

February 20, 2003

### Open Molding Nomenclature

Because of the *regulatory implications* of “controlled spray,” “non-atomized spray,” “covered cure,” etc., it is essential that composites manufacturers and regulators be clear and consistent in the use and meaning of these terms and definitions. This document provides the “official” ACMA definitions of these terms.

- **Mechanical application** means the use of pumps to deliver a pressurized stream of resin or gel coat to a mold through some kind of application device. Spray and non-spray are the two types of mechanical application.
- **Spray** means any material flow moving through the air to be deposited on a mold.
- **Choppers** are devices that add chopped glass fibers to the material stream delivered from an atomized spray or non-atomized spray gun.
- **Atomized spray** is any kind of spray application that is not non-atomized spray, but typically includes Conventional Air Atomizing, High Pressure Airless, Air-Assisted Airless, and High Volume Low Pressure.
- **Controlled atomized spray** is the use of an atomized spray gun in combination with a Controlled Spray program.
- **Controlled Spray** is a specific set of three work practices that can be used to reduce material usage, worker exposures, and emissions. The three work practices included in a Controlled Spray program are spray gun set-up and pressure calibration, training in proper spray techniques, and mold-perimeter containment flanges. A full program description and training materials for Controlled Spray can be obtained from the technical resources section at [www.acmanet.org](http://www.acmanet.org).
- **Non-atomized spray** is any spray application that meets the non-atomized definition in SCAQMD Rule 1162, the Indiana Styrene rule, or the US EPA MACT rule. Non-atomized spray includes both an equipment design requirement and certain essential work practice requirements. The required work practices are specified by the gun supplier and the applicable regulations. ACMA recommends that equipment suppliers and regulators adopt Controlled Spray as the required set of work practices.
- **Non-spray mechanical** is the use of pumps with an application device but does not involve a stream or flow of material through the air. Typical non-spray mechanical devices are pressure fed rollers.
- **Manual application** is any non-mechanical application (without pumps or pressurized material flow), and includes bucket-and-brush and bucket-and-roller, and resin impregnators.
- **Covered cure** means the use of vacuum bagging or other technology where a plastic sheet is used to cover the mold after resin is applied. Covered cure techniques are typically used where higher physical properties of the product are required. Vacuum infusion and other processes where the mold is covered before resin is applied are not considered to be open molding processes.