
REFERENCE: 16/3/3/1/B3/28/1030/22
NEAS REFERENCE: WCP/EIA/ 0001098/2022
DATE: 08 December 2022

The Municipal Manager
Drakenstein Municipality
Civic Centre, Berg River Boulevard
PAARL
7646

Attention: Mr M Wust

Cell: 082 497 8246
Email: marius.wust@drakenstein.gov.za

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED): THE DEVELOPMENT OF THE SOUTHERN PAARL BULK SEWER PIPELINE, PAARL

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation and **adopt** the Maintenance Management Plan, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the EIA Regulations, 2014, you are instructed to ensure, within 14 days of the date of the Environmental Authorisation, that all registered interested and affected parties ("I&APs") are provided with access to and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the Appeal Regulations, 2014, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached Environmental Authorisation.

Yours faithfully

**DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING**

CC: (1) E Visagie (GNEC (Pty) Ltd)
(2) C Winter (Drakenstein Municipality)

Email: eg@gnec.co.za
Email: Cindy.Winter@drakenstein.gov.za

REFERENCE: 16/3/3/1/B3/28/1030/22
NEAS REFERENCE: WCP/EIA/0001098/2022
ENQUIRIES: Samornay Smidt
DATE OF ISSUE: 08 December 2022

ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): THE DEVELOPMENT OF THE SOUTHERN PAARL BULK SEWER PIPELINE, PAARL

With reference to your application for the abovementioned, find below the outcome with respect to this application.

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activities specified in section B below with respect to the Preferred Layout and Design Alternative, as described in the Basic Assessment Report ("BAR"), dated 8 September 2022.

In terms of the NEMA, viz, the EIA Regulations, 2014 (Listing Notices 1 and 3 of 2014 in Government Gazette No. 40772 of 7 April 2017) the Competent Authority hereby adopts the Maintenance Management Plan for the proposed maintenance of the Southern Paarl Bulk Sewer Pipeline, dated 19 July 2022.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

Drakenstein Municipality
c/o Mr M Wust
Civic Centre, Berg River Boulevard
PAARL
7646

Tel.: 082 497 8246
Email: marius.wust@drakenstein.gov.za

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as “**the holder**”.

B. LIST OF ACTIVITIES AUTHORISED

Listed Activity	Activity/Project Description
<p>EIA Regulations Listing Notice 1 of 2014 -</p> <p>Activity Number: 10</p> <p><i>The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes –</i></p> <p><i>(i) with an internal diameter of 0,36 metres or more; or</i></p> <p><i>(ii) with a peak throughput of 120 litres per second or more;</i></p> <p><i>excluding where—</i></p> <p><i>(a) such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve or railway line reserve; or</i></p> <p><i>(b) where such development will occur within an urban area.</i></p>	<p>The proposed gravity fed bulk sewer pipeline is located outside the urban area, will have an internal diameter exceeding 0,36m, and will be approximately 3,5 km long.</p>
<p>EIA Regulations Listing Notice 1 of 2014 -</p> <p>Activity Number: 12</p> <p>The development of -</p> <p>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or</p> <p>(ii) infrastructure or structures with a physical footprint of 100 square metres or more;</p> <p>where such development occurs -</p> <p>(a) within a watercourse;</p> <p>(b) in front of a development setback; or</p> <p>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; —</p> <p>excluding—</p> <p>(aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</p> <p>(bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</p>	<p>The development is located outside the urban area and more than 100 square meters of the development footprint will be located within 32 meters from a watercourse.</p>

<ul style="list-style-type: none"> (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such development occurs within an urban area; (ee) where such development occurs within existing roads, road reserves or railway line reserves; or (ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared. 	
<p>EIA Regulations Listing Notice 1 of 2014 -</p> <p>Activity Number: 19</p> <p>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;</p> <p>but excluding where such infilling, depositing, dredging, excavation, removal or moving—</p> <ul style="list-style-type: none"> (a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies; (d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or (e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies. 	<p>The proposed gravity fed bulk sewer pipeline will cross the Berg River near the western corner of the Val de Vie Estate and traverse the Van Wyks River. To establish these river crossings, excavations and infilling will take place within the watercourses and along the riverbanks.</p>
<p>EIA Regulations Listing Notice 3 of 2014 -</p> <p>Activity Number: 12</p> <p>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</p> <p>i. Western Cape</p> <ul style="list-style-type: none"> i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; 	<p>The proposed development will result in the clearance of limited areas of endangered Swartland Alluvium Fynbos vegetation.</p>

<ul style="list-style-type: none"> ii. Within critical biodiversity areas identified in bioregional plans; iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; iv. 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; or v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister. 	
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The abovementioned list is hereinafter referred to as “**the listed activities**”.

