

## **RFID Frequently Asked Questions (FAQ)**

### **What does RFID stand for?**

Radio Frequency identification

### **What is the Radio Frequency Identification System?**

The RFID system refers to the use of a radio transmitter-receiver (transponder) which stores a unique identification (RFID tag) that is read wirelessly each time a cart is tipped. Each deployed cart and the attached RFID tag have been registered to a particular household and owner. With a completed RFID system, each time a cart is tipped the RFID tag is read and the information is recorded. The RFID tags are read wirelessly by a RFID reader mounted to the collection truck and all data is stored within an onboard computer and immediately wirelessly transferred to a web-based server where it can be accessed by anyone that has access to a computer and is registered.

### **What kind of information is collected?**

With an operational RFID system each time a cart is tipped in the Central Okanagan the following information will be recorded automatically:

- the cart that was tipped (Garbage, Recycling, or Yard Waste)
- address (the cart was assigned to)
- date cart was tipped
- time cart was tipped

In addition, the system makes it simple for collection truck drivers to record the following additional information:

- If an offense was committed (driver pushes a button on touch screen computer).
- Type of offense committed such as illegal item in cart, cart in bike lane, overloaded cart (driver pushes a button on touch screen computer).
- Picture of offense (driver pushes a button on touch screen computer).

### **What happens to the information that is collected?**

All the information that is collected is immediately fed wirelessly into a digital database.

### **Will there be any private information collected by the system?**

The system only collects addresses, not resident's names. Information that is collected is only accessible by the waste collection company and a few local government employees.

The camera resolution can differentiate material types (cardboard vs. yard waste) but isn't high enough to decipher sensitive personal information that may be contained in curbside waste such as brand names and document text.

## Why is this information being collected?

- All of this data is tracked in real-time and will be invaluable for addressing enquiries from the public regarding curbside collection.
- The information collected also allows for targeted education with individual residents. Often, Waste Reduction Office education campaigns have been done through the media with the hope that the minority we are attempting to target will be reached. Unfortunately, this approach has been ineffective in addressing many recent issues including yard waste contamination and carts in bike lanes both of which required door-to-door education with individual residents to show improvement. However, in both examples we didn't have the data necessary to do targeted door-to-door education so we had to address entire streets with bike lanes and the entire region in the case of yard waste contamination when we really only needed to target a few hundred households.
- Provides a way to simply record offenses in the event evidence is required to enforce penalties related to the offence.
- The data will help improve route efficiency, monitor truck speeds, and identify trends in waste management behavior.

## What are the benefits of the RFID system?

- Improved ability to address enquires from the public regarding collection.
- Reduced contamination in the recycling carts which will result in a more valuable product and reduced sorting costs.
- Reduced contamination in the yard waste cart which will result in reduced processing costs and ensure compost is safe to sell to the public.
- Ability to focus education to the households that require it most.
- Saving in landfill space by increasing recycling quantities.

## What happens if I get caught with contamination in my cart?

For your first offence, you will receive a phone call and letter from the Regional District letting you know there was a problem when your cart was tipped, either you had materials that weren't supposed to be in there or your cart was not set up properly at the curb. You will also receive a copy of the photo (s) that were taken at the time your cart was tipped and educational material on what should or should not be included in your cart.

For subsequent offences, your municipality's bylaw department may be notified and you could receive a fine of \$150. Please make sure garbage goes in the grey garbage cart, recycling in the blue recycling cart and only yard waste in the green yard waste cart to avoid a fine.

## Which Municipalities are participating in the RFID program?

City of Kelowna, District of Peachland, District of Lake Country and the Regional District of Central Okanagan.

### **Is there a cost for the RFID program?**

The cost of the program is approximately \$1.50- \$1.70 per household per year, which is already included in your current billing.

### **Why is West Kelowna not participating in the program?**

In October 2010, District of West Kelowna council voted to not participate in the RFID program

### **Where can I get further information on what goes into each cart?**

Visit the Regional Districts website at [www.regionaldistrict.com/recycle](http://www.regionaldistrict.com/recycle)