfortunately, there is a basic inconsistency in the rationale behind the consent agreement and the underlying precepts of the proposed regulation. On the one hand, the current regulation, as poor as it is, at least compelled enforcement officials to investigate the Formosa plant's activities. Under the proposed rule, it is quite possible that this behavior, which all regulatory parties found unacceptable, would actually become legal. It is possible, therefore, that the plant could disassemble the

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containment apparatus at the termination of the agreement, do business as they have over the past few years, and be protected from legal accountability for vinyl chloride releases into the atmosphere.

The proposed rule would restrict suspension reactors in PVC plants to 0.035 discharges/100 batches, not exceeding four discharges/year. Non-reactor sources would be limited to 0.025 discharges/^{batch}year, not exceeding three discharges/year. Using the Formosa plant (with two suspension reactors and a combined non-reactor system) as a model, I estimate that up to 11 releases per year, regardless of size, would be allowable under this regulation (depending, of course, on the number of polymerization batches per year). In practice, each of the Formosa reactors would likely be limited to three discharges per year given the number of polymerization batches typically run through the plant. In that case, the allowable discharges would total about nine per year.

In either of these scenarios, this proposed rule would not greatly affect this plant which was sued for 31 discharges over a 3½-year period. If these releases occurred under a regulatory scheme such as the EPA proposes, the plant, which ranks as the top vinyl chloride emitter in the country, would fulfill the EPA's requirements. Amending the existing regulation with a weakening provision which has virtually no impact on the industry's most prolific discharger and which makes the regulation even less effective is contrary to the EPA's mission and is an exception to Congressional intent for the regulation of such harmful substances.

Need for technology-forcing regulation

Given the carcinogenic nature of this substance, and the lack of conclusive evidence on the health risk posed by current emission levels, it is extremely unwise, and

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contrary to the clean air statute now on the books, to take a step backward. This law requires the EPA to include in its standards an "adequate margin of safety." This margin of safety is necessary to account for unknown effects on sensitive groups in the population, the unknown interaction of pollutants in the air, and the unknown latency between exposure and the development of chronic diseases. In keeping with this directive, the EPA should provide a regulatory incentive which forces use of available technologies to minimize public exposure and which prompts the discovery and implementation of new and improved emission control systems — all geared toward the elimination of vinyl chloride releases. This proposed rule flatly and wrongly rejects this approach toward public protection, and forecloses any further technological investigation of the 10 ppmv standard.

Industry bias

Indeed, the preamble indicates that the EPA, rather than pursue a strategy whose primary mission is to protect environmental and public health, has followed a regulatory process which looks first to industry to see what standards match their competence and ability to comply. Yet, the health risk is irrefutable. As is noted in more that one place in the proposal, there is no known threshold level of effects for vinyl chloride and "any atmospheric concentration of vinyl chloride poses some public health risk" (p. 1183).

Discarding mass emissions limits

In dismissing the 1977 proposed rule which would have set a vinyl chloride emission standard of 5 ppmv, the EPA cited arguments that progressively lower standards would result in little reduction in mass emissions. Yet, the regulation now proposed fails to address the mass emissions question.

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The EPA decided that there were two ways to regulate relief valve discharges at PVC plants -- by mass emission limits and by the frequency of discharges. The logical approach would be to limit the important risk parameter -- the amount of the carcinogen released. This option was discarded, however, because the EPA claims it was unable to identify a sufficiently accurate method for measuring discharge quantities for reporting purposes.

I fault EPA's decision to disregard mass emission limits. The Formosa plant in Delaware has been able to report discharges of 28,006 lbs., 16,072 lbs., 13,236 lbs. and numerous others as small as 1.2 lbs. Certainly, it is possible to discriminate between large and small discharges, and although these estimates may be inaccurate, this inaccuracy does not warrant throwing mass emission limits out the window. Instead, the EPA has chosen expediency over prudence in proposing to restrict the number of allowable discharges without applying any limit on the size of those discharges. I strongly feel a tight cap on the size of vinyl chloride emissions should be established.

Reporting requirements

In the proposed rule, the EPA intends to replace the 10-day reporting requirement for relief valve discharges with a quarterly report. I object to this recommendation.

By reporting on a timely basis, a company serves notice to local, state and federal officials that a carcinogenic substance has been released into the atmosphere, and allows follow-up actions deemed appropriate by those authorities. Furthermore, a shorter reporting period gives the public access to information they have the right to know regarding their exposure to hazardous substances. I urge the withdrawal of this proposal in favor of retaining the existing 10-day reporting requirement.

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Conclusion

The Delaware example clearly demonstrates that reasonable and affordable technology does exist to move us toward the laudable goal of zero vinyl chloride emissions. Given the carcinogenic character of vinyl chloride, the absence of proof that any level of exposure to this substance is safe, the ineffectiveness of the existing regulation, and the "backward-step" represented by the proposed rule, I would strongly argue that the EPA's out-of-hand dismissal of the EDF/EPA proposal to reduce the emission standard to 5 ppmv was inappropriate and that technology-forcing emission and relief valve standards should be adopted.

The reason for my concern is the same as the rationale which initially prompted the regulation of this substance. Vinyl chloride is a carcinogen; its tragic effect may not be realized for years after exposure. I am not sure we can legally or morally support a policy which suggests that a certain risk of cancer and possible death is acceptable because it might cost industry a bit more to reduce or eliminate that risk. Indeed, I think there is a clear legal case to be made that this directly contradicts the intent of Congress in passing the Clean Air Act, and that the EPA is stepping beyond its mandate in trying to change this law administratively. The Delaware example demonstrates that a vinyl chloride containment strategy is acceptable, reasonable and feasible not only to a member of the vinyl chloride industry, but also to State and federal agencies (including the EPA) which regulate that industry. Let us apply this standard of protection nationwide as a sign of true commitment to human and environmental health.