



## **3.0 CRRRC SITE DESCRIPTION**

### **3.1 Waste Stream**

#### **3.1.1 Service Area**

The proposed service area of the CRRRC consists of the City of Ottawa, and the Counties of Prescott-Russell, Stormont, Dundas and Glengarry, Lanark, Leeds & Grenville, Frontenac, Lennox and Addington, and Prince Edward. It is anticipated that the CRRRC would receive waste primarily from the Capital Region.

#### **3.1.2 Waste Characteristics**

The CRRRC is intended to be used for the recovery of resources, diversion of materials from disposal and disposal of residuals for wastes generated by IC&I and C&D sectors within the service area.

The materials to be accepted are solid, non-hazardous waste and surplus soils, and include the following:

- IC&I waste
- C&D waste
- Source separated organics and mixed organics from the IC&I sector
- Petroleum hydrocarbon (PHC) impacted soil
- Surplus soil

The recyclable stream from multi-residential buildings is considered part of the IC&I waste stream for this purpose and will be accepted at the CRRRC if/when available.

#### **3.1.3 Waste Quantities**

It is proposed that the CRRRC will accept waste from the IC&I and C&D sectors up to a maximum of 450,000 tonnes per year. The average daily receipt will be 1,500 tonnes per day (averaged over a calendar year). The maximum daily rate will be 3,000 tonnes per day.

Details of the maximum amount of waste intended to be accepted/processed/stored at each diversion and processing facility are outlined in Appendices D through G as well as in Table 1. The actual amount that will be accepted and processed at each facility will depend on the composition and tonnage of the waste materials received up to the maximum of 450,000 tonnes per year. The incoming material that is not diverted will go to the landfill.



**Table 1: Waste Quantities**

Facility	Daily Maximum Incoming Waste (tonnes)	Annual Maximum Incoming Waste (tonnes)	Storage of Unprocessed Waste (tonnes)	Storage of Processed Waste (tonnes)
C&D processing facility	800	199,680	2,200	2,890
Materials Recovery Facility (MRF)	800	199,680	850	1,680
Organics processing facility	500	50,000	1,800	1,600*
Compost processing area	400	20,000	Not applicable	Not applicable
PHC contaminated soil treatment area	Based on need	25,000	12,500	Not applicable

**Note:** \* pre-processed organic waste/slurry

### 3.2 Site Layout

The following proposed diversion facilities/operations are components of the CRRRC:

- Materials Recovery Facility (MRF);
- C&D processing;
- Organics processing;
- Compost processing and storage (leaf and yard waste and wood);
- PHC contaminated soil treatment;
- Surplus soil management; and,
- Drop off for separated materials or for separation of materials.

The following activities would also take place at the Site:

- Landfill for disposal of residual and non-diverted wastes;
- Leachate pre-treatment facility to treat the leachate generated by the landfill and organics processing; and,
- Flare and possibly power generation to manage the landfill gas (LFG) and the bio-fuel from the organics processing facility.

The proposed layout of the diversion facilities, the landfill component and the ancillary facilities is provided on Figure 6 Site Development Plan. The flow of waste material and products at the Site is shown on Figure 7. The diversion facilities, Site entrance facilities, ancillary facilities and administrative buildings are proposed for the area north of the Simpson Drain, while the landfill component and associated stormwater management and buffer areas are proposed for the area south of the Simpson Drain.