

Office of the Head of Department

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Our Reference: L1.3.5

Your Reference: NC/BA/60/ZFM/KEI!/KAK3/2024

Enquiries: Mr A Nyakaza Date: 31st July 2025

ZERO CARBON CHARGE

Joubert Roux P.O. Box 671 Groenhoek VREDENDAL 8160

Email: joubert@charge.co.za

Dear Sir/Madam

THE GRANTING OF AN ENVIRONMENTAL AUTHORISATION FOR: ACTIVITY NO.1, ACTIVITY NO. 11(i)(ii), ACTIVITY NO. 27 (i)(ii) ACTIVITY NO. 28(i)(ii) OF GN. R. 327, ACTIVITY NO. 12(g)(ii), ACTIVITY NO. 14 (ii)(c)(g)(ii)(ff), OF GN. R. GN. R. 324 OF APRIL 2017 (AS AMENDED): THE PROPOSED ESTABLISHMENT OF AN ELECTRIC VEHICLE CHARGING FACILITY, SOLAR PV PLANT AND ASSOCIATED INFRASTRUCTURE AT AKKERBOOM FARM STALL (PORTIONS 19 & 47 OF FARM FRIER'S DALE, NO. 466) ALONG THE N14, BETWEEN KAKAMAS AND KEIMOES: KAI! GARIB LOCAL MUNICIPALITY, ZF MGCAWU DISTRICT MUNICIPALITY, NORTHERN CAPE.

By virtue of the power conferred to me by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations: THE DEPARTMENT HEREBY GRANTS ENVIRONMENTAL AUTHORISATION FOR: ACTIVITY NO.1, ACTIVITY NO. 11(i)(ii), ACTIVITY NO. 27 (i)(ii) ACTIVITY NO. 28(i)(ii) OF GN. R. 327, ACTIVITY NO. 12(g)(ii), ACTIVITY NO. 14 (ii)(c)(g)(ii)(ff), OF GN. R. GN. R. 324 OF APRIL 2017 (AS AMENDED): THE PROPOSED ESTABLISHMENT OF AN ELECTRIC VEHICLE CHARGING FACILITY, SOLAR PV PLANT AND ASSOCIATED INFRASTRUCTURE AT AKKERBOOM FARM STALL (PORTIONS 19 & 47 OF FARM FRIER'S DALE, NO. 466) ALONG THE N14, BETWEEN KAKAMAS AND KEIMOES: KAI! GARIB LOCAL MUNICIPALITY, ZF MGCAWU DISTRICT MUNICIPALITY, NORTHERN CAPE.

A detailed description of the activity is given in the **Basic Assessment Report dated February 2025**, subject to the conditions listed in the Environmental Authorisation and reasons for the decision are attached herewith. In terms of regulation 4 (2) of the Environmental Impact Assessment Regulations, 2014, you are instructed to notify all registered interested and affected parties, in writing and within fourteen (14) days of receiving of this letter, of the Department's decision in respect of your application as well as the provisions regarding the making of appeals that are provided for in the regulations.



Your attention is drawn to chapter 2 of the National Appeal Regulation which regulates appeal procedures. Should you/ any person affected by this decision wish to appeal, any aspect as prescribed in regulation 4 of the National Appeal Regulations 2014, with the Member of the Executive Council, Ministry of the Department agriculture, environmental affairs, rural development and land reform within 20 days of receiving this letter, by means of one of the following methods:

By facsimile:

(053) 8077328

By post:

Private Bag X 6102, Kimberley, 8300 or

By hand:

90 Long Street, Kimberley, 8300

Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Yours Faithfully

ADV TI BINASE

ACTING HEAD OF DEPARTMENT

DEPARTMENT: AGRICULTURE, ENVIRONMENTAL AFFAIRS, RURAL DEVELOPMENT

AND LAND REFORM

DATE OF DECISION: 13 08 2025

Cc: Clinton Geyser ENVIRO AFRICA CC

Email: clinton@enviroafrica.co.za





ENVIRONMENTAL AUTHORISATION

in terms of National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended).

Authorisation Register Number:	PERMIT 30/2025
Reference Number:	NC/BA/60/ZFM/KEI!/KAK3/2024
Last Amended:	N/A
Holder of Authorisation:	Zero Carbon Charge

Location of activity:

AT AKKERBOOM FARM STALL ON PORTIONS 19 & 47 OF FARM FRIER'S DALE NO. 466, ALONG THE N14, BETWEEN KAKAMAS AND KEIMOES, KAI! GARIB LOCAL MUNICIPALITY, ZF MCAWU DISTRICT MUNICIPALITY, NORTHERN CAPE.

