

DRAFT

Plastics Industry vs Government Regulation

PLASTICS FACE UP TO ENVIRONMENTAL
and HEALTH CONCERNS WITH CONFIDENCE

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Since the late 1960's industry has been faced with an increasing number of federal and state regulations that have had a significant impact on the ability of companies to continue long established manufacturing and marketing practices. All of these regulations are based on laws apparently established for the purpose of increasing the safety of the industrial environment for workers and the general environment in which we all must live. More recently there has been legislation that regulates, or allocates, how we will use our basic energy and raw material resources.

These regulations are under the jurisdiction of many different government agencies including the Department of Labor's Occupational Safety and Health Administration, the Environmental Protection Agency, the Food and Drug Administration, the Federal Trade Commission, Consumer Product Safety Commission and the Federal Energy Administration to cite some of those with which the plastics industry has had considerable contact already.

It would be accurate to say that the net effect of the regulations being imposed by these various agencies on the plastics industry has been to change the industry from one that was free to operate within the normal free enterprise laws of supply and demand to an industry that is highly restricted with respect to what it can produce, how it can produce and where it can market its products.

SPI-23557

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My views on this multiplicity of regulation^S should not be interpreted as a stand against any kind of control. Rather, let me clearly state that our increasingly more sensible views on the use of our world's limited resources and our increasing awareness of some of the hazards presented to industrial workers and consumers in what were once believed to be reasonably safe practices, certainly do need to be under closer control. Our principal concern is that the layering effect created by the rapid imposition of unproven regulatory legislation may smother some of the industrial life it is designed to protect.

In an article in the ~~current~~^{April} issue of Readers Digest our Treasury Secretary, William E. Simon, identified^S some of the economic woes tied to the expanding federal government that is chiefly responsible for these regulatory controls." He says, "For more than 40 years, we in the United States have turned increasingly to the federal government to solve our problems. Yet, as the government has enlarged its dominion over ~~over~~ our affairs, it has become increasingly apparent that concentrating power in Washington can be inefficient, wasteful and ultimately destructive of our freedoms."

~~The~~^{my} intention of ~~my presentation~~ today to identify some of the ~~dilemmas~~^{dilemmas} presented to the responsible manufacturers of plastics materials and finished plastics products in trying to keep their enterprises alive in this increasingly regulated business environment.

First of all, I believe it is important to provide a clear statement of how plastics materials are contributing to our nation's material needs. Through the years plastics, in many applications, have become increasingly important as the preferred material or at least as an attractive alternative to many traditional materials whose growing costs are a reflection of both their scarcity and, in many cases, their high energy consumption.

Even though the expanding use of plastics often means the displacement of other materials from traditional markets, there are likewise many happy marriages between plastics and traditional materials, as well as direct substitutes, that

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yield not only better products but often products that represent more efficient utilization of our material and energy resources. In fact, it is realistic to say that plastics are proving to be ~~one~~ of the scientists' best answer^s to the growing materials and energy shortages we face. With traditional resources dwindling, the role of plastics is bound to grow in importance.

As is the case with many basic materials in our economy, plastics have felt the squeeze of the resource and energy crunch. But unlike many other materials, plastics can be dealt a double blow by any tightening in the nation's energy supplies. The dual problem for the plastics industry and all other users of petrochemicals comes because these industries depend on oil and natural gas both as fuel and raw material. Plastics' feedstock energy needs are small in comparison to the total demand for oil and natural gas -- 1.3 percent of the total for plastics and 5 percent for all petrochemicals.

On the basis of recent resource and environmental profile analyses conducted by the Midwest Research Institute it was concluded that in the typical, randomly selected, plastics and non-plastics containers evaluated, that the plastics containers offered either lower or equal resource and environmental impact as compared to non-plastics containers. The MRI study clearly established that even though the raw material for plastics comes directly from the energy stream, in many cases a plastics product can be expected to use less total energy than the material it replaces.

This is not to say that plastics are to be preferred over other materials since energy use and environmental impact are certainly not the only criteria employed in selecting a material. But it does help us cope with the widespread impression that because plastics are derived from oil they must be heavy energy users.

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Even at the end of their useful life plastics can be recycled into fuel in the energy recovery waste disposal systems that are now in use, under construction or being planned. Plastics can give petroleum a double life -- first as a product and then as a fuel.

It is obvious therefore that plastics have emerged from their role as substitute materials to that of being essential to our nation's well being and that any regulatory legislation that threatens to shut down the industry indiscriminately must be weighed most carefully.

The most concrete example of federal regulatory layering that is still in the process of imposing itself over certain segments of the plastics industry is the control involving vinyl chloride used for the manufacture of polyvinyl chloride resins. The concern over this material has developed, or is developing, regulations at the federal level by such agencies as OSHA, EPA, FDA, CPSC and the Coast Guard as well as separate regulations in some of the states.

