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Vinyl chloride

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*For [unclear] interesting if you haven't
already read it.*

W. H.



Memorandum

February 14, 1980

To: ORC Occupational Safety and Health Group
ORC Occupational Safety and Health Physicians Group
ORC Occupational Safety and Health Lawyers Group

From: Richard F. Boggs

The following is reproduced with the author's permission and provides an interesting assessment of the impact that OSHA's vinyl chloride actions have had on the business community.

Enclosure

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Attache with these notes.

SAFE AND HEALTHFUL WORKING CONDITIONS:
THE CASE OF VINYL CHLORIDE

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The Occupational Safety and Health Act was passed less than ten years ago with an apparent ease and unanimity uncharacteristic of major labor legislation in this country. The Occupational Safety and Health Administration created by the Act, however, has not enjoyed the blessings of its noble birthright. Indeed, OSHA, almost from its inception, has been the target of public criticism and private conspiracy typically reserved for the mad or illegitimate progeny of royalty.

The fall from grace of the highborn is fascinating to observe and intriguing to explain. The "downfall" of OSHA began with the requirement of "inflation impact statements" for major regulatory actions and has been carried on in the "regulatory reform" and "regulatory analysis" movements. These movements are the product of a perception that OSHA, like an unwise monarch, is imposing substantial and oppressive new taxes to support personal adventures which provide or promise little tangible benefit to an already overtaxed populace which, per force, must indulge the king's whims.

There can be no doubt that OSHA regulations impose a tax on the producers and consumers of American-made goods and services. There is, however, considerable latitude for debate over the magnitude of that tax both in absolute terms and in relation to the benefits purchased by the tax. This debate over the absolute and relative impact of OSHA regulation on productivity and cost may never be subject to definitive resolution, but it should be possible to gain some perspective on the issue by analysis of the results of specific

OSHA regulatory initiatives. The OSHA standard governing worker exposure to vinyl chloride provides an excellent vehicle for such an analysis because it was one of the first major new health standards promulgated by OSHA and one whose impact was concentrated in a single easily studied industry.

The Feasibility of Compliance

The battle over the permanent standard for permissible levels of worker exposure to vinyl chloride was beset with the predictions of dire economic consequences which have become commonplace in the standard setting process. Such consequences clearly have not come to pass, a fact which prompted some to conclude that the industry "cried wolf."¹ That conclusion, strictly speaking, is not justified. But, justified or unjustified, it has had the effect of tempering the industry response to other proposed regulations.

The permanent standard initially proposed by OSHA called for a "no detectable" exposure level. The industry responded that such a standard "is not technologically feasible and, if adopted, would shut down the industry."² Interestingly, this claim was supported by the conclusion of a feasibility study commissioned by OSHA.³ The consequences of a possible industry shutdown were detailed in a separate study which indicated that \$65 to \$90 billion in GNP and \$1.7 to 2.2 million jobs were dependent on the production of PVC resins.⁴

The industry argued for a standard which would set a time weighted exposure limit of 10 ppm for polyvinyl chloride resin plants and 5 ppm for vinyl chloride monomer plants⁵ based on feasibility considerations. Organized labor endorsed the "no detectable level" standard and disputed the infeasibility of such a standard. The results of its own feasibility study

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forced OSHA to withdraw from the no detectable level standard and to adopt in its place a 1 ppm standard. The industry challenged both the necessity for and feasibility of this stringent limit in the courts with a notable lack of success, particularly since the court of appeals specifically ruled that

the secretary is not restricted to the status quo. He may raise standards which require improvements in existing technologies or which require the development of new technology⁶

The actual economic consequences of this technology-forcing standard for the viability of PVC plants and the availability of jobs in those plants were remarkably modest. A few older PVC plants were shutdown, in whole or substantial part, because of the projected cost of bringing those facilities into compliance with the requirements of the standard. These shutdowns resulted in the loss of about 325 million pounds of production capacity and 375 jobs--approximately 5 percent of the industry total. Much of the credit for the modesty of these adverse effects now is attributed by the industry to the reasonableness of the standard itself as is evident in the following confidential statement of one company representative.

The OSHA-VCM program was, in the end, a real success story for both OSHA and the VCM-PVC industry. By fighting the "absolute zero" concept originally proposed, industry achieved a more practical 1 ppm standard that allowed it to continue to operate and grow. And, apparently the standard has protected the workers . . . so at least in this case we have a government regulation that has been practical and beneficial to all concerned.

The Cost of Compliance

The vinyl chloride standard may not have been catastrophic for the industry, but it was expensive. The first public estimate of the cost of compliance with the 1 ppm standard indicated that the industry would have to

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invest \$200 million (excluding development costs) in immediate process improvements to satisfy the requirements of the standard.⁷ The VCM-PVC industry actually invested about \$130 million in such process improvements to bring existing production facilities into compliance with the standard. More than 90 percent of this total was accounted for by PVC plants which employ only about 75 percent of the workers in the industry.

The apparent \$70 million cost "saving" recorded by the industry is an attractive focus of attention but in no way offsets the \$130 million actually invested in compliance with the standard. It is difficult to identify the sources of the saving without knowledge of the basis of the original \$200 million cost estimate, but three possibilities deserve note. First, part of the savings may be attributable to the decision to close rather than modify some older PVC plants. Assuming that these plants had the most acute and expensive compliance problems, they may well have accounted for as much as 10 percent of estimated compliance cost, although they represented only 5 percent of PVC capacity, and for as much as \$20 million of the \$70 million saving. Second, part of the savings may have stemmed from miscalculation of the significance of the relative cost advantage of VCM facilities in complying with the standard. For example, there was an almost \$4000 per worker difference between average compliance cost for PVC and for VCM-PVC plants which, if not accounted for in industry cost projections, would have added another \$25 million to those estimates. Finally, the industry was able to find more efficient means to achieve compliance than were foreseen at the time the standard was adopted. The largest producer in the industry reported it had been able to reduce its projected \$42 million compliance costs by 10 to 15 percent through technological developments.⁸

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