

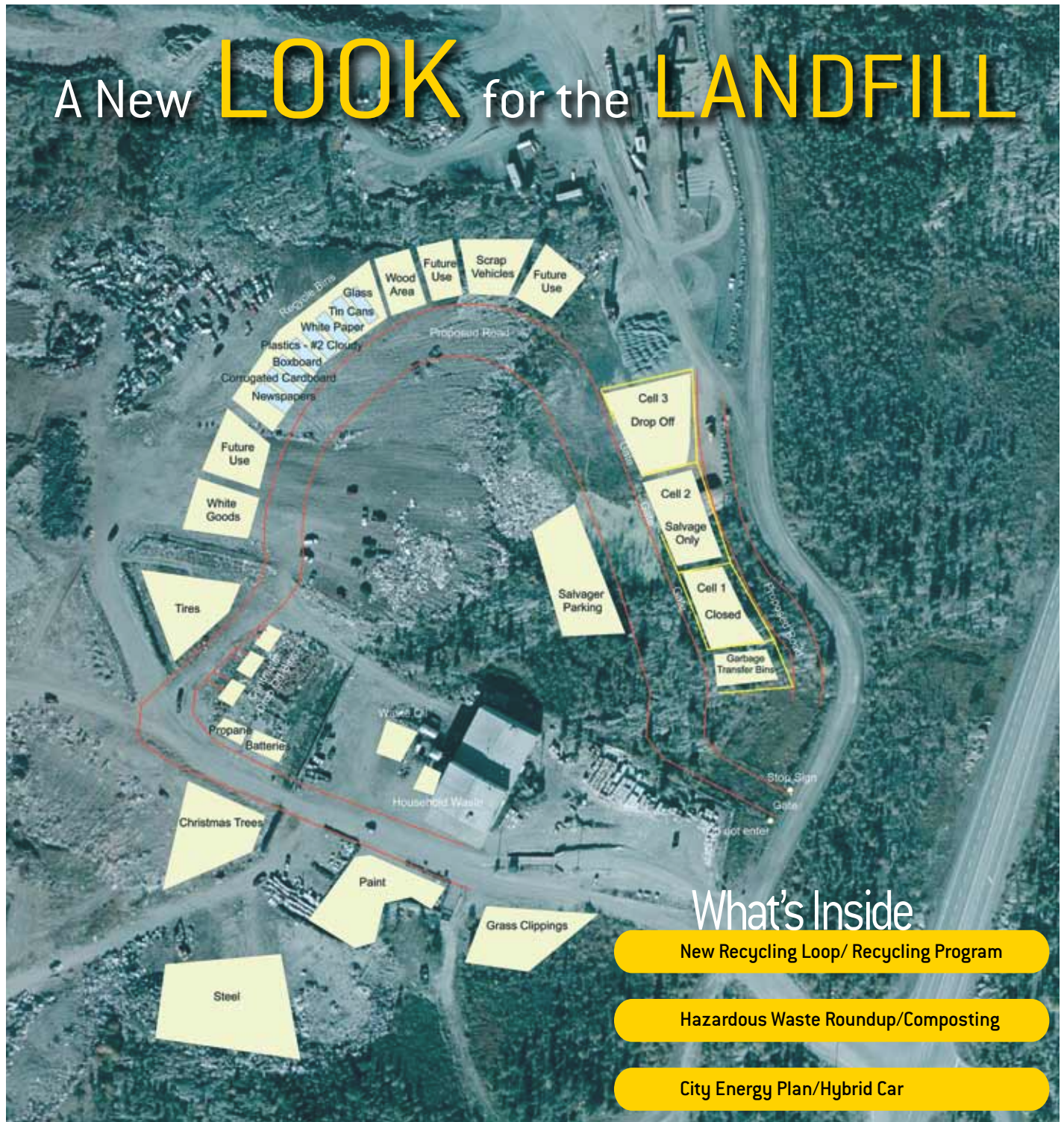


CITY COMMITMENT



Winter 2009

A New LOOK for the LANDFILL



What's Inside

New Recycling Loop/ Recycling Program

Hazardous Waste Roundup/Composting

City Energy Plan/Hybrid Car

NEW Recycling Loop at the Solid Waste Facility



The City of Yellowknife is currently constructing a new area at the Solid Waste Facility. This will make it easier for customers to sort their waste and salvage usable items. The new area will be a loop with designated areas along the road for various types of items. Current areas will be moved to this road such as the recycling bins, appliances, vehicles and wood area.

