Occidental Chemical Corporation

September 19, 1986

RECEIVED
SEP 25 1986
W. F. CARROLL

WFC
FYI
DG

Ms. Marlene C. Carter
1939 W. 59th Street
Chicago, IL 60636

Re: CHICAGO PLASTIC PIPE ORDINANCE

Dear Ms. Carter:

The opponents of plastic pipe focus their arguments around three points: (1) plastic pipe can be permeated by organic soil contaminants; (2) contaminants from plastic pipe manufacture or installation can leach from the pipe; and (3) plastic pipe is an unusual hazard in a fire. The Vinyl Institute, an industry organization and division of the Society of the Plastics Industry, has sponsored outside research to obtain factual information regarding these concerns. I would like to share or to introduce these scientific facts to you.

PVC is a combustible material, but its combustibility is low when compared to the bulk of other construction materials. When the source of flame is removed from PVC pipe, it will not support combustion. Its heat value is lower than the wood studs which surround it, and wood studs clearly could spread a fire. Tests at the National Bureau of Standards reflect the views held by most scientists that there are few, if any, unusually toxic smokes. Most materials are roughly equivalent. In the University of Pittsburgh test, PVC, wool, and many common materials are found to be similarly toxic. Finally, the main combustion product of PVC has been found to be less toxic to primates than the most common combustion gas, carbon monoxide.

PVC pipe is safe for drinking water. PVC is non-corrosive and non-conductive. In normal soil there is virtually no chance of contaminants permeating PVC for several decades. In contaminated soil no jointed pipe system, whether iron, cement or plastic, is recommended for potable water systems. In head-to-head leaching studies in California, plastic pipe (CPVC) is safer for drinking water than metal pipe (copper with tin-lead solder). Neither pipe system poses a problem for introducing carcinogens.

All of the these facts are technically sound. They are available because the Vinyl Institute has over the past three years funded over one million dollars worth of research to define the strengths (and weaknesses) of PVC. These facts are now being put forward in the technical community in peer-reviewed journals and professional meetings. They are equally defensible in the political/regulatory arena.

In summary, PVC is a safe, durable, economical, and easy to install product that has proven itself in applications around the world for over a quarter of a century. I urge you to accept the proposed change in the building code.

Very truly yours,

Donald Goodman
Manager, Technical Projects
PVC Resins & Compounds Division
Occidental Chemical Corporation

Chairman,
Diffusion Science Sub-Committee
The Vinyl Institute