Glass Recycling Isn’t Always Crystal Clear

You may be surprised to learn that glass recycling is harder than it sounds. After all, it is just melted silica (sand) and a few other simple minerals, right? But two critical factors make it tricky.

First, virgin glass is cheap to produce. Thus, the added cost of shipping used glass back to be recycled can make recycling out of the question economically. We are lucky in Northern Colorado. A large glass recycling plant (Coors Bottling in Golden) is relatively close by.

The second problem is the extremely high standards of glass manufacturers. Any foreign material that makes it past the screens in the recycling plant can cause imperfections in drink bottles and become a safety threat to consumers.

Home recyclers can help decrease such contamination by using extra care in preparing glass for recycling. Keep gravel and stones from accidentally getting into your bin, and be especially vigilant to prevent ceramics, pottery, light bulbs, and mirror shards from being mixed with regular bottle glass. Don’t leave bottle caps or metal lids attached. Removing those pesky aluminum rings to which twist-caps are attached would help, too.

Pyrex™ or ceramics have varying chemical compositions and melting temperatures. They create flaws or bubbles like those pictured on the left, and the new glass container cannot be used.

In the past, Coors rejected some loads of glass from the Larimer County Recycling Center due to contamination. This was discouraging, and it forced the County to make the difficult decision to discontinue shipping glass to Coors. Receiving only $15 per ton for mixed-color glass, it was too costly to take it to Golden, only to risk having to bring it back.
The good news is that after two years of putting our glass to secondary uses (such as combining it with backfill material in road construction projects) the amber, or brown-colored, glass is again being shipped to the remanufacturing plant in Golden. Larimer County’s Natural Resources Department and the contractor for the Recycling Center, Waste Management, Inc., have found it economical to go to the extra effort of separating amber glass, which is worth $50 per ton. Since August 2000, amber glass has been sent to Coors and has met the company’s quality control standards.

In addition, the County will install an “air classifier” to the conveyer-sorting belt at the recycling plant. This will help rid the glass of contaminants such as paper and plastic, improving quality.

The Larimer County Recycling Center will continue to collect other colors of glass (clear, green, blue) and put this mixed glass to secondary uses. Residents don’t have to separate by color when recycling. Color separation will occur at the plant.