The holder is herein authorised to undertake the following alternative that includes the listed activities as it relates to the development:

The proposed development entails a gravity fed primary bulk sewer pipeline from the Val de Vie Estate to the existing Drakenstein bulk sewerage infrastructure near the N1. The proposed bulk sewer pipeline will be approximately 3.5 km long and consist of an 800mm diameter pipe (3.45km long, including the 12m long Van Wyks River crossing) and a 600mm diameter gravity fed pipe (110m long, including the 50m long Berg River crossing).

The route of the primary sewer pipeline along with the specifications is described below:

- The route starts in the south with a 600 mm diameter pipe near the northwestern corner of the greater Val de Vie Estate.
- The 600 mm diameter pipe runs in a northern direction along the eastern banks of the Berg River.
- The Berg River crossing is located near the north-western corner of the Val de Vie Estate and the River Farm Estate.
- The Berg River crossing will be with a 600mm diameter gravity fed pipeline system that will be installed via trenching and will be approximately 50m long. The pipeline will be placed on concrete pedestals in the excavated area and will be encased in concrete before the area is backfilled with the excavated soil and compacted.
- On the western bank of the Berg River, an 800mm diameter pipeline will continue in a northerly direction from the river crossing to the existing municipal infrastructure located at the N1 highway, crossing the van Wyks River along the route.

C. SITE DESCRIPTION AND LOCATION

The listed activities will be located on the eastern and western banks of the Berg River in Southern Paarl, and will traverse Erven 9271, 8892, 19436, 8442, Farm No. 1312, Remainder Farm No. 1566 and Farm No. 1651.

The SG21 digit codes are: C05500080000927100000
C05500080000889200000
C05500080001943600000
C05500080000844200000
C05500000000131200000
C05500000000156600000
C05500000000165100000

Co-ordinates for the pipeline route:

	Latitude	Longitude
Start	33° 45' 53.06" S	18° 58' 26.49" E
Middle	33° 46' 48.89" S	18° 58' 21.45" E
End	33° 47' 33.99" S	18° 58' 03.91" E

Refer to Annexure 1: Locality Map and Annexure 2: Site Plan.

The above is hereinafter referred to as "**the site**".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Guillaume Nel Environmental Consultants (Pty) Ltd
c/o Euonell Visagie
PO Box 2632
PAARL
7620

Tel: (021) 870 1874
Email: eg@gnec.co.za

E. CONDITIONS OF AUTHORISATION

Scope of authorisation

1. The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to the Preferred Layout and Design Alternative, as described in the BAR dated 8 September 2022 on the site as described in Section C above.
2. The holder must commence with, and conclude, the listed activities within the stipulated validity period which this Environmental Authorisation is granted, or this Environmental Authorisation shall lapse and a new application for Environmental Authorisation must be submitted to the competent authority

This Environmental Authorisation is granted for-

- (a) A period of **five years** from the date of issue, during which period the holder must commence with the authorised listed activities.
- (b) A period of **ten (10) years**, from the date the holder commenced with the authorised listed activities, during which period the authorised listed activities must be concluded.

3. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
4. Any changes to, or deviations from the scope of the alternative described in section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

Written notice to the Competent Authority

5. Seven calendar days' notice, in writing, must be given to the Competent Authority before commencement of construction activity.
 - 5.1 The notice must make clear reference to the site details and EIA Reference number given above.
 - 5.2 The notice must also include proof of compliance with the following conditions described herein:

Conditions: 6, 7 and 11.

Notification and administration of appeal

6. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision—
 - 6.1 notify all registered Interested and Affected Parties ("I&APs") of –
 - 6.1.1 the outcome of the application;
 - 6.1.2 the reasons for the decision as included in Annexure 3;
 - 6.1.3 the date of the decision; and
 - 6.1.4 the date when the decision was issued.
 - 6.2 draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, 2014 (as amended) detailed in Section G below;
 - 6.3 draw the attention of all registered I&APs to the manner in which they may access the decision;
 - 6.4 provide the registered I&APs with:
 - 6.4.1 the name of the holder (entity) of this Environmental Authorisation,
 - 6.4.2 name of the responsible person for this Environmental Authorisation,
 - 6.4.3 postal address of the holder,
 - 6.4.4 telephonic and fax details of the holder,
 - 6.4.5 e-mail address, if any, of the holder, and

6.4.6 contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the 2014 National Appeals Regulations (as amended).

7. The listed activities, including site preparation, must not commence within 20 (twenty) calendar days from the date the applicant notified the registered I&APs of this decision. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided i.e. the listed activities, including site preparation, must not commence until the appeal is decided.