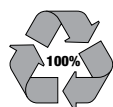
Funding has been approved in the 2009 City budget for a storage building for e-waste that would include computer components and electronics. These items will be shipped to Edmonton to have the toxic materials removed and usable parts recycled.

The other new part of the loop road is the construction of a 3 cell salvaging area. This will be 3 areas separated by chain link fence where customers can drop off their salvageable materials. As a section becomes full it will be closed to dropping off materials but still open for salvaging. When a new section is opened for dropping off material the oldest section will be closed so that it can be safely emptied by the Solid Waste Facility Staff. With this new system salvageable material will be available for a longer period of time and there will no longer be restricted hours on Mondays and Fridays. Contractors will also be encouraged to separate their loads and drop their salvageable wood in this area so that it will be available for salvagers to reuse.

Two public forums were held to receive feedback from residents on the 3 cell system and the design of the recycling loop. As a result, a number of changes were made to incorporate these suggestions. Design of the recycling loop road has already started and construction will be completed in the spring of 2009.

FACTS

By recycling 1 Tonne of paper we save: 17 trees, 26,320 litres of water, 1,753 litres of oil, 266 kg of air pollution, 3.06 cubic yards of landfill space, 4077 Kilowatt hours of energy



Printed on Recycled Paper



Waste Management in Yellowknife

In 2006 the City of Yellowknife implemented a User Pay System for waste disposal. This included a limit of 3 bags that each resident may place at the curb for collection. User Pay was an initiative to make people aware of how much waste they were producing and also an incentive to increase recycling. If a resident needs to put out more than 3 bags they can purchase green bag tags for \$1 each and place these on the extra bags. They can also bring their bags to the Solid Waste Facility and pay \$1 per bag to a maximum of \$5 per vehicle load. City Council also approved Amnesty Week for when residents may have more than the usual amount of waste. There are three Amnesty Weeks per year; Spring, Fall and Christmas. Construction waste, furniture, yard waste, etc. is also received at the Solid Waste Facility for \$5 a load from residents.. During Amnesty Week the \$5 fee is waived but other tipping fees shown below remain in effect.

- 77 Litre (20 US gallons) receptacles may contain loose refuse receptacles must weigh less than 25kg (55lbs)
- 77L bags must be contained within receptacles or shelters
- 77L bags may be stored in receptacles larger than 77L existing larger receptacles can still be used
- Any bags over the three bag limit must be tagged
- Receptacles larger than 77L may not contain loose refuse

If a vehicle dropping off waste has commercial plates they are charged commercial rates.

FACTS The Solid Waste Facility will be replacing their weigh scale in spring 2009

Residential Landfill Tipping Fees:

(For full listing of fees, please see the City's Website)

- Tires
 - less than 20" dia. \$4.00/tire
 - between 20" and 48" dia. \$8.00/tire
- Automotive Batteries
 - up to three batteries/month \$4.00/battery
- Oil Tanks
 - (up to 250 gal.) \$100.00
- White Goods (appliances)
 - Fridge \$35.00 ea.
 - Other \$10.00 ea.
- Domestic Vehicles \$100.00 ea.

Where can tags be purchased?

- City Hall • Reddi Mart • Village Reddi Mart
- Sutherland's Drugs • Yellowknife Direct Charge Co-op
- Solid Waste Facility Gatehouse

Winter Landfill Hours

- Monday and Friday 2:45pm to 4:45pm
- Tuesday, Wednesday & Thursday 8:00am to 4:45pm
- Saturday, Sunday, & Holidays 10:00am to 4:45pm

Summer Landfill Hours

- Monday and Friday 3:45pm to 5:45pm
- Tuesday, Wednesday & Thursday 8:00am to 5:45pm
- Saturday, Sunday, & Holidays 10:00am to 5:45pm