DEFINITIONS

- "Activity" means an activity identified in any notice published by the Minister or MEC in terms of section 24D (1) (a) of the Act as a listed activity or specified activity;
- **"Proponent"** means a person intending to submit an application for environmental authorisation and is referred to as an applicant once such application for environmental authorisation has been submitted;
- "Appellant" means any person who is entitled to submit an appeal in terms of the legislation referred to in regulation 3(1) of the appeal Regulations;
- "Application" means an application for an -
 - (a) environmental authorization in terms of Chapter 4 of the 2014 Environmental Impact Assessment regulations;
 - (b) amendment to an environmental authorisation in terms of Chapter 5 of the 2014 Environmental Impact Assessment regulations;
 - (c) amendment to an EMPr in terms of Chapter 5 the 2014 Environmental Impact Assessment regulations;
 - (d) amendment of a closure plan in terms of Chapter 5 of the 2014 Environmental Impact Assessment regulations;
- **"Basic Assessment Report"** means a report contemplated in regulation 19 of the 2014 Environmental Impact Assessment regulations;
- "EAP" means an Environmental Assessment Practitioner as defined in section 1 of the Act;
- **"EMPr"** means an environmental management programme contemplated in regulations 19 and 23 of the 2014 Environmental Impact Assessment regulations;
- "Registered Interested and Affected Party" in relation to an application, means an interested and affected party whose name is recorded in the register opened for that application in terms of regulation 42;
- **"Public Participation Process"** means the process in which potential interested and affected parties are given an opportunity to comment on, or rare issues relevant to specific activity;
- "NCNCA" Northern Cape Nature Conservation Act No. 9 of 2009
- **"Department"** means the Northern Cape Department of Agriculture, Environmental Affairs, Rural Development & Land Reform
- "The Act" means the National Environmental Management Act, 1998 (Act No. 107 of 1998).
- "MEC" Member of the Executive Council

DECISION

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

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

ACTIVITIES AUTHORISED

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

Zero Carbon Charge

with the following contact details -

Contact person: Joubert Roux (Director)/ Anton Beukes (Environmental Manager)

P.O. Box 671 Groenhoek Vredendal 8160

Cell: 027 213 2431

E-mail: joubert@charge.co.za and anton@charge.co.za

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

THE PROPOSED ESTABLISHMENT OF AN ELECTRIC VEHICLE CHARGING FACILITY, SOLAR PV PLANT AND ASSOCIATED INFRASTRUCTURE AT AKKERBOOM FARM STALL (PORTIONS 19 & 47 OF FARM FRIER'S DALE, NO. 466) ALONG THE N14, BETWEEN KAKAMAS AND KEIMOES, KAI! GARIB LOCAL MUNICIPALITY, ZF MCAWU DISTRICT MUNICIPALITY, NORTHERN CAPE.

Activity No. 1 of GN. R 327 of April 2017 (as amended)

The development of facilities or infrastructure for the generation of electricity from a renewable resource where— (i) the electricity output is more than 10 megawatts but less than 20 megawatts; or (ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare; excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs— (a) within an urban area; or (b) on existing infrastructure.

Activity No. 11 of GN. R327 of April 2017 (as amended)

The development of facilities or infrastructure for the transmission and distribution of electricity-(i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.

Activity No. 27 of GN. R.327 of 07 April 2017 (as amended)

The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for-

- (i) the undertaking of a linear activity; or
- (ii) maintenance purposes undertaken in accordance with a maintenance management plan.

Activity No. 28 of GN. R327 of April 2017 (as amended)

Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for Agriculture or afforestation on or after 01 April 1998 and where such development:

- (i) Will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or.
- (ii) Will occur outside an urban area, where the total land to be developed is bigger than 1 hectare.

Activity No. 12 (g)(ii) of GN. R.324 of 07 April 2017 (as amended)

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. (g) Northern Cape:(ii) Within Critical biodiversity areas as identified in bioregional plans.

Activity No. 14 (ii) (c)(g) (ii) (ff) of GN. R.324 of 07 April 2017 (as amended)

(ii) The development of infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs- (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse; (g) Northern Cape; (ii) Outside urban areas; (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;

The project site is situated at Akkerboom Farm Stall on Portions 19 & 47 of Farm Frier's Dale, No. 466, along the N14, between Kakamas and Keimoes which falls within the jurisdiction of Kai !Garib Local Municipality, ZF Mgcawu District Municipality, Northern Cape Province, with the following co-ordinates:

		Latitude (S) (DDMMSS)	Longitude (E) (DDMMSS		
		Charging Station	Charging Station Corner coordinates		
Coordinates for Alternative 1 (preferred alternative)		(Blue Polygon Figure 3)			
	Corner 1	28°44'19.54"S	20°49'47.09"E		
	Corner 2	28°44'19.79"S	20°49'47.58"E		
	Corner 3	28°44'20.31"S	20°49'47.19"E		
	Corner 4	28°44'20.00"S	20°49'46.72"E		
		Solar Panels - Stage 1 Corner coordinates			
		(Red Polyg	(Red Polygon Figure 3)		
	Corner 1	28°44'22.71"S	20°49'35.21"E		
	Corner 2	28°44'24.73"S	20°49'38.24"E		
	Corner 3	28°44'28.74"S	20°49'34.84"E		
	Corner 4	28°44'24.77"S	20°49'38.22"E		
	Solar Panels - Stages 2 to 7 Corner coordinates				
	(Red Polygon Figure 3)				
	Corner 1	28°44'10.92"S	20°49'33.49"E		
	Corner 2	28°44'15.76"S	20°49'36.02"E		
	Corner 3	28°44'24.17"S	20°49'26.99"E		
	Corner 4	28°44'22.58"S	20°49'27.06"E		
	Corner 5	28°44'11.93"S	20°49'25.55"E		
	Corner 6	28°44'11.31"S	20°49'26.22"E		
	Corner 7	28°44'15.16"S	20°49'28.93"E		

hereafter referred to as "the property".

The project will encompass the development of:

- a solar photovoltaic (PV) plant,
- Electric Vehicle Charging_facility
- a battery energy storage system (BESS), and associated infrastructure to enable sustainable energy generation in order to efficiently charge EV's.

The Charging station and its associated infrastructure will impact on (< 0.5 ha) existing vineyards. The proposed solar sites will impact on less than 8 ha of remaining natural land used for game and livestock grazing.

Project Components:

- 1. <u>Solar PV Plant</u>: The PV plant will consist of an array of solar panels installed in 2 steps: Stage 1 and stages 2-7 (Appendix 12). The development will take place in stages as the demand for electricity increases. The solar panels are expected to generate an electrical output of approximately 7 megawatts (MW), which will be transmitted to the battery storage units and the EV charging infrastructure. The solar panels will be strategically placed to optimize energy capture, considering site-specific environmental factors such as solar irradiation levels and shading.
- 2. <u>Electric Vehicle Charging Infrastructure</u>: The EV charging facility will accommodate approximately six electric vehicles at any given time. This infrastructure will be powered entirely by the solar PV plant and the energy stored in the BESS, making it a sustainable and eco-friendly solution for travelers and locals using electric vehicles along the N14 corridor. The facility will be equipped with fast-charging stations, designed to minimize downtime for EV users.
- 3. <u>Electricity Transmission Infrastructure</u>: The electricity transmission infrastructure will connect the solar PV plant and the battery storage units to the EV charging stations. The initial stage of the project will involve the installation of approximately 300 meters of transmission cabling, with additional stages extending the cabling by a further 450 meters to support the expansion (stages 2-7). 5. Development Footprint: The total development footprint of the project, including the solar PV plant, BESS, and EV charging infrastructure, will cover approximately 8 hectares at the Akkerboom Farm Stall. This footprint includes the installation of necessary utilities, access roads, and support structures, ensuring seamless integration of the renewable energy generation systems with the EV charging facility.
- 4. <u>Battery Energy Storage System (BESS)</u>: The project will incorporate battery energy storage units that will store the electricity generated by the solar PV plant. These batteries will be housed in secure containers alongside other energy management equipment to ensure optimal efficiency and safety. The storage system will provide consistent power to the EV charging infrastructure, ensuring uninterrupted service even during periods of low solar generation or high demand.

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

CONDITIONS

Scope of authorisation:

- 1. Authorisation of the activity is subject to the conditions contained in this authorisation, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.
- 2. The holder of the authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.
- 3. The activities which is authorised must only be carried out at the property indicated above.
- 4. Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be 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 authorisation in terms of the regulations.
- 5. 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 activities.

General conditions:

- 6. A copy of this authorisation must be kept at the property where the activities will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.
- 7. Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.
- 8. The holder of the authorisation must notify the Department, in writing and within 24 (Twenty-Four) hours, if condition 16 of this authorisation cannot be or is not adhered to. In all other cases, the holder of the authorisation must notify the Department, in writing, within seven (7) days if any condition of this authorisation is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
- 9. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.

- 10. This authorisation is subject to the approval by the relevant local authorities i.e. in terms of any relevant legislation administered by those local authorities.
- 11. The activities must not commence without the necessary permits/licenses/approvals and/or service agreements, where it is relevant, from or with the relevant regulatory authorities whether national, provincial or local (these include but are not limited to National Department of Forestry, Fisheries and the Environment, National Department of Agriculture, Land Reform and Rural Development, Department of Housing & Local Government, Department of Water and Sanitation, Department of Mineral Resources and Energy, Department of Transport, Department of Public Works and Infrastructure, Department of Sports, Arts & Culture, South African Heritage Resources Agency, South African Civil Aviation Authority).
- 12. The activities, including site preparation, must not commence before the twenty (20) day appeal period expires or until such time as the Department has considered any appeals that have been lodged.
 - a. One week's written notice must be given to the Department before commencement with the activity.
 - b. Such notice shall make clear reference to the site location details and the reference number given above.
 - c. The said notice must also include proof of compliance with the following condition described herein:

i. Condition: 11

- 13. The applicable conditions of this authorization must form part of all contractors' and sub-contractors' conditions of contract. A performance-based requirement with regard to environmental impact management must be included in all contracts related to any aspect of this authorization.
- 14. The applicant must carry out regular environmental audits to establish compliance with the conditions of this authorization and contracts.
- 15. Any complaints regarding the said development must be brought to the attention of the Department within 24 hours after receiving the complaint. A complaints register must be kept up to date for inspection by the Department.
- 16. Environmental Management Inspectors (EMI) employed by the Department must be given access to the property as described above (see detailed description of the property) for the purposes of assessing and/or monitoring compliance with the conditions contained in this Environmental Authorisation. Where the activity is located on a third party's property the applicant shall be responsible to arrange access for departmental officials.
- 17. This Department may add to, change and/or amend any of the conditions in this authorization if, in the opinion of the Department, the addition, change of amendment is environmentally justified. In event that such impacts exceed its significance as predicted in the independent consultant's Basic Assessment Report and supporting documentation, the authorization may be withdrawn after proper procedures were followed.

- 18. In the event of any dispute concerning the significance of a particular impact, the opinion of this department in respect of its significance will prevail.
- 19. This Department and any national department, provincial department, local authorities or committees appointed in terms of the conditions of this application or any other public authority or organization shall not be held responsible for any damage of losses suffered by the applicant or his 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 applicant with the conditions of approval as set out in this document or any other subsequent document emanating from these conditions of approval.
- 20. The applicant must be responsible for all costs necessary to comply with the above conditions unless otherwise specified.
- 21. The applicant must apply the principle of best practicable environmental option for all technologies used/ implemented during construction and operation phase.

Appeal of authorisation:

- 22. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days, of receiving notice of the Department's decision to authorize the activity.
- 23. The notification referred must -
 - specify the date on which the authorisation was issued;
 - inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the regulations; and
 - advise the interested and affected party that a copy of the authorisation and reasons for the decision will be furnished on request.
 - 24. If the applicant should appeal against this Environmental Authorisation, the applicant/appellant must provide each person and organ of state which was a registered interested and affected party in relation to the applicant's application, within 10 days of having submitted a notice to appeal with a copy of the notice to appeal indicating that the appeal submission will be made available on the day of lodging it with the Minister or MEC, where and for what period the appeal submission will be available for inspection by such person or organ of state.

Management of activity:

- 25. The Environmental Management Programme ("EMPr") dated February 2025 (as compiled by EnviroAfrica CC) and submitted as part of the application for Environmental Authorisation is hereby approved and must be adhered to. The recommendations and mitigation measures of the specialist studies recorded in the Basic Assessment Report dated February 2025 are binding and must be complied with.
- 26. The Alternative 1 (preferred alternative) site of the development is hereby approved in accordance with mitigation measures as outlined in the EMPr.
- 27. Vegetation clearance should be confined to the approved footprint of the proposed development and unnecessary clearance must be avoided.
- 28. Ensure that all "NO-GO" areas which include sensitive areas are clearly defined and adequately demarcated and may not be cleared or used for any kind.
- 29. The Zoning of the property to a classification which permits the desired use is required prior the commence with the development and its associated activities.
- 30. All works to be conducted in an environmentally sensitive manner and in accordance with the EMPr and conditions of this authorization.

Monitoring

- 31. The EMPr must be strictly enforced during all phases of the project.
- 32. Changes to the EMPr, which are environmentally defendable, must be submitted to this Department for acceptance before such changes are effected.
- 33. The Department reserves the right to amend the EMPr should any impacts that were not anticipated or covered in the Basic Assessment Report dated February 2025 be discovered.
- 34. The EMPr must be included in all contract documentation for all phases of implementation.
- 35. In the event of oil spillages and contamination of soil by hazardous substances that contaminated area must be cleaned up immediately by removing the contaminated soil and disposing it off into the designated hazardous skip bin for correct disposal.
- 36. A storm water management plan must be implemented during the construction and operation of the facility. The plan must comply with applicable legislation and prevent off-site migration of contaminated storm water.
- 37. Erosion prevention measures must be employed to ensure the sustainability of all structures and activities.

- 38. An effective monitoring system to detect any leakage or spillage of all hazardous substances must be implemented during all phases of development. This must include precautionary measures to limit the possibility of fuel and other toxic liquids from contaminating watercourse and soil.
- 39. The level of noise during the construction phase of the project must be kept as low as possible and must comply with the Noise Control Regulations (GN R 154) as well as the acceptable day rating levels as per the SANS10103:2008 guidelines.

