

Environmental Authorisation

Authorisation register

number:

EMB/19,12(b)(iii)(iv)/21/06

Holder of Authorisation:

Dihlabeng Local Municipality

Location of activity:

Remaining Extent of the Farm Mary Ann 712, Zandrivier 256, Wassau 711 and Sekoko 1504, Paul Roux, Free State.

Project description:

Activity 19 of Listing Notice 1 (GNR 327) and activity 12(b) (iii) (iv) of Listing Notice 3 (GNR 324).

Proposed construction of an outfall sewer pipeline and pipe bridge.

HEAD OF DEPARTMENT

Department of Economic, Small Business Development, Tourism and Environmental Affairs

2 9 JUL 2021

Private Bag X20801 Bloemfontein, 9300

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.

Activity authorised

By virtue of the powers conferred on it by the National Environmental Management Act ('NEMA'), 1998 (Act No. 107 of 1998) and GNR 326 of the 2014 Environmental Impact

Assessment Regulations as amended, the Department hereby authorises –

Dihlabeng Local Municipality

With the following contact details-

P. O. Box 551

Bethlehem

9700

Contact person: Mr. Lekgetho Isaac Mokgatlhe

Telephone: 058 303 5732

Email: lekgetho@dihlabeng.co.za

To undertake the following activities (hereafter referred to as "the activity") indicated in Listing

Notice 1 (GNR 327) and Listing Notice 3 (GNR 324):

Activity 19:

"The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10

cubic metres from a watercourse".

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Activity 12(b)(iii)(iv):

"The clearance of an area of 300 square metres or more of indigenous vegetation in Free State,

iii. On land, where, at the time of the coming into effect of this Notice or thereafter such land

was zoned open space, conservation or had an equivalent zoning;

iv. Areas within a watercourse or wetland; or within 100 metres from the edge of watercourse or

wetland", as prescribed in the Final Basic Assessment Report (BAR) dated 25 May 2021.

Site coordinates:

| Pipeline route | Latitude (S) | Longitude (E) |
|----------------|--------------|---------------|
| Starting point | 28°18'32.70" | 27°57'21.24" |
| Middle point | 28°18'6.03" | 27°57'23.01" |
| End point | 28°17'47.26" | 27°57'53.98" |

Activity description

NSVT Consultants has been appointed by SM-TB JV on behalf of Dihlabeng Local Municipality, as the independent Environmental Assessment Practitioner (EAP) to undertake a Basic Assessment process for the proposed 2.04km gravity-feed sewer outfall pipeline from the new development, Extension 5, Fateng tse Ntsho to a connection point to the Paul Roux Waste Water Treatment Works (WWTW).

The proposed pipeline will cross Sand River, seasonal wetland, and a drainage line before it connects to the existing outfall sewer connection point. At the section where the sewer pipeline crosses the Sand River, it will be carried by a proposed sewer pipe bridge of 170m in length and 1m wide. Dihlabeng Local Municipality proposed this development so that they can provide sanitation services to the new residential development, which is not yet constructed.

It is confirmed that the existing WWTW has adequate capacity to accommodate the additional loads from the new area. The proposed uPVC pipeline has a DN150mm diameter with an estimated flow rate of 21.492l/s throughput, therefore it is below the Environmental Impact Assessment (EIA) threshold for pipeline specifications as outlined in the 2014 EIA Regulations

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as amended, however, due to the fact that the pipeline will cross watercourses, an

Environmental Authorisation must be obtained.

The granting of this EA 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 EA.

1.2 The holder of the EA 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 EA.

1.3 The authorised activity may only be carried out on the Remaining Extent of the Farm

Mary Ann 712, Zandrivier 256, Wassau 711 and Sekoko 1504, Paul Roux, as indicated

above at the exact site co-ordinates.

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 affected.

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 EA to apply for further

Authorisation in terms of NEMA, 1998(Act 107 of 1998) and the 2014 EIA Regulations as

amended.

1.6 This EA is valid for a period of 3 (three) years from the date of issue. If commencement

of the activity does not occur within that period, the EA lapses and a new application for

an EA must be made.

