# FINAL Aquatic Compliance Statement



ENVIRONMENTAL AND SOCIAL ADVISORY SERVICES

# LATRODEX WIND ENERGY FACILITY IN THE GREAT KEI LOCAL MUNICIPALITY, EASTERN CAPE.

## FINAL AQUATIC COMPLIANCE STATEMENT

<b>Prepared for:</b> Latrodex (Pty) Ltd
Prepared by: $\overbrace{O} \bigcirc \bigcirc$
Also in Cape Town, Port Elizabeth, Johannesburg, Grahamstown, Maputo (Mozambique) and Romsey (UK) www.cesnet.co.za

May 2022



**CES Report Revision and Tracking Schedule** 

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Study Leader/ Registered Environmental Assessment Practitioner – Approval:	Dr Alan Carter									
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	FINAL AQUATIC BIODIVERSITY COMPLIANCE STATEMENT									

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#### **Contact Details: Report Writer**

Name	Ms Robyn Thomson
Designation	EAP, CES
E-mail	h.mduduma@cesnet.co.za

#### **Contact Details: Report Reviewer and Quality Control**

Name	Ms Jaclyn Smith
Designation	Aquatic Specialist, external
E-mail	info@jsenvironmental.co.za

#### **Contact Details: Project Manager**

Name	Ms Robyn Thomson
Designation	Senior Environmental Consultant
E-mail	r.thomson@cesnet.co.za

#### **Contact Details: EAP/Study Leader**

Name	Dr Alan Carter
Designation	Executive and Principal Environmental Consultant
E-mail	a.carter@cesnet.co.za

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# **1 PROJECT TEAM**

#### 1.1 DETAILS AND EXPERTISE OF THE SPECIALISTS

#### Ms Robyn Thomson (Role: Report Writer)

Robyn is a Senior Environmental Consultant with 16 years' experience. She holds a BSc degree with majors in Archaeology, Environmental and Geographical Science, as well as a BSc (Hons) in Environmental Science from the University of Cape Town and Rhodes University respectively. Robyn's key experience includes renewable energy developments, linear developments, residential developments and mining developments, with her main interest being on renewable energy. Her main focuses include Project Management, Basic Assessment Processes, Scoping and EIA Processes, the Environmental Authorisation (EA) Amendment Processes, Reviewing Reports, the Public Participation Process (PPP), Water Use Licence Applications and associated reports and GIS Mapping. Robyn completed both the Introduction to Environmental Impact Assessment Procedure and Introduction to Environmental Risk Assessment Short Courses by Coastal and Environmental Services and the Department of Environmental Science Rhodes University respectively. In addition, Robyn is a member of the International Association for Impact Assessment (IAIA).

#### Ms Jaclyn Smith (Role: Report Review)

Jaclyn is an environmental specialist with a BSc with majors in Environmental Science and Geology from Rhodes University, as well as a BSc (Hons) in Geology from Nelson Mandela Metropolitan University. Jaclyn's honours dissertation looked at the sediment disturbance depth over two beaches in the Port Elizabeth. Jaclyn has over <u>89</u> years' experience as an environment consultant and has undertaken various environmental impact studies. She has undertaken and assisted aquatic specialists with a number of aquatic and wetland impact assessments.

Wetland Training: Rhodes University, Tools for Wetland Assessment (certified competent Wetland Assessment Practitioner). Jaclyn is registered with the South African Council of Natural Scientific Professionals (SACNASP).

<ul> <li>I, Reviewer, declare that, in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Amended Environmental Impact Assessment Regulations, 2017;</li> <li>I act as the independent specialist in this application;</li> <li>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;</li> <li>I declare that there are no circumstances that may compromise my objectivity in performing such work;</li> </ul>
Assessment Regulations, 2017; 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
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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;

1

#### 1.2 DECLARATION

<ul> <li>I undertake to disclose to the applicant and the information in my possession that reasonable influencing - any decision to be taken with competent authority; and - the objectivity of prepared by myself for submission to the complete All the particulars furnished by me in this repo</li> <li>I realise that a false declaration is an offere punishable in terms of section 24F of the Act.</li> </ul>	ly has or may have the potential of a respect to the application by the any report, plan or document to be petent authority; rt are true and correct; and
	31 May 2022
SIGNED	DATE

-

# **2 PROJECT DESCRIPTION AND LOCATION**

#### 2.1 WIND ENERGY FACILITY

Latrodex (Pty) Ltd is proposing the construction of 15MW Wind Energy Facility consisting of five 5 (five) x3MW turbines to be located near Marshstrand, Great Kei Local Municipality, Eastern Cape. The power generated from the WEF will be used to provide electricity to the existing Wild Coast Abalone facility and excess electricity to be fed into the Eskom grid. The proposed WEF is to be located on the ridge overlooking the existing Wild Coast Abalone Facility.

