



REFERENCE: 16/3/3/1/A8/74/3049/22
NEAS REFERENCE: WCP/EIA/0001153/2022
DATE OF ISSUE: 16 February 2023

The Municipal Manager
City of Cape Town
Mike Pienaar Boulevard and Voortrekker Road
BELLVILLE
7530

Attention: Mr. Sarel Beets

E-mail: Sarel.Beets@capetown.gov.za

Dear Sir

APPLICATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) (“NEMA”) AND THE ENVIRONMENTAL IMPACT ASSESSMENT (“EIA”) REGULATIONS, 2014 (AS AMENDED): PROPOSED INSTALLATION OF AN APPROXIMATELY 3.28KM LONG SEWER PIPELINE ADJACENT TO THE KUILS RIVER, CONNECTING TO THE EXISTING RIETVLEI SEWER PUMP STATION ON THE REMAINING EXTENT OF ERF NO. 524, SAREPTA, KUILS RIVER.

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

Yours faithfully

MR. ZAAHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

CC: (1) Mr. Guillaume Nel/Ms. Euronell Visagie(GNEC)
(2) Ms. Maurietta Stewart (City of Cape Town)

E-mail: guillaume@gnec.co.za / eg@gnec.co.za
E-mail: maurietta.stewart@capetown.gov.za

REFERENCE: 16/3/3/1/A8/74/3049/22
NEAS REFERENCE: WCP/EIA/0001153/2022
DATE OF ISSUE: 16 February 2023

ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) (“NEMA”) AND THE ENVIRONMENTAL IMPACT ASSESSMENT (“EIA”) REGULATIONS, 2014 (AS AMENDED): PROPOSED INSTALLATION OF AN APPROXIMATELY 3.28KM LONG SEWER PIPELINE ADJACENT TO THE KUILS RIVER, CONNECTING TO THE EXISTING RIETVLEI SEWER PUMP STATION ON THE REMAINING EXTENT OF ERF NO. 524, SAREPTA, KUILS RIVER.

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 NEMA and the EIA Regulations, 2014 (as amended), the competent authority herewith grants Environmental Authorisation to the applicant to undertake the listed activity specified in Section B below with respect to the preferred alternative as included in the Basic Assessment Report (“BAR”) dated October 2022.

The granting of this Environmental Authorisation (hereinafter referred to as the “Environmental Authorisation”) is subject to compliance with the conditions set out in Section E below.

A. DETAILS OF THE HOLDER OF THIS ENVIRONMENTAL AUTHORISATION

City of Cape Town
c/o Mr. Sarel Beets
Mike Pienaar Boulevard and Voortrekker Road
BELLVILLE
7530

E-mail: Sarel.Beets@capetown.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>Listing Notice 1 of the EIA Regulations, 2014 (as amended):</p> <p>Activity 19: <i>"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;</i></p> <p><i>but excluding where such infilling, depositing, dredging, excavation, removal or moving -</i></p> <ul style="list-style-type: none"> <i>(a) will occur behind a development setback;</i> <i>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;</i> <i>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</i> <i>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</i> <i>(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".</i> 	<p>The development proposal entails the removing or moving, dredging, excavation, infilling or depositing of material of more than 10m³ from the watercourse.</p>

The abovementioned list is hereinafter referred to as "the listed activity".

The holder is herein authorised to undertake the following related to the listed activity:

The proposed development entails the installation of an approximately 3.28km long sewer pipeline adjacent to the Kuils River, connecting to the existing Rietvlei sewer pump station on the Remaining extent of Erf No. 524, Sarepta, Kuils River.

The starting point of the proposed pipeline will be underneath the R300/M23 underpass close to the Stikland industrial area. The pipeline will continue in a south/southeasterly direction adjacent to the Kuils River for approximately 1.65km, before traversing the Kuils River via micro-tunneling at the R102 Bridge located west of the Engen filling station. Thereafter, the pipeline will continue on the western side of the Kuils River until it connects to the existing Rietvlei sewer pump station located in Sarepta.

