 EnviroSci (Pty) Ltd Reg Number 2018/462716/07	Dr Brian Colloty Ecologist (Pr Sci Nat 400268/07) Member of the South African Wetland Society	
	Contact Details b.colloty@gmail.com 083 498 3299	Address 1 Rossini Rd Pari Park Port Elizabeth 6070

WATT: Emoyeni Wind (Pty) Ltd

AQUATIC OPINION – PROPOSED AMENDEMENT PHASE 2 UMSINDE EMOYENI WIND ENERGY FACILITY (NOW CALLED KHANGELA EMOYENI WEF)

EnviroSci (Pty) Ltd was appointed to review the proposed amendment of the authorised facility (EIA Ref No: 14/12/16/3/3/2/687) against the previous aquatic impact assessment compiled and submitted by the same lead author as the undersigned. The initial Aquatic Impact assessment was undertaken in 2015 and revised in 2019 to inform the EIA that was conducted for Phase 2 of the Emoyeni Wind Energy Facility. Subsequently the layout has been revised to accommodate larger, fewer, turbines and renamed the Khangela Emoyeni Wind Energy Facility (Figure 1). The proposed changes in the main specifications are as follows (Table 1):

Table 1: Main proposed amendments

Component / Specification	Authorised	Proposed change
Facility area	Hardstanding area: Up to 45 m x 25 m Turbine foundations: 30 m x 30 m and up to 3 m deep Onsite office compound, including site offices, parking, an operation and maintenance facility and a control room: Anemometer masts CCTV monitoring towers	Hardstanding area: Up to 55 m x 35 m Turbine foundations: 30 m x 30 m and up to 3 m deep Onsite office compound, including site offices, parking, an operation and maintenance facility and a control room: Anemometer masts CCTV monitoring towers
Site access	Existing farm access tracks and watercourse crossing will be upgraded. Internal roads: 9 m width during construction. Reduced to 4 - 6 m during operations. Internal road length: 35.8 km	Existing farm access tracks and watercourse crossing will be upgraded. Internal roads: 12 m width during construction Reduced to 4 - 6 m width during operations Internal road length: 29.3 km
Generation capacity	147 MW	147 MW
Number of turbines	Up to a maximum of 35	Up to a maximum of 33
Turbine generation capacity	1.5 – 4.5 MW	Up to 10 MW
Hub height from ground level	Up to 135 m	Up to 160 m
Rotor diameter	Up to 150 m	Up to 180 m

Component / Specification	Authorised	Proposed change
Blade length	75 m	Up to 90 m
Blade tip height	210 m	Up to 250 m
Area occupied by substations	200 x 250 m single storey substation compound	No amendment required.
Capacity of substation	33/132 kV	No amendment required.
Temporary construction hardstand area per turbine	60 x 30 m (1,800 m ²)	95 x 23 m (2,185 m ²)
Crane pad	14,000 m ²	(Not applicable ¹)
Area occupied by construction laydown areas	Temporary laydown area: Up to three laydown areas of 9 000 m ² each (150 m x 60 m)	No amendment required.
Location of construction camps/ laydown areas	As per layout map included in the Final EIA Report.	No amendment required.
Area occupied by buildings	200 x 250 m	No amendment required.

Original impacts identified included loss of riparian systems and water courses, impact on riparian systems through the possible increase in surface water runoff from hard surfaces and or roads on riparian form and function; increase in sedimentation and erosion within the development footprint; and impact on localized surface water quality. Based on the description of the amendments, when compared to the original impact assessment, the overall risk, with mitigation were already low, and would remain LOW, i.e. the proposed layout has avoided the important water course and wetland areas, and where required making use of existing tracks / road crossing points. Changes such as increase in temporary and permanent turbine hardstands, and widening of the construction road footprint has no material effect on the impacts and ratings as previously ascribed as a similar number of crossings will be required.

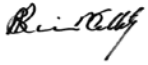
Therefore, for the amendment, the significance of the impact on the aquatic environment would remain LOW after mitigation during the construction, operation and decommissioning phases. This is based on the fact that the aquatic systems are ephemeral and only carries flows after heavy rainfalls, while those areas that were earmarked as having a High Sensitivity would still be avoided. This would thus be in alignment of the amended Biodiversity Assessment Protocols – Aquatic Theme, where any habitats that are seen as sensitive must be avoided by the project footprint as per the requirements of GN 320 of 20 March 2020, i.e. the proposed layout changes still take cognisance of the proposed buffers / no-go areas.

In conclusion, the final impact of the proposed amendment on the aquatic environment with mitigation will remain unchanged from the original impact assessment, i.e. it will remain of low significance. Similarly, in the assessment of potential cumulative impacts, no additional impacts or

¹ Note that the crane pad described in the original reports has been confirmed by the design engineers as not being required in addition to the temporary construction hardstand areas required for the amended layout.

changes to the previously assessed impacts would be required due to the proposed amendment (i.e. the cumulative impacts would remain low with mitigation). Further, no changes to the original mitigations or EMPr considerations are required. Thus, based on the findings of this study, the specialist has no objection to the approval of the proposed amendment.

