



forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA ·0001· Environment House ·473 Steve Biko Road, Arcadia· PRETORIA

DFFE Reference: 14/12/16/3/3/1/2777

Enquiries: Coenrad Agenbach

Telephone: (012) 399 9403 **E-mail:** CAgenbach@dfffe.gov.za

Mr Taufeeq Dhansay
Council for Geoscience
Private Bag X112
PRETORIA
0001

Telephone Number: (012) 841 1138
Cell Number: (067) 426 1467
Email Address: tdhansay@geoscience.org.za

PER E-MAIL

Dear Mr Dhansay

ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED: FOR THE PILOT CARBON DIOXIDE STORAGE PROJECT NEAR LEANDRA WITHIN THE GOVAN MBEKI LOCAL MUNICIPALITY IN THE MPUMALANGA PROVINCE

With reference to the above application, please be advised that the Department has decided to grant authorisation. The Environmental Authorisation (EA) and reasons for the decision are attached herewith.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014, as amended (the EIA Regulations), you are instructed to notify all registered interested and affected parties, in writing and within fourteen (14) days of the date of the decision, of the Department's decision as well as the provisions regarding the submission of appeals that are contained in the EIA Regulations.

In terms of the Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000), you are entitled to the right to fair, lawful and reasonable administrative action; and to written reasons for administrative action that affects you negatively. Further your attention is drawn to the provisions of the Protection of Personal Information Act, 2013 (Act No. 4 of 2013) which stipulate that the Department should conduct itself in a responsible manner when collecting, processing, storing and sharing an individual or another entity's personal information by holding the Department accountable should the Department abuse or compromise your personal information in any way.

Your attention is drawn to Chapter 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303 dated 08 December 2014 (National Appeal Regulations, 2014), which prescribes the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within twenty (20) days from the date that the notification of the decision

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was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

The Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appealsdirector@dfef.gov.za

By hand: Environment House
473 Steve Biko
Arcadia
Pretoria
0083; or

By post: Private Bag X447
Pretoria
0001

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.dffe.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appealsdirector@dfef.gov.za

Yours faithfully



Mr Vusi Skosana

**Acting Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries and the Environment**

Date: *27 September 2023*

cc:	Mr Donavan Henning	Nemai Consulting (Pty) Ltd	E-mail: donavanh@nemai.co.za
	Sindisiwe Mbuyane	Mpumalanga DARDLEA	E-mail: Mbuyanesb@mpg.gov.za
	Mosa Mabuza	Govan Mbeki Local Municipality	E-mail: mm.office@govanmbeki.gov.za



forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 25 of the NEMA Environmental Impact Assessment Regulations, 2014, as amended.

THE PILOT CARBON DIOXIDE STORAGE PROJECT EAST OF THE TOWN OF LEANDRA WITHIN THE GOVAN MBEKI LOCAL MUNICIPALITY IN THE MPUMALANGA PROVINCE

Gert Sibande District Municipality

Authorisation register number:	<i>14/12/16/3/3/1/2777</i>
Last amended:	<i>First issue</i>
Holder of authorisation:	<i>Council for GeoScience</i>
Location of activity:	<i>Portion 2 of the Farm Goedehoop No. 308, Govan Mbeki Local Municipality, Gert Sibande District Municipality, Mpumalanga Province.</i>

This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this Environmental Authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this Environmental Authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, Act No. 107 of 1998, as amended and the EIA Regulations, 2014, as amended.

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

Activities authorised

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

COUNCIL FOR GEOSCIENCE

with the following contact details –

Mr Taufeeq Dhansay
Council for Geoscience
Private Bag X112
PRETORIA
0001

Telephone Number: (012) 841 1138
Cell Number: (067) 426 1467
Email Address: tdhansay@geoscience.org.za

to undertake the following activities (hereafter referred to as “the activity”) indicated in Listing Notice 1 of the NEMA EIA Regulations, 2014 as amended:

