Recycling centre:
Yours to discover!
Welcome

• All blue box and cart recyclables are brought to the Nyle Ludolph Materials Recycling Centre in Waterloo.
• On the next slide you'll see the floor layout of the recycling centre.
• Click on the numbered circles (1-15) to discover the various stages your recyclables go through.

Have fun exploring!
All blue box items are brought to the recycling centre for sorting. The paper and plastic bags are dropped off on one side of the building (1) where a front end loader moves items off to the side until there's enough to fill a truck.
A front end loader (2) scoops items up and puts them into a long transport trailer truck. It takes approximately 20 to 30 minutes to fill a truck.
When the transport trailer truck (3) is fully loaded the driver takes items to a processor in the Niagara area for further sorting.
A large black garage door opens when it senses a collection truck is waiting to get in or out. The collection truck drops containers onto the container drop-off area (4) and then drives through the exit garage door.
A front end loader scoops items onto the conveyor belt (5) where it goes to the pre-sort room.
Workers in the pre-sort room (6) remove any oversized or hazardous items from the moving conveyor belt.
The conveyor belt moves items under a magnet. Here's where glass and steel cans get separated. Glass is broken by the glass breaker (7) and collects in a storage area called a bunker.
What happens to steel cans?

The steel can flattener flattens the cans (8). The cans, like broken glass, also collect in a storage area called a bunker. Both bunkers are located outside at the back of the recycling centre.
The shaker table (9) separates recyclables creating space between them so they're easier to scan.
The optical sorter (10) scans the thickness of recyclables and hits them with a blast of air redirecting them to one of three conveyor belts. The belts are now according to plastic type: #1, #2 and #3-7 (this last belt includes cartons and aluminum).
Workers in this sorting room (11) do the final sort to remove unaccepted items from their particular line.
An eddy current is used to separate aluminum from the remaining material (12). The eddy current functions similar to a reverse magnet forcing the aluminum to fall into its own bunker. The remaining material is garbage and is taken to the landfill.
When a storage area is full of final sorted material (13) then items are pushed onto a conveyor belt and sent to the baler.
The baler presses items tightly together to make a rectangular shape (14). Each bale is tied with metal twine to help keep its shape.
Baled material is then stacked according to type (15). When there are enough bales to fill a tractor trailer truck, they're loaded onto a truck and sent to various marketers within North America.