Environmental Control Officer (ECO) and Duties

- 40. The holder of this authorisation must appoint an independent Environmental Control Officer (ECO) before commencement and must have the experience or expertise in the field of Environment. The ECO will have the responsibility to ensure that the conditions referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMPr and recommendations of the attached specialist studies.
- 41. The ECO must be appointed before commencement of any authorised activity.
- 42. The ECO must meet with the contractors to discuss the conditions of the Environmental Authorisation and the contents of the EMPr prior to commencement of activities.
- 43. Once appointed, the name and contact details of the ECO must be submitted to the Directorate: Compliance and Enforcement Unit of the Department.
- 44. The ECO must keep record of all activities on site, potential impacts, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
- 45. 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.
- 46. Photographs must be taken (before, during and immediately after construction as a visual reference).

Recording and Reporting to the Department

- 47. The holder of this authorisation must keep all records relating to monitoring and auditing on site and make it available for inspection to any relevant and competent authority in respect of this development.
- 48. All documentation such as audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this authorisation, must be submitted to the Directorate: Compliance and Enforcement Unit of the Department.
- 49. Records relating to compliance or non-compliance with any condition of this authorization must be kept in good order. Such records must be made available to any Official from Compliance and Enforcement Unit of this Department within seven (7) days of written request by the said Officer.

Environmental audit report

- 50. The holder of the authorization must submit an environmental audit report to the Department within 30 days of completion of the construction phase and within 30 days of completion of rehabilitation activities.
- 51. The Environmental audit report must:
 - Be compiled by an independent environmental auditor;
 - 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 EMPr.
 - Include measures to be implemented to attend to any non-compliance.
 - Include copies of any approvals granted by other authorities relevant to the department for the reporting period.
 - Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring that they are appropriately addressed.
 - Include evidence of adherence to the conditions of this authorisation and the EMPr where relevant such as training records.

Commencement of the activity:

- 52. Fourteen (14) days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence.
- 53. The authorised activities must not commence before the statutory 20 days of an appeal period has expired.
- 54. Should you be notified by the minister/MEC of a suspension of the authorisation pending appeal procedures, you must not commence with the activities unless authorised by the minister in writing.
- 55. The conditions of this authorisation must be brought to the attention of all persons (employees, subconsultants, etc.) associated with the undertaking of this activity and the applicant must take measures necessary to bind such persons to these conditions.
- 56. All recommendations and mitigation measures as laid down in the Basic Assessment Report and the EMPr dated February 2025 are binding and must be implemented.

Specific Conditions

- 57. No blanket clearing of vegetation to take place on the site. The removal of natural vegetation must be restricted to the footprint of the proposed activity to facilitate the installation of infrastructure and the construction of the various components of the proposed development.
- 58. All the necessary permits must be obtained from all the relevant authorities before commissioning of the proposed project start(s).
- 59. The holder of this environmental authorisation must ensure that environmental impacts are monitored and managed effectively throughout the life cycle of the project.
- 60. A Flora permit must be applied for and granted by the Department of Agriculture, Environmental Affairs, Rural Development & Land Reform, prior to removal of species listed under schedule 1,2 & 3 of the Northern Cape Nature Conservation Act, 2009 (Act No. 9 of 2009).
- 61. The mitigation or control measures in the Fresh Water Specialist Report (dated July 2023) compiled by WATSAN Africa, attached as Appendix D3 as included in the Basic Assessment Report and in the EMPr must be implemented.
- 62. The mitigation or control measures in the Heritage Impact Assessment (dated November 2024) compiled by UBIQUE HERITAGE CONSULTANTS, attached as Appendix D5 as included in the Basic Assessment Report and in the EMPr must be implemented.
- 63. The mitigation or control measures in the Agricultural Compliance statement (dated August 2023) compiled by Digital Soils Africa, attached as Appendix D1 as included in the Basic Assessment Report and in the EMPr must be implemented.

- 64. The following recommendation adopted from the Botanical & Terrestrial Biodiversity Assessment (dated November 2024) compiled by PB CONSULT, attached as Appendix D2 as included in the Basic Assessment Report and in the EMPr must be implemented.
 - All efforts must be made to protect the small watercourse to the west of the proposed Solar facilities (as demarcated in the site sensitivity map Figure 9).
 - 64.2 All mature *Vachellia erioloba* trees, larger than 6m, must be protected during development and operation. No development should be considered underneath the canopy of any of the trees remaining on Portion 47 of the Farm Frier's Dale No. 466.
 - 64.3 The *Vachellia erioloba* and *Adansonia digitata* trees remaining and planted within the parking and garden area of the Akkerboom farm stall (on Portion 19 of the Farm Frier's Dale no. 466) must be protected.
- 65. if any of the identified *Vachellia erioloba* or *Adansonia digitata* trees will be impacted. Nationally protected trees in accordance with the National Forests Act, 1998 (Act No. 84 of 1998), a permit from the Department of Forestry, Fisheries and Environment will be required for the disturbance of protected tree(s).
- 66. The removal, cutting, pruning or relocation plants must be authorised by the relevant authority, i.e. Department of Forestry, Fisheries & the Environment (DFFE).
- 67. Should any archaeological remains be found on site, the South African Heritage Agency (SAHRA) must be contacted and all works must cease immediately in that area, failure to do so constitute an offence in terms of the National Heritage Resource Act, 1999 (Act No. 25 of 1999) as amended.