Activity number	Activity description
<p><u>Listing Notice 1, Item 14:</u> <i>“The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.”</i></p>	<p>To support the operation of the CO₂ injection activity. The CO₂ on-site storage facility is estimated at a combined capacity of 200 tons or roughly 220 cubic metres (the estimation is based on the physical properties of liquid CO₂ at -34.6 °C and a density of 1101kg/m³).</p>
<p><u>Listing Notice 1, Item 27:</u> <i>“The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for –</i> <i>(i) the undertaking of a linear activity; or</i> <i>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.”</i></p>	<p>This activity is triggered by the site establishment in the implementation area (of around 10 hectares).</p>
<p><u>Listing Notice 1, Item 31:</u> <i>“The closure of existing facilities, structures or infrastructure for –</i> <i>(i) any development and related operation activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 of 2014;</i> <i>(ii) any expansion and related operation activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 of 2014;</i> <i>(iv) any phased activity or activities for development and related operation activity or expansion or related operation activities listed in this Notice or Listing Notice 3 of 2014; or</i></p>	<p>This activity is triggered by the decommissioning of the CO₂ on-site storage facility at the end of the injection phase.</p>

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Activity number	Activity description
<p>(v) any activity regardless the time the activity was commenced with, where such activity:</p> <p>(a) is similarly listed to an activity in (i) or (ii) above; and</p> <p>(b) is still in operation or development is in progress; excluding where –</p> <p>(bb) the closure is covered by part 8 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) as decommissioning, in which case the National Environmental Management: Waste Act, 2008 applies; or (cc) such closure forms part of a mining application, in which case the requirements of the Financial Provisioning Regulations apply.”</p>	

as described in the final Basic Assessment Report (BAR) dated August 2023 at:

SG Code and Farm Names

Property name, number and portion for the Carbon Sink Pilot Site	SG Code
Portion 2 of the Farm Goedehoop 308	TOIR00000000030800002

Coordinates:

Corner points	Latitude (S)	Longitude (E)
Property		
A	-26.366304°	28.933773°
B	-26.368118°	28.943966°
C	-26.370033°	28.943483°
D	-26.366608°	28.933906°
Project Implementation area		
	-26.366959°	28.937543°
	-26.368118°	28.943966°
	-26.370033°	28.943483°
	-26.367824°	28.937545°

Locations of the CO ₂ storage tanks		
North Tank	26°22'4.874"S	28°56'25.42"E
South Tank	26°22'6.318"S.	28°56'25.42"E
CO ₂ : Injection pipeline		
Start point: North Tank	26°22'4.874"S	28°56'25.42"E
Start point: South Tank	26°22'6.318"S.	28°56'25.42"E
End	26°22'05.62"S	28°56'27.17"E.

- for the Pilot Carbon Dioxide Storage Project on Portion 12 of the Farm Goedehoop 308 east of the town of Leandra within the Govan Mbeki Local Municipality in the Mpumalanga Province, here after known as 'the property'.

Key phases and activities associated with the development:

1. Site Establishment:
 - a. Levelling of ground for access;
 - b. Fencing of site perimeters (throughout the implementation area);
 - c. Access roads for drilling rigs and CO₂ tankers and parking area;
 - d. Installation of power - transformers/generators etc., which will operate on a regular basis during the Project;
 - e. Construction of temporary potable water and feed water storage facilities (water storage tank) (for the estimated duration of the Project of 2.5 years);
 - f. Construction of shelter for security personnel; and
 - g. Installation of site offices, ablution facilities and support infrastructure for equipment, CGS personnel and contractors.

2. Drilling:
 - a. Drilling of slim holes for geological characterization;
 - b. Hole - The estimated total depth for the wells is approximately 1,800m;
 - Surface Hole – Approximately 125mm diameter;
 - Intermediate Hole – Approximately 125mm diameter; and
 - Production Hole – Approximately 96mm diameter.
 - c. Core acquisition, handling and transport; and,

d. Well completion - cap the well with a swage and valve or other apparatus approved by CGS.

3. Construction of Operation/Injection Area:

- a. Pad preparation earthworks for a large diameter well drilling rig for injection and monitoring wells;
- b. Sump for drill rig and system to treat and dispose of drilling fluids and cuttings;
- c. Concrete pads for two (2) CO₂ Cryogenic Storage Tanks (with a capacity of 100 tons each), compressor/s, heaters;
- d. Injection wells, monitoring wells, well head and equipment, pipelines from storage tanks to injection equipment and monitoring equipment, CO₂ pump skid; and
- e. Storage area for diesel, oils, spare parts, drilling rods, etc.

