



Amended Final Environmental Management Programme

**PROSPECTING IN OFFSHORE SEA CONCESSION AREA 6C,
NORTHERN CAPE, BY TRANS ATLANTIC DIAMONDS (PTY) LTD**

Application Ref. No.: NC30/5/1/1/2/14851 PR



21 September 2026



ANCHOR
environmental

PART OF



Cover photo: Anchor Environmental Consultants

Amended Final Environmental Management Programme

PROSPECTING IN OFFSHORE SEA CONCESSION AREA 6C, NORTHERN CAPE, BY TRANS ATLANTIC DIAMONDS (PTY) LTD

Application Ref. No.: NC30/5/1/1/2/14851 PR

21 September 2026

Report prepared for:

Trans Atlantic Diamonds (Pty) Ltd
109 Kloof Road, Bantry Bay,
Cape Town, South Africa, 8005



TRANS ATLANTIC
DIAMONDS

Report Prepared by:

Anchor Environmental Consultants (Pty) Ltd
8 Steenberg House, Silverwood Close, Tokai, South Africa
www.anchorenvironmental.co.za



Authors: Cheruscha Swart and André de Villiers

Citation: Swart C. 2026. Amended *Final Environmental Management Programme: Prospecting in offshore sea Concession Area 6C, Northern Cape, by Trans Atlantic Diamonds (Pty) Ltd*. Application Ref. No.: NC30/5/1/1/2/14851 PR. Report no. 2364/10 prepared by Anchor Environmental (Pty) Ltd for Trans Atlantic Diamonds (Pty) Ltd. 63 pp + Appendices.

© Anchor Environmental Consultants 2026

Use of material contained in this document by prior written permission of Anchor Environmental Consultants only.

TABLE OF CONTENTS

TABLE OF CONTENTS	I
LIST OF ABBREVIATIONS.....	III
I SCOPE AND CONTENT OF AN ENVIRONMENTAL MANAGEMENT PROGRAMME.....	I
1.1 BACKGROUND AND SCOPE OF AN EMPr	1
1.2 CONTENT OF AN ENVIRONMENTAL MANAGEMENT PROGRAMME	2
1.3 ASPECTS OF THE ACTIVITY THAT ARE COVERED BY THE EMPr.....	3
2 ROLES AND RESPONSIBILITIES.....	5
3 DOCUMENTATION, COMPLIANCE AND REPORTING	11
3.1 DOCUMENT CONTROL/ FILING SYSTEM	11
3.1.1 Method Statements	12
3.1.2 Environmental Awareness Training.....	13
3.1.3 Aspects, Impacts and Risk Assessment	13
3.1.4 Emergency Preparedness and Incident Management.....	14
3.1.5 Incident Registers and Incident Investigation Reports	15
3.1.6 Non-compliances	16
3.1.7 Non-Conformance Notices, Registers and Investigation Reports	16
3.1.8 Corrective action records.....	18
3.1.9 Waste Register.....	18
3.1.10 Marine Megafauna Encounter Register	18
3.1.11 Communications and Complaints register	19
3.1.12 Photographic Record.....	19
3.2 MONITORING AND FREQUENCY OF MONITORING.....	19
3.3 REPORTING AND AUDITING.....	20
3.4 AMENDMENTS TO THE IMPACT MANAGEMENT OUTCOMES AND ACTIONS	21
3.5 QUALITY CONTROL SYSTEM.....	21
4 PROJECT BACKGROUND, LOCATION AND DESCRIPTION	22
4.1 DETAILS OF THE APPLICANT	22
4.2 DETAILS AND EXPERTISE OF THE EAP.....	22
4.3 PROJECT BACKGROUND AND LOCATION.....	22
4.4 DESCRIPTION OF THE ASPECTS OF THE ACTIVITIES.....	23
4.5 COMPOSITE MAP: LOCATION AND ENVIRONMENTAL SENSITIVITIES IN CONCESSION 6C.....	27
4.6 PROJECT PHASING	28
4.6.1 Planning, Design And Establishment Phase.....	28
4.6.2 Operation Phase	28
4.6.3 Decommissioning and Closure Phase.....	29
5 FINANCIAL PROVISIONING.....	31
5.1 DETERMINATION OF THE AMOUNT OF FINANCIAL PROVISION.....	31
5.1.1 Describe the closure objectives and the extent to which they have been aligned to the baseline environment described under the Regulation.....	31
5.1.2 Confirm specifically that the environmental objectives in relation to closure have been consulted with landowner and interested and affected parties.....	31
5.1.3 Provide a rehabilitation plan that describes and shows the scale and aerial extent of the main mining activities, including the anticipated mining area at the time of closure.	31

5.1.4	Explain why it can be confirmed that the rehabilitation plan is compatible with the closure objectives.	32
5.1.5	Calculate and state the quantum of the financial provision required to manage and rehabilitate the environment in accordance with the applicable guideline.	32
5.1.6	Confirm that the financial provision will be provided as determined.	33
6	POLICY AND LEGISLATIVE CONTEXT	34
7	PLANNING, DESIGN AND ESTABLISHMENT PHASE	40
7.1	OVERVIEW	40
7.2	ENVIRONMENTAL AWARENESS TRAINING	40
7.3	INTERESTED AND AFFECTED PARTIES (I&APs) NOTIFICATION	42
7.4	PROTECTION OF BENTHIC AND SENSITIVE HABITATS	43
7.5	PROTECTION OF SUBMERGED PREHISTORIC ARCHAEOLOGICAL, MARITIME ARCHAEOLOGICAL AND PALAEOONTOLOGICAL RESOURCES	44
7.6	MANAGEMENT OF EMPLOYMENT, PROCUREMENT AND ECONOMIC OPPORTUNITIES	45
8	OPERATIONAL PHASE	46
8.1	OVERVIEW	46
8.2	OVERALL ENVIRONMENTAL MANAGEMENT	46
8.3	ONGOING I&AP LIAISON AND COORDINATION, INCLUDING MARINE USERS AND THE FISHING SECTOR	47
8.4	STAFF, PUBLIC AND OTHER SEA USERS' HEALTH, SAFETY AND EMERGENCY MANAGEMENT	49
8.5	MANAGEMENT OF IMPACTS ON TOURISM AND RECREATION	50
8.6	MANAGEMENT OF IMPACTS ON SENSE OF PLACE AND WELLBEING	51
8.7	PROTECTION OF MARINE MEGAFUNA FROM VESSEL OPERATIONS	51
8.8	PROTECTION OF BENTHIC AND SENSITIVE HABITATS	54
8.9	PROTECTION OF SUBMERGED PREHISTORIC ARCHAEOLOGICAL, MARITIME ARCHAEOLOGICAL AND PALAEOONTOLOGICAL RESOURCES	55
8.10	POLLUTION MANAGEMENT	58
8.11	MANAGEMENT OF EMPLOYMENT, PROCUREMENT AND ECONOMIC OPPORTUNITIES	59
9	DECOMMISSIONING AND CLOSURE PHASE	60
9.1	SURVEY/ SAMPLING VESSEL TO LEAVE AREA	60
9.2	INFORMATION SHARING: CONTRIBUTION TO ENVIRONMENTAL AND SCIENTIFIC KNOWLEDGE	60
9.3	FINAL WASTE DISPOSAL	61
9.4	CLOSURE	61
10	REFERENCES	62
11	DECLARATION	63
12	APPENDICES	64
12.1	APPENDIX 1 CV OF EAP	64
12.2	APPENDIX 2 SENSITIVITY MAPS	65
12.3	APPENDIX 3 COORDINATES FOR THE DEVELOPMENT AND ALL ASSOCIATED COMPONENTS	66
12.4	APPENDIX 4 METHOD STATEMENT METHODOLOGY GUIDELINE	67
12.5	APPENDIX 5 ASPECTS, IMPACTS AND RISK ASSESSMENT REGISTER	70
13	ANNEXURES	71
13.1	ANNEXURE A: ENVIRONMENTAL AUTHORISATION	71
13.2	ANNEXURE B: PROSPECTING RIGHT	72
13.3	ANNEXURE C: APPROVED SITE LAYOUT	73
13.4	ANNEXURE D: APPROVED METHOD STATEMENTS	55