The first 197m of the pipeline alignment will be by means of micro-tunneling to install the pipeline underneath the M23 underpass. The next approximate 1.376km of the sewer pipeline alignment will continue along the eastern side of the Kuils River by means of open trench excavation, adjacent to the River as well as an existing sewer pipeline. The width of the proposed open trenching will be approximately 1.84m. The remaining approximate 1.703km will be installed via micro-tunneling for the section that will traverse the Kuils River. The pipeline will be installed via open trenching for the majority of the first half of its length i.e., the northern portion, whilst a trenchless technique via micro-tunneling will be used for the sections of the proposed sewer pipeline that encroach onto and traverse the Kuils and Bottelary Rivers.

The proposed sewer pipeline will consist of various pipeline diameters along its conveyance route as follows:

- Stake value 0m to 197m (Ø630mm by means of micro-tunneling underneath the M23 underpass);
- Stake value 197m to 1573m (Ø750 by means of open trench excavation); and
- Stake value 1573m to 3276m (Ø900 by means of micro-tunneling underneath the Kuils River).

C. LOCATION AND SITE DESCRIPTION

The pipeline route will traverse various properties situated adjacent to the Kuils River.

The preferred route will traverse the following properties:

Erven 17751; 22164; 15447; 15059; 15096; 15026; 4598; 4692; 2484; RE/922; RE/940; RE/802; RE/804; 3173; RE/805; RE/855; 2305; 2310; 2321; 811; 2323; 2340; 10848; 10845; RE/980; 10843; 2373; 763; RE/525 and RE/524, Kuils River.

The starting point of the proposed pipeline will be under the M23/R300 underpass close to the Stikland Industrial area. For the first section of the sewer pipeline alignment, the pipeline will be located in a corridor between the Kuils River and residential suburbs before passing the Kuils River Hospital and the Engen filling station at the R102 Bridge. From here, the pipeline will traverse the formalised Kuils River via micro-tunneling. Multiple roads will be traversed as well as a railway line before connecting with the Rietvlei sewer pump station located in Sarepta.

The SG 21-digit codes are:

Erf Number	SG 21-digit code
17751	C06700040001775100000
22164	C06700040002216400000
15447	C06700130001544700000
15059	C06700130001505900000
15096	C06700130001509600000
15026	C06700130001502600000
4598	C06700130000459800000
4692	C06700130000469200000
2484	C06700130000248400000
RE/922	C06700130000092200000
RE/940	C06700130000094000000
RE/802	C06700130000080200000
RE/804	C06700130000080400000
3173	C06700130000317300000
RE/805	C06700130000080500000
RE/855	C06700130000085500000
2305	C06700130000230500000
2310	C06700130000231000000
2321	C06700130000232100000
811	C06700130000081100000
2323	C06700130000232300000
2340	C06700130000234000000
10848	C06700130001084800000

10845	C06700130001084500000
RE/980	C06700130000098000000
10843	C06700130001084300000
2373	C06700130000237300000
763	C06700130000076300000
RE/525	C06700130000052500000
RE/524	C06700130000052400000

Co-ordinates:

Starting point:

Latitude: 33° 54' 25.30" S

Longitude: 18° 40' 17.14" E

Middle point:

Latitude: 33° 55' 14.30" S

Longitude: 18° 40' 32.54" E

End point (Rietvlei pump station):

Latitude: 33° 56' 01.31" S

Longitude: 18° 40' 19.08" E

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

hereinafter referred to as "the route".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

Guillaume Nel Environmental Consultants ("GNEC")

c/o Mr. Guillaume Nel / Ms. Euronell Visagie

P.O. Box 2632

PAARL

7620

Tel.: (021) 870 1874

Fax: (021) 870 1873

E-mail: guillaume@gnec.co.za / eg@gnec.co.za

E. CONDITIONS OF AUTHORISATION

Scope of authorisation

1. The holder is authorised to undertake the listed activity specified in Section B above in accordance with and restricted to the preferred alternative, described in the BAR dated October 2022 on the route as described in Section C above.
2. Authorisation of the activity is subject to compliance with the conditions set out in this Environmental Authorisation. The holder must ensure 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.

3. The holder must commence with, and conclude, the listed activity within the stipulated validity period which this Environmental Authorisation is granted for, 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 (**5**) years, from the date of issue, during which period the holder must commence with the authorised listed activity; and
 - (b) A period of five (**5**) years, from the date the holder commenced with an authorised listed activity, during which period the authorised listed activity must be concluded.
4. The activity that has been authorised may only be carried out at the route described in Section C above in terms of the approved Environmental Management Programme ("EMPr").
 5. Any changes to, or deviations from the scope of the description set out in Section B and Condition 2 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 such information 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.