Management of activity

8. The draft Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation must be amended to reflect the correct frequency of independent audits and to remove the information not relevant to the proposed development. The amended EMPr must be resubmitted to this Department, and approved, prior to the commencement of construction activities on the site.
9. The Maintenance Management Plan ("MMP") adopted as part of this Environmental Authorisation must be implemented.
10. The EMPr must be included in all contract documentation for all phases of implementation.

Monitoring

11. The holder must appoint a suitably experienced environmental control officer ("ECO") before commencement of any land clearing or construction activity to ensure compliance with the EMPr and the conditions contained herein.
12. The ECO must undertake weekly site visits to monitor compliance with the EMPr. The ECO must report on compliance in writing to this Department monthly during the construction phase.
13. A copy of the Environmental Authorisation, EMPr, MMP, audit reports and compliance monitoring reports must be kept at the site of the authorised activities, and must be made available to anyone on request, including a publicly accessible website.
14. Access to the site referred to in Section C must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.

Auditing

15. In terms of Regulation 34 of the NEMA EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr and must submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Reports must be prepared by an **independent person** (other than not the ECO appointed in terms of condition 11 above or the appointed Environmental

Assessment Practitioner) and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014 (as amended).

The holder must undertake environmental audits and submit an environmental audit report to the Department every 6 months for the duration of the construction phase of the proposed development. Once construction and the relevant site rehabilitation have been completed, an environmental audit must be undertaken and reported on to the Department. Thereafter, such environmental audits must be conducted and reported on to this Department annually, for a period of five years.

The holder must, within 7 days of the submission of each of the above-mentioned reports to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).

Specific Conditions

16. Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape.

Heritage remains include: meteorites, archaeological and/or palaeontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.

17. A qualified archaeologist and/or palaeontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.
18. The relevant requirements with respect to occupational health and safety must be adhered to at all times.

F. GENERAL MATTERS

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activities.
2. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
3. If the holder does not commence with the listed activities within the period referred to in Condition 2, this Environmental Authorisation shall lapse for those activities, and a new application for Environmental Authorisation must be submitted to the Competent Authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the Competent Authority prior to the expiry date of the Environmental Authorisation.

4. The holder must submit an application for amendment of the Environmental Authorisation to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the EIA Regulations, 2014 (as amended) must be submitted.

Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the Competent Authority must only be notified of such changes.

5. The manner and frequency for updating the EMPr is as follows:

Amendments to the EMPr must be done in accordance with Regulations 35 to 37 of the EIA Regulations 2014, (as amended) or any relevant legislation that may be applicable at the time.

G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations 2014 (as amended).

1. An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date on which notification of the decision was sent to the holder by the Competent Authority–
 - 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator; and
 - 1.2. 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.
2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date on which the holder of the decision sent notification of the decision to the registered I&APs–
 - 2.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator; and
 - 2.2. Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organs of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organs 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.
4. 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 2659)
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.

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

H. DISCLAIMER

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the conditions of this Environmental Authorisation 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.

Your interest in the future of our environment is appreciated.

