



**WESTERN CAPE DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING**

**Waste Management Licence Application Additional Information Annexure**

**(application for new facilities, expansion of existing facilities or decommissioning / closure of existing facilities.)**

**AUGUST 2010**

**DEPARTMENTAL REFERENCE NUMBER(S)**

File reference number (EIA):	
File reference number (Waste):	
File reference number (Other):	

**PROJECT TITLE**

PROPOSED EXPANSION OF AN EXISTING LANDFILL SITE AT EXXARO NAMAKWA SANDS MINERAL SEPERATION PLANT, WESTERN CAPE PROVINCE

**Kindly note that:**

1. For an application for a waste management licence that must be subjected to a Basic Assessment or Scoping & Environmental Impact Reporting process, this Annexure must be submitted together with the Basic Assessment Report or Environmental Impact Report. Note that when applying for decommissioning/closure of existing facility only the following sections must be completed 2, 3, 15 and 16.
2. This annexure is current as of 2 August 2010. It is the responsibility of the Applicant / EAP to ascertain whether subsequent versions of the appendix have been published or produced by the competent authority.
3. The required information must be typed within the spaces provided in the report. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. It is in the form of a table that will expand as each space is filled with typing.
4. An incomplete annexure may result in the rejection of the Basic Assessment Report or Environmental Impact Report.
5. The use of "not applicable" in the document must be done with circumspection. Where it is used in respect of material information that is required by the Department for assessing the application, this may result in the rejection of the Basic Assessment Report or Environmental impact Report.
6. **While the different sections of the annexure report only provide space for provision of information related to one alternative, if more than one feasible and reasonable alternative is considered, the relevant section must be copied and completed for each alternative.**
7. Unless protected by law all information contained in, and attached to this report, will become public information on receipt by the competent authority. If information is not submitted with this report due to such information being protected by law, the applicant and/or EAP must declare such non-disclosure and provide the reasons for the belief that the information is protected.
8. This annexure must be submitted together with the Basic Assessment Report or Environmental Impact Report to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. No faxed or e-mailed reports will be accepted. **Please note that for waste management licence applications, this report must be submitted for the attention of the Department's Waste Management Directorate (tel: 021-483-2756 and fax: 021-483-4425) at the same postal address as the Cape Town Office Region A.**

**DEPARTMENTAL DETAILS**

<b>DIRECTORATE WASTE MANAGEMENT</b>
Department of Environmental Affairs and Development Planning Attention: Directorate Waste Management Private Bag X 9086 Cape Town, 8000
Registry Office 1 <sup>st</sup> Floor Utilitas Building 1 Dorp Street, Cape Town
Queries should be directed to: Tel (021) 483-2756 Fax (021) 483-4425

View the Department's website at <http://www.capegateway.gov.za/eadp> for the latest version of this document.

<u>Highlight the type of project:</u>	Recycling and/or recovery facility	Storage and/or transfer facility	Treatment facility	Disposal facility	Other
<b>Please provide a general description of the project and associated infrastructure:</b>					
The proposed project entails the expansion of an existing general waste landfill facility at the Mineral Separation Plant of Exxaro Namakwa Sands Mine in Koekenaap. The footprint area associated with the expansion of the existing landfill site extends approximately 1.3 ha in a northerly direction from the existing landfill site. It is anticipated that the existing landfill site will reach its maximum capacity within the next 12 months, and in order to be pro-active, Namakwa Sands (Pty) Ltd proposes the expansion of this existing landfill site at their Mineral Separation Plant. The area that is proposed for the expansion of the landfill site has been previously disturbed and little natural vegetation remains. The landfill site will be fenced and access to the site will be controlled. The site will be managed in terms of the waste management protocol currently in place at the MSP facility.					

### 1. SIZE OF SITE AND FACILITY, AND CLASSIFICATION OF FACILITY

Size of facility for a waste management activity	13 000 m <sup>2</sup>
Area where the waste management activity takes place	6 029 177 m <sup>2</sup>
In terms of waste disposal and composting facilities: Classification of facility in terms of climatic water balance	GCB
In terms of waste disposal facilities: Classification of Facility in terms of the type and the quantity of waste received	General Waste Landfill facility. Receives: 7-8t/month

### 2. GEOGRAPHICAL COORDINATES OF ALL EXTERNAL CORNER POINTS OF FOOTPRINT OF THE WASTE MANAGEMENT FACILITY

Number of corner	Latitude (S):			Longitude (E):		
1	31°	27'	38.16"	18°	17'	52.83"
2	31°	27'	39.29"	18°	17'	55.99"
3	31°	27'	43.51"	18°	17'	54.50"
4	31°	27'	42.89"	18°	17'	51.27"

