



the denc

Department:
Environment & Nature Conservation
NORTHERN CAPE PROVINCE
REPUBLIC OF SOUTH AFRICA

Private Bag X6102, Kimberley, 8300, Metlife Towers, T-Floor, Tel: 053 807 7300, Fax: 053 807 7328

Enquiries : Ms M Molokwane

Date: 18 October 2016

Reference: NC/ZFM/KA! /LEN/14/2016

The Municipal Manager
Kai! Garib Local Municipality
Private Bag X 6
Kakamas
8870

**WASTE LICENSE IN TERMS OF SECTION 49(1) OF THE NATIONAL ENVIRONMENTAL
MANAGEMENT: WASTE ACT, 2008 (ACT 59 OF 2008) AS AMENDED AND THE
ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS 2014**

Your application form for the above-mentioned license that was received by the department on the 21st April 2016 refers:

1. Attached please find a Waste Management Licence issued by the Department of Environment and Nature Conservation in terms of the abovementioned legislation
2. Please note that the applicant must in writing, within twelve (12) calendar days of the date of the decision on the licence application:-
 - a) Notify all registered interested and affected parties of the outcome, reasons and date of the decision; and
 - b) Inform all registered interested and affected parties of the appeal procedure provided for in chapter 7 of Government Notice No 983 of 8 December 2014.

Kindly quote the above mentioned reference number in any future correspondence with regard to the application

Yours Faithfully

Mr. B.D. Fisher
DIRECTOR: ENVIRONMENTAL QUALITY MANAGEMENT
LETTER SIGNED BY:

Ms D Kgosi
ASSISTANT DIRECTOR: POLLUTION AND WASTE

DATE: 18 / 10 / 2016



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Department:
Environment & Nature Conservation
NORTHERN CAPE PROVINCE
REPUBLIC OF SOUTH AFRICA

Private Bag X6102, Kimberley, 8300, SASKO Building, Tel: 053-807 7430, Fax: 053-831 3530

Ref: NC/ZFM/KAI! /LEN/14/2016

Enquiries: Martha S. Molokwane

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LICENCE NUMBER: NC/ZFM/KAI! /LEN/14/2016

CLASS: G: C: B (DECOMMISSIONING)

WASTE FACILITY: LENNERTSVILLE WASTE DISPOSAL SITE

LOCATION: REMAINING EXTENT OF PORTION 140 OF THE FARM
NEILERSDRIFT 34, KENHARDT ROAD, LENNERTSVILLE

LICENCE HOLDER: KAI! GARIB MUNICIPALITY

ADDRESS: PRIVATE BAG X6, KAKAMAS, 8870

CONTACT PERSON: MR. J.G. LATEGAN

CONTACT DETAILS: TEL: (054) 461 6700, FAX: (054) 461 6401

**LICENCE IN TERMS OF SECTION 49(1)(a) OF THE NATIONAL ENVIRONMENTAL
MANAGEMENT: WASTE ACT, (ACT 59 OF 2008)**

In terms of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) read with the Environmental Impact Assessment Regulations, 2014, published in Government Notice No. 982 of 04 December 2014 (the Regulations), the Director: Environmental Quality Management grant Kai! Garib Municipality a Waste Management Licence for the following waste management activities as listed in Category A of Government Notice No. 921 of 29 November 2013:

Category A

(14) The decommissioning of a facility for a waste management activity listed in Category A.

In this Licence, "Director" means the Director of Environmental Quality Management of the Northern Cape Department of Environment and Nature Conservation and the "HOD" means the Head of Department of Northern Cape Department of Environment and Nature Conservation who may both be contacted at the address below:

Director: Environmental Quality Management
Department of Environment and Nature Conservation
Private Bag X 6102
Kimberley
8301

In this Licence, "Director-General" means the Director-General of the Department of Water and Sanitation who may be contacted at the address below:

Director- General
Department of Water and Sanitation
Private Bag X 313
PRETORIA
0001

1. SITE DETAILS

1.1 LOCATION

1.1.1 This Licence authorises the decommissioning of a waste disposal located on the Remaining extent of Portion 140 of the farm Neilersdrift 34 Kenhardt Road, East of Lennertsville township, at below listed GPS coordinates, within the jurisdiction of Kai! Garib local Municipality, Z. F. Mgcawu District Municipality, Northern Cape Province, (hereafter referred to as "the Site") submitted by the Licence Holder.