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1.7 This EA 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 EA must notify every registered interested and affected parties, in

writing and within 14 (fourteen) calendar days of the date of this EA, of its decision to

authorise the activity.

1.9 The notification referred must –

1.9.1 specify the date on which the EA was issued;

1.9.2 inform the registered interested and affected parties of the appeal procedure

provided for in National Appeal Regulations published in Government Gazette No.

38559 of 12 March 2015;

1.9.3 advise the registered interested and affected parties that a copy of the

Authorisation will be furnished on request; and

1.9.4 give the reasons for the decision.

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 within 20 days after being notified of the decision. The

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appeal should be directed to:

Attention: Mr. T. Molotsi

MEC (DESTEA)

Private Bag X20801

Bloemfontein

9300

Tel: (051) 400 4810

E-mail: modisepm@destea.gov.za

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

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

The Environmental Management Programme (EMPr) submitted as part of application for

an EA is hereby approved.

The provisions of the EMPr included in the Final Basic Assessment Report (BAR) 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 EA.

1.13 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.

1.14 The recommendations and mitigation measures recorded in the Final Basic Assessment

Report dated 25 May 2021 must be adhered to and incorporated as part of the EMPr

where applicable.

1.15 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

The applicant must appoint a suitably experienced Environmental Control Officer (ECO)

for the construction and operation phase of the development that will have the

responsibility to ensure that the mitigation / rehabilitation

recommendations referred to in this EA are implemented and to ensure compliance with

the provisions of the EMPr.

The ECO shall be appointed before commencement of any construction activity. 1.17

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The ECO shall keep record of all activities on site, problems identified, transgressions 1.18

noted and a task schedule of tasks undertaken by the ECO.

1.19 The ECO shall remain employed until all rehabilitation measures, as required for

implementations due to construction damage are completed and the site is ready for

operation.

The ECO shall keep the records to monitoring on site and make them available for 1.20

inspection to any relevant and competent authority in respect of this development.

Construction and operation of the development may be temporarily or permanently 1.21

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

1.22 The holder of the Authorisation must submit an environmental audit report to the

Department within fourteen (14) days upon completion of the construction and

rehabilitation activities. The environmental audit report must –

1.22.1 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.

1.22.2 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

The authorised activity shall not commence within twenty (20) days after the EA has 1.23

been issued by the Department to allow the appeal process to proceed accordingly.

1.24 Should you be notified by the MEC of a suspension of the EA pending appeal

procedures, you shall not commence with the activity to the second by the MEC in

Small Business Development, Tourism and Covironmental Affairs

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Notification to authorities

Fourteen (14) days prior written notice must be given to the Department that the activities

will commence. Commencement for the purposes of this condition includes site

preparation. The notice must include a date on which the construction of the activities will

commence.

Operation

1.26 Fourteen (14) days prior written notice must be given to the Department that the activities

will commence with the operation.

Site closure and decommissioning

Should the activities 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.

Before decommissioning of the development becomes evident a rehabilitation plan must

be compiled and should be approved by this Department.

Specific conditions

An integrated waste management approach that is based on waste minimisation must be

implemented and must incorporate reduction, recycling, re-use and disposal where

appropriate. 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.

Construction waste generated during the construction phase must be disposed of at Paul

Roux waste disposal facility.

1.31 Effort must be made to ensure that preventative actions are taken that any water bodies

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this activity.

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1.32 A Water Use License must be obtained from the Department of Water and Sanitation

prior to commencement of the proposed development.

1.33 The applicant must ensure that wayleave is obtained from South African National Roads

Agency Limited (SANRAL) prior to commencement of the proposed development, if the

pipeline will be within the road reserve.

1.34 A provincial flora permit must be obtained from the Department of Economic, Small

Business Development, Tourism and Environmental Affairs (DESTEA) for the

removal/destruction of all the provincially protected species Helichrysum rugulosum

individuals, prior to the commencement of any construction activities.

1.35 The construction footprint, especially at watercourse crossings must be cordoned off to

ensure activities are limited to the development footprint.

1.36 Adequate storm water and erosion management measures must be implemented for the

entire assessment area during the construction and operational phases.

1.37 The applicant must ensure that storm water is directed away from the site to ensure the

separation of clean and dirty water.

