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Section:	Environmnetal Planning & Open Space Management Section	Date:	15 April 2014

AECOM SA (Pty) Ltd
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Attention: Ms M Maimane
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Dear Sir/Madam

DRAFT SCOPING REPORT FOR WASTE LICENSE FOR PROPOSED DEVELOPMENT OF THE NEW MULTISAND REGIONAL WASTE DISPOSAL FACILITY, GAUTENG PROVINCE

The above-mentioned report dated February 2014 refers.

1. INTRODUCTION

The Environmental Management Services Department (the Department) has considered the Draft Scoping and Environmental Impact Assessment Report dated February 2014 in respect of the abovementioned application. The Draft Scoping and Environmental Impact Assessment Report is submitted to the Environmental Management and Parks Division of the City of Tshwane, hereafter referred to as 'the City', as a commenting authority as required in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2010. The application is made in terms of the National Environmental Management: Waste Act No. 58 of 2008 (NEMA: WA) GN 718 of 3 July 2009.

2. PROJECT LOCATION AND DESCRIPTION

AECOM SA (Pty) Ltd was appointed by Interwaste (Pty) Ltd to conduct the environmental impact assessment for the proposed establishment of a regional waste disposal facility near Pretoria within the City of Tshwane. The proposed project area is located approximately 24 km northwest of Tshwane, 10 km west of Rosslyn and to the south of the R566 Tshwane-Brits road. Ga-Rankuwa is lies 6 km to the north of the project area, opposite the R566 road. A gravel road from the Brits/Rosslyn main access road provides access to the site. The land use currently consists of the mining of san and rock by Multisand (Pty) Ltd, the land owner of the proposed project area.

Based on a study of its waste disposal needs, Interwaste has decided that a Class B liner Waste Disposal Facility will be developed. A Class B waste disposal facility typically comprises the following components, which will be investigated during the EIA phase of the process:

- Waste disposal cells
- Waste treatment facility
- Access control facilities including perimeter fencing
- Laboratory to test and verify the classification of incoming waste
- Access roads to the landfill and link roads between the landfill cells
- Weighbridge with a weighbridge control room
- Public drop-off area
- Leachate collection system
- Pollution ponds control
- Storm water berm
- Leachate treatment facility
- A plant washing bay
- A wheel was for vehicles
- Weather station
- Administration buildings
- Staff dining and ablution facilities
- Workshop and stores
- Transport depot for waste vehicles
- Fuel storage facilities and
- Electricity, water and sewage infrastructure and connections.

The following additional waste management components that aim at the treatment, re-use and recovery of waste are being considered and will be investigated in the EIA phase in terms of their feasibility, benefit and impact on the surrounding environment:

- Material recovery facility(MRF) with a conveyer belt, sorters and skips and
- Facility for the processing of biodegradable waste (compositing facility)

The activities applied for are in terms of the National Environmental Management: Waste Act, 2008, GN 718 of 3 July 2009,

Category A

- ***Activity 2:*** *The storage including the temporary storage of hazardous waste at a facility that has the capacity to store in excess of 35m³ of hazardous waste at any one time, excluding the storage of hazardous waste in lagoons.*
- ***Activity 3:*** *The storage including the temporary storage of general waste in lagoons.*
- ***Activity 4:*** *The storage of waste tyres in a storage area exceeding 500m².*
- ***Activity 6:*** *The scrapping or recovery of motor vehicles at a facility that has an operational area in excess of 500m².*
- ***Activity 7:*** *the recycling or re-use of general waste of more than 10 tons per month.*
- ***Activity 9:*** *the biological, physical or physic-chemical treatment of general waste at a facility that has the capacity to process in excess of 10 tons of general waste per day.*
- ***Activity 12:*** *the remediation of contaminated land.*

Category B

- ***Activity 3:*** *The recovery of hazardous waste including the refining, utilization or co-processing of waste at a facility with a capacity to process more than 500kg of hazardous waste per day excluding recovery that takes places as an integral part of an internal manufacturing process*

within the same premises or unless the Minister has approved re-use guidelines for the specific waste stream.

