



destea

department of
economic, small business development,
tourism and environmental affairs
FREE STATE PROVINCE

Environmental Authorisation

Authorisation register number:	EMS/14,25,6/18/16
Holder of authorisation:	Matjhabeng Local Municipality.
Location of activity:	Portion 1, Farm Theronia. Farm No. 71, Welkom, Free State Province.
Project description	Refurbishment of Theron Waste Water Treatment Works.



Decision

The Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA- 'the Department') is satisfied, on the basis of information available to it and subject to compliance with the conditions of this Environmental Authorisation (EA), that the applicant should be authorised to undertake the activity specified below.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act ('NEMA'), 1998 (Act No. 107 of 1998) and GNR 982 of the 2014 Environmental Impact Assessment (EIA) Regulations as amended, the Department hereby authorises –

Matjhabeng Local Municipality

with the following contact details –

P O Box 708

Welkom

9460

Contact person: Betty Maswanganyi

Telephone: 057 916 4032

Fax: 057 352 7960

E-mail: Betty.tlhabani@matjhabeng.co.za

To undertake the following activities (hereafter referred to as "the activities") indicated in the EIA Regulations, Listing Notice 1 and Listing Notice 2 of 2014 as amended:



Listing Notice 1:

Activity 14: The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80m³ or more but not exceeding 500m³.

Activity 25: The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of more than 2 000 cubic metres but less than 15 000 cubic metres.

Listing Notice 2:

Activity 6: Activity 6: The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding—

- (i) activities which are identified and included in Listing Notice 1 of 2014;
- (ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies;
- (iii) the development of facilities or infrastructure for the treatment of effluent, polluted water, wastewater or sewage where such facilities have a daily throughput capacity of 2 000 cubic metres or less; or
- (iv) where the development is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will not exceed 50 cubic metres per day.

Described in the final Environmental Impact Assessment Report (EIAR) dated August 2018 as;
The refurbishment of Theron Waste Water Treatment Works in Welkom.



Location:

Province	Free State
District Municipality	Lejweleputswa District Municipality
Local Municipality	Matjhabeng Local Municipality
Farm name and number	Portion 1, Farm Theronia. Farm No. 71
Town	Welkom
SG Code	F03900000000007100000
Site coordinates	28° 00' 01.0145"S 26° 41' 38.8126"E

Table 1: Locality of the Theronia Waste Water Treatment Works.

Activity description

The following activities will be conducted as part of the refurbishment:

- **Preliminary treatment:** A new inlet works will be built over the footprint of the B inlet works. The new inlet works will be built at a higher level than the existing inlet works due to hydraulic level requirements. The inlet works will be a reinforced concrete structure with mechanical equipment for screening, screenings treatment and grit removal.
- **Primary treatment:** Construction of a new activated sludge reactor (primary treatment – biological) which is 4.5m deep, 45x30m wide with installed power of 245kW. This will primarily account for mixers, aerators and A-recycle pumps.
- **Secondary treatment:** Conversion of three existing PSTs to SSTs, including complete mechanical refurbishment of each settlement tank.
- **Tertiary treatment:** Construction of a new chlorine building, chlorine contact tank and refurbishment of the existing final effluent pump station.
- **Sludge treatment:** Refurbish existing drying beds (2300m² of drying beds available). Refurbishment of the existing supernatant pump station. Once the sludge is appropriately dried, it will be disposed of at a licensed waste disposal facility. If local farmers request the use of the sludge this will be in agreement with the MLM.

HEAD OF DEPARTMENT
 Department of Economic,
 Small Business Development,
 & Tourism Environmental Affairs
 2018 -12- 1 0
 Private Bag X20801
 Bloemfontein 9300

- **General:** Construction of a new MCC building, refurbishment of the existing administration and control building, construction of new roads within the plant, installation of new pipe work and manholes.
- Refurbishment of the irrigation network
- New uPVC pipelines which will following a similar route to the existing AC pipeline. The new pipelines will be installed within the existing pipeline servitude as far as practically possible, parallel to the AC pipes.