Turbine Design Specifications										
Number of turbines	5									
Power output per turbine	3MW									
Facility output	15MW									
Turbine hub height	Up to 105m									
Turbine rotor diameter	Up to 90m									
Turbine blade length	Up to 45m									
Turbine tip height	150m (maximum height)									
Turbine foundation area	400m <sup>2</sup>									
Crane hardstand area	3 500m <sup>2</sup>									
Turbine road width	14m to be rehabilitated to 8m									

Each wind turbine is made up of a tower, a nacelle and rotor blades. The proposed 3MW wind turbine model will have a hub height of up to 105m and 90m rotor diameter.

Other infrastructure associated with the proposed WEF will be:

- Concrete foundations to support the wind towers;
- Access roads to each turbine;
- Underground cables connecting each turbine to the other and to the mini substation;
- Control room and maintenance facilities; and
- An onsite mini-substation to facilitate interconnection of the WEF with the Wild Coast Abalone Facility and Eskom grid; and
- Two 22 kV powerlines connecting the facility to two existing Eskom substations:
- Chaba sub-station; and
- Rivermouth sub-station
- Temporary infrastructure including a site camp and a laydown area of approximately 30m<sup>2</sup> per turbine (all to be rehabilitated post construction).



Wind energy is a form of solar energy. Winds are caused by the uneven heating of the atmosphere by the sun, the irregularities of the earth's surface, and rotation of the earth. Wind flow patterns are modified by the earth's terrain, bodies of water, and vegetation. This wind flow or motion energy (kinetic energy) can be used for generating electricity. The term "wind energy" describes the process by which wind is used to generate mechanical power or electricity. Wind turbines convert the kinetic energy in the wind into mechanical power and a generator can then be used to convert this mechanical power into electricity. A detailed description or the components of a typical wind turbine subsystem is provided below and shown in **Error! Reference source not found.**:

- A rotor, or blades, which are the portions of the wind turbine that collect energy from the wind and convert it into rotational shaft energy to turn the generator. The speed of rotation of the blades is controlled by the nacelle, which can turn the blades to face into the wind ('yaw control) and change the angle of the blades ('pitch control') to make the most use of the available wind. The maximum rotor diameter for the Latrodex WEF turbines is approximately 90m.
- A nacelle (enclosure) containing a drive train, usually including a gearbox (some turbines do not require a gearbox) and a generator. The generator converts the turning motion of a wind turbine's blades (mechanical energy) into electricity. Inside this component, coils of wire are rotated in a magnetic field to produce electricity. The nacelle is also fitted with brakes, so that the turbine can be switched off during very high winds, such as during storm events. This prevents the turbine from being damaged. All this information is recorded by computers and is transmitted to a control centre, which means that operators don't have to visit the turbine very often, but only occasionally for a mechanical check.
- A tower, to support the rotor and drive train; The tower on which a wind turbine is mounted is not only a support structure, but it also raises the wind turbine so that its blades safely clear the ground, and so that it can reach the stronger winds which are at higher elevations. The tower must also be strong enough to support the wind turbine and to sustain vibration, wind loading, and the overall weather elements for the lifetime of the turbine. The maximum hub height of the Latrodex WEF turbines is approximately 105m.
- Electronic equipment such as controls, electrical cables, ground support equipment, and interconnection equipment.

# 2.2 POWERLINE CONNECTING THE WEF SUBSTATION TO THE ESKOM TWO SUBSTATIONS

#### 2.2.1 CHABA SUBSTATION

Powerline Corridor Option 1 (preferred alternative)

- Extent of powerline within corridor: 453 052 m<sup>2</sup> (12 m width x 37.73 km length)
- Location: connecting the WEF to the Chaba Substation. This route follows the Haga Haga gravel road, turns right on the R349 and then left onto the gravel road past Soto settlement reaching the Chaba substation approximately 1.5 km from the N2.

#### **Powerline Corridor Option 2**

• Extent of powerline within corridor: 466 800 m2 (12 m width x 38.90 km length)



• Location: connecting the WEF to the Chaba Substation. This route follows the Haga Haga gravel road, turns left onto the R349 and then right onto the until it reaches the Chaba substation approximately 1.5 km off the N2.

#### 2.2.2 RIVERMOUTH SUBSTATION

Powerline Corridor Option 1 (preferred alternative)

- Extent of powerline within corridor: 103 245 m<sup>2</sup> (12 m width x 8.59 km length)
- Location: connecting the WEF to the Rivermouth Substation. This route follows a path in a north easterly direction, crossing the Quko River and meeting up with an existing gravel road. It then follows the road in a northerly direction for 1.5 km before turning right onto an existing gravel road. After 2 km the route deviates off the road and meets up with the Rivermouth substation.