- ***Activity 4:*** *The biological, physical or physico-chemical treatment of hazardous waste at a facility that has the capacity to receive in excess of 500 kg of hazardous waste per day.*
- ***Activity 6:*** *The treatment of hazardous waste in lagoons.*
- ***Activity 7:*** *the treatment of effluent, waste water or sewage with an annual throughput capacity of 15 000 cubic meters or more.*
- ***Activity 8:*** *the incineration of waste regardless of the capacity of such facility.*
- ***Activity 9:*** *the disposal any quantity of hazardous waste to land.*
- ***Activity 10:*** *the disposal of general waste to land covering an area in excess of 200m²*

3. KEY FACTORS INFORMING THE COMMENTS

In making its comments in respect of the proposed activity the Department has taken, *inter alia*, the following into consideration:

a) The information contained in the Draft Scoping Report compiled by AECOM SA (Pty) Ltd dated February 2014.

b) Information obtained from the Section's information base including *inter alia:*
   - Geographic Information System (GIS); and
   - Gauteng Open Space Plan (GOSP).

c) Compliance with applicable Municipal, provincial and national policies and guidelines including:
   - The National Environmental Management Act 1998 (Act 107 of 1998) (NEMA): its decision-making principles and Environmental Impact Assessment Regulations;
   - The Tshwane Integrated Environmental Policy (TIEP) and
   - The Tshwane Open Space Framework (TOSF) Policy Statements and Typologies.
   - The Bioregional Plan for the Gauteng Metropolitan Municipalities.

d) The findings on the site inspection undertaken by Mr T Mphephu on 08 April 2014.

4. DISCUSSION

In reviewing the application the Department made the following findings:

a) According to the Tshwane Open Space Framework the following open space typologies influence and/or in close proximity of the proposed development:

   - *A **Blue Way,** namely Medelwater Spruit and its tributaries. Blue Ways are essential in the provisioning of environmental goods and services, the protection of biodiversity, endangered species and ecological systems, as well as eco-based activity. The value of Blue Ways lies in their ability to maintain natural hydrological and ecological cycles, such as conserving valuable aquatic systems, purifying water, recharging water tables and preventing flooding. They also provide in the drinking and irrigation water needs of the city. Blue Ways have a secondary socio-economic and place-making function. Therefore Blue Ways must be conserved.*

   - *A **Blue Node** namely Medelwater Spruit and its tributaries. Blue Nodes are essential in the provisioning of environmental goods and services, the protection of biodiversity, endangered species and ecological systems, as well as eco-based activity. The value of Blue Nodes furthermore lies in their ability to maintain natural hydrological and ecological cycles, such as conserving valuable aquatic systems, purifying water, recharging water tables, preventing*

flooding and providing drinking and irrigation water. Blue nodes have a secondary socio-economic and place-making function. Therefore Blue Nodes must be conserved.

- *A **Green Way,** namely Schietfontein Hills. Green Ways are essential in the provisioning of environmental goods and services, the protection of biodiversity, endangered species and ecological systems, as well as eco-based activity. Class 1 and 2 Ridges are predominantly ecologically pristine and must be conserved. Class 3 and 4 Ridges have been predominantly transformed by human intervention, but remain valuable and need to be retained and rehabilitated where possible as ecological and spatial linkages.*

- *A **Grey Node,** namely Quarries in Ga-Rankuwa South Hills. The value of Grey Ways lies in their socio-economic functioning: the rendering of and support to primary service delivery, as well as their potential to supplement ecological (as linkages) and recreational functioning (once closed and redeveloped).*

b) According to the Bioregional Plan for the Gauteng Metropolitan Municipalities the proposed site is situated within and adjacent to the following areas:

- ***Critical Biodiversity Area 1**: Any terrestrial or aquatic area required to meet biodiversity pattern and/or process thresholds. These include any area that is required for meeting pattern thresholds, namely remaining areas of Critically Endangered vegetation types and areas required to protect threatened species; any area that is required for meeting process thresholds such as areas important for climate change adaptation; and hydrological process areas such as high priority wetlands and catchments, pan clusters and pans within priority catchments. In addition to the above areas where there is little or no choice of area identified, CBAs include all 'best design' sites in terms of meeting pattern and process thresholds, identified by the iterative conservation planning process. 'Best design' refers to an identified network of natural sites that meet pattern and process thresholds in all vegetation types and features in a spatially efficient and ecologically robust way, and aim to avoid conflict with other activities (e.g. economic activity) where it is possible to achieve biodiversity thresholds elsewhere.*

- ***Ecological Support Area 1:** Natural, near natural and degraded areas required to be maintained in a ecologically functional state to support Critical Biodiversity Areas and Protected Areas. These include remaining floodplain, corridor, catchment, wetland and other process areas that have not been identified as Critical Biodiversity Areas but which need to be maintained in a functional state to prevent degradation of these areas. ESA1s can include areas which would otherwise have been identified as CBAs except that have been degraded, but which are currently or potentially still important for supporting ecological processes. These areas are a focus for rehabilitation rather than the intensification of land uses.*

- ***Other Natural Area**: Natural areas not included in the above categories.*

c) The report indicated that the project area is situated within the Highveld climate zone that generally has relatively warm to hot summers and mild winters.