LIST OF ABBREVIATIONS

Anchor	Anchor Environmental Consultants (Pty) Ltd.
CA	Competent Authority
CBA	Critical Biodiversity Areas
DFFE	Department of Forestry, Fisheries and the Environment (Formerly DEFF and DAFF)
DMPR	Department of Mineral and Petroleum Resources
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EBSA	Ecologically or Biologically Significant Marine Areas
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme Report
ERAP	Emergency Response Action Plan
FLO	Fisheries Liaison Officer
HCS	Hazardous Chemical Substance
JNCC	Joint Nature Conservation Committee
LPSMME	Large Pelagic Small Medium & Micro Enterprises Association
MARPOL	The International Convention for the Prevention of Pollution from Ships
MBES	Multi Beam Echo Sounder
MMI	Marine Mammal Institute
MMSO	Marine Mammal and Seabird Observer
MPA	Marine Protected Area
NEMA	National Environmental Management Act No. 107 of 1998, as amended
NHRA	National Heritage Resource Act No 25 of 1999, as amended
OHS Act	Occupational Health and Safety Act No. 85 of 1993, as amended
PAM	Passive Acoustic Monitoring
ROV	Remotely Operated Vehicle
SADSTIA	South African Deepsea Trawling Industry Association
SAHRA	South African Heritage Resource Association
SAMLMA	South African Marine Linefish Management Association
SAMSA	South African Maritime Safety Authority
SAN	South African Navy
SANBI	South African National Biodiversity Institute
SAPFIA	South African Pelagic Fishing Industry Association
SATA	South African Tuna Association
SATLA	South African Tuna Longline Association
SBP	Sub-Bottom profiler
SDS	Safety Data Sheet
SOPEP	Shipboard Oil Pollution Emergency Plan
TAD	Trans Atlantic Diamonds (Pty) Ltd
VMS	Vessel Monitoring, Control and Surveillance

I SCOPE AND CONTENT OF AN ENVIRONMENTAL MANAGEMENT PROGRAMME

I.1 BACKGROUND AND SCOPE OF AN EMPr

The Environmental Management Programme Report (EMPr) is a proactive management tool that guides consistent and ongoing environmental management throughout the life cycle of a development, from planning through operation, and ultimately decommissioning. Its purpose is to prevent or minimise negative impacts through mitigation measures, while enhancing the positive benefits of a development through optimisation measures.

The EMPr follows an outcome-based approach. This means that the focus is on achieving defined environmental management outcomes, rather than prescribing rigid actions in all circumstances. To achieve these outcomes, the EMPr sets out a range of management actions consisting of mitigation and optimisation measures and recommendations identified during the Environmental Impact Assessment (EIA) by the specialists and Environmental Assessment Practitioner (EAP). These may include specific practical site management actions, monitoring programmes, supporting management plans, rehabilitation measures, species search-and-rescue operations, or other environmental management interventions. In this way, the EMPr ensures that a project's actual impacts remain consistent with those assessed during the EIA, and that commitments made during planning and assessment are carried through to implementation. **Mitigation / impact management measures** for mitigating negative impacts are classified as either:

- **Essential:** Mandatory measures that must be implemented and are non-negotiable; or
- **Best Practice / Recommended:** Non-mandatory measures that should be implemented where feasible and appropriate. Alternative measures or approaches may be adopted, provided that the required environmental outcome is still achieved and a clear and defensible motivation is provided for not implementing the recommended measure.

Optimisation measures aimed at enhancing potential benefits are generally considered **Best Practice / Recommended** and are non-mandatory.

The EMPr is therefore intended to allow a degree of flexibility in implementation, provided that the required environmental outcomes are achieved and compliance with the Environmental Authorisation (EA) and relevant environmental legislation is maintained. More information on the implementation and amendment of management outcomes and actions is provided in Section 1.3 and 3.4.

The EMPr is legally binding on the EA holder, Contractor(s), and anyone acting on their behalf. It is usually included as a condition of the EA and must therefore be implemented accordingly.

It further outlines the EA Holder/ Contractor's responsibilities in achieving the environmental outcomes, especially with regards to preventing and mitigating any

negative environmental effects resulting from project-related operational and decommissioning activities.

I.2 CONTENT OF AN ENVIRONMENTAL MANAGEMENT PROGRAMME

The EMPr must be prepared in accordance with Appendix 4 of the National Environmental Management Act (NEMA) EIA Regulations 2014 (as amended). The EMPr must address the management and monitoring of the potential environmental impacts of the proposed activity on the environment throughout the project life cycle. Table 1.1 lists the prescribed requirements for an EMPr and identifies the relevant section or appendix where each item is addressed. This table serves as both a directory to assist readers in navigating the report and a checklist demonstrating compliance with the EIA Regulations.

Table 1.1. Legally Required Content of an Environmental Management Programme, as detailed in Appendix 4 of the Environmental Impact Assessment Regulations (published in GNR 326 and GNR 517).