Notification of authorisation and right to appeal

6. The holder of the authorisation 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;
 - 6.1.3 the date of the decision; and
 - 6.1.4 the date of issue of the decision;
 - 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 Appeal Regulations, 2014 (as amended);
 - 6.3 draw the attention of all registered I&APs to the manner in which they may access the decision; and
 - 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;
 - 6.4.6 the 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 National Appeal Regulations, 2014 (as amended).

Commencement

7. The listed activity, including site preparation, must not commence within 20 (twenty) calendar days from the date the applicant notified the registered I&APs of this decision.
8. In the event that an appeal is lodged with the Appeal Administrator, the effect of this Environmental Authorisation is suspended until such time as the appeal is decided. In the instance where an appeal is lodged the holder may not commence with the activity, including site preparation, until such time as the appeal has been finalised and the holder is authorised to do so.

Written notice to the competent authority

9. A minimum of 7 (seven) calendar days' notice, in writing, must be given to the competent authority before commencement of construction activities. Commencement for the purpose of this condition includes site preparation.
 - 9.1 The notice must make clear reference to the site/route details and EIA Reference number given above.
 - 9.2 The notice must also include proof of compliance with the following conditions described herein:
Conditions: 6, 7 and 14.

Management of activity

10. The draft EMPr dated October 2022 (as compiled by Guillaume Nel Environmental Consultants) and submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.
11. An application for amendment to the EMPr must be submitted to the competent authority in terms of Chapter 5 of the EIA Regulations, 2014 (as amended) if any amendments are to be made to the outcomes of the EMPr, and these may only be implemented once the amended EMPr has been authorised by the competent authority.
12. The EMPr must be included in all contract documentation for all phases of implementation.
13. A copy of the Environmental Authorisation and the EMPr must be kept at the site office. Access to the site/route referred to in Section C above must be granted and, the Environmental Authorisation and EMPr 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. The Environmental Authorisation and EMPr must also be made available for inspection by any employee or agent of the applicant who works or undertakes work at the site/route.

Monitoring

14. The holder must appoint a suitably experienced Environment Control Officer ("ECO"), for the duration of the construction phase to ensure compliance with the provisions of the EMPr and the conditions contained in this Environmental Authorisation.

The ECO must–

- 14.1 be appointed prior to commencement of any construction activities commencing;
- 14.2 ensure compliance with the EMPr and the conditions contained herein;
- 14.3 keep record of all activities on site; problems identified; transgressions noted, and a task schedule of tasks undertaken by the ECO;
- 14.4 remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed;
- 14.5 provide the competent authority with copies of the ECO reports within 30 days of the project being finalised; and
- 14.6 conduct two weekly site inspections during the construction phase.

Environmental audit reports

15. The holder must, for the period during which the Environmental Authorisation and EMPr remain valid -
 - 15.1 ensure that the compliance with the conditions of the Environmental Authorisation and the EMPr is audited;
 - 15.2 submit an environmental audit report four (4) months after commencement of the construction phase to the relevant competent authority;
 - 15.3 submit an environmental audit report six (6) months after completion of the construction phase to the relevant competent authority; and
 - 15.4 submit an environmental audit report every five (5) years while the Environmental Authorisation remains valid.
16. The environmental audit reports must be prepared by an independent person with expertise and must address the objectives and contain all the information set out in Appendix 7 of the EIA Regulations, 2014 (as amended).

In addition to the above, the environmental audit report, must -

- 16.1 provide verifiable findings, in a structured and systematic manner, on–
 - (a) the level of compliance with the conditions of the Environmental Authorisation and the EMPr and whether this is sufficient or not; and
 - (b) the extent to which the avoidance, management and mitigation measures provided for in the EMPr achieve the objectives and outcomes of the EMPr and highlight whether this is sufficient or not;
 - 16.2 identify and assess any new impacts and risks as a result of undertaking the activity;
 - 16.3 evaluate the effectiveness of the EMPr;
 - 16.4 identify shortcomings in the EMPr;
 - 16.5 identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr;
 - 16.6 indicate the date on which the construction work was commenced with and completed or in the case where the development is incomplete, the progress of the development and rehabilitation;
 - 16.7 include a photographic record of the site applicable to the audit; and
 - 16.8 be informed by the ECO reports.
17. The holder must, within 7 days of the submission of the environmental audit report to the competent authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and, where the holder has such a facility, be placed on a publicly accessible website.