The T-WWTW is situated within the Middle Vaal Catchment. The water which is treated by the works will not be directly discharged into a river system as the nearest stream is approximately 10km away and the area is too flat for the water to be gravity fed into a stream. The solution to this is that 3.0 M³/day will be used for irrigating the parks around Welkom via the irrigation network, 3.0 M³/day will be reused in the treatment process and the remaining treated effluent will be evaporated from the maturation ponds and the Flamingo pan. The effluent overflow from the works discharges into Flamingo Pan.

The granting of this Environmental Authorisation is subject to the conditions set out below.

Conditions

Scope of authorisation

- 1.1 Authorisation of the activity is subject to the conditions contained in this document. These conditions form part of the EA and are binding on the holder of the Authorisation.
- 1.2 The holder of the Authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the Authorisation.
- 1.3 The authorised activity may only be carried out at the property/site indicated above.

- 1.4 Any changes to, or deviations from, the project description set out in this Authorisation must be approved, in writing, by the Department before such changes or deviations may be commenced with.
- 1.5 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 which may result in the holder of the Authorisation to apply for further authorisation in terms of NEMA.
- 1.6 If commencement of the activity does not occur within a period of 5 (Five) years from the date of issue, the Authorisation lapses and a new application for an Environmental Authorisation (EA) must be made.
- 1.7 This Authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of this particular activity.

Appeal of authorisation

- 1.8 The holder of the Authorisation must notify every registered interested and affected party, of the decision by the Department in writing 14(fourteen) calendar days of the date of this Environmental Authorisation.
- 1.9 The notification referred must –
 - 1.9.1 specify the date on which the Authorisation was issued;
 - 1.9.2 inform the interested and affected party of the appeal procedure provided for in National Appeal Regulations published in Government Gazette No. 38303 of 8 December 2014.
 - 1.9.3 advise the interested and affected party that a copy of the Authorisation will be furnished on request; and
 - 1.9.4 give the reasons for the decision.
- 1.10 A person affected by the decision who wishes to appeal against the decision must lodge an appeal with the MEC of the Department of Economic, Small Business Development, Tourism and Environmental Affairs. The Appeal should be directed to:



MEC: Economic, Small Business Development, Tourism and Environmental Affairs

Private Bag X20801

Bloemfontein

9300

Fax number: (051) 400 4903

E-mail: govozelam@destea.gov.za

Contact person: Mr. M. Govozela

An appeal not submitted to the MEC at the above mentioned address will not be regarded as valid.

- 1.11 The applicant shall not commence with the proposed activity once an appeal has been lodged with the office of the MEC.

Management of the activity

- 1.12 The Environmental Management Programme (EMPr) submitted as part of Application for EA is hereby approved.
- 1.13 The provisions of the Environmental Management Programme (EMPr) included in the Environmental Impact Assessment Report dated August 2018 are an extension to the conditions of authorisation, and non-compliance with the conditions of the EMPr would accordingly constitute non-compliance with the conditions of this Authorisation.
- 1.14 Should there be a change of ownership and/or project developer, the Department must be notified within 30 (thirty) days prior to the change itself. Conditions imposed in this EA must be made known to the new owner and/or developer and are binding on the new owner and/or developer.
- 1.15 The recommendations and mitigation measures recorded in the Environmental Impact Assessment Report dated August 2018 must be adhered to and incorporated as part of the EMPr where applicable.



1.16 Any updates or amendments to the EMPr must be submitted to the Department of Economic, Small Business Development, Tourism and Environmental Affairs and must be decided upon within a period of 30 days of the submission.

Monitoring

- 1.17 The applicant must appoint a suitably experienced Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation / rehabilitation measures and recommendations referred to in this Authorisation are implemented and to ensure compliance with the provisions of the EMPr.
- 1.18 The ECO shall be appointed before commencement of any land clearing or construction activities.
- 1.19 The ECO shall keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
- 1.20 The ECO shall remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.
- 1.21 Records relating to monitoring must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.
- 1.22 Operation of the development may be temporarily or permanently stopped for reasons of non-compliance with the conditions of this particular EA as set out in this document or any other subsequent document emanating from the conditions of this EA.