### 3 SITE SENSITIVITY VERIFICATION AND MINIMUM REPORT CONTENT REQUIREMENTS

Prior to completing the Aquatic Biodiversity Specialist Assessment in accordance with the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Aquatic Biodiversity (Government Notice 320, dated 20 March 2020), a site sensitivity verification was undertaken to confirm the current land use and environmental sensitivity of the proposed project area as identified by the National Web-Based Environmental Screening Tool (Screening Tool).

The details of the site sensitivity verification are noted below:

Date of Site Visit: 28 January 2022

Specialist Name: Ms Jaclyn Smith

SACNASP Professional Registration Number: 120693

Government Notice No. 320, dated 20 March 2020, includes the requirement that an Initial Site Sensitivity Verification Report must be produced for a development footprint. As per Part 1, Section 2.3, the outcome of the Initial Site Verification must be recorded in the form of a report that-

(a) Confirms or disputes the current use of the land and environmental sensitivity as identified by the national web based environmental screening tool.

(b) Contains a motivation and evidence of either the verified or different use of the land and environmental sensitivity.

(c) Is submitted together with the relevant reports prepared in accordance with the requirements of the Environmental Impact Assessment Regulations.

This report has been produced specifically to consider the aquatic biodiversity theme and addresses the content requirements of (a) and (b) above. The report will be appended to the respective specialist study included in the NEMA related reports produced for the project.

Site sensitivity based on the aquatic biodiversity theme included in the Screening Tool and specialist assessment

Based on the DFFE Screening Tool, the sites were rated LOW sensitivity due to the lack of any significant aquatic systems that may be affected. (See Figure 1).



Figure 2.1 Map of relative aquatic biodiversity theme sensitivity, where Green = LOW sensitivity

Based on the above outcomes, the specialist confirms the environmental sensitivities identified on site, informed by site visits undertaken by Ms Jaclyn Smith would be rated as LOW provided recommendations made be implemented. This information was then compared to current wetland inventories, 1: 50 000 topocadastral surveys mapping and the site. The findings are provided below.

#### 3.1 **TURBINE POSITIONS**

The proposed wind turbines are located along a ridge line and the boundary of two sub-quaternary catchments of quaternary catchment R30A of the Mzimvubu-Tsitsikamma Water Management Area. According the National Wetland Map 5 (NBA, 2018), there are no natural wetlands within 500m of the development site.

The following form observations from the initial site visit:

- 1. Turbine 1 is located within a low sensitivity area. There are unnamed non-perennial streams located south-east and downslope of the site.
- 2. Two water storage dams (artificial wetlands) occur within close proximity to turbine 2.
- 3. A section of natural wetlands occur between turbine 3 and 4.
- 4. Turbine 5 is located in low sensitivity area, however, it is surrounding by non-perennial streams downslope to the east and west of the site.



It is worth noting, that the general study area had received a lot of rainfall and *Cyperus* species (wetland vegetation) were scattered and noticed throughout the hilltop. This is likely as a result of the heavy rainfall period/groundwater contribution in the area.

#### **Recommendations:**

- Turbine 2 should be adjusted to be more than 32m from the water storage dams.
- Turbine 3 and 4 must be adjusted to be more than 50m from the natural wetland area. No infrastructure should be within these areas.

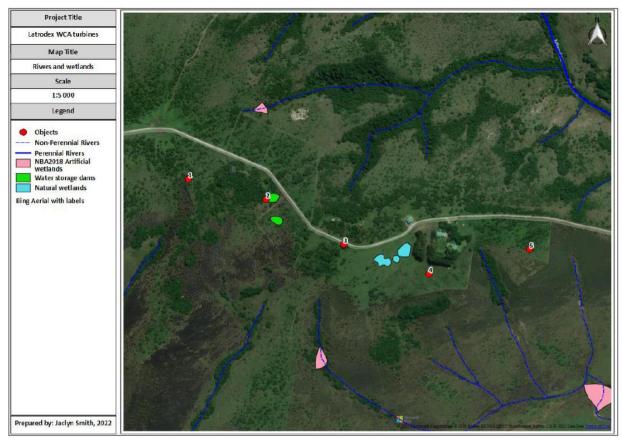


Figure 2.2 Wind turbines rivers and wetlands

FINAL Aquatic Biodiversity Specialist Compliance Statement



Figure 2.3 Natural wetland area between turbines 3 and 4



Figure 2.4 Artificial storage dam adjacent to turbine 2

#### 3.2 POWER LINES

#### 3.2.1 Chaba Powerline

The 33kV powerline connecting to the Eskom Grid from the proposed wind turbines predominantly follows existing gravel access roads, however, in some sections it goes through transformed and untransformed farm lands. The powerline follows a ridgeline/areas of high relief and traverses the Nyarha, Haga-Haga, Kwenxura and Quko Rivers and their first order non-perennial tributaries. According to NBA (2018), there are a number of natural wetlands occurring within 500m of the powerline route and a number of artificial wetlands (water storage dams) occurring within close proximity to the route.