1.38 The applicant must ensure that where the proposed sewer tunnel bridge traverses the

Sand River, the pipeline is placed over the watercourse on aboveground elevated

concrete slabs in order to ensure the continued flow and ecological integrity of the

watercourse.

Adequate leakage detection and prevention measures must be implemented for the

pipeline in order to detect any potential leakages and subsequent contamination of

underground water, the Sand River and the wetland.

1.40 The integrity of the pipeline must be inspected on a minimum biannual basis (twice a

year) in order to ensure that there is no risk of leakages or overflows occurring.

1.41 If any leakages or compromises to the integrity of the pipeline are detected, these issues

must immediately be resolved and the leakages must be repaired. Furthermore the

competent authority must be notified immediately of such leakages.

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1.42 A comprehensive South African Scoring System 5 (SASS 5) aguatic bio-monitoring assessment must be conducted on the Sand River directly downstream of the proposed project area on a minimum annual basis in order to ensure that the ecological functionality and integrity of the watercourse is maintained. This information must then be compared to the baseline data collected during the initial assessment prior to the commencement of the operational phase. Such assessment must be conducted by a suitably qualified and experienced ecologist.

1.43 If any reduction in SASS 5 scores (watercourse health) or chemical and biological water quality is determined due to this proposed development, the competent authority must immediately be notified and the necessary steps must be followed by the applicant to locate and remediate the source of contamination/health reduction as soon as practicably possible.

1.44 Conditions set out by Eskom on a letter dated 30 September 2020 must be accepted in writing prior to commencement of the proposed development and the Technical Service Centre must be informed of the future activities.

The applicant must ensure that in-situ material is removed from the site and backfilled 1.45 with inert material, according to the design engineers' specifications.

1.46 Existing roads in close proximity to the proposed development construction footprint area must be used during the construction phase of the proposed development.

1.47 The proposed pipeline must be constructed as close as possible to the N5 national highway in order to restrict the impact and prevent significant impact on the broader continuous wetland area to the south and the small portion of the Sand River.

1.48 The applicant must ensure that the degree and duration of the construction impacts of the proposed development on the small portion of the Sand River, the wetland area and the remaining undisturbed relatively natural terrestrial grassland pertions is minimised as HEAD OF DEPARTMENT

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far as possible.

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The development footprint through the small portion of the Sand River, the wetland area 1.49

and the remaining undisturbed relatively natural terrestrial grassland portions must be

restricted and kept as small as practicably possible in order to minimise the negative

ecological impact.

1.50 The construction footprint through the small portion of the Sand River, the wetland area

and the remaining undisturbed relatively natural terrestrial grassland portions must also

be adequately rehabilitated as soon as practicably possible after construction in order to

ensure the continued flow and subsequent ecological functionality and integrity of the

Sand River and wetland and to ensure the continued ecological functionality and integrity

of the terrestrial grassland.

1.51 The proposed development must not impact significantly wider than the narrow linear

section.

The applicant must ensure that an Alien Invasive Species Establishment Management 1.52

and Prevention Plan is implemented during the construction and operational phases and

the management plan must be compiled by a suitably qualified and experienced

ecologist.

1.53 A professional archaeologist must be appointed to monitor excavations at the river

crossing as well as 10m wide sections of alluvium flanking both sides of the river at the

bridge.

Recommendations of the specialists conducted as part of the Environmental Impact 1.54

Assessment for the proposed development must be implemented.

If any evidence of archaeological sites or artefacts, paleontological fossils, graves or 1.55

other heritage resources is found during construction, South African Heritage Resource

Agency (SAHRA) and archaeologist and / palaeontologist, must be informed immediately

depending on the nature of the findings.

General

1.56 A copy of the EA must be kept at the property where the activities will be carried on. The

HEAD OF DEPARTMENT to see it EA must be produced to any authorised official of the Departmen

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and must be made available for inspection by any employee or agent of the holder of the

EA who works or undertakes work at the property.

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.

The applicant is responsible for compliance with the provisions for Duty-of-Care and 1.58

remediation of damage contained in Section 28 and Emergency Incidents contained in

Section 30 of the National Environmental Management Act, (Act no 107 of 1998).

