



To: ORASA

## DIVERSION TARGETS FOR ORGANIC WASTE IN THE WESTERN CAPE

Dear Madam / Sir

1. The Department of Environmental Affairs and Development Planning ("the Department") has taken a decision to encourage the diversion of organic waste from landfills over a 10-year period starting in 2017.
2. This was considered due to the following:
  - 2.1. In the National Organic Waste Composting Strategy: Final Status Quo Report it was estimated that 20, 793 600 tons of organic waste was produced in South Africa in 2011. This equates to about 40% of the total General Waste generated in South Africa (the total being approximately 49 995 029 tons). Considering that approximately 13% of general waste generated in South Africa is municipal organic waste, collected predominantly by municipalities, and an additional 61% industrial and agricultural biomass waste, it is surprising that biological treatment (e.g. composting, anaerobic digestion) is not utilised more extensively in South Africa. Furthermore, the World Bank estimates that globally the organic fraction of Municipal Solid Waste is 46% by mass.
  - 2.2. In the Western Cape at least 37% of the waste generated is organic waste. Furthermore, the GreenCape Western Cape Waste-to-Energy Position Paper (2014) indicates that there are potentially 2,992,641 tonnes of organic waste available per year in the Western Cape.
  - 2.3. Landfilling continues to be the main 'default' method of managing organic waste in the Western Cape. At the current rates of disposal to landfill, organic waste causes a variety of significant negative financial, social and environmental impacts. For instance, the high volume of organic waste occupies increasingly scarce landfill airspace, and it produces leachate which requires expensive landfill containment barriers to mitigate against surface and groundwater contamination (diverting funds that could be used for other needed infrastructure, and social projects and programmes). It results in high logistics costs, particularly because the health risks, including smell and vectors, require frequent trips for collection and disposal. It is a significant contributor to greenhouse gases resulting from the production of methane gas during the decomposition process.

- 2.4. Given the high proportion of organics in the waste stream, the diversion of organics from landfill, and therefore the reduction in volumes being disposed in landfills, would significantly extend the lifespan of existing and future landfills. Financial savings would also be made through the possibility of downscaling the design of containment barriers (without organic waste there would be reduced leachate, therefore reduced risk of contaminants and organic compounds polluting sub and groundwater). The resulting reduction in methane generation would assist with meeting South Africa's national greenhouse gas reduction targets and obligations. In addition, converting organic waste into beneficial products could, among other benefits, contribute to the Green Economy by promoting industry and job creation.
3. The Department has therefore decided to put in place a 50% diversion of organic waste from landfill by 2022; and a landfill ban on organic waste to landfill by 2027.
4. One of the strategies to achieve the ban is currently done through the variation of the waste management licences for landfills within the Western Cape by the addition of the following conditions:
- *"2.6. Organic waste is allowed to be disposed of at the Facility, but must be in accordance with the Organic Diversion Plan, targets and procedures referred to in condition 18.10 and 18.11 of the Licence.*
  - *18.10. The Licence Holder must submit an Organic Waste Diversion Plan to the Director 90 (ninety) days after the issue of this Licence and annually thereafter.*
  - *18.11. The information within the Organic Waste Diversion Plan must:*
    - *Provide a status quo of current organic waste sources and volumes disposed at municipal WDFs, and current rates and procedures of organic waste diversion from WDFs; and*
    - *Set annual targets and identify procedures from 2018 that will be implemented to meet these targets for the diversion of organic waste from municipal WDF, in order to reach a 50% diversion by the year 2022 and 100% diversion by the year 2027."*

Yours faithfully,



**EDDIE HANEKOM**

**DIRECTOR: WASTE MANAGEMENT**

**DATE:** 19-07-2018