Content of the Environmental Impact Assessment Report		Section/ Page Numbers
An EMPr must comply with section 24N of the Act and include-		Relevant Section
	details of-	
(a)	(i) the EAP who prepared the EMPr; and	Section 4.2 and Appendix 1
	(ii) the expertise of that EAP to prepare an EMPr, including a curriculum vitae;	Section 4.2 and Appendix 1
(b)	a detailed description of the aspects of the activity that are covered by the EMPr as identified by the project description;	Section 2
(c)	a map at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffers	Section 2 and Appendix 2
(d)	a description of the impact management outcomes, including management statements, identifying the impacts and risks that need to be avoided, managed and mitigated, as identified through the environmental impact assessment process for all phases of the development, including-	Section 6; Section 8 and Section 9
	(i) planning and design;	Section 6
	(ii) pre-construction activities;	Section 6
	(iii) construction activities;	NA
	(iv) rehabilitation of the environment after construction and, in the case of a closure activity, closure; and	Section 9
	(v) where relevant, operation activities;	Section 8
(f)	a description of proposed impact management actions, identifying the manner in which the impact management outcomes contemplated in paragraph (d) will be achieved, and must, where applicable, include actions to-	Section 6; Section 8 and Section 9
	(i) avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation;	Section 6; Section 8 and Section 9
	(ii) comply with any prescribed environmental management standards or practices; and	Section 6; Section 8 and Section 9
	(iii) comply with any applicable provisions of the Act regarding closure, in the case of a closure activity;	N/A
(g)	the method of monitoring the implementation of the impact management actions contemplated in paragraph (f);	Section 3

Content of the Environmental Impact Assessment Report		Section/ Page Numbers
(h)	the frequency of monitoring the implementation of the impact management actions contemplated in paragraph (f);	Section 3
(i)	an indication of the persons who will be responsible for the implementation of the impact management actions;	Section 2, Section 6; Section 8 and Section 9
(j)	the time periods within which the impact management actions contemplated in paragraph (f) must be implemented;	Section 3
(k)	the mechanism for monitoring compliance with the impact management actions contemplated in paragraph (f);	Section 3
(l)	a program for reporting on compliance, taking into account the requirements as prescribed by the regulations;	Section 3
(m)	an environmental awareness plan describing the manner in which-	Section 3
	(i) the applicant intends to inform his or her employees of any environmental risk which may result from their work; and	Section 3
	(ii) risks must be dealt with in order to avoid pollution or the degradation of the environment; and	Section 3
(n)	any specific information that may be required by the competent authority.	N/A

I.3 ASPECTS OF THE ACTIVITY THAT ARE COVERED BY THE EMPr

This EMPr has been compiled to guide the management of all project components and associated activities, as described above. It applies across the pre-construction, construction, and operational phases (Section 6, Section 8 and Section 9). It addresses a wide range of aspects, including: Planning and Design; Environmental Training, Health and Safety Training, management of Waste, Hazardous Substances and Spills, Ecological Receptors, Heritage Resources, Community and Social Aspects, and Economic Aspects.

The EMPr sets out specific management actions to achieve defined outcomes, with the goal of preventing or mitigating negative environmental impacts on key receptors such as fauna and flora, water resources, heritage resources, and the surrounding community, while enhancing the positive benefits.

This outcome-based approach focuses on achieving defined environmental outcomes rather than prescribing rigid actions in all circumstances. The EMPr therefore allows a degree of flexibility in implementation, provided that the required outcomes are achieved and compliance with the EA and applicable environmental legislation is maintained. This approach also enables adaptive management and refinement of actions based on practical implementation experience during the project lifecycle.

Any amendments to management actions must be approved by the Environmental Control Officer (ECO), in consultation with the relevant specialist where necessary, depending on the nature of the alteration and whether the ECO has sufficient expertise in the relevant field. Such changes must also be undertaken in accordance with Regulation 36(1) of the EIA Regulations, 2014, as outlined in Section 3.4, and must remain consistent with the NEMA Precautionary Principle.

It should further be noted that management actions are classified as either Essential or Best Practice / Recommended, as mentioned in Section 1.1. Essential measures are mandatory and non-negotiable, and any changes to these require ECO approval as

described above. Best Practice / Recommended measures are non-mandatory and may be adapted or replaced where appropriate, provided that the required environmental outcome is still achieved and a clear motivation is provided for not implementing the recommended approach. These measures do not necessarily require formal amendment procedures.

It should be noted that Sections 1, 2 and 3 provide general guidance and background information and are not legally binding, while Sections 4, 6, 8 and 9 are legally binding. Effective implementation of the legally binding sections requires adherence to the guidance in the earlier sections. The successful implementation of this EMPr also depends on the participation of several role-players, each with defined responsibilities (see Section 2).

Sections 1, 2, 3 should therefore still be followed to the extent necessary to ensure full compliance with the binding requirements. For this reason, it is recommended that the entire EMPr be implemented as comprehensively as possible. The holder of the EA and the Contractor are informed that they will be monitored and audited on their compliance with Sections 6, 8 and 9 (refer to Section 3.2 and Section 3.3).

2 ROLES AND RESPONSIBILITIES

The effective implementation of the EMPr is dependent on established and clear roles, responsibilities, and reporting lines. Table 2.1 identifies the key stakeholders and their roles and responsibilities in the implementation of the EMPr. This list is not exhaustive and additional roles and responsibilities might be identified by the Competent Authority (CA), Environmental Authorisation (EA) Holder, Contractor and/ or ECO. Also note that some of the roles and responsibilities might, in some instances, overlap or be undertaken jointly/ shared.

Table 2.1. Stakeholders and their roles and responsibilities in the implementation of the EMPr.

Function	Roles and Responsibilities
Competent Authority	Department of Mineral and Petroleum Resources (DMPR) <u>Responsibility</u> Overseeing compliance with the EA and EMPr by reviewing audit reports submitted by the appointed ECO and external auditor.
EA Holder and Project Manager	Trans Atlantic Diamonds (Pty) Ltd Holds legal responsibility for compliance with the EA and EMPr and is accountable for the potential impacts of the activities that are undertaken. Any other arrangements must be entered into between such holder and such other party (e.g., Contractor). The EA Holder's Project Manager will have overall responsibility for the management of the project and the implementation of the EMPr. <u>Responsibilities:</u> - Be fully conversant with the conditions of the EA and the management outcomes and actions contained in this EMPr. - Manage the project and ensure compliance with the EA and approved EMPr. - Ensure that all stipulations contained in the EA and EMPr are communicated to and adhered to by the EA Holder and its Contractor(s). - Appoint an experienced ECO. - Liaise with the Competent Authority, Contractor, ECO and any other relevant parties involved in the project. - Work with the Contractor to facilitate the implementation of its responsibilities and address environmental issues where required. - Ensure that sufficient budget and resources are allocated for the implementation of the EA conditions and EMPr requirements. - Monitor the implementation of the EMPr throughout the project by means of inspections, audits and meetings, as applicable. - Ensure that all required permits, authorisations and licences are obtained, maintained and complied with. - Review and approve all Method Statements (see Section 3.1.1) prior to the commencement of activities, and as required throughout the project. - Ensure compliance with all applicable safety, health and environmental legislation, standards and requirements.