Operation of the activity:

- 68. All waste generated during construction and operation phase (on site) must be disposed of at a waste disposal site licensed for such waste or as directed by any other relevant authority.
- 69. No on-site burning or burying of solid waste is permitted.
- 70. No construction material or any other waste material may be dumped into any watercourse or surrounding area.
- 71. The holder of this environmental authorisation must restrict the construction activities to the approved development footprint.
- 72. Storm water control measures must be properly implemented in order to manage storm water and to prevent erosion.
- 73. 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.
- 74. The applicant must ensure that the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) is implemented by an independent Health and Safety Officer.

- 75. No protected Fauna or Flora may be removed from the area without the necessary permit(s): all the necessary permits must be obtained from all the relevant authorities before commissioning of the proposed project starts.
- 76. Before any work is done search and rescue must be completed, as well monitoring protocol must be compiled for translocation of any Threatened or protected plant species.
- 77. Rescued plants must only be transported and transplanted to an adjacent site of similar ecological character nearest to the site from where plants have been removed. A suitable qualified ECO or specialist must oversee this process to guide on the proper extraction of plants to limit excessive damage to plants and implement proper transplants.
- 78. A monitoring program must be implemented for early detection of alien invasive plant species and must be in accordance with the Conservation of Agriculture Resources Act (Act No 43 of 1983).
- 79. The Holder of this Environmental Authorisation must ensure that the soil and ground water resources are not detrimentally impacted by this activity.
- 80. The Holder of this Environmental Authorisation must ensure construction and operation adheres to the National Water Act; Part 4 Section 19: Pollution Prevention and Part 5 Section 20 Emergency Incidents.
- 81. Dust control measures must be implemented during clearing phase and must comply with the dust regulations promulgated under the Air Quality Act (Act No 39 of 2004).
- 82. A storm water management plan must be implemented throughout the life cycle of the project. The plan must comply with applicable legislation's and prevent off-site migration of contaminated storm water.
- 83. Proper measures to prevent/reduce the risk of erosion and the invasion of alien species must be strictly implemented.
- 84. No clearing of any area outside of the construction footprint may be allowed.
- 85. The planning and design for the small lay-down areas must avoid sensitive areas, and preferably be established in an already disturbed or developed area.
- 86. Soil stockpiles must be in low heaps to widen the use options of the rehabilitated surface/land capability/sustainable land-use options.
- 87. No cleared vegetation stockpiles are to be placed in any of the watercourses. The stockpiles may not exceed 2m in height, and their footprint must be kept to a minimum.
- 88. Stockpiling of removed materials may only be temporary (may only be stockpiled during the period of construction) and must be disposed of at a registered waste disposal facility.
- 89. Backfill material must only be obtained from legal sources with the necessary permits.

- 90. Chemical mobile toilets must be available for workers on site, and must be safely secured to prevent them from being blown away. Sewage waste must be disposed of at the Municipal sewage plant on a regular basis.
- 91. Cleaning of equipment and flushing of mixers must not result in pollution of the surrounding environment. All wastewater resulting from batching of concrete must not be discharged into a watercourse.
- 92. Only approved new roads and existing access roads must be used to gain access to the construction site, thus avoiding further disturbance of the natural environment.
- 93. Concrete mixers must be used for mixing concrete and must be placed on drip trays to prevent accidental spillages.
- 94. Cleaning of equipment and flushing of mixers must not result in pollution of the surrounding environment. All waste-water resulting from batching of concrete must not be discharged into the watercourse.
- 95. Construction vehicles and equipment must be checked and maintained regularly to ensure that the is no environmental contamination as a result of oil, fuel or hydraulic fluid leakages.
- 96. Construction works in proximity to the identified drainage lines should where possible be undertaken during the drier periods to minimise impacts on these features.
- 97. Environmental training must be conducted for the staff/employees before commencement of the project and environmental education must be given throughout the life cycle of the project. Workers should be informed that the hunting, snaring and killing of fauna is not allowed on site.

Site Closure and Decommissioning:

- 98. Should the proposed activity ever cease or become redundant, the applicant 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.
- 99. All areas disturbed by the entire project must be properly rehabilitated to the satisfactory condition.

