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DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

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NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008)**NATIONAL NORMS AND STANDARDS FOR THE TREATMENT OF ORGANIC WASTE**

I, Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, in terms of sections 7(1)(c) and 7(2)(a) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), hereby give notice of my publication of the National Norms and Standards for the treatment of organic waste, for implementation, as set out in the Schedule hereto.

In terms of the National State of Waste Report, 2018, more than 50 percent of organic waste is disposed of at landfill sites throughout the country. The Norms and Standards are aimed at reducing the amount of organic waste that would normally go to landfill sites and, as such, waste will be diverted from landfill to facilities that will be treating it for beneficial use.

The National Norms and Standards for the treatment of organic waste are also aimed at controlling the processing of organic waste material at specific facilities in order to avoid, prevent or minimise potential negative impacts on the biophysical environment.

**BARBARA DALLAS CREECY****MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT**

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1. DEFINITIONS AND ACRONYMS

1.1 Definitions

In these Norms and Standards, any word or expression to which a meaning has been assigned in the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and the National Environmental Management Act, 1998 (Act 107 of 1998, has the meaning so assigned, and unless the context otherwise indicates—

"biodegradable" means any substance or material that degrades by biological activity, resulting in a specific change in the chemical structure of the material where such degradation can occur under aerobic or anaerobic conditions with the end products being gas (carbon dioxide or methane), water, biomass and mineral components;

"biomass" means the total quantity or volume of organisms in a particular area including natural materials from living or recently dead plants, trees and animals, used as fuel in industrial production;

"category 1 organic waste" means organics that have the lowest environmental impact but have the potential to generate offensive odours. These include, but are not limited to, garden and landscaping organics, untreated timber (sawdust, shavings, timber offcuts, crates, pallets, wood packaging), natural fibrous organics (sugar bagasse, peat, straw, seed husks etc.), biodegradable and compostable single use products and packaging, processed fibrous organics (paper, cardboard, paper-processing sludge, non-synthetic textiles), and animal manure (excluding poultry manure);

"category 2 organic waste" means organics that have a greater environmental impact than category 1 organic waste and have the potential to attract vermin and vectors. These, but are not limited to, include natural or processed vegetable organics (vegetables, fruit and seeds and processing sludges and wastes, winery, brewery and distillery wastes, food organics, however, excluding those in category 3 and biosolids and manures (sewage biosolids, animal manure (including poultry manure) and mixtures of manure and biodegradable animal bedding organics);

"category 3 organic waste" means organics that may generate harmful leachate, which could contaminate surface water, groundwater and soil if not correctly managed. These include, but are not limited to, meat, fish and fatty foods (carcasses, parts of carcasses, blood, bone, fish, fatty processing or food), fatty and oily sludges and organics of animal and vegetable origin (dewatered grease trap, fatty and oily sludges of animal and vegetable origin), mixed residual waste containing putrescible organics (putrescible organics including household domestic waste, commerce and industry waste sent to municipal sites) and industrial waste organics (fish processing, paper pulp waste and sludges with high-organic/nitrogen loads);

"Competent Authority" means the organ of State charged by the National Environmental Management: Waste Act, 2008, (Act No. 59 of 2008), as the licensing authority;

"composting" means a controlled biological process in which organic materials are broken down by micro-organisms by means of aerobic and anaerobic processes;

"digestate" means the material remaining after the anaerobic digestion of a biodegradable feedstock;

"estuarine functional zone" has the same meaning as defined in the Environmental Impact Assessment Regulations Listing Notice 3 of 2014, published under Government Notice R985 in *Government Gazette* 38282 of 4 December 2014 as amended from time to time;

"feedstock" means any organic waste material stipulated in Table 1 that is used to supply or fuel a specific organic waste treatment process;

"fertiliser" means any substance which is intended or offered to be used for improving or maintaining the growth of plants or the productivity of the soil;