Function	Roles and Responsibilities
Contractor (Vessel Operator/ Sampling Contractor/ Employees on vessel)	Contractors include the captain on the vessel, the crew handling the equipment and doing sampling, geologist, etc. The Contractor (including Subcontractors and contract workers) is responsible for all activities undertaken during the contract period. Together with the EA Holder, the Contractor is accountable for any potential environmental impacts arising from these activities and is responsible for ensuring that such impacts are effectively managed. The Contractor will be held liable for any remedial work required in terms of the EMPr owing to environmental negligence, mismanagement, or non-conformance. <u>Responsibilities:</u> • Conduct all work in accordance with the EA, EMPr, approved Method Statements and applicable legislation. • Ensure that all Subcontractors have a copy of, and are fully conversant with, the contents of the EA, EMPr and approved Method Statements. • Confine operations to the approved prospecting area and avoid areas identified as sensitive through the specialist studies and EIA process. • Prepare and submit all required Method Statements to the EA Holder for review prior to the commencement of activities (or as required throughout the various project phases). This includes Method Statements falling under the ambit of the Contractor, as well as those prepared by any relevant Subcontractors (see Section 3.1.1). • Ensure adherence to all statutory safety, health and environmental standards. • Notify the EA Holder of any incidents as defined in Section 30(1)(a) of NEMA (Control of Emergency Incidents). • Notify the EA Holder of any changes to the development that may result in significant environmental impacts. • Assist the ECO in compiling and maintaining the required environmental documentation. • Undertake any other responsibilities as determined by the EA Holder. • Report all environmental issues and concerns to the ECO, and implement all instructions relating to the EMPr issued by the ECO.
Environmental Control Officer (ECO)	The ECO should be employed by the EA Holder. The ECO should have appropriate training and experience in the implementation of environmental management specifications. The primary role of the ECO is to act as a quality controller and monitoring agent regarding all environmental concerns and associated environmental impacts. The ECO should be employed for the duration of the project and under any conditions stipulated within the EA. The ECO is to be present on the vessel during prospecting activities, attend regular site meetings, pre-empt problems and suggest mitigation, and be available to advise on incidental issues that arise. Where suitably qualified, the ECO may also fulfil the role of a Marine Mammal and Seabird Observer (MMSO) and Passive Acoustic Monitoring (PAM) Operator, provided that all responsibilities associated with these roles can be effectively discharged. The ECO is also required to conduct compliance monitoring, and assist the contractor in drafting environmental compliance reports. The ECO provides feedback to the EA Holder and Contractor regarding all environmental matters. The Contractor is answerable to the ECO for non-compliance with the specifications as set out in the EA and EMPr. Issues of non-compliance raised by the ECO, or to the ECO, must be taken up by the EA Holder, and resolved with the Contractor as per the conditions of their contract. The ECO must also report to the CA as and when required, in accordance with the EA.

Function	Roles and Responsibilities
	<u>Qualification Requirements</u> This person must, as a minimum, have the following qualifications and experience: • Be an appropriately qualified ECO officer with a suitable environmental diploma or degree; • Have demonstrated and relevant environmental experience; • Be senior enough to have authority over staff on the vessel; • Understand the hierarchy of Environmental Compliance Reporting, and the implications of non-compliance; and • Be able to resolve conflicts and make recommendations, in terms of compliance with requirements of EA and EMPr. <u>Responsibilities:</u> • Be fully conversant with the relevant environmental legislation, policies and procedures, the conditions of the EA, the management outcomes and actions contained in this EMPr, and the measures required to implement and ensure compliance with these requirements. • Understand the background of the prospecting concession and the implementation programme. • Prepare all reports for submission to the EA Holder (as per Section 3). • Review all Method Statements prior to the commencement of activities (or as required). • Ensure that the requirements of the EA, EMPr and approved Method Statements are communicated to all personnel through Environmental Awareness Training. • Manage the day-to-day implementation of the EA, EMPr and approved Method Statements onboard the vessel, and ensure compliance by all personnel. Further refer to Section 6, Section 8 and Section 9 for the Environmental Management Measures that must be implemented and monitored. • Conduct inspections during the operational phase, at a frequency appropriate to the duration of the survey and the condition being inspected (e.g. daily or weekly), to ensure compliance with the EA, EMPr and approved Method Statements, and to verify that mitigation measures are effective in preventing or minimising environmental impacts. • Maintain records of all inspections undertaken during the reporting period (e.g. daily or weekly inspections, as applicable). • Compile Environmental Compliance Reports at the frequency stipulated in the EA (or at least monthly where no reporting frequency is specified), incorporating the findings of inspections, environmental performance, compliance with the EA, EMPr and other applicable licences, and the status of corrective actions. These reports are internal monitoring and compliance reports and are separate from the independent environmental audits required in terms of Regulation 34 and Appendix 7 of the EIA Regulations, 2014. • Act as the environmental liaison and advisor to the EA Holder, Contractor, authorities and other relevant stakeholders on environmental matters. • Measure and communicate the environmental performance of the Contractor and personnel to the EA Holder. • Conduct all environmental monitoring and reporting as outlined in Section 3, including: ○ Assist the Contractor in incident management, investigation and reporting to the EA Holder. ○ Issue non-conformances to Contractors.

Function	Roles and Responsibilities
	○ Ensure that the requisite remedial actions are implemented in the event of non-compliance. ○ Undertake corrective actions, within the stipulated timeframes, where non-compliances occurred. ○ Maintain the relevant Registers as outlined in Section 3. ○ Compile and maintain all documentation for submission to the relevant authorities. • Conduct monitoring to ensure that project-related activities do not have an adverse effect on the local economy, the environment, or the health of workers and community members (See Sections 6 and 8). • Instruct the Contractor to restrict or cease activities affected by an environmental incident or non-compliance until appropriate remedial actions have been implemented. • Educate the prospecting team about the management measures contained in the EMPr and environmental licenses. • Liaison between the EA Holder, Contractors, authorities and other lead stakeholders on all environmental concerns. • Assist in the resolution of conflicts. • In case of non-compliances, the ECO must first communicate this to the EA Holder, who has the power to ensure this matter is addressed. Should no action or insufficient action be taken, the ECO may report this matter to the authorities as non-compliance. • Maintenance, update and review of the EMPr, as required. • Communicate any approved amendments to the EMPr to the relevant stakeholders. • Endorse decisions relating to environmental procedures, specifications and requirements that have cost implications (i.e. variations not allowed for in the Performance Specification).
External Auditor	To be employed by the EA Holder. <u>Responsibility</u> • Conduct External Audit and prepare External Environmental Audit Report as per Section 34 and Appendix 7 of the EIA Regulations, 2014, at a frequently as determined by the EA or the EIA Regulations.
Fisheries Liaison Officer (FLO)	A Fisheries Liaison Officer (FLO) must be appointed to facilitate communication between the EA Holder and potentially affected fishing sectors. The FLO must provide updates on vessel activities, as required, and advise on appropriate actions should fishing gear or fishing vessels be encountered within the survey area. <u>Responsibilities</u> • Facilitate communication between the EA Holder, Project Manager, ECO and affected fishing sectors. • Communicate planned and ongoing survey activities to the fishing sector, as required. • Provide updates on vessel activities in accordance with the agreed communication and operational alert protocol. • Respond to enquiries and facilitate the resolution of issues relating to interactions with fishing activities. • Advise the vessel master and EA Holder on appropriate actions where fishing gear or fishing vessels are encountered within or near the survey area. • Maintain records of communications and stakeholder engagements, where required.