1.1.2 The location of the site must be according to co-ordinates indicated on the Licence application form, submitted by the licence holder which is defined as follows:

Number of corners	Latitude	Longitude
1	28° 45' 14.44" S	20° 59' 58.83"E
2	28° 45' 13.69" S	21° 0' 0.31"E
3	28° 45' 16.24" S	21° 0' 2.39"E
4	28° 45' 17.00" S	21° 0' 0.81"E



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1.2 DOCUMENTS CONSIDERED

- 1.2.1 The Final Basic Assessment Report, for the Lennertsville waste disposal site compiled by GA Consultants (Pty) Ltd with reference no. NC/ZFM/KA/LEN/14/2016 hereafter referred to as the "Report";
- 1.2.2 Waste Licence Application.
- 1.2.3 Record of Decision (RoD) issued by Department of Water and Sanitation, dated 05 September 2016.

LICENCE CONDITIONS

1.3 SITE SECURITY AND ACCESS CONTROL

- 1.3.1 The Licence Holder must ensure effective access control of the Waste Management Site to prevent unauthorised entry. Weatherproof, durable and legible signs in at least three official languages applicable in the area must be displayed at each entrance to the site.

1.4 DESIGNATION OF WASTE MANAGEMENT CONTROL OFFICER

- 1.4.1 A Waste Management Control Officer (WMCO) must be designated to monitor and ensure compliance and correct implementation of all mitigation measures and provisions as stipulated in the Licence and standard operation procedures. The WMCO must:
 - (a) Report any non-compliance with any Licence conditions or requirements or provisions of NEM: WA to the licensing authority.
- 1.4.2 The duties and responsibility of the WMCO should not be seen as exempting the Licence Holder from the legal obligations in terms of the NEM: WA.

1.5 EMERGENCY PREPAREDNESS PLAN

- 1.5.1 The Licence Holder must maintain and implement an emergency preparedness plan. The plan must, amongst others, include measures to address:
 - a) Power failure;
 - b) Equipment malfunction;
 - c) Site fires;
 - d) Spillage (en route and on Site);
 - e) Natural disasters such as floods; and
 - f) The plan must include contact details of the nearest police station, ambulance services and the emergency centre.



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2. CONSTRUCTION

- 2.1 The capping component of closure shall comprise of a single composite liner (comprising of a 15mm thick High Density Polyethylene (HDPE) geomembrane plus a 300 mm thick Compacted Clay Liner (CCL) or Geosynthetic Clay Liner (GCL) and an overlying ballast and growth medium layer. The liner should be covered by a ballast layer made up of at least a drainage layer and ballast soil with upper 200mm topsoil layer to the extent that the above geomembrane layer works has a total thickness of 600mm to provide ballast for intimate contact between the components of the composite liner. Limitations on slopes shall be a minimum of 2% (1v:50h) and a maximum slope of 25 % (1v:4h). Designs should be signed off by a registered Professional Civil Engineer to certify materials available at the specific site resulting a design having an acceptable Factor or Safety against failure of thin veneer systems with particular emphasis on interface shear. **The design drawing reports for capping must be approved in writing by the Responsible Authority before any construction for decommissioning and closure may commence.**
- 2.2 The decommissioning and rehabilitation of Lennertsville landfill site must be in accordance with the Basic Assessment Report: Lennertsville Landfill Site; Closure Application with Northern Cape DENC reference NC/ZFM/KA/LEN/01/2016 prepared by GA Environment (Pty) Ltd dated June 2016.
- 2.3 Construction and further development within the Site must be carried out under the supervision of a Professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 2000 (Act 46 of 2000).
- 2.4 The Site, or any portion thereof must be covered and maintained in such a way that –
- 2.4.1 the formation of pools, and/or damming due to rain is prevented;
 - 2.4.2 free surface runoff of rain-water is ensured;
 - 2.4.3 contamination of stormwater is prevented;
 - 2.4.4 no objects or materials which may hamper the rehabilitation of the site are present; and
 - 2.4.5 minimum or no erosion occurs.
- 2.5 The closure of the Site must be constructed in accordance with recognised civil engineering practices, with special consideration to stability as per approved designs.
- 2.6 The capping of the site must be performed during dry period to avoid creating a recharge zone on the surface of the facility in an effort to minimize contaminants seeping into the groundwater system.
- 2.7 Any development which occurs within 1:100 year flood line and/or within the horizontal distance of 500m from the boundary of a wetland would require a water use licence in terms of section 40 of the National Water Act, 1998 (Act 36 of 1998).