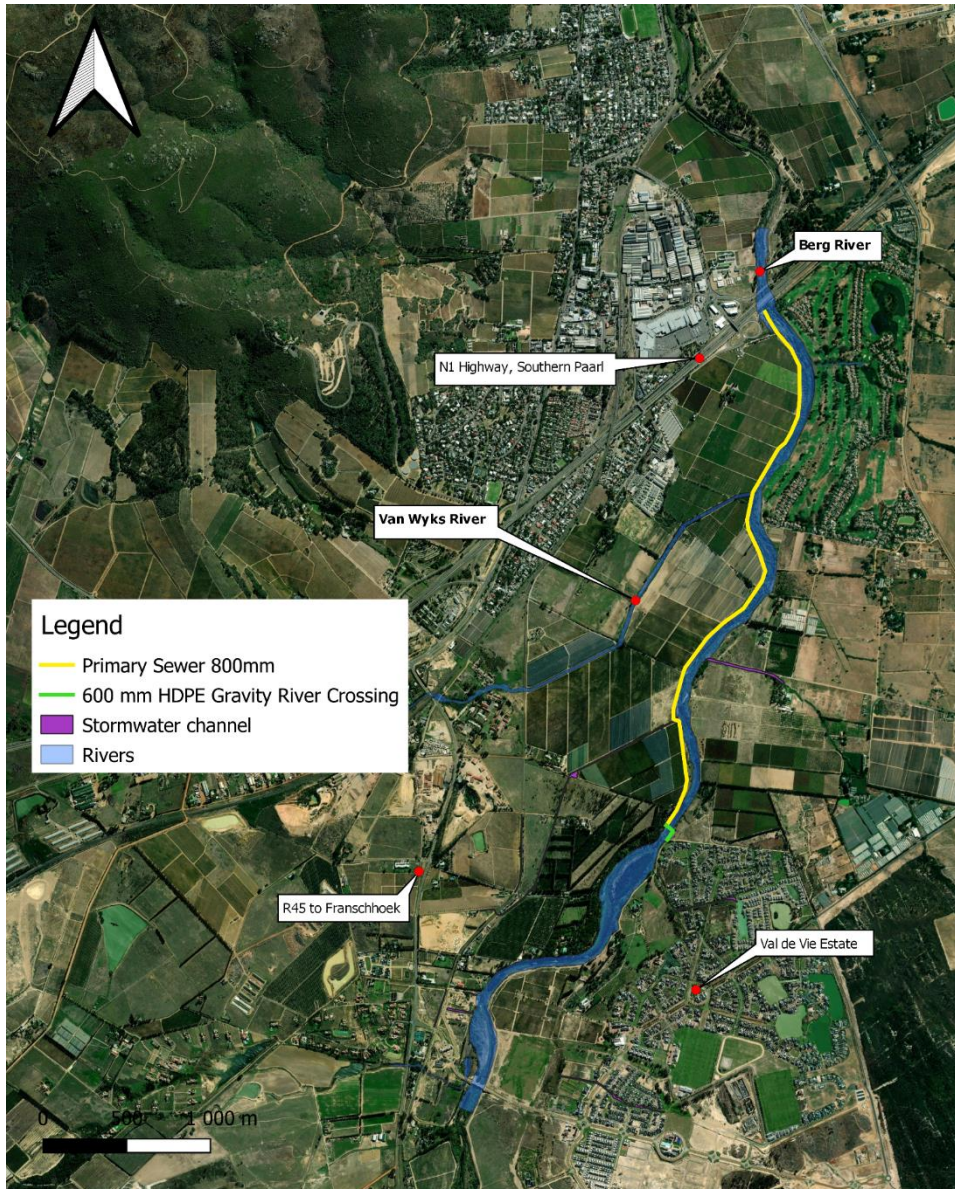
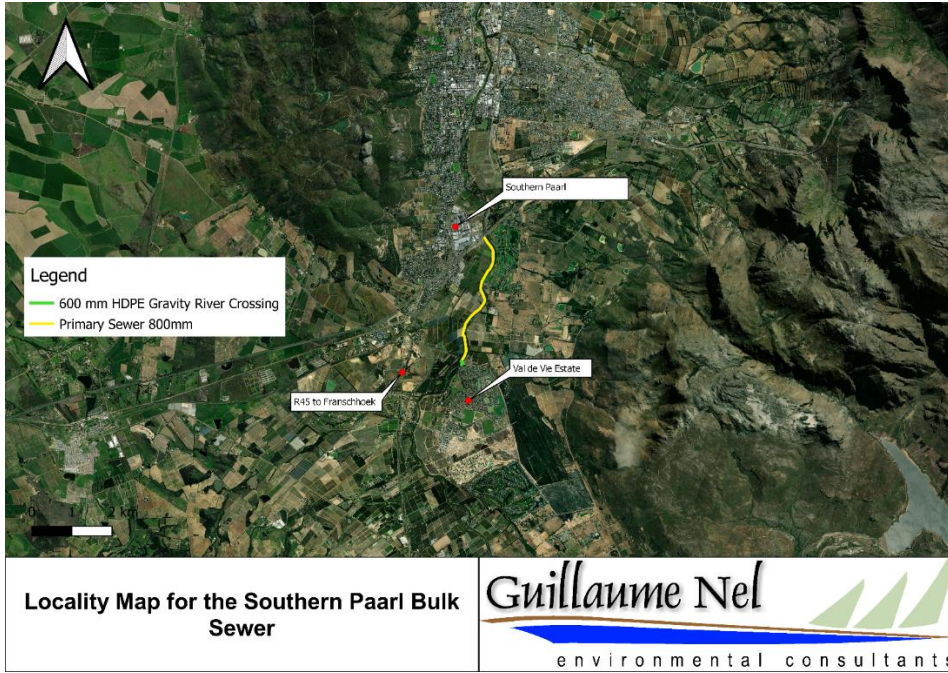
Yours faithfully