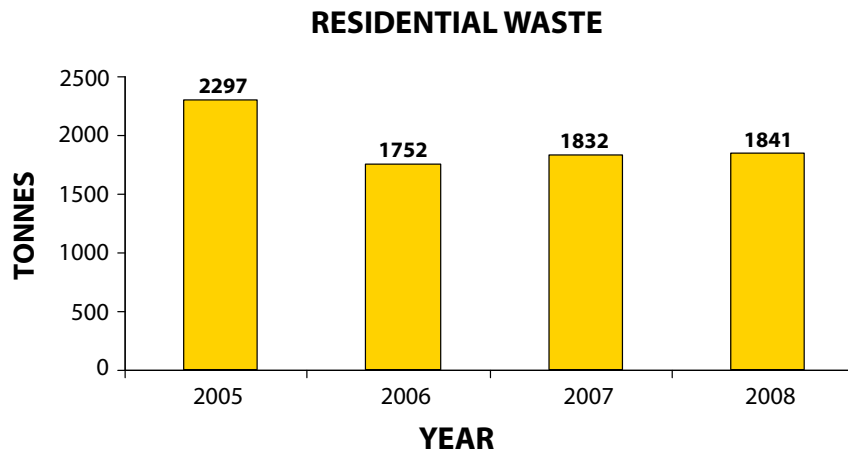


CITY OF YELLOWKNIFE

Recycling Program

The recycling program in Yellowknife is continuing to progress with more businesses making the effort to separate their recyclable materials. They will then receive a lower tipping fee of \$30 per tonne compared to \$65 per tonne for unsorted commercial garbage. Residents are also using the recycling depots located around town to reduce the amount of waste they are producing. Additional bins have been added over the last few years so residents can drop off corrugated cardboard, HDPE #2 plastics (milk jugs) and boxboard at all depot locations. A new recycling drop off depot location was added at the bottom of 52nd Street in 2007. The other recycling bins are located at the Co-op, Ruth Inch Memorial Pool, corner of Franklin Ave, School Draw and at the Solid Waste Facility.

The following chart shows that waste decreased when the user pay system was implemented.



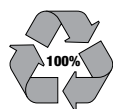
The quality of the recyclable material is also improving with less contamination in the bins. It is especially important that residents deposit their recyclables in the correct bin. Signs on the front of the bins can assist if you are not sure. Less contamination reduces the labor required to sort the recyclables making it more cost effective.

Recyclable materials arrive at the landfill and are dumped inside the building and then baled to make them easier to ship. We ship recyclables when prices are high and stockpile it when prices are low. Some recyclables, such as corrugated cardboard, produce revenue which is used to offset the shipping costs for other recyclables such as boxboard.

Paper products (cardboard, boxboard, newspaper) from Yellowknife are made into new paper products or made into building materials such as cellulose insulation, building paper and asphalt shingles. Metal cans and appliances are made into new metal goods, such as rebar and tractor/grader blades. Plastics are made into new plastic containers or plastic lumber. Glass can be melted down and made into new glass items or crushed and used as fill; currently our glass is being stockpiled. Most of our recyclables are shipped to Edmonton to be processed and resold.

FACTS

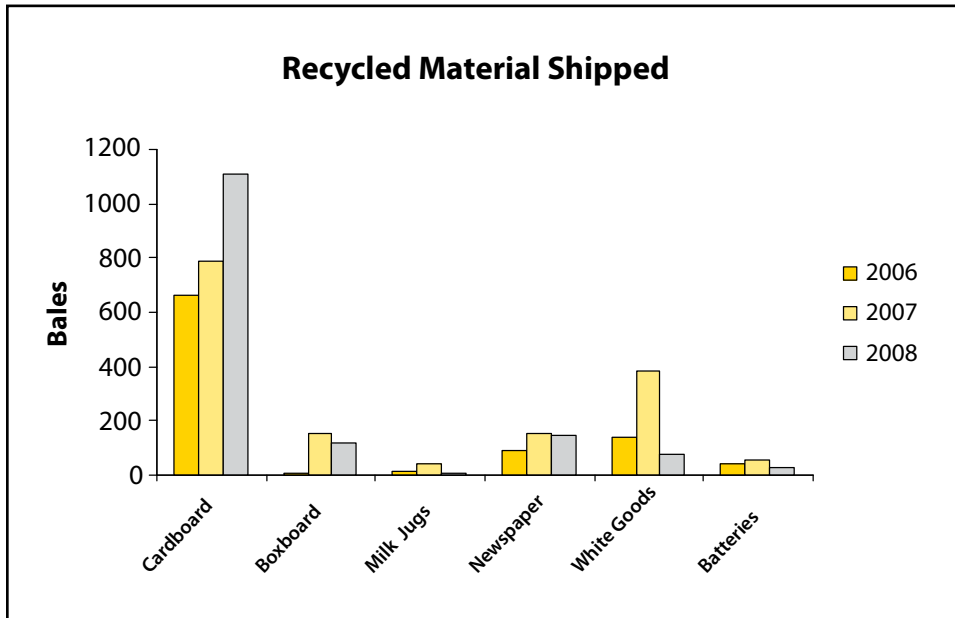
Businesses can take used fluorescent bulbs to NLC Holdings Ltd. 867-766-3803