4. Operation – Injection of CO₂ at the Designated Site:

The operational activity, carried out according to the site plan. This activity involves the process of CO₂ Capture at source, transport via the road and injection into the designated site. Once the CO₂ reaches the injection site, it is carefully stored in Cryogenic Storage Tanks, with a maximum capacity of 100 tons each, and conveyed via pipeline to the injection well. The following injection scenarios can be distinguished:

- a. 40 to 100 tons per day - considering 250 days a year of injection, for two years, to reach the proposed total injection (10,000 to 50,000); and
- b. 15 to 70 tons per day - considering 365 days a year, for two years, to reach the proposed total injection (10,000 to 50,000).

5. Decommissioning:

The borehole will be securely capped with a concrete sanitation block and a lockable metal cap.

The key components of the proposed development are as follows:

- Well/Hole drill site;
- CO₂ Cryogenic Storage Tanks Height;
- CO₂ Injection Pipeline Extension;
- Parking Area;
- Power Transformers/Generators;
- Shelter for security personnel;
- Ablution Facilities;
- Site Offices;

- Support Infrastructure;
- Storage area for diesel, oils, spare parts, drilling rods, etc.;
- Fencing of site perimeters (throughout the implementation area);
- Access roads for drilling rigs and CO₂ tankers and parking area;
- Construction of temporary potable water and feed water storage facilities (water storage tank) (for the estimated duration of the Project of 2.5 years).

Technical Detail Table for the development:

Component	Description / Dimensions
Well/Hole drill site	The estimated total depth for the wells is approximately 1,800m; <ul style="list-style-type: none"> ○ Surface Hole – Approximately 125mm diameter; ○ Intermediate Hole – Approximately 125mm diameter; and ○ Production Hole – Approximately 96mm diameter
CO ₂ Cryogenic Storage Tanks	Height: 8m, Diameter: 6 m (Volume: 226m ³)
CO ₂ Injection Pipeline Extension:	Around 50m, Diameter: 125mm
Parking Area	40m x 80m (Area: 3,200m ²)
Power Transformers/Generators	10m x 5m (Area: 50m ²)
Shelter for security personnel	6m x 6m (Area: 36m ²), Height: 2.5m
Site Offices	20m x 5m (Area: 100 m ²), Height: 2.5m
Ablution Facilities	10m x 5m (Area: 50m ²), Height: 2.5m
Support Infrastructure	20m x 5m (Area: 100m ²), Height: 2.5m
Water Storage	10m x 5m (Area: 50m ²)

Conditions of this Environmental Authorisation

Scope of authorisation

1. The Pilot Carbon Dioxide Storage Project on Portion 12 of the Farm Goedehoop 308 east of the town of Leandra within the Govan Mbeki Local Municipality in the Mpumalanga Province, is approved as per the geographic coordinates cited in the table above.
2. Authorisation of the activity is subject to the conditions contained in this Environmental Authorisation, which form part of the Environmental Authorisation and are binding on the holder of the authorisation.

3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this Environmental Authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised must only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this Environmental Authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further Environmental Authorisation in terms of the regulations.
6. The holder of an Environmental Authorisation must apply for an amendment of the Environmental Authorisation with the Competent Authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.
7. This activity must commence within a period of ten (10) years from the date of issue of this Environmental Authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for Environmental Authorisation must be made in order for the activity to be undertaken.
8. Construction must be completed within five (05) years of the commencement of the activity on site.
9. Commencement with one activity listed in terms of this Environmental Authorisation constitutes commencement of all authorised activities.

Notification of authorisation and right to appeal

10. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this Environmental Authorisation, of the decision to authorise the activity.
11. The notification referred to must –
 - 11.1. specify the date on which the authorisation was issued.
 - 11.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014.
 - 11.3. advise the interested and affected party that a copy of the authorisation will be furnished on request;
and
 - 11.4. Give the reasons of the Competent Authority for the decision.