**Please note:** The corner numbers must be indicate on a site map to be attached to this annexure.

### 3. DETAILS OF THE PERSON WISHING TO HOLD THE WASTE MANAGEMENT LICENCE

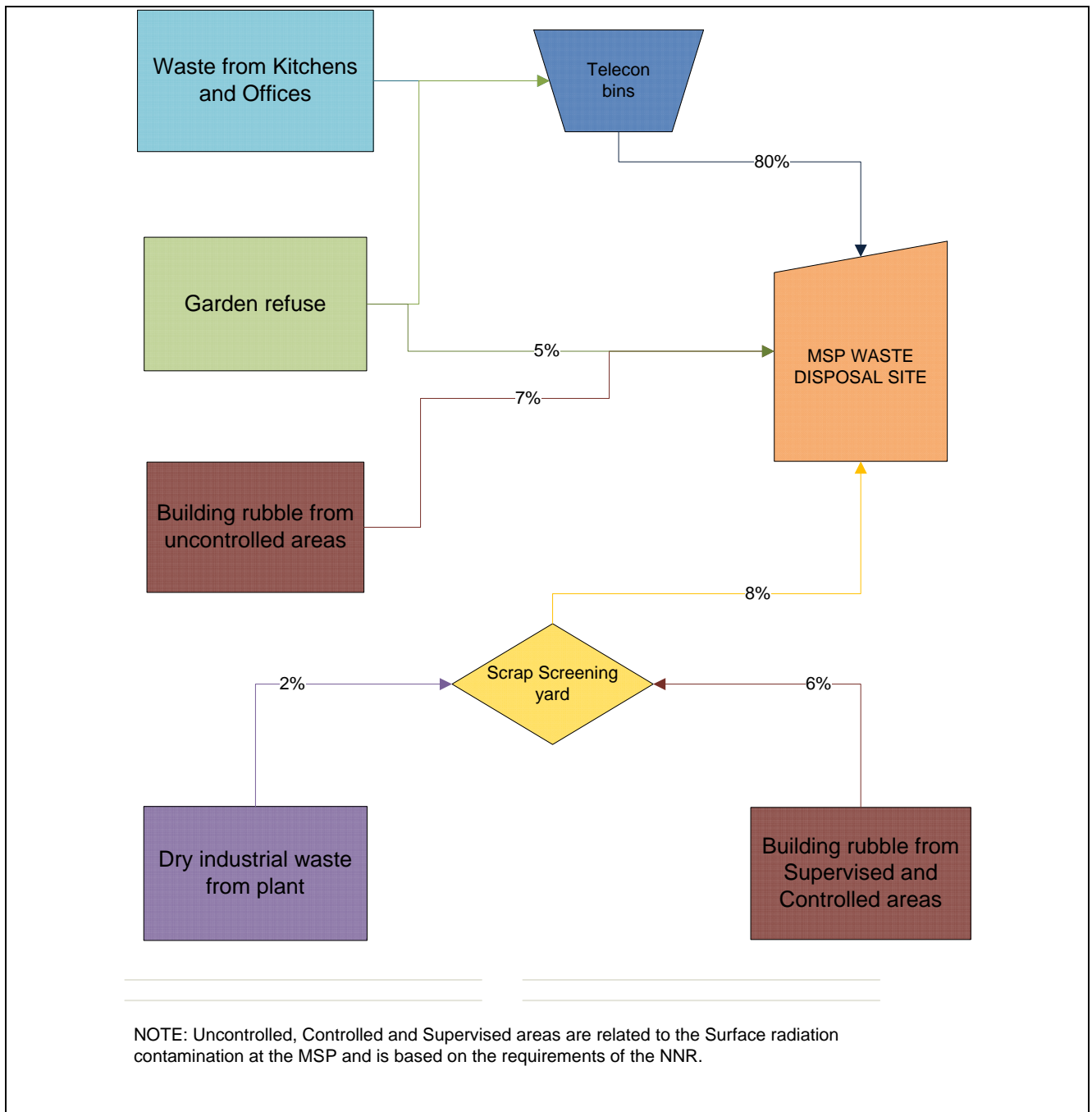
First name and surname:	Johan Bornman					
Company Name (if any):	Exxaro TSA Sands (Pty) Ltd					
Identity and/or Company Registration number:	1998/001039/07					
Physical address:	Exxaro Namakwa Sands, MSP					
Postal address:	PO Box 223					
	Lutzville			Postal code:	8165	
Telephone:	(027) 217 3164			Cell:	083 266 1519	
E-mail:	johan.bornman@exxaro.com			Fax:	(027) 217 3100	
EAP Qualifications	MSc. (Wits); Pr.Sci.Nat					
EAP Registrations/Associations	The South African Council for Natural Scientific Professions (Registration No 400024/00)					

