DIRECTORATE: WASTE MANAGEMENT HADJIRA PECK

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REFERENCE: 19/2/5/4/F4/23/WL0061/20

The Municipal Manager Saldanha Bay Municipality Private Bag X12 VREDENBURG 7380

Attention: Mr David Wright

80 E-mail: <u>David.Wright@sbm.gov.za</u>

VARIATION OF THE WASTE MANAGEMENT LICENCE FOR THE DECOMMISSIONING OF THE CURRENT WASTE BODY AND THE FURTHER EXPANSION OF THE VREDENBURG WASTE DISPOSAL FACILITY (WDF) ON PORTION 2 OF FARM EENZAAMHEID NO. 135, VREDENBURG

WASTE MANAGEMENT LICENCE

A. <u>DECISION</u>

I, Eddie Hanekom, in my capacity as the Director: Waste Management of the Department of Environmental Affairs and Development Planning (hereinafter referred to as "the Department"), in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM:WA), as amended, hereby vary and replace the existing Waste Management Licence (Licence No. 19/2/5/4/F4/23/WL0034/18) and issue this Waste Management Licence to the Saldanha Bay Municipality (hereinafter referred to as 'the Municipality') for the decommissioning of the current waste body and the further expansion of the Vredenburg WDF on Portion 2 of Farm Eenzaamheid No. 135, Vredenburg (hereinafter referred to as "the Facility").

B. <u>DESCRIPTION OF THE ACTIVITY:</u>

The activities for decommissioning of the current waste body and the further expansion of the Vredenburg WDF, as per the "Minimum Requirements for Waste Disposal by Landfill", 1998, Second Edition, Department of Water Affairs and Forestry (DWAF) (now Department of Water and Sanitation) ("Minimum Requirements") and the NEM:WA "National Norms and Standards for Disposal of Waste to Landfill" Government Notice (GN) No. R 636 (GN R 636) of 23 August 2013, will entail but not be limited to the following:

- (a) Disposal of general waste.
- (b) WDF Site Auditing.
- (c) Gate or weighbridge recording procedures.
- (d) Volume Surveys.
- (e) Collection and processing of other data.
- (f) Leachate and water quality monitoring.
- (g) Gas monitoring.
- (h) Air quality monitoring.
- (i) Monitoring of rehabilitated areas.
- (j) The determination of the total airspace at the waste disposal facility within 6 months after this Licence is issued.
- (k) Attend to the health of workers.
- (I) Remedial design to address identified problem areas.
- (m) Final shaping, landscaping and re-vegetation.
- (n) Final landfill cover or capping design.
- (o) Permanent stormwater diversion measures, run-off control and anti-erosion measures.
- (p) Any infrastructure relating to the End-use plan.

The expansion of the Facility through the construction of 2 (two) additional waste cells adjoining and adjacent to the existing waste body will be according to the design requirements of a Class B WDF in terms of GN No. R 636, the NEM:WA: National Norms and Standards for Disposal of Waste to Landfill, dated 23 August 2013.

The following activities listed in the NEM:WA, GN 921, "The list of waste management activities that have, or are likely to have, a detrimental effect on the environment", of 29 November 2013 (GN No. 921) are hereby authorised:

Category A

- 3 (6) The treatment of general waste using any form of treatment at a facility that has the capacity to process in excess of 10 tons but less than 100 tons.
- 3 (12) The construction of a facility for a waste management activity listed in Category A of this Schedule (not in isolation to associated waste management activity).

3 (13) The expansion of a waste management activity listed in Category A or B of this Schedule which does not trigger an additional waste management activity in terms of this Schedule.

3 (14) The decommissioning of a facility for a waste management activity listed in Category A or B of this Schedule.

In this Licence, "Director" means the Director: Waste Management of the Western Cape Department of Environmental Affairs and Development Planning, who may be contacted at the address below:

Director: Waste Management

Department of Environmental Affairs and Development Planning

Private Bag X9086

CAPE TOWN

8000

In this Licence, "Director: RPW" means the Director: Resource Protection and Waste of the Department of Water and Sanitation: Western Cape Provincial Operations, who may be contacted at the address below:

Director: RPW: Western Cape Provincial Operations

Department of Water and Sanitation

Private Bag X16

SANLAMHOF

7532

The granting of this Waste Management Licence is subject to compliance with the conditions set out in section C.

C. <u>LICENCE CONDITIONS</u>

LICENCE NUMBER: 19/2/5/4/F4/23/WL0061/20

WASTE APPLICATION: EXPANSION OF THE VREDENBURG WDF AND REHABILITATION OF PART

OF THE EXISTING VREDENBURG WDF

LOCATION: PORTION 2 OF FARM EENZAAMHEID NO. 135, VREDENBURG

LICENCE HOLDER: SALDANHA BAY MUNICIPALITY

CONTACT PERSON: THE MUNICIPAL MANAGER OR THE DESIGNATED WASTE MANAGER/

OFFICER

ADDRESS: PRIVATE BAG X12, VREDENBURG, 7380

1. LOCATION

1.1 This Licence authorises the Saldanha Bay Municipality to remediate a part of the existing Facility and expand the WDF with the construction of 2 (two) additional waste cells adjoining and adjacent to the existing waste cell, on Portion 2 of Farm Eenzaamheid No. 135, Vredenburg. The expanded WDF will be constructed according to the design requirements of a Class B WDF.