DURATION AND PERIOD OF VALIDITY

This activity(s) must commence within a period of ten (10) years from the date of issue. If commencement of the activity(s) does not occur within that period and the intention is to extend the validity period of the authorization, an application for amendment to extend the validity period must be launched at least three (3) months prior to the expiry date of the validity period. 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.

APPEAL

An appellant must submit an 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 20 days from the date that the notification of the decision was sent to the applicant by the competent authority.

Appeals must be submitted in writing to:

The Member of the Executive Council
Ministry of agriculture, environmental affairs, rural development & land reform
Private Bag X6102
Kimberley
8300

Fax: (053) 832 1026

Please note that in terms of section 43(7) of the National Environmental Management Act, 1998, an appeal under section 43 of that Act 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 is finalised.

ADV. T BINASE

ACTING HEAD OF DEPARTMENT

DEPARTMENT OF AGRICULTURE, ENVIRONMENTAL AFFAIRS, RURAL DEVELOPMENT & LAND REFORM

DATE OF ENVIRONMENTAL AUTHORISATION: 13/08/2025

ANNEXURE 1: REASONS FOR DECISION

1. Background

The applicant, **Zero Carbon Charge** applied for authorisation to carry out the following activities-

THE PROPOSED ESTABLISHMENT OF AN ELECTRIC VEHICLE CHARGING FACILITY, SOLAR PV PLANT AND ASSOCIATED INFRASTRUCTURE AT AKKERBOOM FARM STALL (PORTIONS 19 & 47 OF FARM FRIER'S DALE, NO. 466) ALONG THE N14, BETWEEN KAKAMAS AND KEIMOES, NORTHERN CAPE.

Activity No. 1 of GN. R 327 of April 2017 (as amended)

The development of facilities or infrastructure for the generation of electricity from a renewable resource where— (i) the electricity output is more than 10 megawatts but less than 20 megawatts; or (ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare; excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs— (a) within an urban area; or (b) on existing infrastructure.

Activity No. 11 of GN. R327 of April 2017 (as amended)

The development of facilities or infrastructure for the transmission and distribution of electricity-(i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.

Activity No. 27 of GN. R.327 of 07 April 2017 (as amended)

The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for-

- (i) the undertaking of a linear activity; or
- (ii) maintenance purposes undertaken in accordance with a maintenance management plan.

Activity No. 28 of GN. R327 of April 2017 (as amended)

Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for Agriculture or afforestation on or after 01 April 1998 and where such development:

- (iii) Will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or.
- (iv) Will occur outside an urban area, where the total land to be developed is bigger than 1 hectare.

Activity No. 12 (g)(ii) of GN. R.324 of 07 April 2017 (as amended)

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. (g) Northern Cape:(ii) Within Critical biodiversity areas as identified in bioregional plans.

Activity No. 14 (ii) (c)(g) (ii) (ff) of GN. R.324 of 07 April 2017 (as amended)

(ii) The development of infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs- (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse; (g) Northern Cape; (ii) Outside urban areas; (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;

The project site is situated at Akkerboom Farm Stall on Portions 19 & 47 of Farm Frier's Dale, No. 466, along the N14, between Kakamas and Keimoes which falls within the jurisdiction of Kai !Garib Local Municipality, ZF Mgcawu District Municipality, Northern Cape Province, with the following co-ordinates:

		Latitude (S) (DDMMSS)	Longitude (E) (DDMMS		
Coordinates for Alternative 1 (preferred alternative)		Charging Station	Charging Station Corner coordinates		
		(Blue Poly	(Blue Polygon Figure 3)		
	Corner 1	28°44'19.54"S	20°49'47.09"E		
	Corner 2	28°44'19.79"S	20°49'47.58"E		
	Corner 3	28°44'20.31"S	20°49'47.19"E		
	Corner 4	28°44'20.00"S	20°49'46.72"E		
		Solar Panels - Stage 1 Corner coordinates			
		(Red Polyg	(Red Polygon Figure 3)		
	Corner 1	28°44'22.71"S	20°49'35.21"E		
	Corner 2	28°44'24.73"S	20°49'38.24"E		
	Corner 3	28°44'28.74"S	20°49'34.84"E		
	Corner 4	28°44'24.77"S	20°49'38.22"E		
	Solar Panels - Stages 2 to 7 Corner coordinates				
	(Red Polygon Figure 3)				
	Corner 1	28°44'10.92"S	20°49'33.49"E		
	Corner 2	28°44'15.76"S	20°49'36.02"E		
	Corner 3	28°44'24.17"S	20°49'26.99"E		
	Corner 4	28°44'22.58"S	20°49'27.06"E		
	Corner 5	28°44'11.93"S	20°49'25.55"E		
	Corner 6	28°44'11.31"S	20°49'26.22"E		
	Corner 7	28°44'15.16"S	20°49'28.93"E		

hereafter referred to as "the property".