Recording and reporting to the Department

- 1.23 The applicant must appoint an independent auditor to conduct an environmental audit to ensure that the conditions, mitigation measures and recommendations stipulated in this EA are complied with. The environmental audit report must –



- 1.23.1 Indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the EA conditions as well as the corrective action plan and implementation programme.
- 1.23.2 Be kept on site and be made available for inspection by any relevant and competent authority in respect of this development.

Commencement of the activity

- 1.24 The authorised activity shall not commence within twenty (20) days of the date of notification of Interested and Affected parties of the decision on the EA.
- 1.25 Should you be notified by the MEC of a suspension of the EA pending appeal procedures, you shall not commence with the activity unless authorised by the MEC in writing.

Notification to authorities

- 1.26 Fourteen (14) days prior written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which the construction of the activity will commence.

Operation

- 1.27 Fourteen (14) days prior written notice must be given to the Department that the activity will commence operation.



Site closure and decommissioning

- 1.28 Should the activity ever cease or become redundant, the applicant shall undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

Specific conditions

- 1.29 Construction activities must be limited to the site under construction.
- 1.30 Access to the site must be along existing pathways. Construction vehicles must keep to the designated pathway.
- 1.31 Storm water management must be in place throughout all the stages of the activity. The Storm Water Management Plan submitted as part of the EMPr must be implemented.
- 1.32 An integrated waste management approach that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate must be implemented. Any solid waste shall be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No. 59 of 2008) as amended.
- 1.33 Erosion must be strictly controlled through the utilization of silt traps, silt fencing, Gabions, etc. This is especially pertinent within areas of steeper gradients; Topsoil stockpiles should be protected from erosion through the utilization of silt traps, silt fencing, Gabions, etc.
- 1.34 Strict management control measures must be in place to ensure only water of suitable quality is released into the receiving environment, which should be routinely tested against wastewater quality guidelines.
- 1.35 Control measures must be in place to ensure that no untreated effluents reach the receiving environment should infrastructure and/or power failures occur.
- 1.36 Exotic vegetation managed and affected sites should be replanted/rehabilitated with indigenous grass species.



- 1.37 In order to conserve the ecological structures within the region, a holistic habitat conservation approach should be adopted. This includes keeping general habitat destruction and construction footprints to an absolute minimum within the terrestrial habitat as well. Conserving the habitat units will ultimately conserve the species communities that depend on it for survival.
- 1.38 The integrity of the concreted lined sludge beds must be monitored to ensure that no cracks have developed which could lead to seepage and impact on the groundwater.
- 1.39 The treatment of effluent and wastewater must not impact on a water resource or on any other person's water use, property or land and must not be detrimental to the health and safety of the public in the vicinity of the activity.
- 1.40 Emissions from the activities must be free of odours at levels likely to cause annoyance outside the site.
- 1.41 Sewage sludge from the drying beds and solid sewage waste must be handled, stored, transported, utilised or disposed of in such a manner so as not to cause any odour, health hazard, secondary pollution or other nuisance.
- 1.42 Regular monitoring and maintenance of the Waste Water Treatment Works must be implemented to ensure that it is operating at its full potential.
- 1.43 Facilities for sanitary convenience, fuel storage or any substance which causes or is likely to cause pollution of a water resource should not be placed within the 1:50 year flood-line of any watercourse.
- 1.44 The Department of Water and Sanitation (DWS) should be informed of any incidents that may have a detrimental impact on water resources.
- 1.45 Recommendations of the specialist studies conducted as part of the environmental impact assessment for the development must be implemented.

General

- 1.46 A copy of this particular EA must be kept at the property where the activity will be undertaken. The Authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any



employee or agent of the holder of the Authorisation who works or undertakes work at the property.