"handling" means functions associated with the movement of waste, including storage, treatment and ultimate disposal, by means of manual systems or automated systems;

"hospitality sector" means a sector that includes all the facilities that prepare and serve food out of home and comprises the commercial service sectors and institutional sectors;

"leachate" means an aqueous solution arising when water percolates through decomposing waste and / or because of the biodegradation of the waste and it contains final and intermediate products of decomposition, various solutes and waste residues;

"low lignocellulose (non-woody)" means plant material that gives plants their rigidity and structure and comprises of three main types of carbon-based polymers — cellulose, hemicellulose and lignin, however, the lignin content being lower than woody lignocellulose;

"lignocellulose (woody)" means plant material that gives plants their rigidity and structure and comprises of three main types of carbon-based polymers — cellulose, hemicellulose and lignin;

"littoral active zone" has the same meaning as defined in the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008);

"monitoring" means continuous or non-continuous measurement of a concentration or other parameters for purpose of assessment or control of environmental quality or exposure and the interpretation of such measurements to identify changes in status or trends over a period, which may be achieved by compiling successive audits or analyses results;

"mortalities" means bodies of animals that have died from natural or accidental causes and that cannot be further utilised for human consumption;

"operational area" means an area where organic waste is stored, treated or disposed;

"organic fertiliser" means a fertiliser manufactured from substances of animal or plant origin, or a mixture of such substances, and that is free of any substances that can be harmful to humans, animals, plants or the environment containing at least 40g / kg prescribed nutrients;

"organics" means both processed and unprocessed biodegradable organic material;

"organic waste" means waste of biological origin which can be broken down, in a reasonable amount of time, into its base compounds by micro-organisms and other living things;

"riparian habitat" includes the physical structure and associated vegetation of the areas associated with a watercourse which are commonly characterised by alluvial soils, and which are inundated or flooded to an extent and with a frequency sufficient to support vegetation of species with a composition and physical structure distinct from those of adjacent land areas; and

"watercourse" has the same meaning as defined in Environmental Impact Assessment Regulations Listing Notice 1 of 2014, published under Government Notice R. 983, in *Government Gazette* 38282 of 4 December 2014, as amended from time to time.

1.2 Acronyms

DALRRD - Department of Agriculture, Land Reform and Rural Development.

DWS - Department of Water & Sanitation.

HTC - Hydrothermal Carbonisation.

HTL - Hydrothermal Liquefaction.

SANS - South African National Standards.

SAWIS - South African Waste Information System.

SCWG - Supercritical water gasification.

2. PURPOSE

These Norms and Standards are aimed at controlling the treatment of organic waste at any facility that falls within the threshold as described in paragraph 3 of these Norms and Standards to avoid, prevent or minimise potential negative impacts on the biophysical environment.

3. APPLICATION

3.1 These Norms and Standards apply throughout the Republic of South Africa and are applicable to any organic waste treatment facility that has the capacity to process in excess of 10 tonnes of organic waste per day.

3.2 These Norms and Standards do not replace the need to comply with any other legislation.

3.3 These Norms and Standards do not apply to:

3.4.1 the composting of organic waste;

3.4.2 the construction, operation and expansion of any organic waste treatment facility:

3.4.2.1 within natural watercourses or within 200m of a natural watercourse, measured from the edge of the watercourse as defined by its riparian habitat;

3.4.2.2 within wetlands or floodplains, where the organic waste treatment facility will be located inside of the 1 in 100-year floodline;

3.4.2.3 within estuaries, estuarine functional zones, littoral active zones or within 100m inland of the high-water mark of the sea or an estuary; or

3.4.2.4 that requires the removal of more than 300m² of plant and animal species that are listed as endangered or critically endangered in terms of the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004).

3.4.3 the construction, operation and expansion of any organic waste treatment facility in an area that has been declared a protected area in terms of the National Environmental Management: Protected Areas Act 2003, (Act No. 57 of 2003); or