**4. DETAILS OF THE OPERATIONAL TIMES**

PERIOD	FROM	UNTIL
Weekdays	7.30	16.00
Saturdays	Closed	
Sunday	Closed	
Public holidays	Closed	

**5. DESCRIPTION OF THE WASTE MANAGEMENT ACTIVITIES AND THE WASTE MANAGEMENT OPERATIONS**

5.1 Provide a flow chart of the operation showing all inputs and outputs of the process.



5.2 Give particulars of the source, location, nature, composition and quantity of emission to the atmosphere, surface water, sewer, and ground-water including noise emissions. Solid waste must be in cubic metres (m<sup>3</sup>) or tons (t) and specify units for liquids and gases.

During the period from January 2010 to September 2010, approximately 65.2 tons of domestic waste was disposed of at the existing general landfill facility. The origin of this domestic waste is at the Mineral Separation Plant of Exxaro Namakwa Sands near Koekenaap, Western Cape Province.

## 6. WASTE QUANTITIES

6.1 Indicate or specify types of waste and list the estimated in cubic meters (m<sup>3</sup>) or tons (t) expected to be managed daily (in cubic meters or tons):

Hazardous waste	Non hazardous waste	Total
None	Approximately 0.25 tons	0.25 tons of domestic waste per day

6.2 Indicate the source of information supplied in the table above:

Determined from volumes	Determined with weighbridge/scale	Estimated
Calculations from number of telecom bins filled. Telecom bins are approximately 4m <sup>3</sup> and it is assumed that the weight of waste per cubic meter is 0.2 tons (DEAT guideline 236)		

## 7. RECOVERY, REUSE, RECYCLING, TREATMENT AND DISPOSAL QUANTITIES (NOT APPLICABLE FOR DECOMMISSIONING / CLOSURE APPLICATIONS):

7.1 Indicate the applicable waste types and quantities expected to be recovered, reused, recycled, treated and disposed of annually.

Types of waste (see page 13 for waste classification)	Main source (name of company)	Quantities (tons or m <sup>3</sup> )		On-site recovery reuse recycling treatment or disposal	Offsite recovery reuse recycling treatment or disposal	Offsite disposal
		Quantities /day	Quantities /month	Method & location	Method location and contractor details	
<b>General waste</b>						
Municipal (domestic) waste	Exxaro Namakwa Sands, MSP	Approx 0.2 tons	Approx 7-8 tons	Disposal of domestic waste at general landfill site	N/A	N/A
<b>Hazardous waste</b>						

## 8. SIZE OF THE POPULATION TO BE SERVED BY THE FACILITY

8.1 Indicate the size of the population to be served by the waste management facility:

Size of population	Comment
0-499	N/A. The landfill facility will not serve the community but rather the MSP at Namakwa Sands itself

WASTE MANAGEMENT LICENCE APPLICATION ADDITIONAL INFORMATION ANNEXURE (AUGUST 2010)

Size of population	Comment
500-9,999	
10,000-199,999	
200,000 upwards	

**9. LANDFILL PARAMETERS (ONLY APPLICABLE TO WASTE DISPOSAL FACILITIES)**

9.1 It is imperative that the holder of the waste licence is a fit and proper person in terms of section 59 of the National Environment Management: Waste Act, 2008 (Act No. 59 of 2008). Please disclose the following:

a) The method of disposal of waste (only applicable to waste disposal facilities):

Land-building	
Land-filling	X
Both	

b) The dimensions of the disposal site in metres:

	At commencement	After rehabilitation
Depth	5m	5m
Length	44m	134m
Breadth	15m	90m

c) The total volume available for the disposal of waste on the site:

Volume Available	Mark with "x"	Source of information (determined by surveyor/estimated)
Up to 99		
100 – 34 999		
35 000 – 3,5 million	X	Estimated – 5x134x90 = 60300
> 3,5 million		

d) Compacting and covering of the waste body:

Confirm that the waste body will be covered daily	Yes	No	If no, please explain
Confirm that sufficient cover material is available	Yes	No	If no, please explain
Give an indication of where the cover material will be sourced and indicate the distance in kilometres/metres from waste disposal facility.			
<b>The excavated material originating from the expansion of the existing landfill site will be stockpiled and used as cover material. The area for the expansion of the existing landfill facility is directly adjacent to the existing landfill site.</b>			
Confirm that the waste will be compacted daily	Yes	No	If no, please explain