Let's examine some of the specifics. Prior to 1973, a major issue relating to PVC was whether it was a suitable package for alcoholic beverages. While this investigation was ongoing, vinyl chloride monomer was discovered to be migrating from PVC bottles into distilled spirits packaged under an experimental authorization granted by the Bureau of Alcohol, Tobacco and Firearms of the Treasury Department (BATF) for testing purposes. As a consequence of the migration discovery in May, 1973 the Food and Drug Administration (FDA) announced it would begin a complete reevaluation of PVC usage; at the same time, BATF terminated the interim authority to package alcoholic beverages in PVC. At that time, SPI members interested both in PVC liquor bottles and food packaging generally coordinated in order to cooperate with FDA to reassure and help it with

its studies of the safety of a broad spectrum of applications for PVC.

The turning point, which made an already complicated situation into one of the most involved that this industry has ever faced, occurred in January, 1974 when the deaths of 13 production workers from a liver cancer called angiosarcoma were linked to occupational exposure to vinyl chloride monomer in VCM and PVC plants. Almost simultaneously, reports on laboratory experiments revealed that test animals also contracted angiosarcoma of the liver from breathing vinyl chloride monomer.

As a result of these findings, the United States Department of Labor's Occupational Safety and Health Administration (OSHA) conducted an investigation to determine how seriously worker health was affected by occupational exposure to vinyl chloride and what other factors contributed to the contraction of this rare form of cancer.

After its initial investigations and labor union petitions for action, OSHA published an Emergency Temporary Standard (ETS) on April 5, 1974. The ¹⁵ ETS lowered the previous limitation on vinyl chloride exposure from a ceiling of 500 parts per million (ppm) ~~in~~ the air to a ceiling of 50 ppm. Then, having received additional animal data indicating that angiosarcoma could be induced in some test animals at concentrations as low as 50 ppm, on May 10, 1974 OSHA proposed a Permanent Occupational Exposure Standard for Vinyl Chloride at a concentration level of "no detectable" with a sampling and analytical method capable of measuring concentrations of 1 ppm.

After publication of the Proposed Permanent Standard, OSHA conducted extensive hearings during June and July to help it try to determine the effects of occupational exposure to vinyl chloride monomer and the propriety of its Proposed Permanent Standard to eliminate vinyl chloride from industrial worker breathing zones. At the hearings, SPI's witnesses testified for two full days and provided OSHA with a great deal of information concerning worker health, the industry's technological ability to control occupational exposure to

vinyl chloride in the work place, and the known and suspected effects of occupational exposure to vinyl chloride at various concentrations over different periods of time. It remains our view that the industry evidence demonstrated that (1) it was technologically infeasible to control vinyl chloride exposure to the proposed "no detectable" level, (2) to date, disease found to be related to vinyl chloride exposure has resulted from long term, high exposure to vinyl chloride during the early years of the industry's existence, and (3) the vast majority of workers in the industry today are not believed to be suffering adverse effects from inhalation of vinyl chloride at current levels of exposure.

Nevertheless, OSHA promulgated a Standard limiting worker exposure to an 8 hour time weighted average of 1 ppm, allowing for short term excursions to 5 ppm, and requiring respiratory protection for excessive exposure, i.e., above the average of 1 ppm.

Subsequently, the industry continued its assertion that it is infeasible for the industry at large to achieve compliance with such low exposure levels, and contended that adoption of the Standard as written exceeded the regulatory authority granted to OSHA. To test its conviction, SPI's Vinyl Chloride and Polyvinyl Chloride Resin Producers Group filed a Petition for Review of the Standard in the federal courts.

Petitions for Review were filed by SPI and a number of VCM and PVC producers early this past October; indeed within minutes after OSHA announced the Standard on October 1, 1974. Operating under an expidited briefing and argument schedule, sought so that the case could be heard before the January 1, 1975 effective date of the Standard, Briefs were filed in November and December and Oral Argument on the Case was held in the United States Court of Appeals for the Second Circuit (New York City) on December 13, 1974. Following Oral Argument, the Court did grant a Stay immediately, ~~after the Oral Argument~~ thereby preventing the Standard from going into effect until such time as the Court handed down its decision. The Second Circuit Court issued its denial of the industry's petition

on January 31 and called for the standard to go into effect on April ^{fools} day, just 10 days ago. This did occur and the industry is now operating under the

OSHA Standard despite the fact that the industry has appealed the lower court's decision to the Supreme Court.

There still remains the possibility that the Supreme Court will review and possibly reverse the lower court's decision.