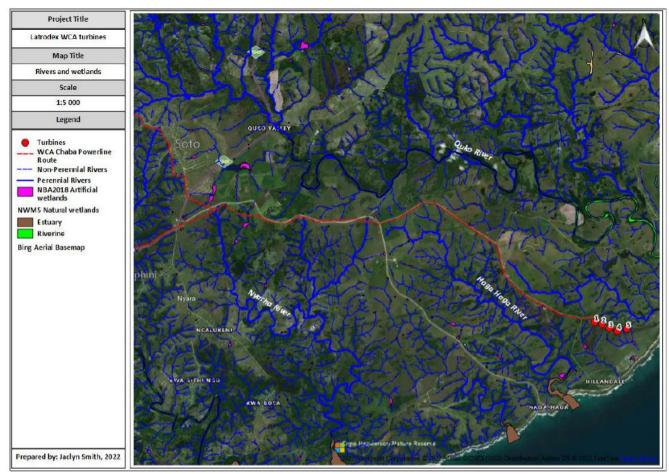


Figure 2.5 Chaba powerline rivers and wetlands (a)

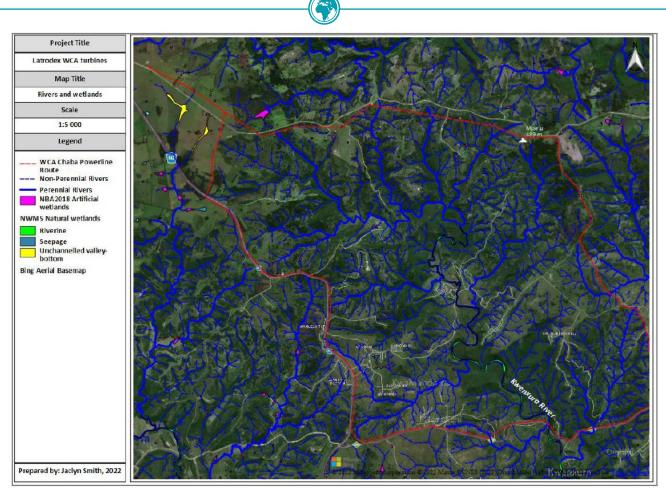


Figure 2.6 Chaba powerline rivers and wetlands (b)

#### **Recommendations:**

- The powerline should be adjusted to go along existing gravel access roads as far as possible.
- All powerline pole placement should be adjusted to avoid water course and wetland crossings as far as possible.
- The route should be surveyed by an aquatic and wetland specialist to identify and delineate riparian and wetland areas.

#### 3.2.2 Rivermouth Powerline

The powerline will cross the Mtendwe, Quko and Kumqotwane Rivers and their associated tributaries. The small portion of the powerline will cross the Nyutura River.

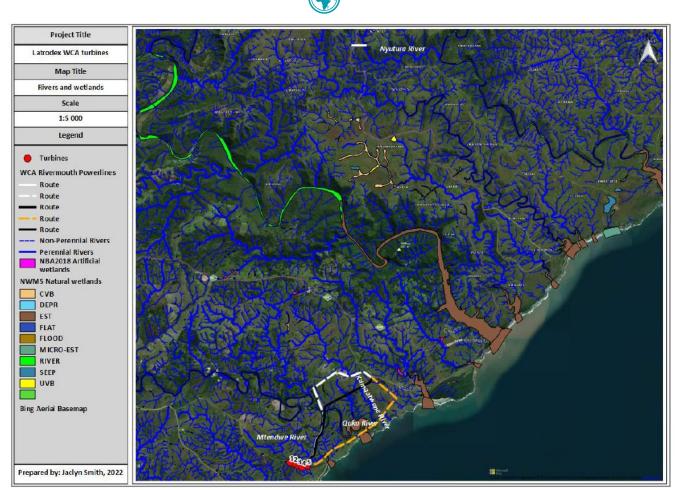


Figure 2.7 Rivermouth powerline rivers and wetlands

#### **Recommendations:**

- The powerline should be adjusted to go along existing gravel access roads as far as possible.
- All powerline pole placement should be adjusted to avoid watercourses and wetland crossings as far as possible.
- The route should be surveyed by an aquatic and wetland specialist to identify and delineate riparian and wetland areas.