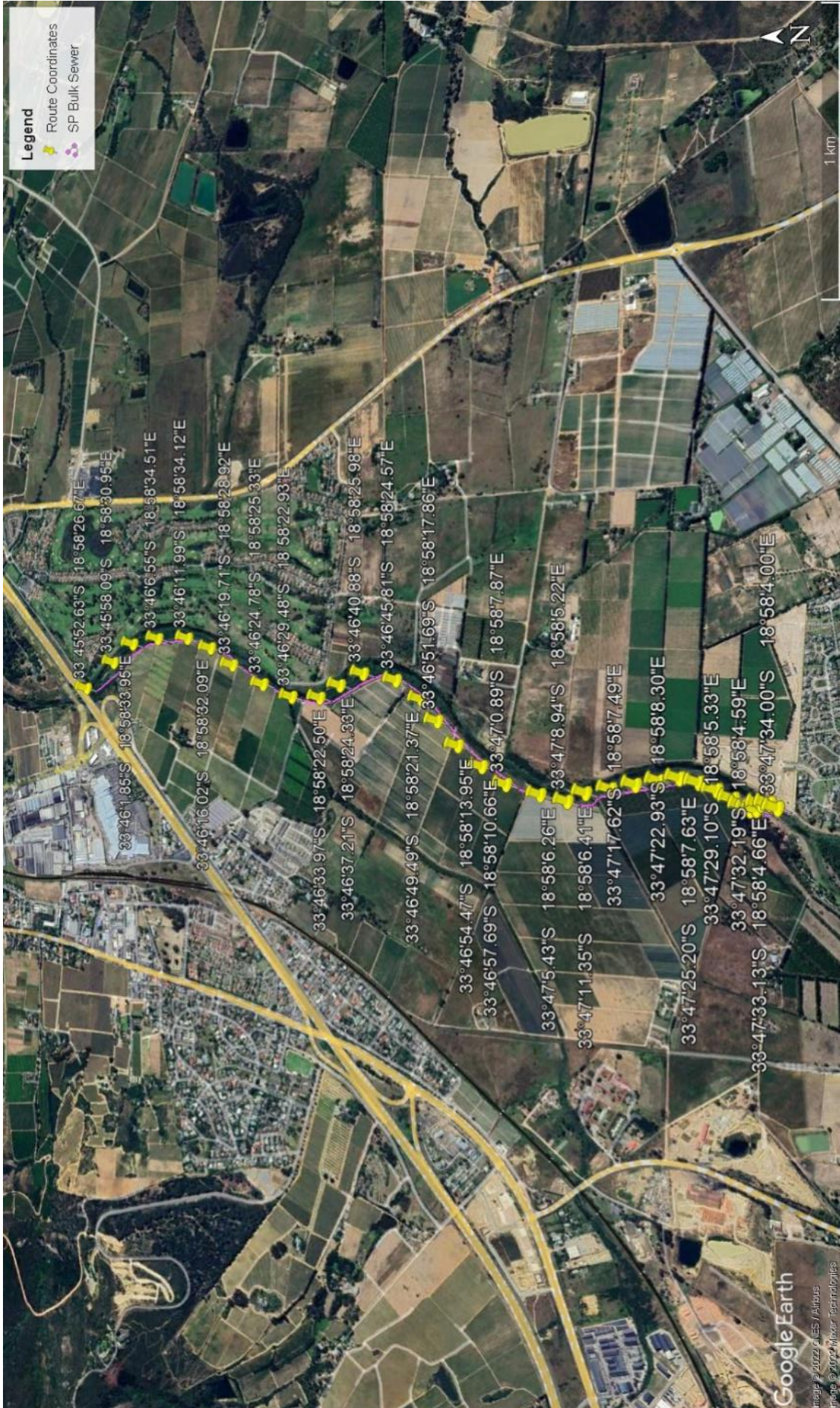
MR. ZAAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)
DATE OF DECISION: 08 DECEMBER 2022

CC: (1) E Visagie (GNEC (Pty) Ltd)
(2) C Winter (Drakenstein Municipality)

Email: eg@gnec.co.za
Email: Cindy.Winter@drakenstein.gov.za

ANNEXURE 1: LOCALITY MAP





ANNEXURE 2: SITE PLAN



LEGEND:

EXISTING 1000mm GRAVITY SEWER MAIN
 PROPOSED 1000mm GRAVITY SEWER MAIN
 PROPOSED 600mm GRAVITY SEWER MAIN
 PROPOSED 400mm GRAVITY SEWER MAIN
 PROPOSED 150mm GRAVITY SEWER MAIN
 PROPOSED 100mm GRAVITY SEWER MAIN

AS-BUILT RECORD

SECTION NO.	DESCRIPTION	DATE

VERSION/AMENDMENTS

NO.	DATE	DESCRIPTION	BY	APPROVED BY
1	2017	ISSUED FOR PERMIT	B. VALENTYN	B. VALENTYN
2	2017	ISSUED FOR PERMIT	B. VALENTYN	B. VALENTYN

