



## U.S. VOC Emission Standards for Consumer Products

January 1999

The Environmental Protection Agency (EPA) has issued final regulations to control volatile organic compound (VOC) emissions from household consumer products, such as cleaning products, floor polishes and waxes, and personal care products. EPA worked in close partnership with major stakeholders, including industry representatives and state and local agencies, in developing the final regulation. The requirements outlined in the final rule are based on product reformulation, a pollution prevention approach.

This final rule affects approximately 220 consumer product manufacturers and importers nationwide. Many of these companies have already taken steps to reformulate their products to emit less potential smog-causing volatile organic compounds. EPA worked closely with these companies in developing the final rule. Because several states have moved ahead with their own regulations for several of these products, a national rule will help "level the playing field." This will minimize situations where companies would have to manufacture several products to meet a "patchwork" of state regulations, instead of one product for nationwide distribution.

The EPA's final regulation is based on best available controls, as defined under the Clean Air Act, and sets specific VOC content limits on 24 consumer product categories (some product categories are divided into sub-categories). The VOC content limits do not include any VOC that has vapor pressure less than 0.1 mm Hg at 20 degrees C. Since many DOW glycol ethers have vapor pressures below this threshold, the use of these low vapor pressure DOW products can reduce the amount of VOC in your formulation. Products meeting this criteria include: TPM, DPMA, DPnP, TPnP, DPnB, TPnB, PPh, EPh and Butyl CARBITOL™ glycol ethers. Starting point formulations that include the use of some of these low vapor pressure solvents may be found at <http://www.dow.com/dowanol/nam/library/l4a.htm> and <http://www.dow.com/dowanol/nam/library/l4b.htm>.