The project will encompass the development of:

- a solar photovoltaic (PV) plant,
- Electric Vehicle Charging_facility
- a battery energy storage system (BESS), and associated infrastructure to enable sustainable energy generation in order to efficiently charge EV's.

The Charging station and its associated infrastructure will impact on (< 0.5 ha) existing vineyards. The proposed solar sites will impact on less than 8 ha of remaining natural land used for game and livestock grazing.

Project Components:

- 1. <u>Solar PV Plant</u>: The PV plant will consist of an array of solar panels installed in 2 steps: Stage 1 and stages 2-7 (Appendix 12). The development will take place in stages as the demand for electricity increases. The solar panels are expected to generate an electrical output of approximately 7 megawatts (MW), which will be transmitted to the battery storage units and the EV charging infrastructure. The solar panels will be strategically placed to optimize energy capture, considering site-specific environmental factors such as solar irradiation levels and shading.
- 2. <u>Electric Vehicle Charging Infrastructure</u>: The EV charging facility will accommodate approximately six electric vehicles at any given time. This infrastructure will be powered entirely by the solar PV plant and the energy stored in the BESS, making it a sustainable and eco-friendly solution for travelers and locals using electric vehicles along the N14 corridor. The facility will be equipped with fast-charging stations, designed to minimize downtime for EV users.
- 3. <u>Electricity Transmission Infrastructure</u>: The electricity transmission infrastructure will connect the solar PV plant and the battery storage units to the EV charging stations. The initial stage of the project will involve the installation of approximately 300 meters of transmission cabling, with additional stages extending the cabling by a further 450 meters to support the expansion (stages 2-7). 5. Development Footprint: The total development footprint of the project, including the solar PV plant, BESS, and EV charging infrastructure, will cover approximately 8 hectares at the Akkerboom Farm Stall. This footprint includes the installation of necessary utilities, access roads, and support structures, ensuring seamless integration of the renewable energy generation systems with the EV charging facility.
- 4. <u>Battery Energy Storage System (BESS)</u>: The project will incorporate battery energy storage units that will store the electricity generated by the solar PV plant. These batteries will be housed in secure containers alongside other energy management equipment to ensure optimal efficiency and safety. The storage system will provide consistent power to the EV charging infrastructure, ensuring uninterrupted service even during periods of low solar generation or high demand.

- a) The applicant appointed The EnviroAfrica CC to apply to undertake a Basic Assessment process.
- b) The process followed is a Basic Assessment process in accordance with Appendix 1 of the NEMA 2014 regulations, as amended.
- c) The Environmental Assessment Practitioner complied with Appendix 1 of the NEMA 2014 regulations dated 04 December 2014, as amended.

2. Information considered in making the decision

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

- a) The Environmental Assessment Practitioner complied with the NEMA Regulations of 04 December 2014, as amended.
- b) Public participation followed is in line with Regulation 41 of 04 December 2014 and proof was submitted together with the Basic Assessment Report submitted in respect of this application.
- c) The information contained in the Basic Assessment Report dated February 2025.
- d) The comments received from interested and affected parties (I & APs) as included in the Basic Assessment Report dated February 2025.
- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 and 23 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).
- f) The findings of the site visit undertaken by official from the Department of Agriculture, Environmental Affairs, Rural Development & Land Reform Mr A. Nyakaza; Mr. Bernard de Witt from EnviroAfrica CC on 09 May 2025.

3. Key factors considered in making the decision

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

- a) Zero Carbon Charge aims to build a national network of charging stations for Electric vehicles (EV), approximately 150 km apart, covering all the strategic highways and major routes in South Africa. Zero Carbon Charge will utilize wind and solar plants, consequently making the charging stations independent of the national electricity grid.
- b) The Charging station and its associated infrastructure will impact on (< 0.5 ha) existing vineyards. The proposed solar sites will impact on less than 8 ha of remaining natural land used for game and livestock grazing.
- c) The EAP who prepared the report has the expertise to carry out the Basic Assessment process.
- d) Impacts of the proposed activity on the receiving environment were described in terms of geographical, physical, biological, social, economic and cultural aspects.
- e) The Basic Assessment identified all legislation and guidelines it considered in preparing the report.
- f) Details of the public participation process conducted were attached, with all the steps taken to notify potential interested and affected parties.
- g) The conditions set out in this Environmental Authorisation have been designed to ensure that the negative impacts and risks associated with the project are identified, addressed and/or managed effectively.
- h) No objections were received from Interested and affected parties.
- i) The need and desirability for the proposed development.

4. 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 Basic Assessment Report dated February 2025 submitted in respect of this application.
- b) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts
- c) The procedure followed for impact assessment is adequate for decision-making process.
- d) The environment or the rights or interests of other parties will not be adversely affected.
- e) The socio-economic impacts will have a positive impact on the surrounding communities within the Kai !Garib Local Municipality.
- f) Integration of environmental issues was considered for the full life cycle of the project.

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