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- 2.8 No extension of the Site footprint is permitted prior to a base liner design report and drawings demonstrating compliance with Regulation 636, National Norms and Standards for Disposal of Waste to Landfill dated 23 August 2013 Class B barrier system and associated conditions is approved by Responsible Authority.
- 2.9 The slope of the sides must be constructed and maintained in such a manner that the occurrence of erosion is prevented.
- 2.10 The Licence Holder must ensure that the gas venting below the cap shall be provided in accordance with the environmental assessment practitioners authorized findings.
- 2.11 The current ongoing pollution effect of the site in operation shall be minimised and remediated continuously until capping closure is implemented.
- 2.12 Under no circumstance may any plant species be harvested or damage and animal species be captured, hunted, harmed or killed.

3. WATER QUALITY MANAGEMENT

3.1 Stormwater Management

- 3.1.1 All runoff water (stormwater) arising as a result of precipitation on land adjacent to the Site must be prevented from entering the Site, diverted and drained from the Site.
- 3.1.2 Uncontaminated runoff water must under no circumstances be used to dilute leachate emanating from the Site.
- 3.1.3 Stormwater channels must not be lined with a concrete and be made as natural as possible.
- 3.1.4 The energy dissipaters, litter traps and sediment traps must be installed in the stormwater channels to reduce velocity of the stormwater.

3.2 Leachate Management

- 3.2.1 Leachate from the Site, including contaminated runoff water must be treated to comply with the quality requirements as prescribed by the Responsible Authority which may be determined from time to time and shall be drained from the facilities in a legal manner.
- 3.2.2 Leachate detection system must be monitored on daily basis for possible leakages. Should a leak or failure be detected during monitoring, it must be reported as an incident according to condition 8.1 below and be addressed to the satisfaction of the Responsible Authority.



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B.

4. MONITORING

4.1 Water Monitoring

4.1.1 The Licence Holder must ensure that surface and groundwater quality monitoring plan, upgradient and downgradient of the site is established and maintained to the satisfaction of the Responsible Authority.

4.1.2 Monitoring boreholes must be equipped with lockable caps. The Responsible Authority reserves the right to take water samples at any time and to analyse these samples or have them analysed.

4.2 Detection Monitoring

4.2.1 Monitoring for surface and groundwater quality must be conducted for variables listed in Annexure I – bi-annually or such frequency as may be determined by the Responsible Authority.

4.3 Investigative Monitoring

4.3.1 If, in the opinion of the Responsible Authority, a water quality variable listed under the detection monitoring programme, as referred to in condition 4.2.1, shows an increasing trend, the Licence Holder shall initiate a monthly monitoring programme until such time that variables of concern are within the limit.

4.4 Post-closure Water Monitoring

4.4.1 Groundwater monitoring must continue after closure of the Site and must be maintained for a period of 30 years, or for such period and/or frequency as may be determined by the Responsible Authority-

(a) For variables listed in Annexure I bi-annually.



5. METHODS OF ANALYSIS

- 5.1 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 8 of 2008), to analyse the samples taken under the monitoring programmes specified in condition 4.
- 5.2 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.

6. AUDITING

- 6.1 Audits and inspections
- 6.1.1 The Responsible Authority reserves the right to audit and/or inspect the Site at any time and at such frequency as the Responsible Authority may decide, or to have the Site audited or inspected.
- 6.1.2 The Licence Holder must make any records or documentation available to the responsible Authority upon request, as well as any other information the Responsible Authority may require.

7. RECORDS

- 7.1 All records required or resulting from activities required by this Licence must:
- (a) Be legible;
 - (b) Be made as soon as reasonably practicable and should form part of the external audit report;
 - (c) If amended, be amended in such a way that the original and any subsequent amendments remain legible and are easily retrievable; and
 - (d) Be retained in accordance with documented procedures.
- 7.2 Records demonstrating compliance with condition 2.2 must be maintained for five years.

8. REPORTING

- 8.1 Reporting of Incidents
- 8.1.1 The Licence Holder must, within 24 hours, notify the Responsible Authority of the occurrence or detection of any incident on the Site which has the potential to cause, or has caused pollution of the environment, health risks, nuisance conditions or water pollution.