### 4 IMPACT STATEMENT

POTENTIAL ISSUES	SOURCE OF ISSUE	NATURE	TYPE	SEVERITY	EXTENT	DURATION	ПКЦНООД	REVERSIBILITY	IRREPLACEABLE LOSS	MITIGATION POTENTIAL	SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURES	SIGNIFICANCE OF IMPACT WITH MITIGATION
						CONS	TRUCT	ION PH	HASE				
Direct physical loss or modification of freshwater habitat	The most notable direct physical loss of freshwater ecosystem habitat will occur at turbine 1 and turbine 2, which are in close proximity to artificial dams and natural wetland areas, respectively.	Negative	Direct	Moderate	Study-area	Short-term	Possible	Reversible	Resource will not be lost	Achievable	MODERATE	<ul> <li>Turbine 2 should be adjusted to be more than 32m from the water storage dams.</li> <li>Turbine 3 and 4 must be adjusted to be more than 50m from the natural wetland area. No infrastructure should be within these areas.</li> <li>Underground cabling crossings points should be aligned along areas or corridors of existing disturbance, e.g., along existing roads, and should ideally be buried within the road fill if</li> </ul>	LOW
Alteration of hydrological and geomorphologi cal processes (erosion and sediment)	Potential sediment related risks associated with the construction phase of this project relate to an increase in sediment supply to watercourses associated with trenching taking place within and near watercourse units. Extensive watercourse and dryland erosion within the study area increases the risk of construction phase sediment mobilisation due to trenching or excavation activities, especially where pipelines are not associated with existing road crossings. Sediment related risks are however temporary in nature and are easily manageable during pipeline upgrades and installations. Trenching within wetlands to lay or upgrade pipes will also temporarily alter natural water distribution patterns. This is not expected to affect many watercourses as most pipe crossings are associated with roads, where the pipelines will be buried in the road fill, rather than in the wetland bed material. All pipeline crossings of large perennial river systems are at the location of existing bridges with the water reticulation pipelines expected to be attached to bridges. These are therefore no expected diversions of watercourses to create dry working areas.	Negative	Direct	Moderate	Study-area	Short-term	Possible	Reversible	Resource will not be lost	Achievable	MODERATE	<ul> <li>possible.</li> <li>Prior to the commencement of any construction activities, the following features must be staked out by a surveyor and demarcated using brightly coloured shade cloth: <ul> <li>o The construction servitude at all watercourses crossings extending 15m either side of the crossing.</li> <li>o Artificial dams and natural wetlands.</li> </ul> </li> <li>Demarcations are to remain until construction is complete.</li> <li>All areas outside of this demarcated working areas must be considered no-go areas for the entire construction phase. Any contractor found working within No-Go areas must be fined as per fining schedule/system setup for the project.</li> <li>No equipment laydown or storage areas must be located within delineated wetland or riparian habitats.</li> <li>Access to and from the project site should be either via existing roads or within the</li> </ul>	LOW

POTENTIAL ISSUES	SOURCE OF ISSUE	NATURE	ТҮРЕ	SEVERITY	EXTENT	DURATION	ПКЦНООВ	REVERSIBILITY	IRREPLACEABLE LOSS	MITIGATION POTENTIAL	SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURES	SIGNIFICANCE OF IMPACT WITH MITIGATION
Impacts to water quality	Water quality impacts during construction will be limited to potential increased water turbidity associated with potential increased sediment supply to watercourses, and pollution related to potential spillages of fuels and chemicals during construction of the pipeline alignments. If poorly managed, this impact could be of a moderately low significance, where large sediment plumes are regularly deposited into onsite watercourses during construction, and where onsite spill related pollution risks are not mitigated properly.	Negative	Direct	γοw	Study-area	Short-term	Possible	Reversible	Resource will not be lost	Achievable	LOW	<ul> <li>construction servitude.</li> <li>All disturbed areas beyond the construction site that are intentionally or accidentally disturbed during the construction phase must be rehabilitated immediately to the satisfaction of the ECO. All disturbed areas must be prepared and then re-vegetated to the satisfaction of the ECO as per the relevant rehabilitation plan.</li> </ul>	LOW
Impacts to ecological connectivity and/or ecological disturbance impacts	During construction, the presence of workers and machinery in the general vicinity of onsite watercourses is likely to create noise, vibrations and dust which have the potential to temporarily disturb and displace fauna that make use of watercourse corridors for movement and refuge. Use of watercourses for refugia by fauna in the context of the study area is however likely to be limited due to the urban and per-urban nature of the area, and the generally degraded state of onsite watercourses. Additionally, construction phase disturbances will be temporary.	Negative	Direct	row	Study-area	Short-term	Possible	Reversible	Resource will not be lost	Achievable	LOW		LOW
Inappropriate storage and handling of hazardous substances could lead to surface and ground water pollution	Inappropriate storage and handling of hazardous substances such as diesel, paint, pesticides, etc. could lead to surface and ground water pollution due to, for example, oil leaks, spillage of diesel, etc.	Negative	Direct	Severe	Localised	Long-term	Probable	Reversible	Resource will not be lost	Easily Achievable	MODERATE	<ul> <li>All hazardous substances must be stored in a bunded area with an impermeable surface beneath them. Ensure that such areas are designed into the layout plan for the site camp.</li> <li>A Spill Response Contingency Plan must be drafted and implemented.</li> </ul>	LOW