1.59 The holder of the EA must notify the Department, in writing within 48 (forty-eight) hours, if

any condition of this EA cannot be or is not adhered to. Any notification in terms of this

condition must be accompanied by reasons for the non-compliance.

1.60 Non-compliance with a condition of the EA may result in criminal prosecution or other

actions provided for in the National Environmental Management Act, 1998 and the 2014

EIA Regulations as amended.

1.61 The Department shall not be held responsible for any damages or losses suffered by the

applicant or his successor.

Approved:

HOD: Department of Economic, Small **Business** Development, Tourism

Environmental Affairs (DESTEA)

Date: 1/9

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Annexure 1: Reasons for Decision

1. Background

The applicant, Dihlabeng Local Municipality, applied for an EA to commence with the activities

of Listing Notice 1, GNR 327 and Listing Notice 3, GNR 324:

Activity 19:

"The infilling or depositing of any material of more than 10 cubic metres into, or the dredging,

excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10

cubic metres from a watercourse".

Activity 12(b)(iii)(iv):

"The clearance of an area of 300 square metres or more of indigenous vegetation in Free State,

iii. On land, where, at the time of the coming into effect of this Notice or thereafter such land

was zoned open space, conservation or had an equivalent zoning;

iv. Areas within a watercourse or wetland; or within 100 metres from the edge of watercourse or

wetland", as prescribed in the Final Basic Assessment Report (BAR) dated 25 May 2021.

The applicant appointed NSVT Consultants to undertake Environmental Impact Assessment

process for the activities as required by Regulation 21 of 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 Final Basic Assessment Report (BAR) dated 25 May 2021

completed by NSVT Consultants.

b) Mitigation measures as proposed in the Final Basic Assessment Report (BAR) dated 25

May 2021 and the EMPr.

c) 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).

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d) The findings of the site visit were undertaken by Ms. N. Molokwane from the Department on the 02nd of June 2021.

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:

- a) Ecological Impact Assessment
- b) Phase 1 Heritage Impact Assessment
- c) Geotechnical Investigation
- d) Solid Waste Management
- e) Storm Water Management
- f) Energy Efficiency

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4. Findings

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

- (a) The proposed sewer tunnel bridge will be constructed directly adjacent to the existing traffic bridge of the N5 national highway which traverses the Sand River. The Sand River constitutes a significant perennial watercourse and forms an important part of the regional surface water catchment- and drainage area.
- (b) A small artificially constructed earth dam is also present directly adjacent south of the most north-easterly portion of the proposed pipeline route, which dams up a small ephemeral water drainage line.
- (c) The drainage line however continues to flow through the earth dam overflow and underneath the N5 national highway in a northerly directly. The proposed pipeline route will therefore also traverse this small water drainage line.
- (d) With the exception of the provincially protected species Helichrysum rugulosum only found to be present within the remaining relatively undisturbed natural portions of the

terrestrial grassland, no Red Data listed species or any other species of conservational significance were found to be present within the proposed sewer tunnel bridge area or along the proposed pipeline route.

- (e) The proposed footprint is underlain by well-developed alluvial and geologically recent overbank sediments of the Sand River. Investigation of exposed alluvial cuttings next to the bridge crossing shows little evidence of intact Quaternary fossil remains.
- (f) The N5 river crossing as well as the associated 10m wide sections of alluvium flanking both sides of the river at the bridge is designated a site rating of Generally Protected A and the rest of the linear footprint is designated a site rating of Generally Protected C.
- (g) The surrounding area is associated with heaving clays, as is evident in the test results. Care should be taken with the in-situ materials. It is recommended that as much of the insitu material as is economically feasible be removed from the site and backfilled with inert material, according to the design engineers' specifications.
- (h) Construction waste generated during the construction phase will be disposed at Paul Roux waste disposal facility.
- (i) Adequate storm water and erosion management measures will be implemented for the entire assessment area during the construction and operational phases.
- (j) The pipe has been designed in a way that it gravitates, therefore, would not require any pump station during operation.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the Environmental Authorisation, the proposed activities 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 potential detrimental environmental impacts resulting from the proposed activities can be mitigated to acceptable levels, therefore the application is accordingly granted.

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