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The following chart shows the number of bales recycled in 2006 to 2008.

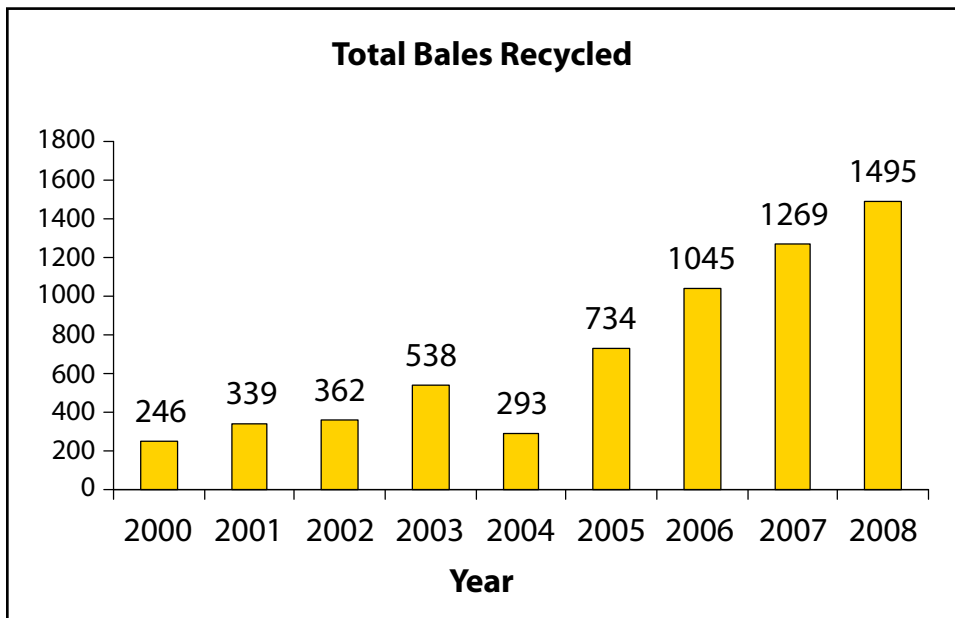


FACTS

The Solid Waste Facility accepts recyclables in the building on Tuesday mornings and Friday afternoons

Household Hazardous Waste Roundups will be held spring and fall during Amnesty Weeks.

This chart shows the total number of bales shipped since 2000.

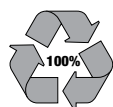


FACTS

Information on backyard and worm composting is available at the Solid Waste Facility Gatehouse and on the City Website

FACTS

The Solid Waste Facility recycles fluorescent bulbs, and accepts used oil and antifreeze from citizens



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Household Hazardous Waste Roundup

On Saturday, September 20th, 2008 the GNWT's Environmental and Natural Resources Department joined forces with City staff from the Solid Waste Facility to hold our first Household Hazardous Waste Roundup. This event was a great success with approximately 300 vehicles dropping off hazardous waste from their homes and a great deal of dangerous chemicals were diverted from the landfill. Most of these hazardous wastes were packaged and shipped south for proper disposal. The fluorescent light bulbs were put through a bulb crusher at the Solid Waste Facility which removes the mercury and other hazardous materials and the glass was recycled. The paint that is usable was made available for salvaging at the Solid Waste Facility and the rest was allowed to dry before being put in the landfill. Household Hazardous Waste Roundups are a great educational tool. They will help make the public more aware of the dangers of certain products so they will consider if a product is needed before purchasing.