Specific conditions

18. Surface or ground water must not be polluted due to any actions on the site. The applicable requirements with respect to relevant legislation pertaining to water must be met.
19. An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a waste disposal facility licensed in terms of the applicable legislation.
20. Should any heritage remains be exposed during excavations or any actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape (in accordance with the applicable legislation). 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 archaeological remains (including fossil bones and fossil shells); 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; rock art and rock engravings; shipwrecks; and graves or unmarked human burials.

A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains in accordance with the requirements of the relevant authority.

21. The holder of the Environmental Authorisation must, at all times, ensure that the activities comply with the Noise Regulations in terms of the relevant legislation.

General matters

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activity.
2. If the holder does not commence with the listed activity within the period referred to in Condition 3, this Environmental Authorisation shall lapse for the activity, 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.
3. 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.

4. The manner and frequency for updating the EMPr is as follows:
Amendments to the EMPr, other than those mentioned above, 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.
5. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.

F. 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 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 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 Organ 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 Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
4. The appeal and the responding statement must be submitted to the address listed below:

By post: Attention: Mr. Marius Venter
Western Cape Ministry of Local Government, Environmental
Affairs and Development Planning
Private Bag X9186
CAPE TOWN
8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr. Marius Venter (Tel: 021 483 3721)
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

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

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>.

G. 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)
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

DATE OF DECISION: 16 FEBRUARY 2023

CC: (1) Mr. Guillaume Nel/Ms. Euonell Visagie(GNEC)
(2) Ms. Maurietta Stewart (City of Cape Town)

E-mail: guillaume@gnec.co.za / eg@gnec.co.za
E-mail: maurietta.stewart@capetown.gov.za

FOR OFFICIAL USE ONLY:

EIA REFERENCE NUMBER: 16/3/3/1/A8/74/3049/22
NEAS EIA REFERENCE NUMBER: WCP/EIA/0001153/2022

ANNEXURE 1: LOCALITY PLAN



First section of the proposed sewer pipeline:



Second section of pipeline route:



ANNEXURE 2: SITE PLAN



ANNEXURE 3: REASONS FOR THE DECISION

In reaching its decision, the competent authority, *inter alia*, considered the following:

- a) The information contained in the application form received by the competent authority via electronic mail correspondence 26 August 2022; the BAR dated October 2022, as received by the competent authority via electronic mail correspondence on 21 October 2022; and the EMPr submitted together with the BAR.
- b) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the NEMA.
- c) The comments received from I&APs and the responses provided thereon, as included in the BAR dated October 2022.
- d) No site visits were conducted. The competent authority had sufficient information before it to make an informed decision without conducting a site visit.

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 which, according to the competent authority, were the most significant reasons for the decision is set out below.

1. Public Participation

The Public Participation Process comprised of the following:

- An advertisement was placed in the "Tygerburger" newspaper on 15 June 2022;
- Background Information Documents were hand-delivered to landowners on 15 June 2022;
- Four sets of notices were placed along the starting, middle and end points of the sewer pipeline route on 20 June 2022;
- Organs of state, State Departments, the ward councillor and I&APs were notified via e-mail on 20 June 2022;
- The pre-application BAR was placed on the website of Guillaume Nel Environmental Consultants for the duration of the commenting period;
- The pre-application BAR was placed at the Kuils River Public Library on 15 June 2022;
- The pre-application BAR was made available for comment from 20 June 2022 until 20 July 2022;
- E-mails were sent on 26 August 2022 to announce the availability of the draft BAR; and
- The draft BAR was made available from 26 August 2022 until 30 September 2022.

Authorities consulted

The authorities consulted included the following:

- City of Cape Town;
- Department of Environmental Affairs and Development Planning ("DEA&DP"): Waste Management;
- DEA&DP: Pollution & Chemicals Management;
- Western Cape Department of Agriculture;
- CapeNature;
- Western Cape Department of Transport and Public Works;
- Department of Water and Sanitation; and
- Heritage Western Cape.

The competent authority is satisfied that the Public Participation Process that was followed met the minimum legal requirements. All the comments and responses that were raised were responded to and included in the BAR.