1.2 The location of the Facility must be according to the co-ordinates indicated on the Waste Management Licence Application Form dated 10 March 2016 and Waste Management Licence Application Additional Information Annexure, dated 24 June 2016, submitted by the Licence Holder, which is defined as follows:

Table 1-1: Footprint of the Facility

Disposal Facility	Corner numbers	Latitude (S)	Longitude (E)
Current/existing Waste Disposal Facility	Α	32°55'13.14"	18°2'52.03"
	В	32°55'17.05"	18°3'6.52"
	С	32°55'13.72"	18°3'6.81"
	D	32°55'7.87"	18°3'6.73"
	E	32°55'2.62"	18°3'7.21"
	F	32°54'58.24"	18°3'7.01"
	G	32°54'57.77"	18°3'3.01"
	Н	32°55'8.8"	18°2'54.08"
Extension of the Waste Disposal Facility	I	32°55'10.2"	18°2'41.43"
	J	32°55'10.02"	18°2'41.28"
	K	32°54'59.7"	18°2'42.58"
	L	32°55'0.34"	18°2'55.78"
	М	32°55'0.25"	18°2'55.9"
	N	32°54'57.01"	18°2'56.13"

1.3 Location of property on which Facility is situated:

Table 1-2: Location of the Facility

Latitude (S)	Longitude (E)	
32°55'5.05''	18°2'53.02''	

- 1.4 The footprint of the Facility and its associated infrastructure is approximately 138 000m².
- 1.5 The Surveyor General 21 Digit code of the Facility is: C0460000000013500002.

2. PERMISSIBLE WASTE

- 2.1 Any portion of the Facility as demarcated in condition 1.2, may be used for the disposing of general waste. Only waste that is classified as general waste according to the NEM:WA or any current and future Norms and Standards developed by the Department is permitted.
- 2.2 No hazardous waste is permitted to be disposed of at the Facility. If more than 80m³ of hazardous waste is going to be stored at the Facility, registration in terms of the relevant NEM:WA, National Norms and Standards for the Storage of Waste (GN No. 926 of 29 November 2013) must be done.
- 2.3 The Licence Holder must prevent the acceptance of any waste not authorised at the Facility.
- 2.4 All waste loads must be checked at the gate according to the EMPr to prevent the disposal of waste not permitted by this Licence.
- 2.5 Organic waste is allowed to be disposed of at the Facility, but must be in accordance with the Organic Waste Diversion Plan, targets and procedures referred to in conditions 20.8 and 20.9 of the Licence.

3. APPOINTMENT OF A WASTE MANAGEMENT CONTROL OFFICER/ENVIRONMENTAL CONTROL OFFICER

- 3.1 A Waste Management Control Officer (WMCO)/Environmental Control Officer (ECO), who will monitor and ensure compliance and correct implementation of all mitigation measures and provisions as stipulated in the Licence and Environmental Management Programme (EMPr) dated 27 June 2016, must be appointed prior to any construction activities being undertaken on the Facility. The WMCO/ECO must:
- 3.1.1 report any non-compliance with any Licence conditions or requirements or provisions of NEM:WA to the Director through the means reasonably available;
- 3.1.2 monitor the closure activities and ensure that the closure plans are in accordance with approved engineering designs;
- 3.1.3 identify and submit potential measures to the Licence Holder and the Director in respect of waste minimisation, including the reduction, recovery, re-use and recycling of waste; and
- 3.1.4 submit a declaration to the Director upon completion of the construction works that all possible mitigation measures have been put in place and highlight likely deficiencies before commencement of the listed activities.

4. <u>CONSTRUCTION</u>

- 4.1 The Facility or any portion thereof may only be used for the disposal of permissible waste as per condition 2 if the Facility or any such portion has been constructed or developed according to the conditions listed under condition 4 of this authorisation.
- 4.2 Construction, operation and further development within the WDF shall be in accordance with the approved drawings, included in the final BAR dated 27 June 2016 or any further approved drawings, and shall adhere to a Class B containment barrier design as described in GN. 636. The design drawings report for extension of the WDF and related infrastructure must be approved in writing by the Director before any construction and disposal may commence.
- 4.3 The construction must adhere to the additional Record of Decision (Ref: 16/2/7/G100/D53/Z1/1) dated 30 June 2020, related to the amended design drawings, as permission has been granted for a foundation height increase in the construction process barring all other previous conditions are met.
- 4.4 Construction and further development within the proposed WDF must be carried out under the supervision of a Registered Professional Engineer. The operational waste cell must adhere to a Class B containment barrier design as described in GN 636, NEM:WA, National Norms and Standards for Disposal of Waste to Landfill, dated 23 August 2013 including a leachate collection system. The final design drawings must be submitted with the Construction Quality Assurance plan in condition 4.10.2 to the Director and the Director: RPW prior to commencement of construction at the Facility.
- 4.5 The maximum height of the Facility may not exceed 10m above the natural ground level or 45m above mean sea level (MSL).
- 4.6 The waste body, or any portion thereof must be covered and maintained in such a way that:
- 4.6.1 the formation of pools, and or damming due to rain is prevented;
- 4.6.2 free surface runoff of rain-water is ensured:
- 4.6.3 contamination of stormwater is prevented;
- 4.6.4 no objects or material which may hamper the rehabilitation of the Facility are present; and
- 4.6.5 minimal or no erosion occurs.
- 4.7 The slope of the waste body must be constructed and maintained in such a manner that the occurrence of erosion is prevented.
- 4.8 The Licence Holder must ensure that the gas ventilation measures are put in place with the installation of the final capping of the existing waste body.
- 4.9 The Licence Holder must ensure that concurrent rehabilitation is done at fully utilized areas throughout the life of the Facility, until the existing Facility is ceased and capped upon reaching full capacity.
- 4.10 The Licence Holder must ensure that the proposed design of Cell 1 and 2 are constructed as per the Department of Water and Sanitation recommendations letter in the Record of Decision dated 6 September 2016. The following amendments must be made to the designs:

- 4.10.1 The requirements for an underlying blanket drain, which prevents Geosyntheitc Clay Liner (GCL) prehydration and increases hydraulic gradient across the composite liner shall be replaced with a subsurface finger drain system of equivalent performance instead.
- 4.10.2 A Construction Quality Assurance plan must be submitted prior to the start of construction, which confirms materials specification as compliant with Geosynthetic Research Geomembrane (GRI GM) 13, GRI GCL 3 and GRI Geotextile 12 for Geomembrane (GM), GCL. The Quality Assurance Plan amendments of the piggy back liner (where it is acceptable to replace the aggregate gas venting layer and GCL with a 100g/m² geotextile to serve as both gas vent and protection layer).
- 4.11 The Licence Holder must ensure that Construction Quality Assurance (CQA) takes place during construction, all construction material must comply with relevant South African National specifications, or any prescribed management practice or standards which ensure equivalent performance. Details of quality assurance during construction must be provided to the Director and the Director: RPW; this must also include confirmation that construction will be supervised by a Registered Professional Engineer.
- 4.12 After construction of the Facility or further development within the Facility, the Licence Holder shall notify the Director thereof and the person referred to in condition 4.4 shall submit a certificate or alternatively a letter to the Director that the construction of the Facility or further development within the Facility, as proposed by the Licence Holder and approved by the Director, is in accordance with recognised civil engineering practices and the requirements in this Licence, before disposal may commence on the Facility. If the Director is satisfied with the construction of the Facility or any further development within the Facility and has given written permission, the Licence Holder may use the Facility or any further development within the Facility for the disposal of waste.
- 4.13 Works shall be constructed and maintained on a continuous basis by the Licence Holder to divert and drain from the Facility in a legal manner, all runoff water arising on land adjoining and adjacent to the Facility, which could be expected as a result of the estimated maximum precipitation during a period of 24 hours with an average frequency of 1:50 (one in fifty) years (hereinafter referred to as the "estimated maximum precipitation") shall be diverted by a diversion berm. Such a berm shall be constructed of material having a permeability equal to or less than 1x10-8 m/s.
- 4.14 Works shall be constructed and maintained on a continuous basis by the Licence Holder to divert and drain from the working face of the Facility, all runoff water arising on the Facility, which could be expected as a result of the estimated maximum precipitation and to prevent such runoff water from coming into contact with leachate from the Facility. Runoff water arising on the Facility shall be diverted by a diversion berm of sufficient height. Such berm shall be constructed of material having a permeability equal to or less than 1x10-8 m/s.
- 4.15 Runoff water referred to in condition 4.14 shall comply with the quality requirements as prescribed by the Director together with the Director: RPW, which may be determined from time to time and shall be drained from the Facility in a legal manner.

- 4.16 Runoff water referred to in condition 4.14 which does not comply with the quality requirements referred to in condition 4.15 and leachate from the Facility shall, by means of works which shall be constructed and maintained on a continuous basis by the Licence Holder and be lined as approved by the Director and the Director: RPW, to prevent pollution to groundwater:
- 4.16.1 be treated to comply with the quality requirements referred to in condition 4.15 and discharged in a legal manner and/or,
- 4.16.2 be evaporated in a perimeter berm impoundment constructed with a permeability equal to or less than 1x10-8 m/s and/or,
- 4.16.3 be discharged into any convenient sewer if accepted by the Authority in control of that sewer.
- 4.17 Any development which occurs within 1:100 (one in one hundred) year flood line and/or within 500m from the boundary of a wetland would require a water use licence in terms of section 21 of the National Water Act, 1998 (Act No. 36 of 1998).
- 4.18 This Licence must be made binding to the main contractor, as well as individual contractors and should be included in tender documentation for the construction contract.
- 4.19 The Facility must be constructed in accordance with recognized civil engineering practices to ensure that it remains stable, as well as to avoid and maintain erosion impact.
- 4.20 Should any archaeological artefacts be exposed during excavation, the construction in the vicinity of the finding must be stopped. Under no circumstances shall any artefacts be destroyed. Such an archaeological Facility must be marked and fenced off, and the South African Heritage Resource Agency must be contacted within 48 hours.
- 4.21 The Engineer's construction completion certificate with supporting evidence to confirm compliance with the amended design layout and South African National Standard (SANS) specifications 10409 and 1526 as amended and SANS 1200 series (addressing the receiving face of the foundation material, GCL, geomembrane, geotextile, cushion layer, and aggregate leachate collection system (LCS) materials and installation quality control) shall be provided along with the voltage diagram of an Electric Leak Location Survey (ELLS) in accordance with American Society for Testing and Materials (ASTM) D7007 if the lining contractor is an International Association of Geosynthetic Installers (IAGI) accredited installation contractor of certified welders, or alternatively ASTM D8265 if the lining contractor is not American Concrete Institute (ACI) approved or equally approved.
- 4.22 The Licence Holder shall notify the Responsible Authority within seven days of commencing with the GCL placement, and allow the Responsible Authority the opportunity of sample collection.

5. MANAGEMENT

- 5.1 The Environmental Management Programme (EMPr) dated 27 June 2016, submitted as part of the final Basic Assessment Report (BAR), is hereby approved and must be implemented together with all the conditions of this Licence.
- An application for the amendment to the EMPr could be submitted to the Director if any further amendments are to be made to the EMPr and such amendments may only be implemented if the amended EMPr has been authorised by the Director.
- 5.3 The EMPr must be included in all contract documentation for all phases of implementation.
- 5.4 The Licence Holder must notify the Director immediately of any events or incidents that may cause significant environmental damage or breach the requirements of the EMPr.
- 5.5 The Facility must be managed by fit and proper persons who are competent in respect of the responsibilities to be undertaken by them.
- 5.6 Any persons having duties that are or may be affected by the matters set out in this Licence must have convenient access to a copy of it, kept at or near the place where those duties will be carried out.
- 5.7 A copy of this Licence and the EMPr must be kept at the Facility where the waste listed activities will be undertaken. The Licence and EMPr must be produced to any authorised official of the Department who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein, and must be made available for inspection by any employee or agent of the Licence Holder who works or undertakes work at the Facility.
- 5.8 The Licence Holder shall remain responsible for the Facility, and/or any of the impacts arising from the operations on the environment.

6. FACILITY SECURITY AND ACCESS CONTROL

- 6.1 The Licence Holder must prevent unauthorised access to the Facility, by having the Facility enclosed within a fence and a gate of 1.8m high, thereby providing adequate access control.
- 6.2 Weatherproof, durable and legible notices must be displayed at each entrance in at least 3 (three) official languages applicable to the area. These notices must prohibit unauthorised entry, state the hours of operation, include the types of waste permissible, the name, address and telephone number of the Licence Holder and the person responsible for the operation of the Facility.
- 6.3 The Licence Holder must prevent the acceptance of any waste not authorised at the Facility as per condition **Error! Reference source not found.**.
- 6.4 Waste must be screened at the entrance of the Facility to ensure compliance to condition 6.3.