We are planning to hold roundups twice a year during the spring and fall Amnesty Weeks. The following is a list of items that should be kept for the next roundup rather than put with your household garbage:

- Adhesives
- Batteries (less than 1 kg in size) such as AA, AAA, C, D
- Household cleaners
- Fertilizers
- Pesticides
- Fuels
- Mercury items such as thermostats
- Solvents

These items can be taken to the Solid Waste Facility year round by residents or saved for the next HHW roundup:

- Paint
- Florescent bulbs
- Used oil
- Antifreeze
- Automotive Batteries (\$4 tipping fee, limit of 3 per month)

Rechargeable batteries from electronics (such as phones, cameras, laptops, cordless power tools) can be taken to:

- Roy's Audiotronic
- The Source
- Canadian Tire
- Staples
- City Hall
- Gatehouse at the Solid Waste Facility
- Home Building Center

Let's all keep our homes and land safe by disposing of harmful items responsibly



FACTS

Pizza boxes cannot be put in cardboard bins.

One bale of garbage takes up 1.4m³ of space. Last year we saved 1,758m³ of landfill space by recycling 1,269 bales.

For more information: www.yellowknife.ca

Backyard Composting

The City of Yellowknife recently completed a one year study on backyard composting. With a \$5,000 donation from the Shell Environmental Fund, we purchased and distributed 100 composters to households around Yellowknife and asked them to record how much waste they placed in their composters. From this study we determined that backyard composting is possible in our northern climate and it does not take a noticeable amount of time to separate compostable materials. Participants were not as willing to take waste out to the composter in the colder weather and most households required at least two composters to store the volume of waste generated.

Backyard composting is an easy way to reduce the amount of waste that is going into our landfill but it also produces a great soil amendment that can be used in our gardens. Kitchen scraps (such as vegetable peelings and apple cores) are put into the composter, along with leaves and grass from the yard. During the warmer months the contents of the composter needs to be mixed about once a week and water added if it is too dry. During the winter months the contents will freeze but waste can continue to be added all winter. In the spring when it thaws the volume will drop quickly. After approximately a year the finished product can be removed and used to increase the nutrient value of vegetable or flower gardens. Given the rocky nature of our landscape finished compost is a valuable product here in Yellowknife and saves money and resources by not having to truck in topsoil.

Thank-you to all study participants for submitting their data!



TIPS FOR REDUCING Solid Waste

REDUCE

1. Reduce the amount of unnecessary packaging.
2. Adopt practices that reduce waste toxicity.

REUSE

3. Consider reusable products.
4. Maintain and repair durable products.
5. Reuse bags, containers and other items.
6. Borrow, rent or share items used infrequently.
7. Sell or donate goods instead of throwing them out.

RECYCLE

8. Choose recyclable products and containers and recycle them.
9. Select products made from recycled materials.
10. Compost yard trimmings and some food scraps.
11. Educate others on source reduction and recycling practices. Make your preferences known to manufacturer, merchants and community leaders.
12. Be creative – find new ways to reduce waste quantity and toxicity.

FACTS

The Solid Waste Facility Contact Number is:
Gatehouse: 867-669-3406

Centralized Composting in Yellowknife

In November of 2007 Ecology North received funding from the GNWT to hire staff to explore options for large scale composting in the City of Yellowknife. This position was shared by Shannon Ripley and Katherine Mackenzie starting in December 2007 and lasted four months. Working with representatives from the GNWT and the City of Yellowknife they looked at various types of composting operations and sources of compostable waste.