POTENTIAL ISSUES	SOURCE OF ISSUE	NATURE	ТҮРЕ	SEVERITY	EXTENT	DURATION	ПКЦНООВ	REVERSIBILITY	IRREPLACEABLE LOSS	MITIGATION POTENTIAL	SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURES	SIGNIFICANCE OF IMPACT WITH MITIGATION
Littering and the use of informal ablution facilities by construction workers could cause surface and ground water pollution	The littering of general waste and the use of the surrounding environmental as informal ablutions by construction workers could lead to pollution in the surrounding water sources and the general vegetation which could have a detrimental impact on plant and animal species in the surrounding areas.	Negative	Direct	Moderate	Localised	Short-term	Possible	Reversible	Resource will not be lost	Easily Achievable	LOW	<ul> <li>Littering must be avoided and litter bins must be made available at various strategic points onsite.</li> <li>Refuse from the construction site must be collected on a regular basis and deposited at an appropriate landfill site.</li> <li>The bins should be animal proof i.e. the lids must not allow animals to get in and scavenge.</li> <li>There must be sufficient litter bins on site and they should be emptied regularly and as necessary. Waste manifests to be provided by the municipality to prove legal disposal.</li> <li>Portable ablution facilities must be located on site and must be situated away from (&gt;50m) from any watercourses.</li> </ul>	LOW

POTENTIAL ISSUES	SOURCE OF ISSUE	NATURE	ТҮРЕ	SEVERITY	EXTENT	DURATION	ПКЦНООД	REVERSIBILITY	IRREPLACEABLE LOSS	MITIGATION POTENTIAL	SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURES	SIGNIFICANCE OF IMPACT WITH MITIGATION
Stormwater management and erosion prevention	During the construction phase, failure to implement effective stormwater management measures may result in increased surface soil erosion and contamination of stormwater and resulting surrounding watercourses.	Negative	Direct, Indirect	Moderate	Study area	Long-term	Possible	Reversible	Resource will not be lost	Easily Achievable	MODERATE	<ul> <li>The construction site must be managed in a manner that prevents pollution watercourses or groundwater, due to suspended solids, silt or chemical pollutants.</li> <li>Berms and swathes must be placed in areas that may be prone to erosion.</li> <li>Temporary cut-off drains and berms may be required to capture storm water and promote infiltration.</li> <li>The unnecessary removal of groundcover from slopes must be prevented, especially on steep slopes which will not be developed.</li> <li>If re-vegetation of exposed surfaces cannot be established, temporary erosion and sediment control measures must be maintained until such a time that re-vegetation can commence.</li> <li>All temporary erosion and sediment control measures done done done done done done wegetation cover has successfully recolonised the affected areas.</li> <li>After every rainfall event, the contractor must check the site for erosion damage and rehabilitate this damage immediately. Erosion rills and gullies must be filled-in with appropriate material and silt fences or fascine work must be established along the gulley for additional protection until vegetation has re-colonised the rehabilitate darea.</li> </ul>	LOW

POTENTIAL ISSUES	SOURCE OF ISSUE	NATURE	ТҮРЕ	SEVERITY	EXTENT	DURATION	ПИКННООД	REVERSIBILITY	IRREPLACEABLE LOSS	MITIGATION POTENTIAL	SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURES	SIGNIFICANCE OF IMPACT WITH MITIGATION
		T	T	1	T	OP	ERATIC	ON PHA	SE				
Direct physical loss or modification of freshwater habitat	During the operational phase of the WEF direct impacts to freshwater habitat may occur during maintenance of pipeline infrastructure within the vicinity of watercourses. This is likely to occur very infrequently and where sensitive areas are avoided during repairs or maintenance,	Negative	Direct	Low	Study-area	Short-term	Possible	Reversible	Resource will not be lost	Achievable	LOW	<ul> <li>Mitigation impacts discussed above for the construction phase apply to maintenance activities during operation.</li> </ul>	• LOW
Impacts to water quality	Water quality impacts during the operation of the WEF are mostly unlikely to take place. Where these could occur is during pipeline crossing repairs or maintenance, where any potential pollutants used (fuels etc.) are poorly managed and there is a risk of spillage	Negative	Direct	Low	Study-area	Short-term	Possible	Reversible	Resource will not be lost	Achievable	LOW	<ul> <li>Mitigation impacts discussed above for the construction phase apply to maintenance activities during operation.</li> </ul>	• LOW
Impacts to ecological connectivity and/or ecological disturbance impacts	During operation phase maintenance and repairs the presence of workers and machinery in the general vicinity of onsite watercourses is likely to create noise, vibrations and dust which have the potential to temporarily disturb and displace fauna that make use of watercourse corridors for movement and refuge	Negative	Direct	Low	Study-area	Short-term	Possible	Reversible	Resource will not be lost	Achievable	LOW	<ul> <li>Mitigation impacts discussed above for the construction phase apply to maintenance activities during operation.</li> </ul>	• LOW

### **5 C**ONCLUSIONS

Based on the above outcomes, the specialist confirms the environmental sensitivities identified on site, informed by site visits undertaken on 28 January 2022 would be rated as LOW provided recommendations made be implemented.