**10. THE RECLAMATION/DIVERSION METHOD AT THE WASTE DISPOSAL FACILITY**

10.1 Mark with an "x" the method to be used (reclamation not allowed at the working face of the disposal facility):

At source  
 Recycling installation  
 No reclamation/diversion planned  
 Estimate the planned diversion rate in percentage

X
44% of total waste on site will be disposed at the disposal facility

**11. FATAL FLAWS FOR THE SITE (ONLY APPLICABLE TO WASTE DISPOSAL FACILITIES):**

Indicate which of the following apply to the facility for a waste management activity:

Within a 3000m radius of the end of an airport landing strip	Yes	No <b>X</b>
Within the 1 in 50 year flood line of any watercourse	Yes	No <b>X</b>
Within an unstable area(fault zone, seismic zone, dolomitic area, sinkholes)	Yes	No <b>X</b>
Within the drainage area or within 5 km of water source	Yes	No <b>X</b>
Within an area with shallow and/or visible water table	Yes	No <b>X</b>
Within an area adjacent to or above an aquifer	Yes	No <b>X</b>
Within an area with shallow bedrock and limited available cover material	Yes	No <b>X</b>
Within 100 m of the source of surface water	Yes	No <b>X</b>
Within 1km from the wetland	Yes	No <b>X</b>
Indicate the distance to the boundary of the nearest residential area	<b>7km</b>	
Indicate the distance to the boundary of the industrial area	<b>10 km</b>	

**12. RAINFALL (ONLY APPLICABLE TO WASTE DISPOSAL FACILITIES):**

a) Indicate the wettest 6 months of the year:

November – April	
May - October	<b>X</b>

For the wettest six month period indicated above, indicate the following for the preceding 30 years

	Total rainfall for 6 months (mm)	Total A-pan evaporation for 6 months (mm)	Climatic water balance
For the 1 <sup>st</sup> wettest year	249.4	-	-
For the 2 <sup>nd</sup> wettest year	230.8	641	-410.2
For the 3 <sup>rd</sup> wettest year	208.2	697	-488.8
For the 4 <sup>th</sup> wettest year	200.4	-	-
For the 5 <sup>th</sup> wettest year	197.3	653	-455.7
For the 6 <sup>th</sup> wettest year	193.0	791	-598
For the 7 <sup>th</sup> wettest year	185.2	-	-
For the 8 <sup>th</sup> wettest year	175.8	421	-245.2
For the 9 <sup>th</sup> wettest year	171.2	720	-548.8
For the 10 <sup>th</sup> wettest year	160.3	891	-730.7

**13. LOCATION AND DEPTH OF GROUND WATER MONITORING BOREHOLES (ONLY APPLICABLE TO WASTE DISPOSAL FACILITIES):**

Codes of boreholes	Borehole locality	Depth (m)	Latitude						Longitude			
			°	'	"	°	'	"				
G7	Adjacent to existing landfill facility	50.27m	31°		27'		44.81"	18°		17'		47.03"
.....	.....		°		'		"	°		'		"
.....	.....		°		'		"	°		'		"
.....	.....		°		'		"	°		'		"

**14. LOCATION AND DEPTH OF LANDFILL GAS MONITORING TEST PIT (ONLY APPLICABLE TO WASTE DISPOSAL FACILITIES):**

Codes of boreholes	Borehole locality	Latitude						Longitude				
		°	'	"	°	'	"					
.....	.....		°		'		"	°		'		"
.....	.....		°		'		"	°		'		"
.....	.....		°		'		"	°		'		"

**15. EVERY CLOSURE APPLICATION FOR FACILITIES SHOWN IN THE TABLE BELOW MUST AS A MINIMUM BE ACCOMPANIED BY DOCUMENTATION AS INDICATED HEREAFTER:**

Requirements	Recycling &/ recovery Facility	Storage &/ transfer Facility	Treatment facility	Disposal facility
Design of storm-water management	X	X	X	X
Design of leachate management				X
Design & duration of landfill gas monitoring and management				X
Design of settlement/surface pondage				X
Design of access roads				X
Topographic Map indicating the property	X	X	X	
Topographic Map indicating the landfill property boundary, cells (fill areas), wells, and structures within and surrounding the landfill site				X
Plan Drawings (including Final Contour Grade Map) indicating (a) the final contours and vegetation in relationship to the surrounding land and any run-off control structures				X
Plan Drawings (including Final Contour Grade Map) indicating (b) well location(s), depth to groundwater and flow direction				X
Plan Drawings (including Final Contour Grade Map) indicating (c) the locations at which gas monitoring takes place				X
Drawings showing the proposed final restored profile for the landfill accompanied by calculations of the remaining tonnages of waste (void space) and materials necessary to close, cap and restore the landfill				X

