

From the Director's Desk

August 2011

Recycling seems to be on a lot of minds lately if my email and phone messages are any indication of interest in our District. Here are just a few facts about recycling from the web:

1. Recycling a four-foot stack of newspapers saves the equivalent of one 40-foot fir tree.
2. If all morning newspapers read in this country were recycled, 41,000 trees would be saved daily and 6 million tons of waste would never end up in landfills.
3. Enough energy is saved by recycling one aluminum can to run a TV set for three hours or to light one 100 watt bulb for 20 hours.
4. Recycling a soda can saves 96% of the energy used to make a can from ore and produces 95% less air pollution and 97% less water pollution.
5. Five recycled soft drink bottles make enough fiberfill for a man's ski jacket. Thirty-six recycled bottles can make one square yard of carpet.
6. Five soda bottles yield enough fiber for one extra large T-shirt.

These facts should make anybody feel good about recycling, but before we start congratulating ourselves we need to look out how recycling is carried out. What is involved in recycling paper, plastics or paper and from where?

There are three primary points of collection for materials; commercial, households and industry and each requires a unique approach in order to maximize the costly benefits of recycling. Commercial and industry generally generate one primary recyclable material; a furniture store recycles large quantities of cardboard and a steel fabrication plant generates scrap metal. These materials generally bring a high price when sold to recyclers because they are clean and sorted when they arrive.

Households generate a dirty mix of plastic, paper and metal in very small amounts yet when combined with thousands of other households become a very large quantity. These materials are generally picked up as a single stream, i.e., they are all tossed into a recycle container together and compacted in a truck prior to deliver to a recycler. At this point either the material is compacted and baled and shipped to a MRF (Material Recycling Facility) or it is delivered to a MRF directly.

Once at a MRF it is mechanically sorted by material type and baled for shipment to a re-processor; for paper materials this is typically a paper mill, for plastics to a facility that cleans, shreds and melts the material into fibers or pellets; and for metals to a facility that melts the material back to its base form for reuse.

So what does it take to start a curbside recycling program in our District? First you need a container for your recyclable materials, typically an \$80.00 cost; multiplied by thirty thousand households in the urban areas of the District and you have an initial investment of \$2.4 million dollars. To service that

many households you need at least four trucks dedicated to curbside recycling at a cost of \$250,000 apiece, or another million dollars.

Now that we have the equipment to collect your materials curbside, where do we take it? In our District we are looking at a recycle baling center that would simply gather all of the materials together into 1500 pound bales and then sell it to a MRF. A recycling center of this size requires land, a building, a baler, heavy equipment to handle the waste, fuel and utilities, and let's not forget the labor. All of this adds up to at least another million dollars.

A \$4.5 million dollar initial investment, with ongoing maintenance and operational cost, so here are a few more interesting facts to pay the initial cost:

1. You need to collect 144,000,000 water bottles, last year we collected 6,000; or
2. You need to collect 900,000,000 newspapers , last year we collected 170,000; or
3. You need to collect 4,500,000 soda cans, last year we collected 43,000

We have a long way to go before we reach our maximum capabilities as a District; residents must gain discipline in proper recycling methods to capture all recyclables. In the mean time we continue to service our drop off centers and are working on long term solutions that will be of benefit to all within the District.