

STYROFOAM®

The ISWM office often receives questions about what to do with Styrofoam® in the form of plastic egg cartons, cups, or take-out containers. At present it cannot be recycled at the landfill, so for now it goes into the trash. Styrofoam makes up less than 1% by weight and volume in landfills. Fortunately, new technologies are developing which allow it to be recovered and reused. One method is *densifying*, mechanically breaking down the cellular structure. An example is compressing 8000 8 oz. cups to fit in a cylinder 15 inches tall by 15 inches diameter! This product is then used to manufacture such items as crown molding, decorative picture frames, or nursery flats. One company that does this is Dart Container Corporation with 15 recycling centers in North America, recycling 1.5 million tons of plastic in one year. Two of its programs are for Styrofoam® cups: **Care** supplies *densifiers* to businesses who then sell the remains back to Dart and **Recycla-Pak** which provides a corrugated box which doubles as a collection bin and a shipping box. This box maximizes the number of cups held and restricts it to cups only.

Styrofoam® is a restricted trademark of Dow Chemical Company. The correct term is foam or polystyrene. It is also EPS (expanded or extruded polystyrene) with recycling symbol #6. One of the building blocks is styrene, a clear liquid derived from petroleum and natural gas by-products. Styrene is also a chemical naturally occurring in wheat, strawberries, peanuts, coffee beans, and cinnamon. Foam products are very popular because they are inexpensive, lightweight, good insulators, convenient, and sanitary. A Dutch study found that foam cups were less harmful to the environment than solid cups, requiring fewer raw materials, no washing or cleaning products. Proponents of foam cups claim superiority to paper cups which have 2 times the loss of heat, 2 times the volume, 5 times the weight, often a non-degradable liner and 2 times the gas emissions in manufacturing. Foam is here to stay and we need to find more solutions for handling it. Personally, I try to remember to take my own container for 'doggie bags' at a restaurant and my own coffee cup to meetings.