WASTE MANAGEMENT LICENCE APPLICATION ADDITIONAL INFORMATION ANNEXURE (AUGUST 2010)

Requirements	Recycling &/ recovery Facility	Storage &/ transfer Facility	Treatment facility	Disposal facility
Provision of services that were provided by the facility being closed	X	X	X	X
Post Closure Site management & Operation	X	X	X	X
Monitoring Plan	X	X	X	X
Emergency Preparedness plan	X	X	X	X
Rehabilitation measures including removal of site structures,	X	X	X	X
Rehabilitation measures including waste compaction and capping; application of topsoil & vegetation establishment				X
Procedures for the inspection or auditing of the rehabilitation process and mechanisms for reporting to the licensing authority.	X	X	X	X
Long and short term stability				X
Procedures and timescales for ensuring final levels are achieved				X

**16. INFORMATION NEEDED WHEN APPLYING FOR ACTIVITIES LISTED UNDER CATEGORY A AND B, BUT IS NOT LIMITED THERETO:**

The following MUST be included in the application as supporting documentation and the applicant must indicate specific section(s) where they are appended in the reports.

REQUIRED PIECE OF INFORMATION	SECTION IN THE REPORTS WHERE IT CAN BE FOUND	COMMENTS (If any)
<b>1. 1:50 000 topography /topo-cadastral map of the area showing:</b>		
1.1 The site and 5km radius	Appendix A of Basic Assessment Report	
1.2 Existing neighbouring residential and industrial areas	Appendix A of Basic Assessment Report	The closest residential area – 7km The closest industrial area – 10km
1.3 Possible future development (indicate the type of development)	N/A	The landfill forms part of mine infrastructure
1.4 Other waste handling facilities (existing or closed) in the area	Section E of the Basic Assessment Report	In Lutzville - 10km
1.5 Existing and possible future neighbouring residential areas.	Appendix A of Basic Assessment Report	In Koekenaap – 7km
<b>2. The site plan drawn to scale showing the site's boundary showing:</b>	Appendix B of Basic Assessment Report	N/A
2.1 Activities or development existing in all 4 directions of the facility.	Appendix A of the Basic Assessment Report	N/A
2.2 Waste receipt, storage and handling areas	N/A	N/A
2.3 Impermeable surfaces	N/A	N/A
2.4 Sealed drainage systems	N/A	N/A
2.5 Drainage system for the facility including sumps and discharge points	N/A	N/A
2.6 Road names and access from all major roads in the area	Appendix A of the Basic Assessment Report	N/A
2.7 Bufferzone (waste disposal and composting facilities)	N/A	There are no sensitive receptors in close proximity of the site.
<b>3. Security and access aspects of the facility</b>	Appendix A and B1 of Basic Assessment Report	Access control exists. Only security and the Line Manager hold a key to the access gate.
<b>4. Emergency preparedness plan</b>	N/A	N/A
<b>5. Waste hierarchy implementation plan</b>	Section F of the Basic Assessment Report	N/A
<b>6. Operational plan</b>	Appendix J of the Basic Assessment Report	The existing waste management procedure can be used as the operational plan
<b>7. Latest external audit report (only apply for permit/licence amendment)</b>	N/A	N/A
<b>8. Geo-hydrological report (only apply to waste disposal facilities , storage facilities and treatment of waste)</b>	Appendix J of the Basic Assessment Report	The Groundwater modelling report that was previously undertaken for the Mineral Separation Plant indicates that the aquifer in the vicinity of the MSP has been classified as a poor aquifer system, producing very low yielding

WASTE MANAGEMENT LICENCE APPLICATION ADDITIONAL INFORMATION ANNEXURE (AUGUST 2010)

		boreholes and poor quality groundwater. As a result, no groundwater users exist within at least 3 km of the evaporation ponds, which are situated adjacent to the existing landfill facility.
7. Description risk assessment	Section F of the Basic Assessment Report	N/A

**17. ANY OTHER REQUIREMENTS IN TERMS OF THE WASTE ACT**

Please describe how the principles of waste management as set out in section 16 of National Environment Management: Waste Act, 2008 (Act No. 59 of 2008) have been taken into account:

Section 16(1) of the National Environment Management: Waste Act, 2008 (Act No. 59 of 2008), has been taken into account by means of implementing waste care, such as waste minimisation, pollution prevention and correct disposal. These are the responsibility of all Namakwa Sands personnel, contractors, consultants and visitors. Alternative products and waste disposal methods will continuously be considered and investigated as well as ways of avoiding, reducing, re-using and recycling of waste at the Mineral Separation Plant. The telecom containers containing domestic waste are emptied on a regular basis and the waste is disposed of at the Solid waste disposal site. It is also ensured that the smaller waste bins and other waste containers within the MSP that are labelled "domestic waste" are emptied in the domestic waste telecom bins on a regular basis.