Yours Sincerely



Ecologist (Pr. Sci. Nat. 400268/07)

Member of the Wetland Society of South Africa

SASAqs member

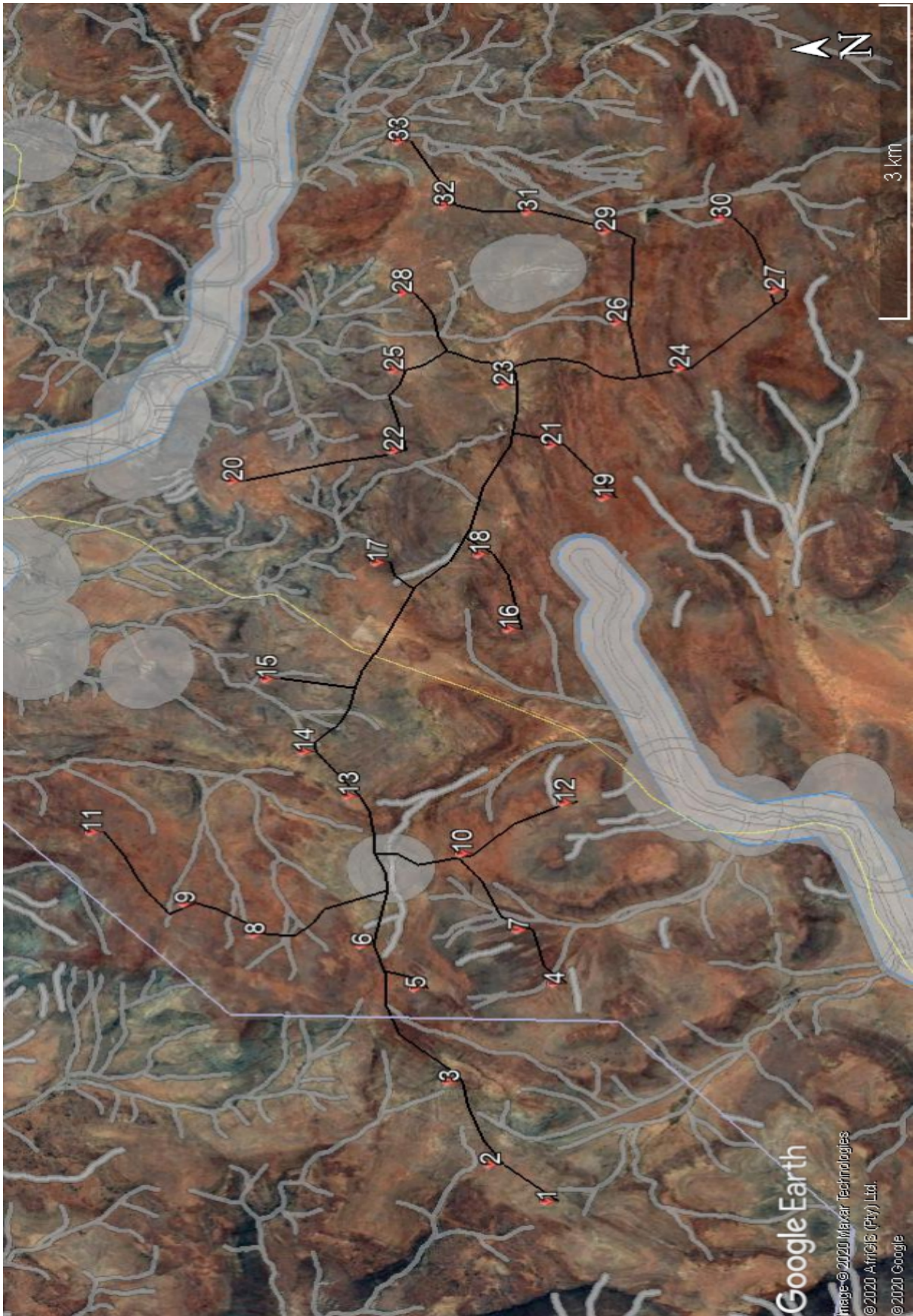


Figure 1: The amended layout and the aquatic environment delineated within the proposed site



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(For official use only)
File Reference Number:	
NEAS Reference Number:	DEA/EIA/
Date Received:	

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

PROJECT TITLE

Proposed Amendment of the Phase 2 Umsinde Emoyeni Wind Energy Facility near Murraysburg, Western Cape Province

Kindly note the following:

1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

Departmental Details

Postal address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
Email: EIAAdmin@environment.gov.za

1.

1. SPECIALIST INFORMATION

Specialist Company Name:	EnviroSci (Pty) Ltd		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	4	Percentage Procurement recognition
Specialist name:	Dr Brian Colloty		
Specialist Qualifications:	Ph.D Botany / aquatic sciences		
Professional affiliation/registration:	SACNASP Pr Sci Nat Ecology 400268/07		
Physical address:	1 Rossini Rd Pari Park PE		
Postal address:	As Above		
Postal code:	6070	Cell:	0834983299
Telephone:	0413662077	Fax:	-
E-mail:	b.colloty@gmail.com		

2. DECLARATION BY THE SPECIALIST

I, Brian Colloty, declare that

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Brian Colloty
Signature of the Specialist

EnviroSci (Pty) Ltd
Name of Company:
21/08/2020
Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, Brian Colloty, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.

21/08/2020 Brian Colloty
Signature of the Specialist
EnviroSci (Pty) Ltd
Name of Company

21/08/2020
Date
[Signature]
Signature of the Commissioner of Oaths

21/08/2020
Date

COMMISSIONER OF OATHS (RSA)
R P van der Merwe
Professional Accountant (SA)
57 Pickering Street, Newton Park
Port Elizabeth, 6045