



October 25, 2005

To Whom It May Concern:

**SUBJECT: Weld-On® Adhesive Materials and the EPA's Plastic Surface Coating  
MACT Regulations**

It is IPS understanding that adhesives and surface coatings are not the same and the same standard cannot be applied to both. Surface coatings are such products as paints, aerosol sprays, epoxy coatings and other materials that are sprayed, brushed, troweled or applied in some manner to a surface and where the entire surface of the coating is exposed to the air and emits Volatile Organic Compounds (VOCs).

Weld-On solvent-cement adhesives and primers, on the other hand, are not in the same category because their solvents have been defined as: "a liquid which is a VOC during application and one in which, through chemical and/or physical reactions, such as polymerization, 20 percent or more of the VOC becomes an integral part of a finished material." [South Coast Air Quality Management District (SCAQMD) Rule 1168(b) (57)].

The process of solvent welding involves the softening of the surfaces of two substrates (typically a pipe end and a fitting receptacle) by wetting them with solvents (primers) and/or adhesives (solvent-based cements), and joining them together through a chemical and/or physical reaction(s) to form a fused union SCAQMD Rule 1168(b)(67). Typically, as much as 50 - 60 percent of the solvent-cement and primer VOCs are retained in the joints (fused unions) of properly applied PVC, CPVC and ABS cements and primers.

Since the bond strength, shear strength or burst strength of any plastic pipe union must meet standards set by ASTM (American Society for Testing & Materials) we must maintain the formulations as tested to those and other standards. Water or other liquids cannot be added to reduce the VOCs without immediate joint failures.

The best way to achieve the intent of MACT directives to reduce VOC emissions is to select *Low VOC Weld-On®* cements and primers that are already on the market and have been tested to ASTM, NSF, IAPMO and other standards while still meeting the eleven California Air Quality Management or Air Pollution Control Districts' more stringent VOC emission requirements that Low VOC products, that meet bond, shear and burst strength requirements, be used.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Richard B. Winn".

Richard B. Winn  
Manager – Safety, Health & Environmental Affairs