STEP 1 - Waste in

Collection vehicles bring household waste to the NRRC and tip it into the reception bays.

Office building and control room

Reception pit

Reception pit

Oversize pit

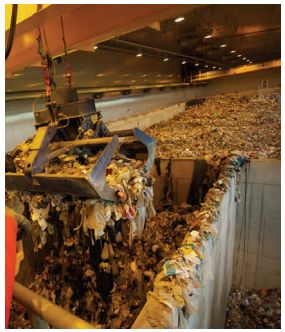
Undersize pit

STEP 2 – Pre treatment

Waste material goes through a giant rotating drum to separate it into oversize and undersize fragments.

Ramp

Warehouse



STEP 3 - Bio treatment

Waste material is laid out in rows where the natural microbes accelerate decomposition. Air is pulled through the building to create a 'negative' pressure environment and it also aides in drying the waste material. During the 14 day process waste loses up to 30% of its weight. It is moved by giant 8 tonne overhead cranes and finally passes through a shredder before entering the mechanical treatment phase.

Shredder

Bio filter – Air that is pulled through the building also helps to dry the waste material. The air is passed through a filtration system before being released into the atmosphere

SRF out

STEP 5 – Baling

The SRF is packaged into bales and sent to energy from waste plants where it is used to create electricity

STEP 4 – Refinement

A series of mechanical conveyors and screeners remove metals which are sent for recycling. The remaining product is manufactured into solid recovered fuel (SRF) with a portion of bio-stabilised residue sent to landfill.

Recyclable materials out

Hills Northacre resource recovery centre (NRRC) - flow diagram