2. Alternatives

The following route alternatives were investigated:

Alternative 1:

The starting point of the alternative alignment will be at the same location as the preferred pipeline route, *i.e.*, underneath the R300/M23 underpass close to the Stikland industrial area and will continue for 197m via micro-tunneling to install the pipeline underneath the M23 underpass. The pipeline will continue in a south/southeasterly direction adjacent to the Kuils River for approximately 1.376km by means of open trenching.

After approximately 1.65km, instead of traversing the Kuils River at the R102 Bridge located next to the Engen filling station, the pipeline will continue on the eastern side of the river and adjacent to the existing sewer pipeline alignment next to the formalised Kuils River section, for approximately 2km. The alternative pipeline route will traverse the Kuils River and Bottelary River once via micro-tunneling.

The alternative route is discarded since the pipeline will be slightly bigger in diameter, therefore a network of secondary pipelines will have to tie in with the pipeline to reduce the pressure and overload on the current sewerage system network and sewerage pump stations in Kuils River.

Preferred alternative – herewith authorised:

The preferred alternative entails the installation of an approximately 3.28km long sewer pipeline adjacent to the Kuils River, connecting to the existing Rietvlei sewer pump station on the Remaining extent of Erf No. 524, Sarepta, Kuils River.

The starting point of the proposed pipeline will be underneath the R300/M23 underpass close to the Stikland industrial area. The pipeline will continue in a south/southeasterly direction adjacent to the Kuils River for approximately 1.65km, before traversing the Kuils River via micro-tunneling at the R102 Bridge located west of the Engen filling station. Thereafter, the pipeline will continue on the western side of the Kuils River until it connects to the existing Rietvlei sewer pump station located in Sarepta.

The first 197m of the pipeline alignment will be by means of micro-tunneling to install the pipeline underneath the M23 underpass. The next approximate 1.376km of the sewer pipeline alignment will continue along the eastern side of the Kuils River by means of open trench excavation, adjacent to the River as well as an existing sewer pipeline. The width of the proposed open trenching will be approximately 1.84m. The remaining approximate 1.703km will be installed via micro-tunneling for the section that will traverse the Kuils River. The pipeline will be installed via open trenching for the majority of the first half of its length *i.e.*, the northern portion, whilst a trenchless technique via micro-tunneling will be used for the sections of the proposed sewer pipeline that encroach onto and traverse the Kuils and Bottelary Rivers.

The proposed sewer pipeline will consist of various pipeline diameters along its conveyance route as follows:

- Stake value 0m to 197m (Ø630mm by means of micro-tunneling underneath the M23 underpass);
- Stake value 197m to 1573m (Ø750 by means of open trench excavation); and

- Stake value 1573m to 3276m (Ø900 by means of micro-tunneling underneath the Kuils River).

The installation of the proposed sewer pipeline via a trenchless technique (i.e., construction of the sewer pipeline via micro-tunneling) within the delineated extent of the rivers is the preferred option, as it will have the smallest physical footprint.

“No-Go” Alternative:

This alternative entails maintaining the *status quo* and as such, the proposed sewer pipeline will not be installed. This alternative was not deemed as preferred, as it will not reduce the overload on the current sewer system, which has been causing numerous sewage leaks into the river system. The benefits to the holder and creation of jobs would not be realised. The “no-go” alternative is therefore not warranted.

3. Impacts, assessment and mitigation measures

3.1 Activity Need and Desirability

The pipeline route will cross various properties adjacent to the Kuils River. The zoning of the affected properties is Public Open space, Special Open Space, Mixed-Use, Transport (Public Roads and Public Parking), Limited Use, Single Residential (Conventional Housing), General Business and Agricultural. The City of Cape Town will register a servitude where there currently is none, to accommodate the proposed pipeline.

The Kuils River sewer outfall from the Bottelary/R300 interchange to the Rietvlei Pump Station functions beyond its design capacity and causes the pipeline to overload during peak and wet weather events. The proposed sewer pipeline will result in a decrease in the overload of sewerage network and thereby provide additional capacity.

The Kuils River area is currently experiencing a sewerage infrastructure capacity shortage, resulting in raw sewage leaking into the river at some points along its alignment. The proposed sewer pipeline will alleviate the capacity shortage and reduce the leakage of raw sewage. As such, the proposed pipeline will improve living conditions by providing water and sanitation services and reduce potential sewage pollution in the river system. Furthermore, an increase in civil infrastructure/sewer pipelines will increase the services capacity in the Kuils River area, thereby alleviating the overload on the current sewerage network.

