

Recycling: The Missing Piece of the Resource Conservation Puzzle

By Jerry Wright, Superintendent, Solid Waste Division, City of Rapid City, SD

Recycling is one of the purest forms of energy conservation in the modern world. Case in point: aluminum. Did you know that it only takes 10% of the energy to make a can from a can, compared to making the same can from virgin materials? Or that there is a 50% saving in energy when one makes a steel can from a used steel can, compared to making the same can from virgin materials? Or that, to bury plastic waste is about the same as burying pure petroleum?

Recycling in our community couldn't be much easier. We have a single stream process, which means that you don't need to separate your glass, cans and plastic. All three types of recyclables go into the same container which, for most people, can conveniently be rolled to the street with the trash for pick up. For people outside the city limits, four drop-off locations provide easy access to all on their routine trips into town on any given day. For everybody, the drop locations also serve recyclers of newspapers, cardboard, and yard waste.

Our web site, found at www.rcgov.org under the Department of Public Works, Division of Solid Waste, provides a wealth of information on how to recycle other products, from electronics to building materials, prom dresses to baby carriages. We want to keep usable products out of the waste stream. Every product that stays in the use stream is a product that isn't replaced by something that uses up more of our planet's *finite, precious* natural resources. While we can't ever replace what we have lost, used or squandered, we can dramatically reduce the rate at which we use what remains.

Tremendous amounts of energy can be saved through recycling. When we "do the math" at the Rapid City Landfill, we discover that our 3,034 tons of recycled materials in 2008 translates into a huge savings in energy. With the 70 ton of aluminum cans recycled last year, we conserved about 1.6 million KWH of electricity. With the 250 plus ton of recycled plastic, we conserved over 250 ton of petroleum. These are with a recovery rate of only 25% or so. Imagine the energy saved, if we had 100% recovery in our community. What a difference it would make if the entire nation successfully recycled 100% of the high value and high energy items now land filled.