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8.1.2 The Licence Holder must, within 14 days, or a shorter period of time, if specified by the Responsible Authority, from the occurrence or detection of any incident referred to in condition 8.1.1, submit an action plan, which shall include a detailed time schedule, to the satisfaction of the Responsible Authority of measures taken to –

- (a) correct the impact resulting from the incident;
- (b) prevent the incident from causing any further impacts; and
- (c) prevent a recurrence of a similar incident.

8.1.3 In the event that measures have not been implemented within 21 days to address impacts caused by the incident referred to in condition 8.1.1, or measures which have been implemented are inadequate, the Responsible Authority may implement the necessary measures at the cost and risk of the Licence Holder.

8.2 Other Reports

8.2.1 The information required in terms of condition 4 must be reported to the Responsible Authority in a yearly report and thereafter at such frequency as may be determined by the Responsible Authority. The information must also be included into 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.

8.2.2 The Licence Holder must submit a written report to the Responsible Authority regarding any deviations from plans described in this Licence and must obtain written permission from the Responsible Authority before such deviations may be implemented.

9. LEASING AND ALIENATION OF THE SITE

9.1 Should the Licence Holder want to alienate or lease the site, he/she shall notify the Director in writing of such an intention at least 120 days prior to the said transaction for approval.

9.2 Should the approval be granted, the subsequent Licence Holder shall remain liable for compliance with all Licence conditions.



10. TRANSFER OF WASTE MANAGEMENT LICENCE

- 10.1 Should the Licence Holder want to transfer the Licence, he/she must apply in terms of Section 52 of the National Environmental Management: Waste Act, 2008 (Act No 59 of 2008).
- 10.2 Any subsequent Licence Holder shall be bound by conditions of this Licence.

11. GENERAL

- 11.1 The Issuance of this RoD does not exempt the Licence Holder from compliance with any other legislation including section 40 of the National Water Act, Act 1998 (Act 36 of 1998).
- 11.2 The licence shall not be transferable unless such condition is subject to condition 9.1 above.
- 11.3 The construction of the licensed activity may not commence within (20) days of the date of signature of this licence.
- 11.4 Should you be notified by the HOD, in writing, of a suspension of the licence pending any appeals decision on the authorized activities, you may not commence with the licensed activities.
- 11.5 After an appeal period has expired and no good cause to extend the appeal period has been submitted, the activity will commence provided a notice has been submitted to the Department.
- 11.6 The notice must include a date on which it is anticipated that the activity will commence.
- 11.7 This activity must commence within a period of two (2) years from the date of issue. If commencement of the activity does not occur within that period, the licence lapses and a new application for licence must be made in order for the activity to be undertaken.
- 11.8 If the proponent anticipates that commencement of the activity would not occur within two (2) year period, he / she **must** apply and **show good cause** for an extension of the Licence six (6) months prior to its expiry date.
- 11.9 This licence shall not be construed as exempting the Licence Holder from compliance with the provisions of the National and Provincial Legislation and any relevant Ordinance, Regulation, By-laws and relevant National Standards and norms.
- 11.10 Transgression of any condition of this licence could result in the validity of the licence being terminated by the Department.



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- 11.11 Non-compliance with a condition of this licence may result in criminal prosecution or other actions provided for in Section 67(1) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008).
- 11.12 Any Committees, Public Authority or Organisation appointed in terms of the application shall not be held responsible for any damages or losses suffered by the Licence Holder or his/her successor in title in any instance where construction or operation are to be temporarily or permanently stopped for reasons of non-compliance with this licence.
- 11.13 In terms of section 28 and 30 of the National Environmental Management Act No. 107 of 1998, and section 19 and 20 of the National Water 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 Applicant'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 environmental acceptable manner.
- 11.14 Any changes to, or deviations from, the project description set out in this licence must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the licence to apply for further licence in terms of the regulations.
- 11.15 This licence is valid for a period of twenty (20) years and shall be reviewed every five (5) years from the date of issue or at any time before or after that date. Based on the results of the review, especially compliance to licence conditions or recommendations from the audit reports and or changing legislation, the licence could be amended or withdrawn or validity thereof extended.