#### **Recommendations:**

#### Turbines

- Turbine 2 should be adjusted to be more than 32m from the water storage dams.
- Turbine 3 and 4 must be adjusted to be more than 50m from the natural wetland area. No infrastructure should be within these areas.

#### Chaba powerline

- The powerline should be adjusted to go along existing gravel access roads as far as possible.
- All powerline pole placement should be adjusted to avoid water course and wetland crossings as far as possible.
- The route should be surveyed by an aquatic and wetland specialist to identify and delineate riparian and wetland areas.

#### Rivermouth powerline

- The powerline should be adjusted to go along existing gravel access roads as far as possible.
- All powerline pole placement should be adjusted to avoid watercourses and wetland crossings as far as possible.
- The route should be surveyed by an aquatic and wetland specialist to identify and delineate riparian and wetland areas.



# DETAILS OF SPECIALIST AND DECLARATION OF INTEREST IN TERMS OF REGULATIONS 12 AND 13 OF THE AMENDMENTS TO THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 AS AMENDED.

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

Application for environmental authorization in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Amendments to the Environmental Impact Assessment Regulations, 2014. This form is valid as of 6 January 2021.

#### PROJECT TITLE

LATRODEX (PTY) LTD WIND ENERGY FACILITY AND OVERHEAD POWERLINE, MARSHSTRAND,											
GREAT KEI LOCAL MUNICIPALITY											
SPECIALIST 1	PECIALIST 1 JS Environmental Consulting (Pty) Ltd										
Contact person:	Ms Jaclyn Smith										
Postal address:	PO Box 19176, Tecoma, East London										
	TO DOM TOTTO, TOCOMIA, EAST LONGON										
Postal code:	5241 Cell: 0725550464										
i usiai coue.	3241	Cell.	0725550464								
Telephone	0705550404										
Telephone:	0725550464	Fax:	N/A								
		_									
E-mail: info@jsenvironmental.co.za											
Professional affiliation(s) (if SACNASP Professional Natural Scientist (No. 120693)											
any)		,									
	L										

Project Consultant:	Coastal and Environmental Services								
Contact person:	Dr Alan Carter								
Postal address: PO Box 8145, Nahoon, East London									
	5210	Cell:	0827393419						
Postal code:									
Telephone:	0437267809	Fax:							
E-mail:	a.carter@cesnet.co.za								

#### 4.2 The SPECIALIST

], Ms Jaclyn Smith

, declare that -

General declaration:

- 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 environmental impact assessments, 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 will take into account, to the extent possible, the matters listed in regulation 8 of the regulations when preparing the application and any report relating to the application;
- 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;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available
  to interested and affected parties and the public and that participation by interested and affected parties is facilitated
  in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate
  and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by

interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;

- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence and is punishable in terms of section 24F of the Act.

#### Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed
  activity proceeding other than remuneration for work performed in terms of the Amendments to Environmental Impact
  Assessment Regulations, 2014 as amended.
- I have a vested interest in the proposed activity proceeding, such vested interest being:

Signature of the environmental assessment practitioner: JS Environmental Consulting (Pty) Ltd Name of compa hγ: 01/08/202 Date: \$ignatur Ssioner of Oaths: 51 2022 OGus1 Date: 1115 d mmissia **Designation:** <sup>1</sup> Curriculum Vitae (CV) attached LYNN SMIT COMMISSIONER OF OATHS REFERENCE NUMBER: 9/1/8/2 EAST LONDON 25 TECOMA STREET, BEREA EAST LONDON, 5214 Page 3 of 5

Official stamp (below).

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#### Annexure 1

#### CONTACT

Cell: 072 555 0464

Email: info@jsenvironmental.co.za

Postal address: P.O. Box 19176 Tecoma East London 5214

#### **EDUCATION**

2010-2012 Rhodes University BSc Geology and Environmental Science

2013-2014 Nelson Mandela University BSc (Hons) Geology

#### COURSES

2018 EIA Course Rhodes University

2018 Tools for Wetland Assessment – Certified Competent Rhodes University

#### PROFESSIONAL REGISTRATION

Registered Professional Natural Scientist with South African Council for Natural Scientific Professions (Reg No. 120693)

### CURRICULUM VITAE

JACLYN SMITH Pr.Sci.Nat

ENVIRONMENTAL CONSULTANT

#### EXPERTISE

I have seven years' experience in environmental consulting. I have experience in managing and undertaking Environmental Impact Assessments (EIA) and Aquatic and Wetland Assessments as well as extensive experience in the following areas:

**Public Participation:** Managing and undertaking the public participation process in support of EIA's including public meetings and community and stakeholder engagement.