DRAKENSTEIN MUNICIPALITY
 SOUTHERN PAARL BULK GRAVITY OUTFALL AND SECONDARY SEWER MAIN

PROJECT TITLE
 BERG RIVER BULK GRAVITY OUTFALL SEWER MAIN

DATE
 2017

SCALE
 1:1000

PROJECT NO.
 2178.00.ZA.06.A802

DESIGNED BY
 B. VALENTYN

CHECKED BY
 A. SCHEEPERS

DATE
 2017

SCALE
 1:1000

PROJECT NO.
 2178.00.ZA.06.A802

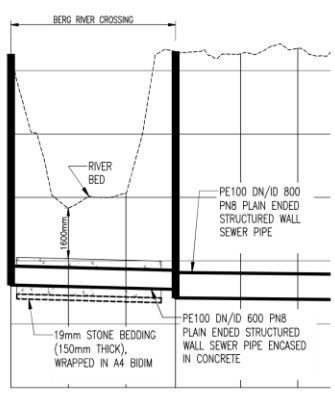
DESIGNED BY
 B. VALENTYN

CHECKED BY
 A. SCHEEPERS

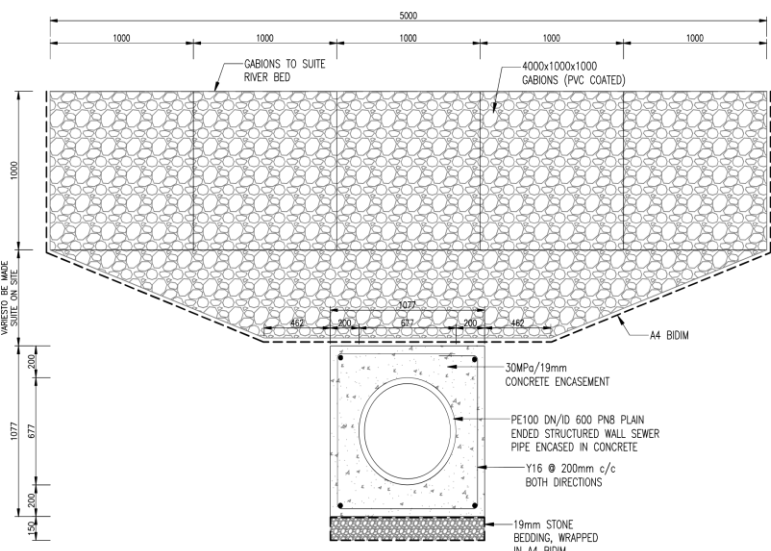
DATE
 2017

SCALE
 1:1000

- NOTE:**
- CONTRACTOR TO MAKE PROVISION FOR TEMPORARY DEALING WITH WATER DURING CONSTRUCTION IN HIS BATES.
 - CONTRACTOR TO SUBMIT DEALING WITH WATER METHODOLOGY TO ENGINEER FOR APPROVAL, BEFORE COMMENCEMENT OF ANY WORK.
 - CONSTRUCTION OF RIVER CROSSING TO BE PERFORMED IN THE DRY SUMMER MONTHS.
 - CONTRACTOR TO LIAISE WITH THE RELEVANT OFFICIALS OF THE BERG RIVER DAM WITH REGARDS TO OPENING OF SLUICE.
 - CONCRETE REINFORCEMENT TO HAVE 50mm COVER.
 - BACKFILL MATERIAL OF RIVER BED TO BE THE SAME OR SIMILAR MATERIAL REMOVED DURING EXCAVATION.
 - CARE TO BE TAKEN THAT BACKFILL DOES NOT DISPLACE THE MAIN FROM ITS LINE AND/OR ELEVATION.
 - PE100 DN/ID 600 PNB SEWER PIPE TO BE STRAPPED DOWN WHEN POURING CONCRETE, TO PREVENT LIFTING OF SEWER PIPE. CARE TO BE TAKEN TO ENSURE THAT SEWER PIPE HOLDS ITS VERTICAL AND HORIZONTAL ALIGNMENTS.



TYPICAL DETAIL OF RIVER CROSSING
 SCALE 1:100



RIVER CROSSING CONCRETE ENCASEMENT DETAIL
 SCALE 1:20

<p>Doing good while doing business</p>	<p>VERSION/AMENDMENTS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>AUTHORISED</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2017</td> <td>ISSUED FOR PERMIT</td> <td>B. VALENTYN</td> </tr> </tbody> </table>			NO.	DATE	DESCRIPTION	AUTHORISED	1	2017	ISSUED FOR PERMIT	B. VALENTYN	<p>PROJECT TITLE DRAKENSTEIN MUNICIPALITY SOUTHERN PAARL BULK GRAVITY OUTFALL AND SECONDARY SEWER MAINS</p> <p>DRAWING TITLE 600mmØ BULK RIVER CROSSING CONCRETE ENCASEMENT DETAIL</p>		<p>SCALE 1:1000</p>	<p>DESIGNED BY B. VALENTYN</p> <p>CHECKED BY A. SCHEEPERS</p>
	NO.	DATE	DESCRIPTION	AUTHORISED											
1	2017	ISSUED FOR PERMIT	B. VALENTYN												
<p>DATE 2017</p>	<p>PROJECT NO. 2178.00.ZA.06.A802</p>	<p>DATE 2017</p>													

ANNEXURE 3: REASONS FOR THE DECISION

In reaching its decision, the Competent Authority considered, *inter alia*, the following:

- a) The information contained in the Application Form dated 11 May 2022, the EMPr and MMP submitted together with final BAR on 9 September 2022.
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation and Alternatives (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- d) The comments received from I&APs and responses to these, included in the BAR received on 9 September 2022; and
- e) The balancing of negative and positive impacts and proposed mitigation measures.