Function	Roles and Responsibilities
Marine Mammal and Seabird Observer (MMSO)	A minimum of two independent, designated and appropriately qualified Marine Mammal and Seabird Observers (MMSOs), experienced in the identification of marine mammals, seabirds and turtles, must be employed and be present on board the survey vessel throughout the prospecting programme. The appointed MMSOs must keep watch for marine megafauna in the path of the survey vessel and implement the mitigation measures and observation protocols contained in the JNCC Guidelines, the EA and this EMPr throughout all daylight operations. Where survey operations are undertaken during periods of darkness, fog or other poor visibility, the appointed MMSOs must also operate the Passive Acoustic Monitoring (PAM) system to detect the presence of marine mammals that may be at risk. Accordingly, the appointed MMSOs and PAM operators may be the same individuals, provided that a minimum of two suitably qualified personnel are available to fulfil these functions. One of the appointed personnel may also fulfil the role of the ECO, provided that all responsibilities can be effectively discharged. For the purposes of this EMPr, marine megafauna include, but are not limited to, marine mammals (whales, dolphins, porpoises and seals), seabirds, sea turtles and other notable marine fauna. <u>Responsibilities</u> • Keep watch for marine megafauna during vessel operations in accordance with the applicable mitigation protocols. • Implement the required marine megafauna mitigation measures, including any relevant JNCC procedures and requirements of the EA and EMPr. • Operate or assist with the PAM system, where applicable. • Record all observations of, encounters with and incidents involving marine megafauna, including species, location, behaviour and any observable responses to survey activities. • Advise the vessel master and survey personnel on the implementation of mitigation measures where marine megafauna are present. • Prepare an MMSO close-out report for submission to the Department of Forestry, Fisheries and the Environment (DFFE), where required.
Passive Acoustic Monitoring (PAM) Observer	A minimum of two suitably trained Passive Acoustic Monitoring (PAM) Operators must be appointed and be present on board the survey vessel throughout the prospecting programme. The survey vessel must be equipped with a Passive Acoustic Monitoring (PAM) system. The appointed PAM Operators must operate the PAM system during periods of darkness, fog or other reduced visibility, or where otherwise required, using passive acoustic hydrophones to detect the vocalisations of marine mammals that may be at risk from vessel operations or acoustic survey activities. The appointed PAM Operators must implement the applicable mitigation measures and monitoring protocols contained in the JNCC Guidelines, the EA and this EMPr whenever PAM is in use. The appointed PAM Operators and MMSOs may be the same individuals, provided that a minimum of two suitably qualified personnel are available to fulfil these functions. One of the appointed personnel may also fulfil the role of the ECO, provided that all responsibilities can be effectively discharged.

Function	Roles and Responsibilities
	<u>Responsibilities</u> • Operate and maintain the PAM system during required monitoring periods. • Monitor and interpret acoustic detections of marine mammals and communicate relevant observations to the vessel master and other relevant personnel. • Implement or advise on the implementation of the required mitigation measures where marine mammals are detected. • Maintain records of PAM detections, monitoring activities and mitigation actions undertaken. • Contribute to the preparation of PAM monitoring records and the PAM components of the MMSO/PAM close-out report, where required.

3 DOCUMENTATION, COMPLIANCE AND REPORTING

3.1 DOCUMENT CONTROL/ FILING SYSTEM

The completed EMPr must be signed and dated by both the contractor and the holder of the EA in Section 10 before the activity commences, and each page must be initialised. This template, once signed and dated, is legally binding. The holder of the EA will remain responsible for its implementation.

Once completed and signed, the Applicant must make this EMPr available to the public in accordance with regulation 26 (h) of the EIA Regulations, 2014. Copies of this EMPr must be stored in such a manner that it is accessible to all on site personnel, and must be distributed to all senior contract personnel, who are required to familiarise themselves with its contents.

To ensure accountable and demonstrated implementation of the EMPr, several reporting systems, documentation controls and compliance mechanisms must be in place. The holder of the EA is responsible for the management of an EMPr file in which all documentation detailed below must be filed. The EMPr file must be made available at all times on request by the CA or other relevant authorities.

The EMPr file will form part of any environmental audits undertaken as prescribed in the EIA Regulations. The following documents must be placed in the EMPr filing system and be accessible at all times:

- 1) Signed EMPr, as well as any amendments thereof;
- 2) Signed EA from the CA (Attach as Annexure A);
- 3) Approved prospecting area (Attach as Annexure B);
- 4) All Approved and signed Method Statements by Contractor(s)/ Sub-contractor(s) (Attach as Annexure C);
- 5) Minutes and attendance register of vessel meetings;
- 6) On-site Registers to be kept by ECO:
 - Environmental Awareness Training Register
 - Incident Register
 - Non-Conformance Register
 - Signed-off Corrective Action Records
 - Waste Register
 - Weekly/ Daily inspection
 - Marine Megafauna Encounter Register
 - Complaints Register (from community)
- 7) Photographic record;
- 8) A copy of all corrective actions signed off;
- 9) Reports:
 - **Environmental Compliance Reports:** Prepared by the ECO at the frequency stipulated in the EA or, where no frequency is specified, at least monthly during the operational phase. These reports must summarise the findings of inspections undertaken during the reporting period (e.g. daily or weekly inspections, as applicable), environmental performance,

compliance with the EA, EMPr and other applicable licences, and the status of corrective actions.

- **Independent Environmental Audit Reports:** Prepared by an independent Environmental Auditor in accordance with Regulation 34 and Appendix 7 of the EIA Regulations, 2014, at the frequency stipulated in the EA or the EIA Regulations.
- **Environmental Close-out Report:** Prepared by the ECO (or other suitably qualified person) at the completion of the prospecting programme, summarising compliance with the EA and EMPr, implementation of rehabilitation measures, outstanding corrective actions (if any), and confirming that the site has been left in an environmentally acceptable condition.

3.1.1 METHOD STATEMENTS

A method statement is a written document that sets out in detail the materials, labour and methods for carrying out a specific activity; the measures that will be taken to minimise environmental impacts; and the way in which relevant management actions/mitigation measures in the EMPr must be implemented. It must be prepared by the EA Holder, Contractor, Sub-Contractor, or any party undertaking the task. It must be prepared in such detail that the EA Holder and ECO are able to assess the Contractor's compliance with the EMPr.