7. WATER QUALITY MANAGEMENT

- 7.1 <u>Stormwater Management</u>
- 7.1.1 Uncontaminated runoff water must under no circumstances be used to dilute leachate emanating from the Facility.
- 7.1.2 Stormwater channels must not be lined with concrete, but must be made as natural as possible.
- 7.1.3 The energy dissipaters, litter traps and sediment traps must be installed in the stormwater channels to reduce velocity of the stormwater.
- 7.2 <u>Leachate management</u>
- 7.2.1 Leachate from Facility, including contaminated runoff water, must be treated to comply with the quality requirements as prescribed by the Director and the Director: RPW, which may be determined from time to time and shall be drained from the Facility in a legal manner.
- 7.3 All areas where waste is temporarily stored and handled, excluding the disposal area, must be designed and managed such that there is no escape of contaminants into the environment. All runoff, if any, must be prevented from entering local watercourses.

8. <u>IMPACT MANAGEMENT</u>

- 8.1 All waste storage and sorting activities must be done on hardened surfaces with waterproof bases, drainage system with bund walls and must be roofed.
- 8.2 Windblown litter must be contained on site with the perimeter fencing, or by any other practical means.

 Any waste/windblown litter contained on any fences and outside the boundaries must be removed and disposed.
- 8.3 Waste disposed of at the Facility must be compacted and covered on a daily basis with a 150mm thick layer of soil or other material approved by the Director, so as to prevent it being blown around during windy conditions, or being exposed such that scavengers and informal waste collectors have access to disposed waste.
- 8.4 Waste may not be burned at the Facility.
- 8.5 All staff and visitors' occupational health and safety risks must be identified and managed. Protective clothing must be worn at the Facility and the provisions of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) must be complied with.
- 8.6 A two-way access road must be constructed with material that creates minimal dust. This access road must also be maintained to facilitate easy access to Facility and the active cells.
- 8.7 The stockpiles of cover materials, which can be a source of dust, must be managed appropriately. The plan to minimise dust generation should be implemented, as described in the EMPr.
- 8.8 Fugitive dust emissions must be mitigated through wet suppression methods and earth moving operations should be restricted during windy conditions.

- 8.9 The presence of any nuisances, such as vectors (flies and vermin), exposed waste, windblown litter, bad odours, etc., must be monitored and the monitoring results must be kept in terms of conditions 15 and 16.
- 8.10 All invasive alien vegetation must be removed from the Facility annually (one a year).
- 8.11 An 800 m buffer zone must be established around the Facility, this buffer zone must restrict any residential development within 800 m of the Facility. This buffer zone must be established by registering a servitude on the adjoining and adjacent properties. The buffer zone should be extended in the northerly direction of the Facility as to accommodate the nearby Waste Water Treatment Works found in this area.
- 8.12 Reclamation of waste may occur at the Facility at the discretion of the Licence Holder, but may not take place on the waste body and the Licence Holder must adhere to the NEM:WA "National Norms and Standards for the Sorting, Shredding, Grinding, Crushing, Screening or Bailing of General Waste" of 11 October 2017. In addition, GN No. 926 of November 2013, NEM:WA, "Norms and Standards for Storage of Waste" and GN 1064, NEM:WA: "Waste Tyre Regulations", of 29 September 2017 and any subsequent waste tyre regulations must be adhered to where applicable.
- 8.13 The Licence Holder must manage landfill gas in terms of the DWAF, Minimum Requirements, with a gas monitoring and/or passive ventilation system established.
- 8.14 All sumps for water or gas monitoring at the Facility must be routinely inspected and cleaned.
- 8.15 Spill kits, which include hydrocarbon absorbent material, must be stored at the Facility and staff must be trained to use these spill kits.
- 8.16 Any complaint from the public must be attended to by the Licence Holder, who must take all reasonable and practical steps to alleviate the cause of the complaint within a reasonable timeframe to the satisfaction of the Director and record it in terms of conditions 15 and 16.
- 8.17 Skips must be provided for hazardous waste, which must be removed regularly for disposal at a suitably licenced WDF.
- 8.18 An area must be demarcated for fuelling and workshop services. This area must be bunded to contain any spillages to 110% capacity of the volume of liquid stored to reduce the possibility of soil and water contamination.
- 8.19 The Licence Holder must ensure that all the hazardous waste is removed from the Facility prior to commencing of final capping.
- 8.20 An Emergency Response Plan (ERP) must be developed, and all staff must be trained in the implementation thereof. The ERP should be regularly updated and must include fire evacuations, injury on duty, accidents, and procedures caused by unexpected hazardous waste ending up at the Facility.

9. <u>ENVIRONMENTAL POLLUTION INVESTIGATIONS</u>

- 9.1 If, in the opinion of the Director, any environmental pollution, nuisances or health risks may be or is occurring on the Facility, the Licence Holder must investigate the cause of the problem and take reasonable steps to alleviate the problem in consultation with the Director.
- 9.2 Should the investigation carried out as per condition 9.1 above reveal any unacceptable levels of pollution, the Licence Holder must submit a report with mitigation measures to the satisfaction of the Director.

10. RUNOFF WATER QUALITY MANAGEMENT

- 10.1 Works constructed in compliance with condition 4 must be of such a capacity as to maintain no freeboard and to accommodate:
- 10.1.1 all stormwater runoff, which could be expected as a result of the estimated maximum precipitation during a period of 24 (twenty four) hours with an average frequency of once in the fifty years; and
- 10.1.2 all expected leachate.
- 10.2 Works constructed in compliance with condition 4 must, on a continuous basis, be properly maintained.
- 10.3 All runoff water (stormwater) arising as a result of precipitation on land adjoining and adjacent to the Facility must be prevented from entering the Facility and must be diverted and drained from the Facility, by means of works constructed by the Licence Holder in accordance with condition 4.

