

Integrated Processing and Transfer Facility

The newly constructed Integrated Processing and Transfer Facility (IPTF) at the Edmonton Waste Management Centre enables Edmonton to recover recyclable and compostable materials from both the residential and commercial waste streams.

Waste that is not recyclable or compostable will also be captured and prepared for a planned Biofuels Facility, which will produce methanol and ethanol from trash. This will enable Edmonton to divert 90 per cent of its residential waste from the landfill by 2015.

The IPTF has three operational components:

1. Transfer operations - operational Sept. 9, 2009

Commercial waste and residuals from the Composting and Recycling Facilities are deposited into semi-trailers for transport to Beaver Regional Waste Management Commission landfill near Ryley, Alberta or the West Edmonton landfill.

- Two loading bays with hydraulic tampers to compact loads
- Up to 10 trailer units filled per hour. Thirty-three trailer units available for use.
- Average daily throughput estimated at 1,000 tonnes/day. Peak capacity is 2400 tonnes/day.
- Anticipated annual throughput approximately 250,000 tonnes, dropping to 175,000 tonnes once the Biofuels Facility is in full production in 2012.

2. Pre-processing of waste - operational early 2010

Residential and suitable commercial waste is sorted mechanically and manually into three streams:

- Organic materials conveyed to the Edmonton Composting Facility and non-recyclable, non-compostable waste to adjacent facility for conversion into "refuse derived fuel".
- cardboard, metals and plastics recovered for recycling.
- Pre-processing capacity is up to 1,000 tonnes per day. Approximately 250,000 tonnes/year.

3. Preparation of refuse-derived fuel - operational 2011

A mechanical system will prepare feedstock for the planned Biofuels Facility (to

be constructed by 2012). Non-recyclable and non-compostable waste is converted to “refuse derived fuel” (RDF) which will in turn be converted to methanol and ethanol at the planned Biofuels Facility.

- Will produce up to 400 tonnes of refuse derived fuel per day; approximately 100,000 tonnes per year

IPTF Quick Facts

Size:

- 19,094m² (205,526 ft²)
- equivalent to approximately 2.3 CFL football fields

Education

- Features an overhead viewing gallery to allow tour groups to watch the facility in action

Workforce:

- Owned and operated by the City of Edmonton
 - twenty five full-time employees and twenty long-haul truck drivers, supplemented by contracted labour and equipment as required

Cost of construction:

- Phase 1: Transfer station and base building: ~\$24 million (now in operation)
- Phase 2: Pre-processing equipment: ~\$27 million (construction continuing – late 2009 start-up)
- Phase 3: RDF process ~\$39M (construction 2010)

How to use it

Customers arriving at the Edmonton Waste Management Centre will weigh their loads on the scales as usual and be directed to the appropriate facility for unloading. Those sent to the IPTF will be directed to a location within the massive hall where they will simply tip their load onto the floor and leave. Heavy equipment will move the trash either to trailer loading pits for transfer haul or to the pre-processing feed conveyors for sorting. Bins and containers will be available for drop off of recyclables and hazardous waste.

Hours of Operation

Monday to Friday: 7:30 a.m. – 7:00 p.m.

Saturday, Sunday and statutory holidays: 8:00 a.m. – 5:00 p.m.

Toward 90% Waste Diversion

The City currently diverts about 60% of residential waste from landfill by reducing, recycling and composting. The IPTF and the future Biofuels facility will enable the City to convert an additional 30% into methanol and ethanol.