

The Business of Garbage

By Diane Strandberg, *Tri-City News*, January 22nd, 2006.

This past month, as Christmas celebrations turned into January's fresh start, thousands of pounds of garbage and recyclable materials were sorted, sold, squashed, baled, melted, pulped or buried as Tri-City residents emptied their closets of old stuff to make way for new stuff. Most of us do this chore more or less religiously and, once our garbage, newspapers, cans, plastic, bottles, cardboard and mixed paper are dragged to the curb, it's off our minds. Then it's off to the dump, charity thrift store or recycling depot with the rest of the junk. But the story of our consumer waste doesn't end there. In fact, it just gets more interesting as our old stuff takes on new life — and provides jobs and income for businesses and non-profit groups along the way. *Tri-City News* reporter Diane Strandberg looks at this business of garbage.



CRAIG HODGE/THE TRI-CITY NEWS

Trucks leave the *Coquitlam Resource Recovery Plant* carrying 38 tonnes of garbage. The plant, on United Boulevard, receives approximately 1,000 tonnes of garbage on weekdays and 700 tonnes on weekends. Total amount of refuse shipped to Cache Creek from various municipalities in the Lower Mainland is approximately 1,300 tonnes per day, seven days a week.

A pound of garbage every day — that's about what each Tri-City resident generates and dumps at the curb-side. It doesn't sound like a lot but it adds up to a large mound of rubbish.

Last year, Coquitlam residents produced 18,000 tonnes of garbage, Port Coquitlam people another 8,310 tonnes and Port Moody citizens 4,000 tonnes.

And like the tributary of a vast river, our household garbage becomes part of a much larger waste stream.

After it is collected, it is dumped at the *Coquitlam Resource Recovery Plant (Wastech)*, where it is compacted and baled, along with commercial and other residential garbage, and trucked 330 kilometres to a landfill site at Cache Creek. There it lies under a soil cover to form part of a huge plateau on 48 hectares (128 acres) in a dry valley. On an average day, *Wastech* hauls 1,300 tonnes of Lower Mainland garbage from Coquitlam to the Interior town.

Although some of it is diverted and burned in the GVRD's *Waste-to-Energy Facility* in Burnaby to provide steam for a paper recycling plant, most of our garbage goes to Cache Creek, where it sits and rots.

Recycling Option

The garbage at Cache Creek is neither an eyesore nor an environmental hazard, according to the *Greater Vancouver Regional District*, which is responsible for our garbage. It provides jobs for local residents and meets strict standards. But landfills are costly to maintain and they don't last forever, we're told. The GVRD is even now looking for a new place to store our waste because Cache Creek will be full in two years.

The alternative to throwing things out, as it has been since the mid-1980s, is recycling. Most of us sort our newspapers, cans and bottles in the hope that we're doing something good for the environment.

And according to the GVRD, we are. A study in 1998 found we have cut our waste by half, producing just 0.681 tonnes per person annually compared to 1.38 tonnes before 1990.

Recycling is a good habit to get into, says Ken Carrusca, a senior engineer with the GVRD, because diverting stuff from the waste stream reduces the demand for new landfills and the need for virgin resources, such as trees for paper and ore for metals. "When you save landfill space, you extend the life of your assets and your resources," Carrusca said.

What They're Worth

But even more important for taxpayers is that recycling cuts-down on garbage costs: The more we recycle, the less garbage we generate for the landfill, which keeps those costs down. City garbage costs are further reduced by the value of the recyclables sold as base materials for new products.

In Coquitlam, for example, garbage costs have stayed stable for several years, according to city spokesperson Therese Mickelson. Landowner fees last year were \$155 for garbage and recyclable collection and disposal, including yard trimmings. And Coquitlam residents are also recycling more and throwing out less, with per capita garbage down 13% to 348 pounds since 2000.

"Recycling pays-off," said Mickelson.

Port Coquitlam is the real success story when it comes to recyclables, though. In 2003, PoCo switched to an automated collection system and changed from the blue box and bag system, where people have to sort their own recyclables, to a single-stream system. PoCo residents now put all their recyclables, except glass, which isn't accepted, into one container, which is then taken to *Happy Stan's Recycling* in PoCo, where someone else sorts the plastic, newspapers and cans.