11. MONITORING

- 11.1 <u>Monitoring methods and parameters:</u>
- 11.1.1 The Licence Holder shall carry out all tests in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), referred to in the Standards Act, 2008 (Act No. 8 of 2008), to analyse the samples taken under the monitoring programmes specified in condition 11.3.
- 11.1.2 The Licence Holder shall only use another method of analysis if written proof that the method is at least equivalent to the SABS method, is submitted to the Responsible Authority.
- 11.1.3 The Licence Holder must put in place a monitoring and measurement plan that must inter alia include:-
- 11.1.3.1 mass (in tonnes or kilograms) received, recycled, reclaimed, treated and transferred;
- 11.1.3.2 waste types and sources;
- 11.1.3.3 air quality monitoring; and
- 11.1.3.4 an annual topographical survey submitted to the Director in the form of an Airspace Determination Report, which must estimate the remaining volume of airspace on the Facility and the remaining lifetime for the disposal of waste at the Facility.

11.2 <u>Water Quality Monitoring</u>

- 11.2.1 A groundwater management plan in terms of quality and quantity must be implemented, which will include monitoring boreholes up-gradient and down-gradient of the Facility and maintained to the satisfaction of the Director. Three monitoring boreholes, in addition to the existing boreholes for the expanded footprint of the Facility, must be sited and drilled, 1 (one) up-gradient and 2 (two) down gradient of the WDF, to a depth that penetrates the whole aquifer.
- 11.2.2 Monitoring boreholes must be equipped with lockable caps. The Director and the Director: RPW reserves the right to take water samples at any time and to analyse these samples or have them analysed.
- 11.2.3 Groundwater levels for all boreholes to be used for monitoring purposes must be monitored on a quarterly basis.
- 11.2.4 In the event that groundwater users become affected by waste disposal activities due to unacceptable water quality as a result of the contamination plume migrating and emanating from WDF, the community must be compensated with potable water.

11.3 <u>Detection</u>

11.3.1 Monitoring shall be conducted on a biannual (twice per year) basis during late summer and late winter to capture seasonal variation, for the water quality variables as agreed by the Department and the Director: RPW.

11.4 <u>Investigative Monitoring</u>

11.4.1 If, in the opinion of the Director: RPW, a water quality variable listed under the detection monitoring programme, as referred to in condition 11.3.1, shows an increasing trend, the Licence Holder shall initiate a monthly monitoring programme until such time that the variable is within acceptable limits.

11.5 <u>Further Investigation</u>

11.5.1 If, in the opinion of the Director: RPW, groundwater, surface water and/or air pollution have occurred or may possibly occur, the Licence Holder shall conduct the necessary investigations and implement additional monitoring and rehabilitation measures, which shall be to the satisfaction of the Director: RPW.

11.6 <u>Liner Leak and Failure Detection Monitoring</u>

- 11.6.1 The leak detection system must be monitored on a daily basis for possible leakages.
- 11.6.2 Should a leak or failure be suspected or detected during monitoring or at any time, it must be regarded as an incident according to condition 16 below and be addressed to the satisfaction of the Director.
- 11.6.3 Inspection of liners, where liners are accessible, must be performed monthly. Liners must be repaired or replaced when inspection tests show deterioration or leakage and these corrective action(s) shall be performed to the satisfaction of the Director.

12 <u>AUDITING</u>

12.1 Internal Audits

- 12.1.1 Internal audits must be conducted quarterly (four times per year) by the Licence Holder and on each audit occasion an official report must be compiled by the relevant internal auditor to report the findings of the audits, which must be submitted by the Licence Holder to the Director within 30 (thirty) days of the completion of the audit report and must be made available to the external auditor and to all relevant authorities if requested. The records kept in terms of condition 15 must also be included in the audit report. Furthermore, the Licence Holder must hold discussions with the Department regarding the planned audit reports to ensure compliance with condition 12.1.3.
- 12.1.2 The internal audit reports must be included in an appendix in the external audit report referred to in condition 12.2.
- 12.1.3 The internal audit report must:
- 12.1.3.1 prescribe to the tabular format and utilise the Department's Audit Protocol;
- 12.1.3.2 specifically state whether conditions of this Licence are adhered to (0=Non-Compliance; 1=Partial-Compliance; 2=Compliance) and provide relevant comments for each condition;
- 12.1.3.3 include an interpretation of all available data and test results regarding the operation of the Facility and all its impacts on the environment;
- 12.1.3.4 specify target dates for the implementation of the recommendations to achieve compliance;
- 12.1.3.5 specify whether corrective action which was taken for the previous audit's non conformities was adequate;
- 12.1.3.6 inter alia, address the issues raised in audit report and provide an indication of the budget/financial allocation, as well as indicate the timeframes and responsible person(s) to address the issues; and
- 12.1.3.7 include appendices containing all records kept as required in terms of this condition 15.

12.2 External Audits

- 12.2.1 The Licence Holder must appoint an independent external auditor to audit the Facility annually (once a year) and this auditor must compile an audit report documenting the findings of the audit.
- 12.2.2 The audit report must specifically state whether conditions of this Licence are adhered to and must include an interpretation of all available data and test results regarding the operation of the Facility and all its impacts on the environment.
- 12.2.3 The audit report must contain recommendations regarding the rectification of non-compliances or potential non-compliances with the Licence conditions, and must specify target dates for the implementation of the recommendations by the Licence Holder.

- 12.2.4 The external audit report must be submitted to the Environmental Monitoring Committee (hereinafter referred to as the "Monitoring Committee"), provided in Condition 13 below, within 3 (three) months, from the date on which the external auditor finalised the report.
- 12.2.5 Each external audit must be submitted to the Director within 30 (thirty) days, from the date on which the external auditor finalised the report.
- 12.2.6 Both the internal and external audit reports must be in accordance with the format as prescribed by the Department.