Section 16(3) of the National Environment Management: Waste Act, 2008 (Act No. 59 of 2008) has been addressed through the compilation and implementation of an EMP (Environmental Management Programme) for the expansion of the existing landfill facility at the MSP of Namakwa Sands.

In this section please describe how any other requirements in terms of the National Environment Management: Waste Act, 2008 (Act No. 59 of 2008), not dealt with above, have been complied with/addressed:

Other requirements in terms of the National Environment Management: Waste Act, 2008 (Act No. 59 of 2008) that have been addressed include the reduction, re-use, recycling and recovery of waste. The responsibility of waste care, such as waste minimisation, pollution prevention and correct disposal, is applicable to all Namakwa Sands personnel, contractors, consultants and visitors. Alternative products and waste disposal methods will continuously be considered and investigated as well as ways of avoiding, reducing, re-using and recycling of waste at the Mineral Separation Plant. The telecom containers containing domestic waste are emptied on a regular basis and the waste is disposed of at the Solid waste disposal site. It is also ensured that the smaller waste bins and other waste containers within the MSP that are labelled "domestic waste" are emptied in the domestic waste telecom bins on a regular basis.

**18. COMPETENCE OF THE PERSON/COMPANY THAT WILL HOLD THE WASTE MANAGEMENT LICENCE**

It is imperative that the holder of the waste licence is a fit and proper person in terms of section 59 of the National Environment Management: Waste Act, 2008 (Act No. 59 of 2008). Please disclose the following:

(a) Legal compliance:

	Yes / No	Describe
Has the applicant ever been found guilty or issued with a non compliance notice in terms of any national environmental management legislation?	No	N/A
Has the applicant's licence in terms of the Waste Act 2008 ever been revoked?	No	N/A
Has the applicant ever been issued with a non compliance notice or letter in terms of any South African Law?	No	N/A

**Please note:** Details required above include any information that the applicant wants the Department to take into consideration in determining whether they are a "fit person" and this includes reasons why the offence happened and measures in place to prevent recurrence.

(b) Technical competence:

WASTE MANAGEMENT LICENCE APPLICATION ADDITIONAL INFORMATION ANNEXURE (AUGUST 2010)

What technical skills are required to operate the site?	<ul style="list-style-type: none"> <li>- Read and write.</li> <li>-Drivers license (Code EC1).</li> <li>-Knowledge on waste management (reduce, re-use &amp; recycle).</li> <li>-Must be able to distinguish between domestic waste and other waste.</li> <li>-Have a good understanding and knowledge of the waste disposal permit and approval conditions, Waste Management Procedure and other related procedures.</li> </ul>
How will the applicant ensure and maintain technical competency in the operation of the site?	<ul style="list-style-type: none"> <li>-Specific departmental induction &amp; refresher induction</li> <li>-Training on the following procedures:                             <ul style="list-style-type: none"> <li>» GOHSProcSys002 - Procedure for accident and incident investigation and reporting</li> <li>» GQProcSys004 - Procedure for corrective and preventative action</li> <li>» MQProcServ011 - Procedure for operating of domestic waste disposal site MSP</li> <li>» MEProcEnvir005 – Procedure for waste handling (MSP)</li> </ul> </li> <li>-Awareness training through monthly Environmental Themes and Toolbox talks.</li> <li>-Internal and external audits will include the management of the landfill site and legal compliance.</li> </ul>
Qualifications of person and relevant employees?	<p><b>1. Johan Bornman:</b>                      BSc (Honours) Wild Life Management                      BL Landscape architecture                      15 years experience in Environmental Management in the mining industry</p> <p><b>2. Netta Groenewald:</b>                      General Nursing and Midwifery Diploma                      Certificate in Occupational Health                      BA Degree in Industrial Psychology                      B Tech in Safety Management                      8 Years in Occupational Health                      3 Years in SHEQ Manager</p> <p><b>3. Correen le Roux</b>                      Masters in Environmental Management                      10 Years in Environmental Management</p> <p><b>4. Heinrich Stevens</b>                      Grade 10                      8 Years Supervisory experience</p>
Experience of person and relevant employees? (highlight the persons/employees duties and responsibilities in terms of the experience)	See above