While the OSHA activity and the Court case have been going on, the

U.S. Environmental Protection Agency (EPA), the Consumer Product Safety

Commission (CPSC) and the Food and Drug Administration (FDA) have moved to

prohibit the use of vinyl chloride monomer as a propellant for a wide range of

aerosol products including drugs and cosmetics. Similarly, the United States

Coast Guard is reported to be working on proposed regulations which, like the

OSHA Standard, will be aimed at governing vinyl chloride monomer exposure in

locations within its maritime jurisdiction.

During the period that OSHA was promulgating its vinyl chloride standard,

the Environmental Protection Agency was conducting investigations for the

purpose of developing a formal air emission standard for the VCM and PVC

industries. In mid March EPA published a draft of its proposed vinyl chloride

standard that it now proposes to publish in its final form in June.

On the Food and Drug Administration front, the Agency intends to publish

an Interim Food Additive Regulation for PVC food contact applications except

that this coverage now may or may not extend as far as containers for drugs

and cosmetics and potable water pipe. Although we expected this Regulation

to be published some time ago, it has been held up by concerns at FDA Staff

level about whether the regulation of PVC should exceed traditional examinations

for extraction by regulating residual monomer content, material thickness and

the like.

At this juncture, we are unable to predict with certainty how the Staff will ultimately proceed, or when the proposed Interim Regulation will be issued.

In summary, what was once a problem involving potential ingestion of vinyl chloride which had migrated from finished PVC into the packaged spirits or food, has now become a more serious and complicated matter involving both the inhalation and ingestion of vinyl chloride by industrial workers and the general public as well. (Despite the increased circumstances, the situation is as well under control as possible.)

The industry is confident that it will continue to produce polyvinyl chloride resins although the impact of all these regulations^s on its productivity and increased costs is not fully known at this time.

The principal concern of industry with this type of rapid influx of new regulations is that there is too much, too soon to allow for the technologically feasible controls to be developed. This concern was expressed in a court opinion involving Industrial Union Department, AFL-CIO versus Hodgson, regarding an asbestos regulation.

A Three judge panel from the U.S. Court of Appeals for the District of Columbia Circuit commented on this as follows: "Congress does not appear to have intended to protect employees by putting their employers out of business - either by requiring protective devices unavailable under existing technology or by making financial viability generally impossible."

Thus, it is the industry's opinion that any OSHA or EPA regulation must achieve an appropriate balance between satisfactory worker health protection and the technologically and economically feasible means for assuring this.

What other regulations or layering of regulations does the plastics industry expect? It is too early to predict with certainty.

Many environmentalists are convinced that the problems of vinyl chloride are but the tip of a chemical iceberg - an iceberg that will continue to float to the surface during the decades ahead.

Whatever the situation maybe, the plastics industry is confident that it can develop the controls required to provide for necessary worker and public safety. The industry's major concern is being engulfed with unnecessary technological^{ly} infeasible and redundant regulations that will shut down major segments of the industry.

In order to approach the problem so as to develop reasonable and necessary regulatory legislation the plastics industry together with other segments of the chemical industry is moving to establish better legislative liaison.

It does not help us in the chemical industry that we are a ^{highly technical} ~~high-technology~~ industry, so complex and often so ^{mysterious} arcane in many of our aspects that many of our own employees don't understand or cannot explain what we're doing. One of the great challenges confronting us is the difficulty - often, it seems, the impossibility - of acquiring public understanding of the underlying rationale of some of our actions.

Congress has a problem with this too, for very often the members must give their constituents the feeling that they really do understand the ramifications and rationale of ^{complex} ~~high~~ technology when in fact they may not. So Congressmen seek to simplify not only the problem, but the solution.

We need a constituency - a bloc of supporters who believe in us. Our employees and our shareholders seem the most logical candidates.

Unless we in the business world can develop a constituency comparable to that of the other major institutions of the nation, I believe we run the strong risk in the long term of being submerged in or subjected to these other interests.

We have complained for many years that "free" enterprise has been losing its freedom. In many ways we have. But I believe this loss of our freedoms is going to increase exponentially unless we undertake activity and vigorously to develop a substantial body of support in this country.

The plastics industry must become policitically oriented so as to understand the interplay of forces that determine national policy. We must encourage dialogue between industry and congress before the legislation is passed.

For too long business management has concentrated on its own internal operating problems with little regard for legislators and the public understanding ^{of} what makes the industrial machine keep running.

In opening its doors to communicate with the outside world, industry must be as frank and open with its bad problems as well as its major contributions.

It is with this spirit of open exchange that the plastics industry is approaching its regulatory problems. There appears to be a confidence that such openness will lead to those controls that are truly required ~~to be applied~~ for the health and safety of workers and the public alike.