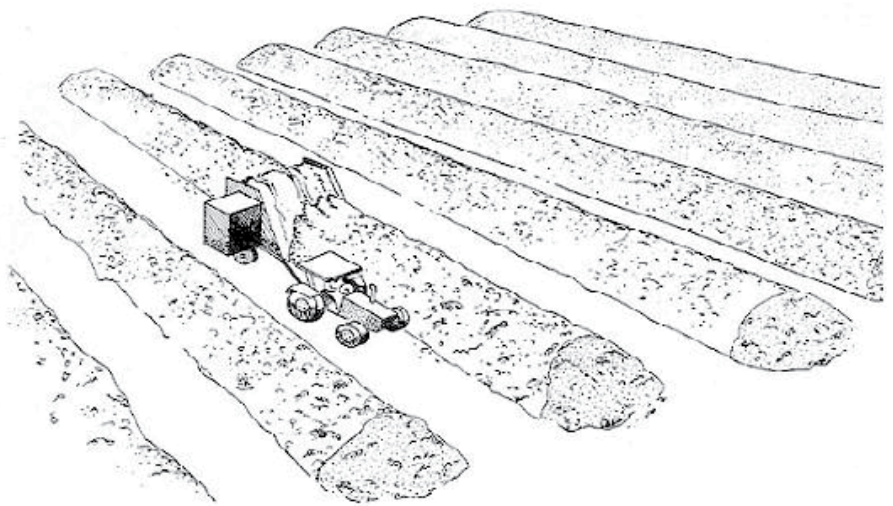
Composting is a way of breaking down food wastes into a nutrient rich soil amendment that can be added to gardens. Some households in Yellowknife are already composting using backyard composters or worm composters. A centralized composting operation has the advantage that much more waste can be composted, especially from businesses and institutions. Also, the large volume of material composted allows it to reach much higher temperatures which enables a greater variety of waste materials to be composted, as the high temperatures kill any harmful organisms that may be present. For example, meat and animal bones will compost in a large scale composting operation whereas it is not safe to put these items in a backyard composter. A centralized composting operation is also able to accept waste paper products (cardboard, boxboard, newspaper) and waste wood if it is not able to be recycled another way (such as pizza boxes that are greasy cannot be recycled with the cardboard). The finished soil that will be created from a large scale composting operation can be used in the city parks, for the landfill closure or sold to the public. Composting organic wastes would reduce the City's landfill costs, extend the life of the landfill and help to minimize the attractiveness of the landfill to birds.

The Ecology North study recommended doing a two year pilot project using the turned windrows method. This method has low setup

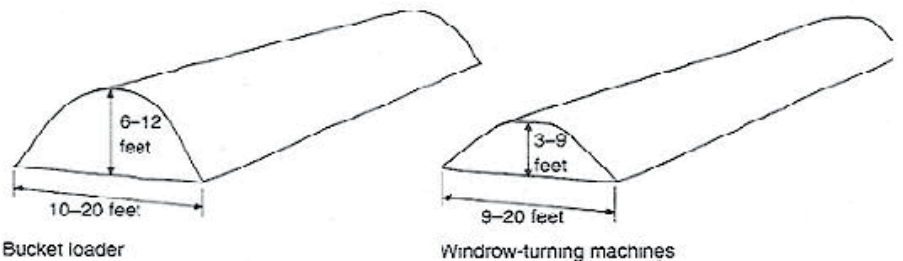
and operational costs and can be located at the current Solid Waste Facility. They also recommend that compostable waste be obtained from several businesses around town that are willing to participate in this pilot project. Obtaining compostable waste from residences is a long term goal for this project but for the pilot project it will be simpler to use just a few suppliers.

City employees are currently in the process of constructing a pad out of recycled asphalt at the Solid Waste Facility where the windrows will be located. Funding and necessary permits have been applied for so if everything is in place we hope to start the pilot project in the spring of 2009.

Windrow Composting [Rynk et al.1992]



Windrow composting with an elevating face windrow turner.



Typical windrow shapes and dimensions.



The GNWT's Beverage Container Recovery Program accepts juice, pop, bottled water, beer, wine, liquor and other alcoholic beverage containers.

City Energy Plan

The primary focus of the City of Yellowknife's Community Energy Plan is to reduce our impact on the environment and lower our energy expenses. The Plan has set ambitious goals of reducing City operation emissions by 20% and community emissions by 6% over 2004 levels by 2014. The goals are part of the City's commitment to The Partners for Climate Protection (PCP) program, to which 172 other Canadian municipalities have made the same commitment. Yellowknife's efforts to implement the Energy Plan have been recognized by The PCP program as a leader, with only four other communities of similar size to reach the same level of implementation. The City is investing \$500,000 annually in energy efficiency measures and renewable energy options and expects to achieve its goals by the 2014 date. Some of the projects being implemented are listed below.