Method Statements must be submitted by the Contractor or Subcontractors (as and when required), to the EA Holder and ECO, at least 14 days before the start of the activity to which the Method Statement applies, unless the ECO specifies otherwise. Method Statements are not required to be submitted to the CA.

If the method statement is deemed insufficient, it must be returned to the Contractor for revision and resubmission. Each accepted Method Statement must be signed and dated on each page by both the Contractor and EA Holder as a sign of commitment to following the agreed-upon methods. Signed Method Statements must be included in the EMPr file as Annexure C. Given that the Method Statement is a dynamic document, it may require regular updates in-line with actual implementation and any changing requirements.

Some management activities may overlap, which could also result in overlapping Method Statements. The ECO must confirm whether any of these Method Statements may be combined. Unless otherwise indicated by the ECO, the Contractor must provide the following Method Statements:

- Prospecting procedures;
- Materials and equipment to be used;
- Environmental awareness training plan;
- How and where samples/materials/equipment will be stored;
- Waste management system that will be implemented;
- Timing and location of activities;
- Emergency preparedness – Spills, training, other environmental emergencies;
- Fire control/ management plan;
- Incident management plan;
- Marine megafauna interaction and risk management; and
- Heritage and palaeontology management

Section 6, Section 8 and Section 9 outline the management actions and desired outcomes for the various aspects of the project and should be used to guide the preparation and drafting of the method statements. The guideline methodology for preparing method statements have been included in Appendix 4.

3.1.2 ENVIRONMENTAL AWARENESS TRAINING

Environmental awareness training courses must be conducted for all personnel on the vessel. All staff must be trained prior to starting work, and proof of training must be kept in the environmental file. The ECO must develop an awareness training program. Training must be based on the information outlined in Section 6, Section 8 and Section 9 so as to ensure that the actions are implemented and outcomes achieved. Where appropriate, the ECO must consult with a H&S/SHE Officer when preparing H&S-related training content, or the H&S/SHE Officer may deliver the H&S-specific component of the training.

The ECO will be responsible for managing and implementing the training program before the operational activities commence. All employees who will be present on the vessel, must attend the training. A single training course will be provided to all employees on the vessel. All attendees must remain for the full duration of the course, and sign an attendance register, which will be kept on file. The Contractor may be required to provide additional on-site training on any environmental aspects that are unclear to the personnel.

Every employee needs to undergo the following:

- An induction before boarding the vessel;
- task-based learning and skills development;
- weekly toolbox talks;
- personnel working with hazardous substances must be trained in the safe handling of the specific substance
- annual environmental induction refresher training sessions (if required); and
- must be retrained based on the outcome(s) of corrective action (where relevant).

The following information must be included in the training register:

- Those trained;
- The date and time of the training;
- The trainer's name;
- A synopsis of the training's subject matter; and
- The efficacy of training initiatives.

3.1.3 ASPECTS, IMPACTS AND RISK ASSESSMENT

A detailed Environmental Aspect/ Impact Register, based on specific contractor methodologies and activities, must be developed and must be submitted to the EA Holder for approval prior to commencement of works. This register is intended to capture project-specific risks not fully defined during the Basic Assessment process. An example template is provided in Appendix 5.

The assessment process includes four key steps:

- i. Identify all elements that could interact with the environment, considering factors such as environmental characteristics and sensitivity.
- ii. Evaluate the potential impacts of the activities, including their duration, intensity, and the extent to which they can be mitigated.
- iii. Rank the risks based on the likelihood of adverse impacts and the severity of consequences, using a 'worst-case scenario' as defined by the risk matrix of 'likelihood and consequence probability.'
- iv. Determine the level of mitigation required for each environmental aspect. Higher potential severity and greater consequences of unmanaged effects necessitate more rigorous environmental management.

3.1.4 EMERGENCY PREPAREDNESS AND INCIDENT MANAGEMENT

Prior to starting prospecting activities, the Contractor must submit a vessel-specific Emergency Preparedness and Incident Management Plan (method statement) for approval by the EA Holder. The Plan must be based on the Environmental Aspect/Impact Register, reviewed bi-annually, and updated whenever site conditions or identified risks change.

The objective of the Plan is to minimise risks to people, property and the environment by ensuring a coordinated, timely and effective emergency response. The Plan must establish the procedures, responsibilities and resources required to prevent, respond to, manage and recover from environmental emergencies, and must include:

- Significant risks identified in the Environmental Aspect/Impact Register and the procedures for managing these risks;
- Roles, responsibilities, accountability and liability of all personnel involved in emergency response;
- Internal (EA Holder, ECO and Contractor) and external (affected parties and government authorities) communication and incident notification procedures;
- Emergency response and remediation procedures for different types of emergencies, including protocols for preventing, containing and reporting accidental spills, fires and hazardous material releases;
- Incident recording and reporting procedures;
- Emergency response equipment and resource requirements;
- Training requirements for personnel involved in emergency response;
- A register of hazardous materials, their potential impacts, and associated response measures for accidental release; and
- Key emergency contact details, including the:
 - Project Manager;
 - Contractor/ Vessel Master;
 - Environmental Control Officer;
 - Health and Safety Officer;
 - Emergency Medical Services (EMS) and ambulance services;
 - Nearest hospitals or clinics;
 - South African Police Service (SAPS);
 - South African Maritime Safety Authority (SAMSA), where applicable;
 - National Sea Rescue Institute (NSRI), where applicable;

-
- Spill response contractor or oil spill response service;
 - Relevant port authority or harbour control, where applicable; and
 - Any other emergency services or competent authorities relevant to the operational area.

This list is not exhaustive. The holder of the EA must ensure that the list is maintained and updated throughout the project to reflect current contact details, operational locations, ports of mobilisation, contractors, emergency response providers and any additional authorities or organisations relevant to the prospecting activities.

3.1.5 INCIDENT REGISTERS AND INCIDENT INVESTIGATION REPORTS

An incident includes all minor and major incidents or events. An incident may also constitute a Non-Compliance where the incident results from a failure to comply with the EA, EMPr, or applicable environmental legislation. Where an incident is significant or repeated or not addressed immediately, it may lead to a Non-Conformance.

An environmental incident includes:

- Unplanned events with negative outcomes, which may include human injury, environmental damage, or asset loss;
- Near misses, i.e., extraordinary events that could have reasonably resulted in such incidents;
- Deviations from the EMPr requiring immediate attention by the ECO (for example, a contractor's staff member littering);
- Any environmental impact resulting from an action which is in contravention of the EMPr and EA, which, as a single event, would have a minor impact, but if cumulative and continuous, would have a significant impact; and
- General issues such as injured wildlife.

Examples include:

- Loss of containment incidents or releases of liquids, solids, or gases;
- Spills of dangerous goods or hazardous substances (regardless of volume or weight);
- Complaints from regulatory authorities;
- Regulatory breaches, including directives, fines, or breaches of authorisation/license conditions;
- Stakeholder complaints;
- Damage or loss to third-party property; and
- Collision with or injuring marine megafauna through prospecting activities.