All information presented to the Competent Authority was taken into account in the consideration of the application for Environmental Authorisation. A summary of the issues that were considered to be the most significant for the decision is set out below.

1. Public Participation

The public participation process included:

- identification of and engagement with I&APs;
- the placing of a newspaper advertisement in the 'Paarl Post' on 10 February 2022;
- fixing notice boards at the site where the listed activities are to be undertaken and public areas on 10 February 2022;
- giving written notice to the owners and occupiers of land adjacent to the site where the listed activities are to be undertaken, the municipality and ward councillor, and the various Organs of State having jurisdiction in respect of any aspect of the listed activities from 10 February 2022 to 13 May 2022,;
- circulating the pre-application draft BAR to I&APs from 11 February 2022; and
- circulating two in-process draft BARs to I&APs from 13 May 2022 and 29 July 2022, respectively.

The Department is satisfied that the Public Participation Process that was followed met the minimum legal requirements and the comments raised and responses thereto were included in the comments and response report.

Specific alternatives, management and mitigation measures have been considered in this Environmental Authorisation, and EMPr (to be amended in terms of Condition 8) to adequately address the concerns raised.

2. Alternatives

Preferred Layout and Design Alternative (Herewith authorised)

The proposed development entails a gravity fed primary bulk sewer pipeline from the Val de Vie Estate to the existing Drakenstein bulk sewerage infrastructure near the N1. The proposed bulk sewer pipeline will be approximately 3.5 km long and consist of an 800mm diameter pipe (3.45km long, including the 12m long Van Wyks River crossing) and a 600mm diameter gravity fed pipe (110m long, including the 50m long Berg River crossing).

The route of the primary sewer pipeline along with the specifications is described below:

- The route starts in the south with a 600 mm diameter pipe near the northwestern corner of the greater Val de Vie Estate.
- The 600 mm diameter pipe runs in a northern direction along the eastern banks of the Berg River.
- The Berg River crossing is located near the north-western corner of the Val de Vie Estate and the River Farm Estate.
- The Berg River crossing will be with a 600mm diameter gravity fed pipeline system that will be installed via trenching and will be approximately 50m long. The pipeline will be placed on concrete pedestals in the excavated area and will be encased in concrete before the area is backfilled with the excavated soil and compacted.
- On the western bank of the Berg River, an 800mm diameter pipeline will continue in a northerly direction from the river crossing to the existing municipal infrastructure located at the N1 highway, crossing the van Wyks River along the route.

Alternative 1

This is a layout alternative that entails routing the bulk sewerage pipeline along the eastern banks of the Berg River. This will allow for an easy river crossing of the Berg River via the existing N1 bridge. This option was not preferred since an additional river crossing will be required to accommodate developments and further secondary pipelines to the west, which would increase the potential impacts on the Berg River. This alignment would also have to be routed through the Boschenmeer Estate's Golf Club, requiring additional land acquisition negotiations, which is not favourable.

Alternative 2

This is a design alternative. It is proposed that the river crossing is constructed as a siphon system, as opposed to the preferred gravity system. The crossing will be via welded inverted siphon. In the siphon crossing, the capacity of the main 600mm diameter gravity pipeline is split into three smaller, separate, staggered pipeline legs that will operate under hydraulic pressure to siphon the sewerage to the other side of the river. The siphon system will however always have sewerage in the pipeline that will only be flushed away through the build-up of sewerage in the line. This poses an increased risk of blockages and potential spillages. The gravity system is a better environmental option as it will always 'self-drain' thereby ensuring that sewerage always gravitates away and prevents the potential accumulation of sewerage under the riverbed.

"No-Go" Alternative

The no-go alternative was considered. However, it was not preferred since not proceeding with the proposed project would result in a lack of adequate bulk sewer infrastructure to service the Paarl South area. It will curtail future development in the Southern City Corridor and prevent the municipality from meeting its service delivery demands for the municipal area.