Commencement of the activity

12. The authorised activity must not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014, and no appeal has been lodged against the decision. In terms of Section 43(7), an appeal under Section 43 of the National Environmental Management Act, Act No. 107 of 1998, as amended will suspend the Environmental Authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

Management of the activity

13. The layout plan attached as Figure 2: Site Plan of the EMPr and Closure Plan submitted as Appendix F of the final BAR dated August 2023 is approved and must be adhered to.
14. The Environmental Management Programme (EMPr) and Closure Plan submitted as Appendix F as part of the final BAR dated August 2023 is approved and must be implemented and adhered to.
15. The EMPr must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
16. Changes to the approved EMPr must be submitted in accordance with the EIA Regulations applicable at the time.
17. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the basic assessment be discovered.

Frequency and process of updating the EMPr

18. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 25 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the Environmental Authorisation or EMPr.
19. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
20. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of the EIA Regulations, 2014 as amended. The updated EMPr must

have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.

21. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of the EIA Regulations, 2014 as amended. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
22. The holder of the authorisation must apply for an amendment of an EMPr, if such amendment is required before an audit is required. The amendment process is prescribed in Regulation 37 of the EIA Regulations, 2014, as amended. The holder of the authorisation must request comments on the proposed amendments to the impact management outcomes of the EMPr or amendments to the closure objectives of the closure plan from potentially interested and affected parties, including the competent authority, by using any of the methods provided for in the Act for a period of at least 30 days.

Monitoring

23. The holder of the authorisation must appoint an experienced Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this Environmental Authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.
 - 23.1. The ECO must be appointed before commencement of any authorised activities.
 - 23.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
 - 23.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
 - 23.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

Recording and reporting to the Department

24. All documentation e.g., audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this Environmental Authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department.

25. The holder of the Environmental Authorisation must, for the period during which the Environmental Authorisation and EMPr remain valid, ensure that project compliance with the conditions of the Environmental Authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.
26. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, considering the processes for such auditing as prescribed in Regulation 34 of the NEMA EIA Regulations, 2014 as amended.
27. The holder of the authorisation must, in addition, submit environmental audit reports to the Department within 30 days of completion of the construction phase (i.e., within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
28. The environmental audit reports must be compiled in accordance with Appendix 7 of the NEMA EIA Regulations, 2014 as amended and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the Environmental Authorisation conditions as well as the requirements of the approved EMPr.
29. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Notification to authorities

30. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

Operation of the activity

31. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

Site closure and decommissioning

32. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and Competent Authority at that time.

Specific conditions

33. The two Historical Railway Culverts at CO-03 and CO-05 must be avoided as a "no-go" area with a 30m buffer to prevent any indirect impact and ensure that during site clearance and construction activities these structures are not damaged.
34. The potential grave at CO-02, that must be located within or on the boundary of the proposed CO₂ Injection site. Therefore, any site clearance activities for the proposed Injection site within 30m of the approximate location, must be monitored by a heritage specialist/archaeologist.
35. The materials demarcating the 30m buffer must be highly visible and made of durable material to ensure that they remain in place during the construction and operation activities.
36. A permit must be obtained from the relevant Department for the removal or destruction of indigenous, protected, or endangered plant or animal species (if any) and a copy of such permit/s must be submitted to the Department for record keeping.
37. No exotic plants must be used for rehabilitation purposes. Only indigenous plants of the area must be utilised.
38. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.
39. If any evidence of archaeological sites or remains (e.g., remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, marine shell, and charcoal/ash concentrations), unmarked human burials, fossils or other categories of heritage resources are uncovered during construction, work in the immediate area must be halted, and SAHRA must be alerted immediately, and a professional archaeologist or palaeontologist (depending on the nature of the finds) must be contacted as soon as possible to inspect the findings.
40. Construction must include design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of stormwater run-off.
41. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, reuse, and disposal where appropriate. Any solid waste must 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).