d) The report indicated that the project area is located in a predominantly rural area with the general air quality being good.

e) The report indicated that noise from current mining activities occurs within the project area mainly due to crushing, blasting and vehicular noise.

f) The report indicated that according to the published maps of the area, the project area is underlain by igneous rocks of the Bushveld Complex that intruded into the older sedimentary sequences of the Pretoria Group.

g) The report indicated that the project area is located at the northern foothills of the Magaliesberg mountain range.

h) The report indicated that the soils of the project area fall within the Ae21d classification.

i) The report indicated that large sections of the existing project area have been irreversibly transformed, primary by current and historical and mining activities.

j) The report indicated that there is no actual evidence of overgrazing present on the site and the only disturbed areas are those areas currently begin mined or used for mine infrastructure and tailings from sand washing.

k) The report indicated that the project area falls within the Crocodile (West) Marico Water Management Area (WMA3), one of 6 water management areas that make up the Limpopo River Basin Catchment Area.

l) The report indicated that groundwater occurrence in the Rustenburg Layered Suite of the Bushveld Complex is mainly associated with weathered, low permeability mafic rocks.

m) The report indicated that a total of 137 plant species were identified in the surveyed area (Götze, 2008) which in spite of large transformed area indicates high species diversity.

n) The report indicated that no sensitive or endangered fauna were recorded during the previous surveys.

o) The report indicated that birds positively identified in the survey totaled 74 species. The number of bird species recorded is high, but unnatural for the bushveld region.

p) The report indicated that there are no natural watercourses within the project area. The wetlands occurring to the downstream side of the settling dams were formed as result of the settling dams and not due to natural causes.

q) The report indicated that three farm workers cemeteries were identified on the site that are important and should be protected.

r) The report indicated that no other important cultural heritage resources were found to be present on the farms.

s) The Identification and Evaluation of candidate Site Report indicated that the existing landfills have a limited life and there is a demand for a long term well operated waste disposal facility in the northern area of the City of Tshwane.

t) The Identification and Evaluation of candidate Site Report therefore concluded that the Multisand site is the preferred site at present and the site should be investigated in detail to confirm the suitability of the site for development of a regional landfill and further determine its characteristics for this purpose.

u) The report indicated that the following specialist studies will be undertaken and included as part of the EIA report:
   - Geotechnical Investigation Report
   - Geological Investigation Report.
   - Geohydrological (including quality) Investigation Report.
   - Visual Impact Assessment Report.
   - Air quality and odour study.
   - Traffic Impact Assessment.

- Social Impact Assessment
- Ecological Survey Report
- Heritage and Archaeological Assessment
- Wetlands Impact Assessment and Water Quality Investigation
- Soil and Agricultural Assessment Report.

5. RECOMMENDATIONS

The Department recommends that the following issues be taken into consideration:

a) A detailed layout plan, overlaying all sensitivities shall be included within the EIA report and submitted to this Department for perusal. It is recommended that a composite sensitivity plan be over imposed on the site plan to redirect the layout of the proposed development. The layout plan shall also be made available for the surrounding Interested and Affected parties to evaluate and comment on.

b) The detailed design of the waste site that must incorporate a construction and operational phase must be submitted to this Department for perusal.

c) A complete waste handling and management procedure for the operational phase should be included in the EIA report.

d) The site specific Storm Water Management Plan should be implemented. The plan should be designed to adequately control the volume, speed and location of runoff, to avoid soil erosion and to prevent contaminated water from leaving the landfill site and entering the natural environment in an uncontrolled manner.

e) All identified specialist studies must be conducted and included in the EIA Report. The Assessment must indicate all potential impacts of the proposed development and appropriate mitigation measures.

f) All activities on the site must comply with the Tshwane Municipality's By-Laws.

g) An Environmental Management Plan should be included in the EIA Report.The EMP should identify all activities that may have an adverse impact on the environment or the potential to cause environmental harm, and detail the mechanisms employed to prevent or minimize the impact of these activities. If require, the ways in which the conduct of the activity will enable altered to minimise or reduce the adverse environment impact of the activity is detailed including a time table for implementation.

6. CONCLUSION

The Department recommends that issues highlighted above be taken into consideration during the EIA phase of the project.

Yours faithfully

15/04/2014

Mr Livhuwani Siphuma Date:
EXECUTIVE DIRECTOR: ENVIRONMENTAL MANAGEMENT AND PARKS DIVISION
Letter signed by: Rudzani Mukheli
Designation: Deputy Director: Environmental Planning and Open Space Management Section

CC Gauteng Department of Agriculture and Rural Development Attn: Ms Zingisa Smale Tel: (011) 240 2574 Fax: (011) 240 1000