All incidents that occur must be recorded in an Incident Register by the ECO and immediately reported to the Contractor and EA Holder. At a minimum, the following must be recorded in the Incident Register for each environmental incident:

- The date, time, location and description of the incident;
- The cause of the incident;
- The type/ nature of incident;
- The name of the person responsible;
- The impact/ significance of the Incident (minor or significant) and any associated risks (an assessment of both immediate and long-term effects);

-
- Where an incident constitutes a significant or repeated transgression or Non-Compliance, the ECO must also issue a Non-Conformance Notice in accordance with Section 3.1.7.
 - Toxicity of the substances involved;
 - Details of any spillages, damages, injuries, or fatalities and the parties involved;
 - What remedial or corrective action was taken to mitigate the incident;
 - Measures or corrective/ remedial action taken to mitigate or prevent the effects of the incident and avoid future occurrences; and
 - A record of repeat minor offences by the same contractor or staff member.

Immediate actions must be taken by the Contractor to contain, stop or minimise any further environmental impacts in accordance with the Contractor's Emergency Preparedness and Incident Management Plan (Section 3.1.4).

The Contractor/ ECO must investigate every incident and prepare an Incident Investigation Report describing the cause of the incident, remedial measures implemented, Corrective Actions required (see Section 3.1.8) and measures to prevent recurrence. For each incident recorded, the required Corrective Action must also be recorded in the Incident Investigation Report.

The Contractor must address the findings of the investigation and implement the Corrective Actions as soon as possible after the report and Corrective Actions have been reviewed and approved by the ECO. The timeframe for implementation will depend on the nature of the incident and must be agreed with the ECO.

3.1.6 NON-COMPLIANCES

Non-compliance refers to the failure of the Developer, Contractor or Subcontractors to adhere to the requirements, conditions, or standards set out in the EMPr (i.e., the management outcomes and actions), EA, or relevant environmental legislation. This generally involves planned or ongoing activities that do not meet regulatory or procedural requirements. A Non-Compliance may or may not involve an incident. Where an incident results from a failure to comply with the EMPr, EA, or applicable environmental legislation, it is also considered a Non-Compliance.

Any Non-Compliance must be addressed immediately by the responsible Contractor or person, where necessary, to prevent or minimise further environmental impacts, and must not be delayed.

Non-Compliances must be recorded in the ECO Environmental Compliance Reports. For each Non-Compliance recorded, the required Corrective Action must also be recorded and communicated to the Contractor for implementation in accordance with Section 3.1.8 below.

3.1.7 NON-CONFORMANCE NOTICES, REGISTERS AND INVESTIGATION REPORTS

Non-Conformances include repeated Non-Compliances, significant transgressions and major environmental incidents, especially when the incident is not addressed timeously. A Non-Conformance therefore occurs where a matter is considered sufficiently significant or repeated to require formal escalation and investigation.

In the case of a Non-Conformance, a Non-Conformance Notice must be issued in writing by the EA Holder or ECO to the responsible Contractor or person. The Non-Conformance Notice must contain the same information as the Incident Register (refer to Section 3.1.5).

The ECO must be notified of any significant incident or suspected Non-Conformance as soon as possible to enable the ECO to assess the matter and, where required, issue the Non-Conformance Notice without delay. The ECO must record all Non-Conformance Notices that have been issued in a Non-Conformance Register and the ECO Environmental Compliance Reports.

Once a Non-Conformance Notice has been issued, the Contractor/ ECO must conduct a full investigation, including an assessment of the root cause of the issue and the Corrective Actions (see Section 3.1.8) and preventive measures required to prevent recurrence. The findings must be recorded in a formal Non-Conformance Investigation Report. For each Non-Conformance recorded, the required Corrective Action to remediate any environmental damage and prevent recurrence must also be recorded in the Non-Conformance Investigation Report.

The Contractor must address the findings of the investigation and implement the Corrective Actions as soon as possible after the report and Corrective Actions have been reviewed and approved by the ECO. The timeframe for implementation will depend on the nature of the Non-Conformance and must be agreed with the ECO.

Major incidents considered Non-Conformances

Major incidents that are considered Non-Conformances include those that cause substantial environmental damage; or have a significant potential impact on the environment. These major incidents/ Non-Conformances are reportable to the authorities and include the following (note that not all of these are necessarily relevant to the offshore prospecting activities):

- Spills into watercourses, the estuarine or marine environment, or drains, as defined by relevant legislation;
- Loss of hydrocarbons or chemicals exceeding 20 litres on land;
- Spills or releases, including soil movement, that extend offsite and have a negative impact;
- Death or injury to livestock, wildlife, or any fauna caused by construction or operational activities;
- Disturbance of previously undetected culturally significant sites without proper approval;
- Transfer of known alien invasive species or diseases due to construction or operational activities;
- Fires;
- Traffic incidents;
- Damage to property outside the development area;
- Unresolved landowner disputes where no agreement can be reached;
- Incidents likely to generate regional or widespread negative publicity;
- Serious environmental damage or imminent risk of such damage;
- Significant environmental degradation, pollution, or non-compliance with the EA, this EMPr or other legislative requirements; and

- Exceedances of prescribed dust fall standards where dust monitoring is mandated. Where a Non-Conformance also constitutes a major incident, the Incident Investigation Report required in Section 3.1.5 may also serve as the Non-Conformance Investigation Report.

3.1.8 CORRECTIVE ACTION RECORDS

For each Incident recorded, Non-Compliance identified, or Non-Conformance Notice issued, the required Corrective Action must be recorded in the relevant report, i.e. the Incident Investigation Report for incidents, ECO Environmental Compliance Report for Non-Compliances, and the Non-Conformance Investigation Report for Non-Conformances.

The Corrective Action in these reports must include the following:

- The nature of the non-compliance/ environmental damage;
- The actions or outcomes required to correct the situation; and
- The date by which each corrective or preventive action must be completed.

The Contractor must implement the required Corrective Actions as soon as possible, within a timeframe agreed with the ECO, depending on the nature of the incident. This timeframe does not replace the requirement for immediate action to prevent or minimise further environmental impacts. Failure to comply shall be reported to the ECO.

On completion of the corrective action, the Contractor must issue a Corrective Action Report to the ECO. If satisfied that the Corrective Action has been completed satisfactorily, the ECO must sign off the Corrective Action Report, which must be included in the EMPr file. A Corrective Action is considered complete once the report has been signed off by the ECO.

The Contractor/ EA Holder must report in the external audit how the required actions were implemented and whether the Corrective Actions were successful.

3.1.9 WASTE REGISTER

Waste must be separated and stored in designated areas in accordance with the requirements of the EMPr and applicable legislation. The ECO must maintain a Waste Register for all waste generated during the campaign, where applicable. The register must be updated regularly and must record the type and quantity of waste generated, the date of generation, how the waste was stored and handled onboard, and the method and destination of disposal or recycling. Records of waste removed from the vessel must be retained, including waste disposal receipts, waste manifests or other supporting documentation, where applicable. The register must be retained in the EMPr filing system and made available to the external auditor for inspection and auditing.