(c) Financial Provisions:

Attach to this annexure a plan of estimated expenditure for the following:

Environmental Monitoring	Included in existing monitoring programme
Provision and replacement of infrastructure	R65 000. This includes the following costs: <ul style="list-style-type: none"> <li>• Landfill pit preparation (44m x 15m x 5m) – R35 000</li> <li>• Earth berms and other stormwater control measures – R15 000</li> <li>• Fencing and notice board – R15 000</li> </ul>
Provision for appropriate equipment	Use of existing equipment
Closure/decommissioning/rehabilitation and aftercare	R80 000
Confirmation that adequate funds have been budgeted for the above aspects	N/A

## 19. INFORMATION FOR WASTE DISPOSAL FACILITIES

The following aspects MUST be addressed and included in the application documentation for waste disposal facilities and the applicant must indicate specific section(s) where they are appended in the reports.

REQUIRED PIECE OF INFORMATION	SECTION IN THE REPORTS WHERE IT CAN BE FOUND	COMMENTS (If any)
Waste disposal facility designs	Appendix B of the Basic Assessment Report	Due to the small nature of the proposed landfill facility, no detailed facility design is available.

WASTE MANAGEMENT LICENCE APPLICATION ADDITIONAL INFORMATION ANNEXURE (AUGUST 2010)

REQUIRED PIECE OF INFORMATION	SECTION IN THE REPORTS WHERE IT CAN BE FOUND	COMMENTS (If any)
Closure plan (report)	Chapter 5 of the EMP (Appendix J of the Basic Assessment Report)	The landfill pits must be backfilled to a level as close as possible to its original topography Backfilled pits must be finally capped with at least 500mm of subsoil/dorbank. Topsoil/growth medium may only be applied after 12 months if there are no further signs of active subsidence. The topsoil/growth medium layer must be at least 200mm thick. The area will be protected against wind erosion by placing shade nets as windbreaks across the site. A revegetation programme will be introduced if natural restoration is not successful.
Closure/Remedial designs	Chapter 5 of the EMP (Appendix J of the Basic Assessment Report)	See above comment
Landfill conceptual designs (only apply for construction and decommissioning of waste disposal facilities)	Appendix B of the Basic Assessment Report	N/A
End-use plan (only apply to waste disposal facility closure)	Chapter 5 of the EMP (Appendix J of the Basic Assessment Report)	Rehabilitate to natural state (as detailed above)
Design for site roads	Appendix B of the Basic Assessment Report	Existing roads as indicated on site plan
The 1 in 50 year flood-line of all watercourses	Not determined	N/A
Laboratory facilities	N/A	Existing facilities available
Design and location of fuel storage areas	N/A	None required
Design and location waste quarantine areas	N/A	None required
Design and location of waste inspection areas	N/A	None required
Site's drainage system	Refer to the EMP (Appendix J of the Basic Assessment Report).	A stormwater management plan will be implemented during and the site is to be rehabilitated to a natural state after closure, restoring natural drainage.
Site's emergency control system and plan	N/A	As for the MSP
Liner specifications	N/A	None required
Leak detection system and monitoring	N/A	None required. Pollution potential of small, general (i.e. domestic) waste landfills in dry climate regarded as negligible
Leachate management plan	N/A	Not required, due to the low rainfall of the area.
Calculations of leachate generation	N/A	Not required
Leachate collection and treatment	N/A	Not required
Groundwater monitoring	Appendix B of the Basic Assessment Report	Existing monitoring takes place at borehole No. G7 at the existing landfill facility
Gas management and/or harvesting	N/A	N/A
Air quality monitoring and management	Appendix B of the Basic Assessment Report	Dust fall-out monitoring is undertaken on the site as indicated on the relevant figure in Appendix B of the Basic Assessment Report.
Co-disposal ratio calculation	N/A	N/A

WASTE MANAGEMENT LICENCE APPLICATION ADDITIONAL INFORMATION ANNEXURE (AUGUST 2010)

REQUIRED PIECE OF INFORMATION	SECTION IN THE REPORTS WHERE IT CAN BE FOUND	COMMENTS (If any)
Stability monitoring and management	N/A	Not required
Daily and intermediate cover requirements	Section F of the Basic Assessment Report	Cover all waste after disposal with the stockpiled excavated material. No waste may be exposed to wind
Temporary and permanent capping requirements	Section F of the Basic Assessment Report and Chapter 5 of the EMP (Appendix J of the Basic Assessment Report)	<p>The landfill pits must be backfilled to a level as close as possible to its original topography.</p> <p>Backfilled pits must be finally capped with at least 500mm of subsoil/dorbank.</p> <p>Topsoil/growth medium may only be applied after 12 months if there are no further signs of active subsidence. The topsoil/growth medium layer must be at least 200mm thick.</p> <p>The area will be protected against wind erosion by placing shade nets as windbreaks across the site.</p> <p>A re-vegetation programme will be introduced if natural restoration is not successful.</p>