- 1.47 Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.
- 1.48 The holder of the Authorisation must notify the Department, in writing within 48 (forty eight) hours, if any condition of this Authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
- 1.49 Non-compliance with a condition of this Authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.
- 1.50 National government, provincial government, local authorities or committees appointed in terms of the conditions of this Authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the applicant or his successor in title in any instance where operation be temporarily or permanently stopped for reasons of non-compliance by the applicant with the conditions of the authorisation as set out in this document or any other subsequent document emanating from these conditions of Authorisation.
- 1.51 The applicant is responsible for compliance with the provisions of Section 28 (Duty of care) of NEMA (Act 107 of 1998) relating to remediation of damage.
- 1.52 Emergency and reporting of environmental incidents as stipulated in Section 30 of NEMA (Act 107 of 1998) must be followed accordingly.

Approved/Not Approved

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Dr. M. Nokwequ
Acting HOD: DESTEA

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10/12/18.....
Date:

Annexure 1: Reasons for Decision

1. Background

The applicant, Matjhabeng Local Municipality, applied for authorisation to commence with Activity 14 and 25 of Listing Notice 1 and Activity 6 of Listing Notice 2 of the 2014 EIA Regulations as amended, described in the Environmental Impact Assessment Report dated August 2018 as-

The refurbishment of Theron Waste Water Treatment Works in Welkom, Free State Province.

The applicant appointed Hatch Africa (Pty) Ltd to undertake the scoping and environmental impact reporting process, for the activities as described under the 2014 EIA Regulations as amended.

2. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the Environmental Impact Assessment Report dated August 2018 completed by Hatch Africa (Pty) Ltd and, the accompanying EMPr.
- b) The objectives and requirements of relevant legislation, policies and guidelines and Section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).
- c) The findings of the site visit undertaken by Ms. R. Likhoele from the Department of Economic, Small Business Development, Tourism and Environmental Affairs.

3. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. Factors considered in making the decision are the following:

- Details provided of the EAP's qualifications and expertise indicates that the EAP is competent to carry out the environmental impact assessment procedures.

- The Environmental Impact Assessment Report dated August 2018 identified all legislation and guidelines that have been considered in the preparation of the Report.
- The potential impacts associated with the development are assessed in detail and no fatal flaws were identified.
- The methodology used in assessing the potential impacts identified in the Environmental Impact Assessment Report dated August 2018 has been adequately indicated.
- A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA regulations, 2014 for public involvement.

4. Findings

After consideration of the information and factors listed above, the Department made the following findings -

- The proposed development is In line with the current approved IDP and SDF for the area.
- The procedure followed for the EIA process has been adequate and compliant to the requirements of the EIA Regulations, 2014 as amended.
- The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- Legal and procedural requirements have been met.
- No significant environmental degradation will result directly from the activity applied for if the proposed mitigation measures and recommendations in the Environmental Impact Assessment Report dated August 2018 and EMPr are implemented.
- This development is provided for in the infrastructure planning of the municipality and there will be no implication on the infrastructure planning of the Municipality.
- The WWTW has not been running at optimal treatment capacity due to poor maintenance and theft. It is essential that the WWTW is refurbished and that the new infrastructure is installed to meet the discharge limits set by DWS.
- By refurbishing the broken and damaged components of the WWTW, the WWTW will be able to operate at optimal level and will be able to service the town of Welkom as well as the surrounding townships and settlements and ensure sanitation. The new Extended



Aeration Activated Sludge Plant will treat water to acceptable discharge standards such that Flamingo Pan is no longer polluted.

- The proposed development will contribute towards SIP 6: Integrated Municipal Infrastructure project. This SIP relates to the development of the national capacity to address all the maintenance backlogs and upgrades required in water, electricity and sanitation bulk infrastructure.
- As far as could be established the proposed development of a fuel service station will not have any adverse impacts that cannot be sufficiently mitigated on the surrounding environment.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the Environmental Authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The application is accordingly granted.