3.2 Botanical impacts

A Botanical Compliance Statement dated May 2022, was compiled by Capensis Ecological Consulting (Pty) Ltd., to assess the potential botanical impacts associated with the proposed development.

According to the Compliance Statement, the entire route is dominated by alien grass cover, with almost no shrub cover present apart from some planted vegetation. There are no patches of vegetation representative of natural habitat along the route. The vegetation consists mostly of kweek grass and a small number of opportunistic indigenous species. Annual weeds are also present across much of the route.

The number of indigenous plant species is very low and the species present is very patchy. The ecological functioning has been highly altered through habitat

fragmentation and surrounding urban development, surface soil disturbance and exotic species.

No significant impacts on biophysical elements are anticipated as a result of the development, as the route is completely transformed.

3.3 Freshwater impacts:

A Freshwater Impact Assessment Report dated May 2022, was compiled by Freshwater Ecologist Network Consulting (Pty) Ltd., to assess the potential freshwater impacts associated with the proposed development.

The Kuils and Bottelary Rivers will be traversed by the proposed sewer pipeline. Due to the construction of the surrounding road infrastructure and industrial properties, the vegetation structure and composition of the Kuils and Bottelary Rivers are transformed, therefore the extent of natural riparian vegetation for these watercourses is limited. The Kuils River hosts a mix of facultative wetland vegetation species (including *Typha capensis*, *Phragmites australis*, *Cyperus textilis*, *Persicaria* sp.), but also ruderal species such as *Cynodon dactylon* and *Pennisetum clandestinum*, and woody alien invasive plants such as *Acacia saligna*, *Salix babylonica* and *Populus* sp. The vegetation composition of the Bottelary River consists predominantly of graminoid and herbaceous alien invasive plant species including *Pennisetum clandestinum* and *Rumex* sp.

Impacts to the instream habitat integrity of the two rivers include channel modification due to channel straightening, riparian vegetation removal, bed and bank modification. The reaches of these rivers where the proposed sewer pipeline will traverse, are canalised and confined to a concrete channel. The instream integrity of these rivers is further modified by raw sewage leaks and storm water runoff from urban areas. The existing various service pipeline crossings, road crossings, and railway line contribute to the overall disturbance of these river systems.

The majority of the proposed sewer pipeline will be located directly adjacent to and on top of the embankments of the Kuils River. However, there are sections where the proposed sewer pipeline will encroach into the delineated extent of the Kuils River, particularly along the narrow eastern embankments associated with the upper reach of the Kuils River, north of Pioneer Street and adjacent to the Soneike residential area. The river will be crossed once at the central reach of the Kuils River, upgradient of the R102 road crossing.

The construction and operation of the proposed sewer pipeline, including open trenching outside the delineated extent of the watercourses and horizontal directional drilling underneath the watercourses, pose a low negative risk to the overall integrity of the Kuils and Bottelary Rivers, post the implementation of the recommended mitigation measures. The mitigation measures and recommendations of the specialist have been included in the EMPr.

3.4 Heritage impacts:

Heritage Western Cape indicated in a correspondence dated 6 May 2022 (in response to the Notification to Develop) that the proposed development will not impact on heritage resources and no further action in terms of Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) is required.

3.5 Dust, traffic and noise impacts

Potential dust, traffic and noise impacts are anticipated during construction. However, no significant potential dust, traffic and noise impacts are anticipated as these impacts will be mitigated by the implementation of the mitigation measures included in the EMPr.

The development will result in both negative and positive impacts.

Negative Impacts:

- Potential disturbance of the watercourse and embankments;
- Potential pollution of the watercourse; and
- Potential noise, traffic and dust impacts during construction.

Positive impacts:

- Employment opportunities will be created during the construction phase of the development;
- The removal of alien invasive vegetation along the Kuils River will improve the ecological functioning of the river system;
- Increase in sewerage capacity in the Kuils River area; and
- Reduced risks of sewage system overloads in the Kuils River area.

National Environmental Management Act Principles

The National Environmental Management Act 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.

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 activity will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the NEMA and that any potentially detrimental environmental impacts resulting from the listed activity can be mitigated to acceptable levels.

You are reminded of your general duty of care towards the environment in terms of Section 28(1) of the NEMA which states: "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."

-----END-----