General

42. The recommendations of the EAP in the final BAR dated August 2023 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.
43. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPr must be made available for inspection and copying-
- 43.1. at the site of the authorised activity,
 - 43.2. to anyone on request; and
 - 43.3. Where the holder of the Environmental Authorisation has a website, on such publicly accessible website.
44. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of Environmental Authorisation: 27 September 2023



Mr Vusi Skosana

Acting Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries & the Environment

Annexure 1: Reasons for Decision

1. Information considered in making the decision

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

- a) The listed activities as applied for in the application form received by the Department on 29 May 2023.
- b) The information contained in the final BAR dated August 2023.
- c) The comments received from Interested and Affected Parties (I&APs) as included in the final BAR dated August 2023.
- d) Mitigation measures as proposed in the final BAR dated August 2023 and the EMPr.
- e) The information contained in the specialist input contained within the Appendices of the final BAR dated August 2023 and as appears below:

Title	Prepared by	Date
Freshwater Assessment for the proposed Pilot Carbon Dioxide Storage Project, Mpumalanga Province, South Africa	Nitai Consulting (Pty) Ltd	May 2023
Terrestrial Biodiversity Compliance Statement	Nitai Consulting (Pty) Ltd	May 2023
Pilot Carbon Dioxide Storage Project Near Leandra, Mpumalanga Province Heritage Impact Assessment	Nitai Consulting (Pty) Ltd	May 2023
Palaeontological Desktop Assessment Proposed Carbon Dioxide Storage Project near Leandra in Mpumalanga	Banzai Environmental	May 2023
Air Quality Specialist Study	UVW – Centro de Modelação de Sistemas Ambientais, Lda	May 2023
Groundwater Specialist Study	Nemus	May 2023

2. Key factors considered in making the decision

All information presented to the Department was considered in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The findings of all the specialist input conducted and their recommended mitigation measures.
- b) The need for the proposed project which is to mitigate the emissions of CO₂ into the atmosphere.
- c) The final BAR dated August 2023 identified all legislations and guidelines that have been considered in the preparation of the BAR.
- d) The methodology used in assessing the potential impacts identified in the final BAR dated August 2023 and the specialist input have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the NEMA EIA Regulations, 2014 as amended for public involvement.