## DECLARATIONS

### THE APPLICANT

I ....., in my personal capacity or duly authorised (please circle the applicable option) by ..... thereto hereby declare that I:

- regard the information contained in this report to be true and correct, and
- am fully aware of my responsibilities in terms of the National Environmental Management Act of 1998 ("NEMA") (Act No. 107 of 1998), the Environmental Impact Assessment Regulations ("EIA Regulations") in terms of NEMA (Government Notice No. R. 543 refers), and the NEM: Waste Act (Act no 59 of 2008), and that failure to comply with these requirements may constitute an offence in terms of the environmental legislation;
- appointed the environmental assessment practitioner as indicated above, which meet all the requirements in terms of regulation 17 of GN No. R. 543, to act as the independent environmental assessment practitioner for this application;
- have provided the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the environmental legislation including but not limited to –
  - o costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
  - o costs incurred in respect of the undertaking of any process required in terms of the regulations;
  - o costs in respect of any fee prescribed by the Minister or MEC in respect of the regulations;
  - o costs in respect of specialist reviews, if the competent authority decides to recover costs; and
  - o the provision of security to ensure compliance with the applicable management and mitigation measures;
- am responsible for complying with the conditions that might be attached to any decision(s) issued by the competent authority;
- have the ability to implement the applicable management, mitigation and monitoring measures;
- hereby indemnify, the government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of, inter alia, the content of any report, any procedure or any action for which the applicant or environmental assessment practitioner is responsible; and
- am aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

**Please Note:** If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

---

Signature of the applicant:

---

Name of company:

---

Date:

**THE INDEPENDENT ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)**

I ....., as the appointed independent environmental practitioner ("EAP") hereby declare that I:

- act/ed as the independent EAP in this application;
- regard the information contained in this report to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and the NEM: Waste Act (Act no 59 of 2008);
- have and will not have no vested interest in the proposed activity proceeding;
- have disclosed, to the applicant and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and the NEM: Waste Act (Act no 59 of 2008);
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2010 (specifically in terms of regulation 17 of GN No. R. 543) and the NEM: Waste Act (Act no 59 of 2008), and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the application was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- have ensured that the comments of all interested and affected parties were considered, recorded and submitted to the competent authority in respect of the application;
- have kept a register of all interested and affected parties that participated in the public participation process;
- have provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not; and
- am aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

**Note:** The terms of reference must be attached.

---

Signature of the environmental assessment practitioner:

---

Name of company:

---

Date:

**THE INDEPENDENT PERSON WHO COMPILED A SPECIALIST REPORT OR UNDERTOOK A SPECIALIST PROCESS**

I ....., as the appointed independent specialist hereby declare that I:

- act/ed as the independent specialist in this application;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- have and will not have no vested interest in the proposed activity proceeding;
- have disclosed, to the applicant, EAP and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2010 (specifically in terms of regulation 17 of GN No. R. 543) and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the specialist input/study was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments on the specialist input/study;
- have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;
- have ensured that the names of all interested and affected parties that participated in terms of the specialist input/study were recorded in the register of interested and affected parties who participated in the public participation process;
- have provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not; and
- am aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

**Note:** The terms of reference must be attached.

---

Signature of the specialist:

---

Name of company:

---

Date:

### GENERAL WASTE CATEGORISATION

Municipal waste
Commercial and industrial waste
Brine
Fly ash and dust from miscellaneous filter sources
Bottom slag
Organic
Construction and demolition waste
Paper
Glass
Metal
Tyres
Other (specify)

### HAZARDOUS WASTE CATEGORISATION

Gaseous waste
Mercury containing waste
Batteries
POP Waste
Pesticide containing waste
Inorganic chemical waste
Asbestos containing waste
Waste oils
Organic halogenated and/or sulphur containing solvents
Organic halogenated solids and compounds with sulphur
Organic solvents without halogens and sulphur
Other organic waste without halogens and sulphur
Tarry and bituminous waste
Brine
Fly ash and dust from miscellaneous filter sources
Bottom ash
Slag
Mineral waste
Waste of Electric and Electronic Equipment (WEEE)
Metal scrap
Health care risk waste
Miscellaneous