3. Impact Assessment and Mitigation measures

3.1 Activity need and desirability

Paarl is experiencing significant growth in the Southern City Corridor. The lack of adequate bulk sewerage infrastructure currently inhibits development in this area. The proposed development is required to augment the area's existing sewerage infrastructure, to alleviate pressure off the existing sewerage infrastructure, and allow for future development in Southern Paarl. It will ensure that the Drakenstein Municipality can meet their service delivery demands and accommodate future development in the Southern Paarl City Corridor, as identified in the municipality's forward planning and as set out in the municipal Spatial Development Framework. The bulk sewerage infrastructure also forms part of the municipal long-term bulk sewerage master plan. The preferred route was informed by specialist input and is the best practicable environmental and engineering options.

3.2 Biophysical Impacts

Historically, the site contained Swartland Alluvium Fynbos vegetation, which is classified as endangered in the latest list of ecosystems that are threatened and in need of protection (dated 18 November 2022). The Berg River flows directly adjacent to the majority of the proposed bulk sewer pipeline route. The development footprint has been severely transformed by anthropogenic activities, with little intact natural vegetation remaining. The riparian area of the Berg River is also impacted by historic agricultural activities and the surrounding residential developments. Large levees have been created along portions of the western boundary of the Berg River riparian area. These levees were likely created to prevent the flooding of adjacent agricultural areas and have resulted in the alteration of the riverbanks and the natural flow patterns within the river. Disturbance within the catchment and riparian areas of the Berg River has resulted in the erosion and incision of the riverbanks, that has caused significant encroachment of alien and invasive plant species into the riparian area. Although the site is considered to be severely transformed, the watercourses are considered to be of high ecological importance. Due to this, CapeNature recommended that an Environmental Control Officer undertake weekly site visits during the construction phase to audit compliance with the EMPr. This requirement is included in the EMPr (to be amended in terms of Condition 8) and is specified in Condition 12 of this Environmental Authorisation. To limit potential floodline impacts, an underground pipeline will be installed, and sewer manholes will be raised above the 1:100 year floodline, or where not possible, lockable manhole covers will be used. In addition, a welded pipe will be used to eliminate pipe joints, which reduces the risk of sewerage spillage. The gravity design system that will be used for the river crossings will ensure that the sewerage gravitates away from the river and that it will not accumulate in this section of the pipeline, thereby eliminating the potential for blockages. A 40m buffer area will be included along the Berg River and a 15m buffer area along the Van Wyks River. Only essential activities are allowed within the buffer areas, such as the construction of the river crossings.

The EMPr contains the detailed mitigation measures as recommended in the specialist studies and, provided that all the mitigation measures are fully implemented and adhered to, the potential negative impacts will be reduced from a medium significance to a low significance, which is acceptable from a biophysical impact perspective.

A Water Use Licence Authorisation ("WULA") in terms of the National Water Act, 1998 (Act 38 of 1998) was issued in 2017 and the Department of Water and Sanitation confirmed that the WULA is still valid. An amendment to the WULA is however underway for the change from a siphon system (as approved in the existing WULA) to a gravity system.

Furthermore, a MMP has also been compiled to address routine maintenance activities taking place in the affected stretch of the watercourses. The maintenance of the structures authorised in this Environmental Authorisation forms part of this MMP. It must be noted that the accepted maintenance activities only relate to the activities described in the MMP. Should any new activities and associated infrastructure, not included in the MMP, require maintenance and if any of the applicable listed activities are triggered, an Environmental Authorisation must be obtained prior to the undertaking of such activities. It remains the responsibility of the proponent to determine if any other listed activities are triggered and to ensure that the necessary Environmental Authorisation is obtained.

The fact that the MMP is adopted by the Competent Authority does not absolve the applicant from its general "duty of care" set out in Section 28(1) of the NEMA, which states that "Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment." (Note: When interpreting their "duty of care" responsibility, cognisance must be taken of the principles of sustainability contained in Section 2 of NEMA)

Negative Impacts:

- The proposed development will have a negative impact on the watercourses which are considered to be of ecological importance. The impacts will however be mitigated to a satisfactory level with the implementation of the preferred alternative and adherence to the EMPr during the construction and operational phase.
- During the construction phase, traffic, noise, visual and dust impacts can be expected, which will only be temporary and is expected to be negligible with the implementation of the EMPr.

Positive impacts:

- The proposed development will improve service delivery in terms of bulk sewerage removal services for Paarl South.
- The proposed development will allow for future development, as included in the forward planning for the municipal area.
- Temporary employment opportunities will be created during the construction phase.

4. National Environmental Management Act Principles

The National Environmental Management Principles (set out in section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;

- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and
- the selection of the best practicable environmental option.

5. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMPr, the Competent Authority is satisfied that the proposed listed activities will not conflict with the general objectives of integrated environmental management stipulated 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 listed activities can be mitigated to acceptable levels.

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