Wood Pellet Heating

Recreational Facilities

Yellowknife is now host to some of the Greenest recreational facilities in Canada with a recent installation of a wood pellet boiler. Today when you use the Ruth Inch Memorial Pool, Community Arena or Curling Rink you can rest assured your activities are having a minimal impact on our changing climate. Wood pellet heating is considered carbon neutral, meaning the life cycle of wood consumes as much carbon dioxide when a tree is growing as when it is burned as a wood pellet. The project will reduce carbon dioxide emissions by 850 tonnes, which represents a 19% reduction in year over year City operational emissions.

The project cost \$530,000 for the installation of the boiler and district heating system to connect the buildings and is supported by a \$280,000 grant from the Federal Government and Department of Municipal and Community Affairs. The boiler is expected to save \$40,000 annually (at \$1 per liter fuel oil) producing a 7 year payback on the City's funds.



With increased concern over the environment and volatile fuel prices, wood pellet heating has become an attractive alternative for Yellowknife residents. Local wood pellet stove suppliers have seen a surge in sales over the past year and an increased interest in central wood pellet heating systems. To support the trend to centralize wood pellet heating systems the City is installing two boiler systems at its lift stations as a demonstration project that will save money and the environment. The wood boilers will be connected to the existing oil fired systems and each is expected to save \$2,000 and reduce emissions by 18 tonnes.

FACTS

In 2008, Yellowknife will save 23,474 trees by recycling cardboard, boxboard and newspapers

Hybrid Car

The City's fleet is going Green with a recent purchase of a hybrid vehicle. The purchase is part of an effort to ensure City vehicles are appropriately sized to meet the needs of their intended use, as well as to demonstrate a new technology that represents the future of the transportation sector. The Toyota Prius will be used at the Fire Hall and has a fuel economy rating of 4 L/100km, which is far superior to Ford Ranger's 13.1 L/100km that the vehicle will replace.



Con Mine Geothermal Study

The City is conducting a feasibility study examining the viability of using heat from the old Con Mine within the community for heating. The study will answer four primary questions:

What is the sustainable size of the heating resource?

Where would it best be utilized within the community?

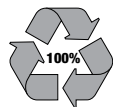
How (technically) would it be extracted and delivered to an end customer?

Is it economical to develop this resource?

The City will have a preliminary report available to the public early in 2009 that will provide answers to these questions.

FACTS

The Solid Waste Facility is closed Mondays and Fridays until 2:45 PM in order to clean designated areas











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WHAT Yellowknife Recycles!