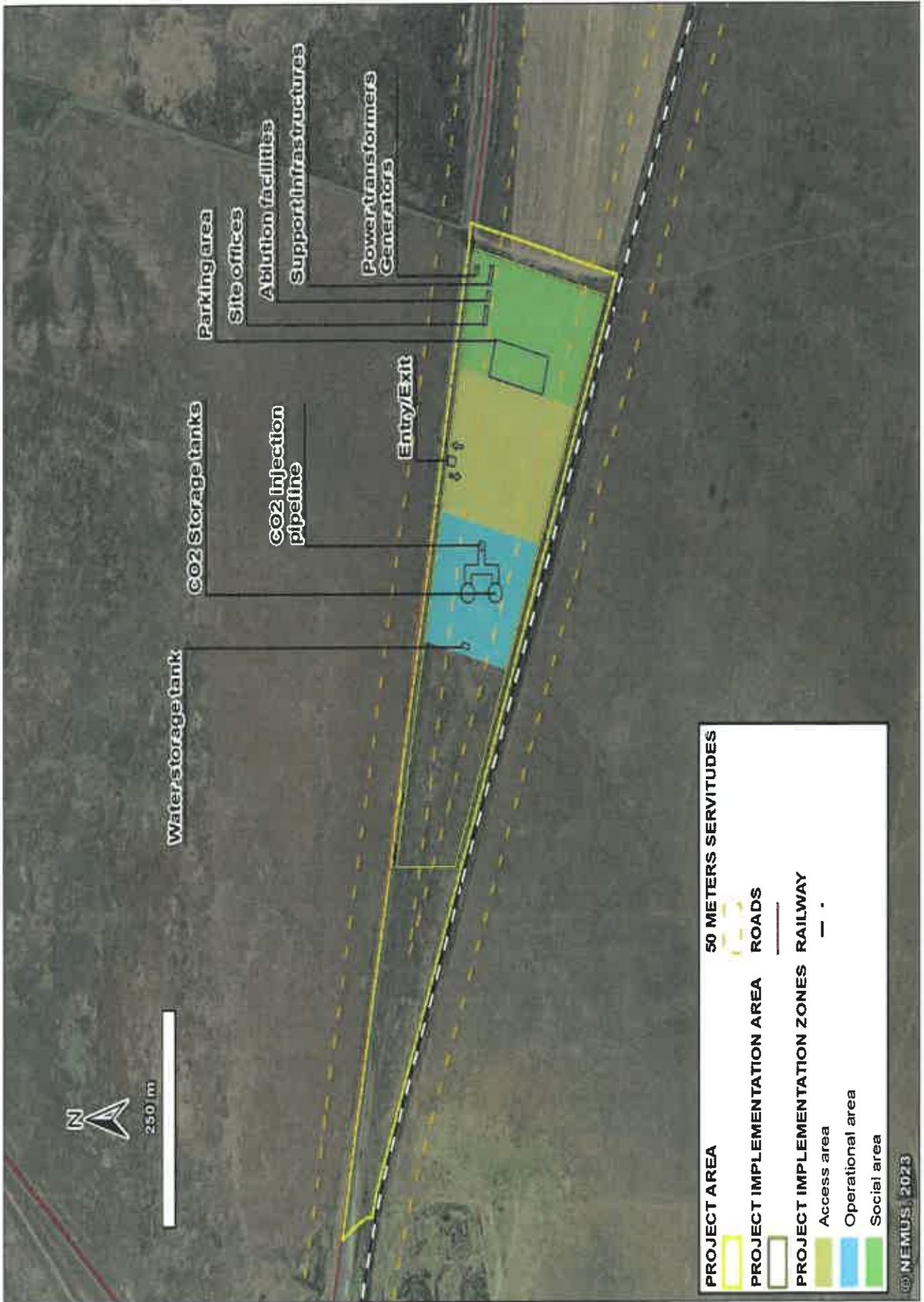
3. Findings

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

- a) The identification and assessment of impacts are detailed in the final BAR dated August 2023 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The information contained in the final BAR dated August 2023 is deemed to be accurate and credible.
- d) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the final BAR and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the Environmental Authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. **The Environmental Authorisation is accordingly granted.**

APPENDIX A: SITE LAYOUT PLAN



VS



forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Private Bag X447, Pretoria, 0001, Environment House, 473 Steve Biko Road, Pretoria, 0002 Tel: +27 12 399 9000, Fax: +27 86 625 1042

Ref: Acting Arrangements
Enquiries: Devinagie Bendeman
Telephone: 012 399 9337 **E-mail: vbendeman@dffe.gov.za**

Mr Vusi Skosana
Director: National Integrated Authorisations

Dear Mr Skosana

APPOINTMENT AS CHIEF DIRECTOR: INTEGRATED ENVIRONMENTAL AUTHORISATIONS (ACTING) FROM 27 SEPTEMBER 2023 UNTIL 29 SEPTEMBER 2023

I hereby inform you that you have been appointed to act in the post of Chief Director: Integrated Environmental Authorisations from **27 September 2023 until 29 September 2023**. Please note that acting arrangements may be terminated by any party giving 24 hours written notification.

All correspondence and other documents that are usually signed by the Chief Director: Integrated Environmental Authorisations must be signed under **Chief Director: Integrated Environmental Authorisations (Acting)** during the above-mentioned period.

Your appointment in the above acting position remains subject to the provisions of the Public Service Act, 1994 (Proclamation No. 103 of 1994), as amended, the Government Employees Pension Fund Act, 1996 (Proclamation No. 21 of 1996), the regulations promulgated under these Acts and relevant circulars.

In the execution of your duties and the exercising of the powers delegated to you, you will furthermore be subjected to the provisions of the Public Finance Management Act, compliance with the Promotion of Access to Information Act, Promotion of Administrative Justice Act, the Minimum Information Security Standard, Departmental Policies and other applicable legislations with the Republic of South Africa. You are therefore advised to make yourself familiar with the provisions of these legislations and policies and the amendments thereof. (Copies of Departmental policies can be obtained from the Human Resource Office).

Yours sincerely

Ms Devinagie Bendeman
DDG: Regulatory Compliance & Sector Monitoring
Date: 27 September 2023

ACKNOWLEDGEMENT

I ACCEPT / ~~DO NOT ACCEPT~~

appointment as Chief Director: Integrated
Environmental Authorisations (Acting)

Signed:

Date: 27 September 2023



Batho pele- putting people first

The processing of personal information by the Department of Forestry, Fisheries and the Environment is done lawfully and not excessive to the purpose of processing in compliance with the POPI Act, any codes of conduct issued by the Information Regulator in terms of the POPI Act and / or relevant legislation providing appropriate security safeguards for the processing of personal information of others.