Water Use Licencing: Undertaking numerous water use licence applications with a Section 21 (a), (b), (c), (e), (f), (g) and (i) component.

**Specialist studies:** Preparation of reports and field assessments for vegetation impact assessments and waste management assessments.

Auditing: Construction and operation compliance audits for road and infrastructure upgrades as well as housing developments throughout the Eastern Cape.

**Permit applications:** Preparation of applications for removal of protected plant and tree species to DEDEAT and DAFF as well as demolition permit applications to ECPHRA.

#### EMPLOYMENT

Terreco Environmental cc Environmental Consultant 2015-2017

CES – Coastal and Environmental Services (Pty) Ltd Environmental Consultant 2017-2019

#### CONSULTING EXPERIENCE

#### Environmental Impact Assessments

- Construction of the new Sipetu River Bridge, Eastern Cape. 2014.
- Basic Assessment Report Process
- Tsomo Bulk Sanitation Upgrade, Eastern Cape. 2014-2016.
   Basic Assessment Report Process
- Thynk Retail One (Pty) Ltd Road and Services to Portion 9 of Farm 809, Quenera North, East London. 2017-2018.
  - Basic Assessment Report Process
- Rec-Oil Used-Oil Recycling Facility in Wilsonia, East London. 2017 to 2019.
  - Scoping and Environmental Impact Reports in support of Environmental Authorisation and Waste Licence Applications

#### CONSULTING EXPERIENCE

- Proposed Infrastructure Developments in the SANBI Kwelera National Botanical Garden, Eastern Cape. 2017 to 2019.
  - Basic Assessment Process
- Nottinghill Farm NEMA Section 24G Application, Eastern Cape. 2017 to 2018.
  - Section 24G application

#### Aquatic and Wetland Impacts Assessments

- Amalinda Downs Development, Amalinda, East London. 2018.
- Villa Rosa Development, Eastern Cape. 2017.
- Hope Village Development, Gauteng. 2018.
- Cambridge West Housing Development, Eastern Cape. 2019.
- Boulders WEF Powerline, Western Cape. 2019.
- Mbhashe Access Roads Upgrade, Mbhashe Local Municipality, Eastern Cape. 2019.
- MBSA Clarkebury Road Upgrade, Eastern Cape. 2019.
- Kei Road Housing Development, Eastern Cape. 2017.
- Tsomo WWTW Upgrade, Eastern Cape. 2019.
- Willowvale and Idutywa Informal Settlement Upgrades. 2020.
- Ventnor Dam, Tarkastad. 2020.
- BCMM Ward 46 Road and Culvert Upgrade. 2020.
- Dordrecht Sports Field Upgrade. 2020.

#### Water Use Licencing and Risk Assessments

- Alice pipelines and road upgrade, Eastern Cape. 2019.
- Amatolaville Primary School, Stutterheim, Eastern Cape. 2018.
- SKG Properties Bengal Heights Development, Amalinda, East London. 2017.
- Yellowwoods River Sewer Pipeline Crossing, Eastern Cape. 2019.
- Qwabi Bridge Widening, Eastern Cape. 2018.
- Mdantsane Pedestrian Bridges, Eastern Cape. 2019.

#### Permit applications

- MBSA J-Site, East London, Eastern Cape. 2016.
  - ECPHRA Demolition permit applications
- Mjanyana and Nessie Knight Hospital Upgrades, Eastern Cape. 2014.
  - ECPHRA Demolition permit applications
- Blind River Bridge Repairs, East London, Eastern Cape. 2014.
   DAFF Protected plant permit application
- SKG Voestalpine Development, ELIDZ, East London, Eastern Cape. 2019.
  - Vegetation assessment and DAFF and DEDEAT plant relocation permits

#### **Construction and Operation Compliance Auditing**

- SANRAL Upgrade of the R72 from Openshaw Village to Birah River, Eastern Cape. 2017 to 2019.
- Wavecrest Hotel Expansion, Eastern Cape. 2018 to 2019.
- Kidds Beach Retirement Village, Eastern Cape. 2018.
- > Da Gama annual external Water Use Licence Audit, Eastern Cape. 2018.
- Coffee Bay Quarry Works and Rehabilitation, Eastern Cape. 2015-2016.
- Coffee Bay to Zithulele Hospital Road and Bridge Upgrade, Eastern Cape. 2015-2016.
- Clippety Clop Housing Development. Eastern Cape. 2015-2016.
- > Fynbos and Ndancama Housing Development, Eastern Cape. 2014-2017.

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