	YES	NO	WHAT TO DO
 Newspapers	<ul style="list-style-type: none"> ✓ Newspaper ✓ Inserts (Pamphlets) 	<ul style="list-style-type: none"> ✗ Boxboard (cereal boxes, etc.) ✗ Phone Books ✗ Brown Paper ✗ Corrugated Cardboard 	Clean and Dry
 Corrugated Cardboard	<ul style="list-style-type: none"> ✓ Corrugated Cardboard ✓ Brown Paper Bags ✓ Brown Envelopes ✓ Brown Packaging Paper 	<ul style="list-style-type: none"> ✗ Waxed Cardboard (refrigerator boxes) ✗ Pizza Box ✗ Boxboard ✗ Newspaper 	Clean, Dry and Flattened
 Boxboard	<ul style="list-style-type: none"> ✓ Cereal, Cracker, Granola Bar Boxes ✓ Magazines & Catalogues ✓ Coloured Paper ✓ Wrapping Paper ✓ Egg Cartons ✓ Posters/Calendars 	<ul style="list-style-type: none"> ✗ Pizza Boxes ✗ Waxed Cardboard (refrigerator boxes) ✗ Waxed Paper ✗ Paper Towel & Tissues ✗ Corrugated Cardboard ✗ Newspaper 	Clean, Dry and, Flattened
 Plastics #2 Cloudy	<ul style="list-style-type: none"> ✓ Milk Jugs ✓ Cloudy Vinegar Bottles ✓ Cloudy Water Jugs ✓ Windshield Washer Fluid Containers (check bottom for #) 	<ul style="list-style-type: none"> ✗ Clear Plastic ✗ Solid Coloured Plastic ✗ Ice Cream Buckets ✗ Plastic Pop Bottles ✗ Cleanser Bottles ✗ Ketchup Bottles ✗ Syrup Bottles 	Rinse Jugs Remove caps Crush them down – Look for this symbol: 
 White Paper	<ul style="list-style-type: none"> ✓ White Paper ✓ White Envelopes (windows OK) ✓ Letterhead ✓ Computer Paper 	<ul style="list-style-type: none"> ✗ Newsprint ✗ Boxboard ✗ Magazines ✗ Brown Paper Products ✗ Carbon Paper ✗ Laminated Paper ✗ Coloured/Construction Paper 	Staples are OK Paperclips are OK
 Tin Cans	<ul style="list-style-type: none"> ✓ Tin Cans (Soup Cans, Fruit Cans, Coffee Cans, etc.) 	<ul style="list-style-type: none"> ✗ Aluminum Cans (Pop, Beer) ✗ Aerosol Cans ✗ Propane Bottles ✗ Lids (if separate from can) ✗ Paint Cans 	Label are OK Empty and Rinse Trap the lids inside the can
 Glass	<ul style="list-style-type: none"> ✓ Glass Containers 	<ul style="list-style-type: none"> ✗ Metal Lids ✗ Broken Windows & Mirrors ✗ Dishes ✗ Ceramic/Clay Items ✗ Light Bulbs 	Empty and Rinse Labels OK

* This list is subject to change. Please check updated lists as they are sent out for any changes. Or check the City website in the recycling section at: www.yellowknife.ca

Last Updated Nov 18/08



Please recycle this newsletter with your office paper.

What To Do With Unwanted Goods?

LETS WORK TOGETHER TO REDUCE WHAT GETS LANDFILLED!

Item	Organization	Notes
Clothing, Household Items, Books, Furniture	St. Pat's Parish Hall Flea Market 52 nd Ave & 52 nd St. 920-4961	Call first because they have limited storage space
Anything!	YKTrader.com Online at: www.yktrader.com 444-0987	Can sell or give away, post basic ads for free. Published in free newsletter
Refundable Beverage Containers	The Bottle Shop #7 Old Airport Rd. 873-4449	Mon – Fri 10:00-5:30 Saturday 9:00-4:30
Children's Toys, Towels, Bedding, Furniture	YK Women's Society 5610 Franklin Ave. 873-9131 (anytime)	Call with furniture, they maintain a list of people looking
Anything! Furniture, Books, Bedding, Food	YWCA Transitional Housing Rock Hill Apts # 102, 4904-54 th Ave 873-5760 (daytime) 445-7876 (after hours)	Holds a public clothing exchange on Wednesdays Call with large items
Used Clothing and Footwear Furniture	Salvation Army Thrift Store 4701 Franklin Ave. 766-2942	Call with furniture, they maintain a list of people looking
Towels and Bedding Pet Crates / Kennels Collars & Leashes	Great Slave Animal Hospital (Shelter) 873-4252 <OR> NWT SPCA 669-0068 nwtspca@theedge.ca	Call first with bedding since they have limited storage Call for drop-off location
Rechargeable Batteries Cell Phones	Roy's Audiotronic , The Source, Canadian Tire, Home Building Center, Staples, Solid Waste Facility	Do not take single use batteries www.rbrc.com
Glasses with Lenses in Good Repair	Yellowknife Eye Clinic GogaCho Building 47 th St. 873-3577	Collect for the Lion's Club
Glass Bottles (see notes!)	YK Glass Recyclers 3510A McDonald Dr. 669-7654	Blue bottles, large jars, 750 ml green bottles without bump, small Tabasco sauce bottles
Computer Hardware	Computers for Schools Smart Communities Society 873-6455	Provides refurbished computers for schools, non-profit organizations and community groups. Has an intern program that teaches youth computer refurbishing
Anything!	Yellowknife Freecycle www.ca.gropus.yahoo.com	An online group where you can post things to give away or post if you are looking for an item



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