13 MONITORING COMMITTEE

- 13.1 The Licence Holder must take all reasonable steps to establish and ensure the continued functioning of the Vredenburg WDF Environmental Monitoring Committee (in this Licence, referred to as the "Monitoring Committee") for the normal operative lifetime of the Facility.
- 13.2 The Monitoring Committee shall be representative of relevant interested and affected persons and may consist of at least 3 (three) of the following representatives:
- 13.2.1 Licence Holder and/or his/her appointed consultant(s) or advisor(s);
- 13.2.2 Representative(s) of the Health, Environment and/or Waste Departments of the relevant local authority;
- 13.2.3 Representative(s) of this Department; and
- 13.2.4 At least 3 (three) persons/parties, their representatives elected by the local residents, or proof of notification of the invitation to attend the Monitoring Committee to interested and affected parties of each meeting.
- 13.3 The monitoring committee may institute its own constitution to an alternative to condition 13.2.
- 13.4 The Monitoring Committee shall meet annually (once a year) and no later than 3 (three) months after the finalisation of the external audit report was conducted in terms of condition 12.2, and submitted in terms of condition 12.2.1.
- 13.5 The Licence Holder must keep minutes of all meetings of the Monitoring Committee and distribute these minutes to all members of the Monitoring Committee within 30 (thirty) days after the meeting.

14 DEPARTMENTAL AUDITS AND INSPECTIONS

- 14.1 The Department and the Director: RPW reserves the right to audit and/or inspect the Facility at any time and at such a frequency as the Director and Director: RPW may decide, or to have the Facility audited or inspected.
- 14.2 The Licence Holder must make any records or documentation available to the Director and the Director: RPW upon request, as well as any other information the Director and Director: RPW may require.

14.3 The findings of these audits or inspections shall be made available to the Licence Holder within 60 (sixty) days of the end of the audit or inspection and shall not be treated as confidential.

15 RECORD KEEPING

- 15.1 The Licence Holder must keep records of all monitoring results, nuisances and complaints at the Facility.
- 15.2 Accurate records of waste volumes or masses received and recovered must be kept at the Facility and reported to the Department as per condition 15.5.
- 15.3 All records required or resulting from activities required by this Licence must:
- 15.3.1 be legible;
- 15.3.2 be made available and should form part of any audit report;
- 15.3.3 if amended, be amended in such a way that the original and any subsequent amendments remain legible and are easily retrievable;
- 15.3.4 be retained in accordance with documented procedures which are approved by the Department;
- 15.3.5 be made available upon the request of the Director: RPW.
- 15.4 The Licence Holder shall record all borehole data and chemical analysis as required in condition 11.3.1.
- The Licence Holder must register and report all waste volumes or masses received, recovered, disposed of or stored to the Department's Integrated Pollutant and Waste Information System (IPWIS), which can be accessed on the URL: http://ipwis.pgwc.gov.za/ipwis3/public, as required by the Department.

16 <u>REPORTING</u>

- 16.1 The Licence Holder must, within 24 (twenty four) hours, notify the Director of the occurrence or detection of any incident at the Facility which has the potential to cause, or has caused any pollution.
- 16.2 The Licence Holder must, within 14 (fourteen) days, or as specified by the Director from the occurrence or detection of any incident referred to in condition 16.1, submit an action plan, which must include a detailed time schedule, and resource allocation signed off by management, to the satisfaction of the Director, of measures taken to:-
- 16.2.1 correct the impact resulting from the incident;
- 16.2.2 prevent the incident from causing any further impact; and
- 16.2.3 prevent a recurrence of a similar incident.

- 16.3 In the event that measures have not been implemented within 21 (twenty one) days of the incident, to address impacts caused by the incident referred to in condition 16.1, or measures which have been implemented are inadequate, the Director may implement the necessary measures at the cost and risk of the Licence Holder.
- 16.4 The Licence Holder must keep and maintain an incident and complaints register, which must be kept at the Facility and be made available at the request of the Director.
- The Department must be notified within 7 (seven) days of any changes to the management of the Facility including the name of the incoming person together with evidence that such person has the required technical competence.
- 16.6 The Department must be notified within 14 (fourteen) days of the following changes:
- 16.6.1 licence holder's trading name, registered name or registered office address;
- 16.6.2 particulars of the licence holder's ultimate holding company (including details of an ultimate holding where a licence holder has become a subsidiary); and
- 16.6.3 steps taken with a view to the licence holder going into bankruptcy, entering into composition or arrangement with creditors.
- 16.7 The Department must be notified without delay in the case of the following:
- 16.7.1 any malfunction, breakdown of failure of equipment or techniques, accident or fugitive emission which has caused, is causing or may cause significant pollution;
- 16.7.2 the breach of conditions of this licence; and
- 16.7.3 any significant adverse environmental and health effects.
- 16.8 Prior written notification must be given to the Director of the following events and within the specified timeframes:
- 16.8.1 as soon as practicable prior to the permanent cessation of any operational activities;
- 16.8.2 full or partial cessation of the operational activities for a period likely to exceed 3 (three) months; and
- 16.8.3 full or partial resumption of the operation of all or part of the activities after a cessation notified under 16.8.2 above.
- 16.9 The information required in terms of conditions 11.3.1 must be reported to the Director in the format specified in conditions 15 and 16, where applicable, within a period of 30 (thirty) days following the analysis of the samples. The information must also be included in a trend report, which must contain a graphical presentation of all results obtained previously at any specific point, as well as an interpretation and discussion of the results of each monitoring occasion.

17 LEASING AND ALIENATION OF THE FACILITY

17.1 Should the Licence Holder want to alienate or lease the Facility, he/she must notify the Director in writing of such an intention at least 120 (one hundred and twenty) days prior to the said transaction. Should the approval be granted, the subsequent Licence Holder shall remain liable to compliance with all Licence conditions.

18 TRANSFER OF LICENCE

- 18.1 Should the Licence Holder want to transfer holder-ship of this Licence, he/she must apply in terms of section 52 of the NEM:WA.
- 18.2 Any subsequent Licence Holder shall be bound by the conditions of this Licence.

19 **COMMENCEMENT**

- 19.1 The activities hereby licenced may not commence within 20 (twenty) days of the date of signature of this Licence.
- 19.2 Should the Licence Holder be notified by the Director of a suspension of the Licence pending any appeals decision on the authorised activities, he/she may not commence with the activities until authorised by the Director in writing.
- 19.3 After the 20 (twenty) day appeal period has expired and no good cause to extend the appeal period has been submitted, a written notice must be given to the Department that the activity will commence.
- 19.4 This activity must commence by 5 February 2022. If commencement of the activity does not occur within that period, the validity of this Licence lapses and a new application for waste management licence must be made in order for the activity to be undertaken.
- 19.5 If the proponent anticipates that commencement of the activity would not occur by 5 February 2022, he/she must apply and show good cause for an extension of the Licence 6 (six) months prior to its expiry date.