12. APPEAL OF LICENCE

- 12.1 The licence holder must notify every registered interested and affected party, in writing and within ten (10) days, of receiving the Department's decision.
- 12.2 The notification referred to in 12.1. must –
- 12.2.1 Specify the date on which the licence was issued;
- 12.2.2 Inform the registered interested and affected party of the appeal procedure provided for in Chapter 8 of the Environmental Impact Assessment Regulations, 2014 in terms of National Environmental Management Act, 1998, as amended;



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12.2.3 Advise the interested and affected party that a copy of a licence and reasons for the decision will be furnished on request;

12.2.4 An appeal against the decision must be lodged in terms of Chapter 8 of the Environmental Impact Assessment Regulations, 2014 of NEMA 1998, as amended, from the date of this licence, with:

The Member of Executive Council
Department of Environmental Affairs and Nature Conservation
Private Bag X 6102
KIMBERLEY
8300
Tel no.: (053) 807 7300
Fax: (053) 807 7367



Mr. B. D. Fisher

DIRECTOR - ENVIRONMENTAL QUALITY MANAGEMENT

DATE: 18 October 2016



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ANNEXURE I

WATER QUALITY VARIABLES REQUIRED FOR DETECTION AND INVESTIGATIVE MONITORING:

Monitor at bi-annual intervals for:

Arsenic (As)
Cadmium (Cd)
Calcium (Ca)
Chemical Oxygen Demand (COD)
Chloride (Cl)
Electrical Conductivity (EC)
Flouride (F)
Iron (Fe)
Magnesium (Mg)
Manganese (Mn)
Nitrate (NO₃-N)
pH
Potassium (K)
Sodium (Na)
Sulphates (SO₄)
Total Dissolved Solids (TDS)



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DWS: ENGINEERING SERVICES

ACCRONYMS USED IN WATER USE AND WASTE LICENCE CONSIDERATIONS (as at August 2015)

CCL - Compacted Clay Liner
GCL – Geosynthetic Clay Liner
GM – Geomembrane
GT - Geotextile
GD – Geodrain
GN – Geonet

HPDE – High Density Polyethylene
LLDPE – Linear Low Density Polyethylene
PVC – Poly Vinyl Chloride
PP – Polypropylene
PET – Polyester

PCD – Pollution Control Dam
RWD – Return Water Dam
FSL – Full Supply Level
NOC – Non Overspill Crest
NGL – Natural Ground Level
GWL – Ground Water Level
FoS – Factor of Safety
LCS – Leachate Collection System
LDS – Leak Detection System
RoM – Run of Mine
TSF – Tailings Storage Facility
1v:4h – 1 vertical in 4 horizontal slope
1:100yr – 1 in 100 year return period event
Rf – Rain Fall
MAR – Mean Annual Runoff
SEF – Safety Evaluation Flood
PMF – Probable Maximum Flood
Slunits – Standard International Units
CQA –Control Quality Assurance
PrEng – Professional Engineer as defined by the Act 46 of 2000

NWA – National Water Act, act 36 of 1998
NEMA – National Environmental Management Act, act 107 of 1998
NEMWA - National Environmental Management Waste Act, act 59 of 2008
PAJA – Public Administrative Justice Act, act 3 of 2000



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PFMA – Public Finance Management Act, act 1 of 1999
MR2 – Minimum Requirements for Waste Disposal by Landfill, 2nd Edition, 1998
MPRDA – Mining & Petroleum Resources Development Act, Act 28 of 2002 as amended
R636 – Norms and Standards for Disposal of Waste to Landfill R363 of 23 August 2013
NEMA Regulations 2013 refers to Regulations 982, 983, 984, 985
NEMWA Regulations 2013 refers to Regulation 634, 635, 636 of 23 August 2013 and Regulations 921 to 926 of 29 November 2013
NWMS – National Waste Management Strategy

DWS – Department of Water and Sanitation
DEA – Department of Environmental Affairs
DMR – Department of Mineral Resources

MSW – Municipal Solid Waste
WWTW – Waste Water Treatment Works
H:H – High Hazard
H:h – Low Hazard
Std Pr – Standard Proctor
MDD –Maximum Dry Density
OMC –Optimum Moisture Content
DT – Double Textured
SD – Single Textured
NWNP – Non Woven Needle Punched
OIT – Oxidative induction Time
ESCR – Environmental Stress Cracking Resistance
VoC – Volatile Organic Compound

PL –Plastic Limit
LL – Liquid Limit
PI – Plastic Index
FM – Fineness Modulus

G:L/M/S:B+- - General Waste: Large/Medium/ Small site: Water Balance positive/negative
EMP – Environmental Management Plan



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