The switch resulted in a remarkable 58% increase in the diversion of recyclable materials, according to Francis Cheung, PoCo's director of engineering and operations, and kept 600 tonnes of garbage (7.22% of total volume) out of the landfill last year.

Garbage costs also dropped. Last year, PoCo residents paid \$158 for garbage and recycling compared to \$165 in 2004. Still, the city pays a fee for recycling charges, which amounts to approximately \$33 per unit, or \$500,000.

Port Moody residents, meanwhile, paid \$163 last year for garbage pick-up and recycling, including collection of yard trimmings.

Value of Paper

Not all recyclable materials are created equal, however, and some are more valuable than others because they are more readily turned into something else.

Although we're told to recycle as much as we can, newsprint is the gold standard for recyclable materials. At US\$80 a ton, newspaper recyclers are getting their money's worth.

"They probably pay for the whole recycling system," said Tom Fawcett, general manager of *Catalyst Paper* in Coquitlam. His company takes Tri-City newspapers, pulps them and removes the ink, to create a fibrous, grey material that is shipped by barge to Crofton, on Vancouver Island, where it is mixed with virgin fibre to make other paper.

According to the GVRD's Carrusca, there are costs associated with recycling, such as transportation, sorting and handling, and market prices for materials fluctuate. But when revenue is factored in, recycling still makes financial sense, Carrusca said. And because paper and cardboard are valuable and easily recyclable, the GVRD wants us to recycle more of it and is considering cracking down on the amount that is dumped in landfills, reducing it from 20% of volume to 10%.

Prices Fluctuate

Price swings do occur, however, and they can put a dent in financial equation for recycling. Glass and tin cans, for example, don't have the financial return of paper and aluminum pop tins, and the value of all recyclable materials can rise or fall with changes in the world economy.

In Tri-Cities, residents are isolated from most international price fluctuations because garbage contracts go to the lowest bidders, who take all the risk.

International Paper Industries (IPI), for example, which collects Coquitlam and Port Moody garbage, sends the newspaper to *Catalyst*, the mixed paper to other BC pulp mills, the cans to Alcan, the plastic containers to *Merlin Plastics* in Delta, and processes the glass into aggregate for road construction at its own plant, according to Richard Woo, IPI vice-president, who praised Coquitlam and PoMo residents for their recycling efforts.

"By recycling, we reduce that which goes to the landfill, save on costs and the environment on a global scale," Woo said.

PoCo recyclables are equally mined for their value. The city's new recycling contract with *Canadian Fibre* (which is taking over from *Happy Stan's*) will see revenue from newspaper and mixed paper offset processing costs, according to Cheung, who said, "The more paper, the more revenue."

Old Is New Again

The saying that one man's garbage is another man's treasure is true for larger consumer items as well. Our cast-offs are income generators for a variety of local businesses and social service organizations.

Some are long-standing, such as *Litchfield and Co. Ltd.* of PoCo, which has made a business of demolishing buildings and selling the materials for nearly 50 years. Some are new, such as *QuikDrop*, a PoCo eBay drop-off store that evaluates and sells second-hand items for customers on the online auction service for a commission. And some, such as *Techno Trash*, also in PoCo, help us get rid of a growing problem — electronic trash.

And then there are the thrift stores that take our old clothes, shoes and household items and resell them to help pay for needed community services, such as *Crossroads Hospice Society*, *Share Family and Community Services* and the *Salvation Army*, which processes the goods for all its Lower Mainland stores at its distribution centre in PoCo.

Like scrap dealers of old, these business and organizations make a profit from used goods. Recycling is a huge industry, says Brock MacDonald, executive director of the *Recycling Council of BC*, providing jobs and incomes for many people, although the value of our used goods as commodities has never been quantified.

And more companies are taking responsibility for their products so they don't end up in the landfill, MacDonald said. The high-end auto manufacturer BMW, for example, is making car interiors with materials that can be composted.

Eventually, we'll get to the place where nothing is thrown away. "Zero waste," said MacDonald, "That's something we're getting close to."

If money can be made from it, industries will crop up to make this environmental dream a reality.