20 GENERAL

- 20.1 This Licence shall not be transferable unless such transfer is subject to condition 18 above.
- 20.2 This Licence shall not be construed as exempting the Licence Holder from compliance with the provisions of any National and Provincial Legislation and relevant Ordinance, Regulation, By-laws and relevant National Norms and Standards.
- 20.3 Transgression of any condition of this Licence could result in the suspension of the Licence by this Director.

- 20.4 This Licence is valid until the combined waste disposal airspace capacity of 1.46 x 106 m³ has been reached for the 2 (two) new waste cells authorised in this WML.
- 20.5 The Licence may be reviewed at any time before the waste disposal airspace capacity is reached.

 Based on the results of the review, especially compliance to Licence conditions or recommendations from the audit reports and/or changing legislation, the Licence can be amended or withdrawn or the validity thereof be extended.
- 20.6 Non-compliance with a condition of this Licence may result in criminal prosecution or other actions provided for in Section 67(1) of the NEM:WA.
- 20.7 In terms of Sections 28 and 30 of the NEMA, and Sections 19 and 20 of the National Water Act, 1998 (Act No. 36 of 1998), any costs incurred to remedy environmental damage must be borne by the person responsible for the damage. It is therefore imperative that the Licence Holder reads through and understand the legislative requirements pertaining to the project. It is the Licence Holder's responsibility to take reasonable measures which include informing and educating contractors and employees about environmental risks of their work and training them to operate in an environmentally acceptable manner.
- 20.8 The Licence Holder must submit an Organic Waste Diversion Plan to the Director on an annual basis.
- 20.9 The information within the Organic Waste Diversion Plan must:
- 20.9.1 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
- 20.9.2 set annual targets and identify procedures from 2018 that will be implemented to meet these targets for the diversion of organic waste from municipal WDFs, in order to reach a 50% diversion by the year 2022 and 100% diversion by the year 2027.

D. <u>APPEAL OF LICENCE</u>

- Appeals must comply with the provisions contained in the National Appeal Regulations, 2014 (GN No. 993 of 2014), as amended.
- 1.1 An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date that the notification of the decision was sent to the holder by the Competent Authority:
- 1.2.1 Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator; and
- 1.2.2 Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
- 1.3 An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date that the notification of the decision was sent to the registered I&APs by the holder:
- 1.3.1 Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014, as amended to the Appeal Administrator; and
- 1.3.2 Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
- 1.4 The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
- 1.5 The appeal and the responding statement must be submitted to the address listed below:By post: Western Cape Ministry of Local Government, Environmental Affairs and Development Planning

Private Bag X9186

CAPE TOWN

8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr Marius Venter (Tel: 021 483 3721)

Room 809

8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority to the address listed above and/ or via e-mail to DEADP.Appeals@westerncape.gov.za.

A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from Appeal Authority at: Tel. (021) 483 3721, E-mail Marius.Venter@westerncape.gov.za or URL http://www.westerncape.gov.za/eadp.

E. <u>DISCLAIMER</u>

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the conditions of the Licence shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Yours faithfully,

EDDIE HANEKOM

DIRECTOR: WASTE MANAGEMENT

DATE OF DECISION: _____

CC: (1) Malise Noe (DWS: Resource Protection and Waste)

(2) Wilna Moolman (DWS: Resource Protection and Waste)

Email: NoeM@dws.gov.za

Email: MoolmanW@dws.gov.za

ANNEXURE

A. <u>REASONS FOR THE DECISION (APPEALABLE)</u>

The reasons for the having granted this Waste Management Licence decision, after an application for variation of the existing Waste Management Licence was submitted to this Department, as well as factors affecting the broader development that were considered to ensure the effective implementation of this Licence, are explained below:

The Licence Holder applied for variation of the Waste Management Licence to deviate from the originally approved Class B Liner plan by installing the Class B Liner closer to the natural ground level.

The Department of Water and Sanitation recommended that the Saldanha Bay Municipality non-substantive design amendment of the Vredenburg Landfill extension (new cell), as reported by Aurecon Consulting Engineers in its letter with reference 111504_02_01 dated 14 February 2020, referenced by this Department in its letter dated 5 March 2020, for a foundation height increase of 1.5m, be conditionally accepted provided that all previous conditions be met.

B. REASONS FOR THE ORIGINAL DECISION TO ISSUE THE LICENCE (NOT APPEALABLE):

The reasons for the Licence decision, as well as factors affecting the broader development that were considered to ensure the effective implementation of this Licence, are explained below:

- 1. The Department conducted a review of selected WML as per Section 53 (1) of the NEM:WA, which states that: "A licensing authority must review a waste management licence at intervals specified in the licence, or when circumstances demand that a review is necessary".
- 2. The proposed variation was in line with Section 54 (1) (a) and (d) of the NEM:WA, which states that:
 - "(1) A licensing authority may, by written notice to the holder of a waste management licence, vary the licence-
 - (a) if it is necessary or desirable to prevent pollution; (and)
 - (d) to make a non-substantive amendment".
- 3. The review and subsequent non-substantive amendments was conducted in order to align the Vredenburg Licence conditions with current waste legislation and repeal the existing Licence (Ref: 19/2/5/1/F4/23/WL0050/16), issued by Department of Environmental Affairs and Development Planning, and issue this Licence.

The reasons for the Licence decision, as well as factors affecting the broader development that were considered to ensure the effective implementation of this Licence, are explained below:

- (a) The information contained in the Application Form for a Waste Management Licence dated 10 March 2016;
- (b) The Basic Assessment Report (BAR) dated 27 June 2016, compiled by Jeffares & Green (Pty) Ltd dated 27 June 2016, including the Waste Management Licence Application Additional Information Annexure dated 24 June 2016;
- (c) Comments raised by I&APs throughout the Public Participation Process (PPP), the Applicant and the Environmental Assessment Practitioner's responses thereto;
- (d) The Facility visit and inspection done by an official of the Department on 6 October 2016;
- (e) Relevant information contained in the Department's information base;
- (f) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the NEMA and
- (g) The Record of Decision issued by DWS on 22 September 2016.

Regulation 29(a) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) Environment Impact Assessment (EIA) Regulations, 2014: Government Notice No. R. 982 of 14 December 2014, specifies that an Environmental Authorisation (including a Waste Management Licence) may be amended, if the amendment "will not change the scope of a valid environmental authorisation nor increase the level or nature of the impact, which impact was initially assessed and considered when the application was made for an environmental authorisation".

Furthermore, Section 54(1)(d) of the NEM:WA, 2008 specifies that a Licensing Authority may vary a waste management licence to make a non-substantive amendment.

The amendment of the Department of Water and Sanitation Record of Decision, dated 7 December 2016, was taken into consideration prior to consideration of the variation of this Waste Management Licence.

With reference to the above, the Department has granted the variation as per the Applicant's request to amend certain conditions. Accordingly, the variations as found within conditions: 4.4, 4.5, 4.10, 4.13, 4.14, 4.16, 10.1, with the removal of 7.1.1 and 7.2.2 from the previous WML, were authorised and are thus appealable during the appeals window period.

The aforementioned variations relate only to the technical specifications which should have been included in the original Department of Water and Sanitation Record of Decision and therefore should have been included in the Waste Management Licence. The activity as originally proposed, remains unchanged. Therefore, the non-substantive variations were reflected above.

The environment and the rights and interests of other parties are not likely to be adversely affected by this decision to vary the Waste Management Licence conditions as the impacts associated with the proposed activity were assessed during the EIA process.

A summary of the issues, which in the Department's view were of the most significance, are set out below.

Environment

The proposed development will expand the existing WDF with the construction of two (2) additional waste cells directly adjoining and adjacent to the existing WDF on the east side of the existing WDF and south of the Waste Water Treatment Works (WWTW).

The Facility does not fall within any Critical Biodiversity Areas. The Facility is degraded and transformed due to the presence of invasive alien vegetation.

Current excavations for cover material have left depressions and disturbance of the area.

An artificial wetland as a result of releasing effluent from the WWTW into the environment is located approximately 150m north of the Facility.

Some activities around the Facility include agricultural activities and a golf course.

The Vredenburg Waste Disposal Facility is located on unconsolidated sedimentary material of a Tertiary Quaternary age. Granite bedrock that intruded the Malmesbury Group is found 40m below the unconsolidated material.

ALTERNATIVES

The following alternatives were considered:

Facility Alternatives

No alterative regarding the decommissioning of the existing WDF were considered as the rehabilitation of the WDF will have a positive impact on the environment.

Six Facility alternatives with 7 options were identified and considered, in which the public was involved in the Facility selection process. The preferred Facility was thus selected based on feasibility, practicality, environmental impact, technical details, public acceptance and the economic viability of the development. This resulted in the Facility located directly adjoining and adjacent to the existing waste disposal facility being accepted as the preferred Facility for the development.

Activity Alternatives

No activity alternatives have been assessed as the activity is focused on the expansion of the existing waste disposal facility and the development of the regionalisation of waste disposal in the West Coast District Municipality.

Design Alternatives

No sensitive or "no-go" areas were identified, which meant that the entire Facility could be developed, thus no layout alternatives were considered. Once the Facility for the proposed activity was located, the appointed engineer provided the most feasible and acceptable design option available based on the technical details of the Facility. Some of the design requirements are listed below:

- (a) The Facility located directly adjoining and adjacent to the waste disposal facility was selected as the preferred Facility as a result of the Public Participation Process.
- (b) The construction of 2 (two) additional waste cells adjoining and adjacent to the existing waste cell will be according to the design requirements of a Class B WDF in terms of GN. R636.
- (c) Since the proposed WDF is located directly adjoining and adjacent to the existing WDF, it was decided that the new basal liner would be extended up the slope of the existing unlined WDF in order to ensure that the proposed waste cells will be properly sealed.
- (d) The layout is designed to fit the space available, suit the area topography, address facility operations and promote associated vehicles manoeuvrability.
- (e) The Facility would be accessed through the existing WDF and the infrastructure of the exiting WDF would be used for the new waste cells.
- (f) Contaminated stormwater, uncontained stormwater and leachate management systems would be implemented for the WDF.
- (g) Water quality monitoring and landfill gas monitoring would be implemented for the new waste cells.

PUBLIC PARTICIPATION PROCESS

The PPP comprised of the following:

- (a) Background Information Document (BID) was compiled and circulated for a 21-day commenting period from 27 January 2016 to 17 February 2016.
- (b) A notification letter and the BID was sent to all I&APs on 27 January 2016.
- (c) An advertisement of the Application for the Waste Management Licence was placed in the Weslander and Die Burger on 28 January 2016.
- (d) The Facility notice was placed at the WDF on 10 February 2016 notifying the I&APs of the project.
- (e) A Public Open Day was held on 10 February 2016 at the Saldanha Bay Municipal Offices in Floryn Street.
- (f) All comments on the BID were collated into the Comments and Response Report.
- (g) The draft Basic Assessment Report was released for 30-day public comment from 26 April 2016 to 30 May 2016.
- (h) All comments on the draft Basic Assessment Report were collated into the second Comments and Response Report.
- (i) The final Basic Assessment Report was submitted to the Department of Environmental Affairs and Development Planning and the Department of Water and Sanitation for the decision-making regarding the application for the Waste Management Licence on 27 June 2016.

Authorities consulted:

- (a) Cape Nature
- (b) Heritage Western Cape
- (c) Department of Water and Sanitation (DWS)

Comments and recommendations provided by the other relevant authorities have been considered in the evaluation of this application. No authorities objected to the commencement of the activity. Where possible and relevant, the conditions imposed by Cape Nature and DWS have been included in the Waste Management Licence.