3.1.10 MARINE MEGAFaUNA ENCOUNTER REGISTER

The ECO must maintain a Marine Megafauna Encounter Register. The register must record noteworthy fauna encountered during the campaign, including marine mammals, turtles, threatened, protected or vulnerable species, and any other fauna requiring specific management or intervention. The register must record the species, date and location of the encounter, the action taken and, where applicable, details of any

intervention. Photographs and other supporting documentation must be retained where appropriate. The register must be retained in the EMPr filing system and made available to the external auditor for inspection and auditing.

3.1.11 COMMUNICATIONS AND COMPLAINTS REGISTER

A communications/ complaints register should be kept by the ECO to record all communications/ complaints received from communities, stakeholders and individuals. All complaints must be investigated and responded to as soon as reasonably practicable. Where the complaint requires input from personnel onboard the survey vessel, a response must be provided as soon as practicable following the vessel's return to port. The Complaints Register must:

- Record the name and contact details of the complainant;
- Record the time and date of the complaint;
- Contain a detailed description of the complaint;
- Where relevant and appropriate, contain photographic evidence of the complaint or damage; and
- Contain a copy of the ECOs written response to each complaint received and keep a record of any further correspondence with the complainant. The ECOs written response must include a description of any corrective action to be taken and must be signed by the Contractor, ECOs and affected party.

3.1.12 PHOTOGRAPHIC RECORD

A digital photographic record must be kept. The photographic record must be used to show adherence to the EA, EMPr, Method Statements, any other licences and relevant legislation, where possible.

3.2 MONITORING AND FREQUENCY OF MONITORING

Implementation of the requirements stipulated in the EA, EMPr (this document) and Method Statements must be monitored throughout the project. The ECO is responsible for assisting the Contractor and monitoring compliance by the Contractor and all vessel staff with these requirements. For certain management measures outlined in Sections 6, 8 and 9, specialist studies may have indicated examples of how compliance can be demonstrated (e.g. appointment records, contracts, monitoring records, or registers). Where this has not specifically been indicated, the EA Holder should consult with the ECO regarding appropriate proof of compliance. The form of proof required must be determined by the ECO based on the nature of the management measure.

The ECO must conduct inspections during the operational phase at a frequency appropriate to the duration of the survey and the aspect being inspected (e.g. daily or weekly), to ensure compliance with the EA, EMPr and approved Method Statements, and to verify that the prescribed mitigation and management measures are effective in preventing or minimising environmental impacts.

3.3 REPORTING AND AUDITING

Environmental Compliance Reports (ECO)

The ECO must compile Environmental Compliance Reports at the frequency stipulated in the EA or, where no reporting frequency is specified, at least monthly during the operational phase. Where a survey campaign extends for less than one month, a single report covering the entire survey period is sufficient. Where multiple survey campaigns are undertaken, separate reports must be prepared for each reporting period, as applicable.

The Environmental Compliance Report must include, as a minimum:

- Reporting period and survey activities undertaken during the reporting period;
- Dates on which inspections were undertaken and a summary of the inspection findings;
- A summary of the prospecting activities undertaken during the reporting period, including the location and duration of activities;
- An assessment of compliance with the conditions of the EA, the EMPr, approved Method Statements and any other applicable permits, licences or authorisations;
- A summary of environmental monitoring undertaken, including marine megafauna observations, environmental observations and any specialist monitoring where applicable;
- A summary of all environmental incidents, emergencies, spills or near misses, including investigations undertaken and corrective actions implemented;
- A summary of complaints received from Interested and Affected Parties or other stakeholders, together with the status of investigations and responses provided;
- A summary of all non-conformances identified, including the cause of the non-conformance, corrective actions implemented, responsible person(s), and the status of close-out;
- A summary of waste generated, handled and disposed of during the reporting period, including any waste disposal records where applicable;
- A summary of environmental awareness training undertaken, including attendance records and topics covered;
- A summary of environmental management measures implemented during the reporting period, where applicable;
- Photographic evidence, where appropriate, to demonstrate compliance, environmental conditions, incidents or corrective actions;
- An evaluation of the effectiveness of mitigation measures implemented and recommendations for any additional mitigation or improvements required;
- A summary of outstanding actions from previous reports and the status of their implementation; and
- An overall statement by the ECO on the environmental performance of the project and the level of compliance achieved during the reporting period..

The Environmental Compliance Reports must be submitted to the EA Holder and retained as part of the EMPr file.

External Environmental Audits (Section 34 and Appendix 7 of the EIA Regulations, 2014)

In terms of Section 34 of the EIA Regulations, 2014 (as amended), the EA Holder's compliance with the conditions of the EA and EMPr must be audited by an independent external auditor, as specified in the EA. These audits are mandatory once an EA has been issued, and for as long as the EA/ EMPr remains valid. The frequency of audits must align with the intervals specified in the EA or, where not specified, with the requirements of Section 34 of the EIA Regulations, which states at least once per 5 years. The findings must be documented in an Environmental Audit Report, which is submitted to the CA for acceptance. All audit reports must comply with the requirements of Section 34 and include the information specified in Appendix 7 of the EIA Regulations, 2014.

3.4 AMENDMENTS TO THE IMPACT MANAGEMENT OUTCOMES AND ACTIONS

Once the activity has commenced, the holder of an EA may make amendments to the impact management outcomes and actions in the following manner:

- Amendment of the impact management outcomes – in line with regulation 37 of the EIA Regulation, 2014
- Amendment of the impact management actions – in line with regulation 36 of the EIA Regulations, 2014

3.5 QUALITY CONTROL SYSTEM

Every environmental and social monitoring project must adhere to recognised monitoring guidelines, conventions, and standards and must take baseline study results into consideration. As such, an integrated management system (IMS) consisting of an environmental management system based on ISO 14001 and a quality management system (QMS) based on ISO 9001 must be developed and maintained by the ECO.

4 PROJECT BACKGROUND, LOCATION AND DESCRIPTION

4.1 DETAILS OF THE APPLICANT

Name of applicant: Trans Atlantic Diamonds (Pty) Ltd

Tel No: +27 84 568 9204

Postal and Physical Address: 109 Kloof Road, Bantry Bay, Cape Town, South Africa, 8005

4.2 DETAILS AND EXPERTISE OF THE EAP

Name of EAP: Ms Cheruscha Swart

Tel No: 021 701 3420

E-mail address: cheruscha@anchorensvironmental.co.za

Company: Anchor Environmental Consultants (Pty) Ltd.

Expertise of the EAP (Curriculum Vitae included):

- MSc (Cum Laude) Zoology; BSc (Hons) & BSc Biodiversity and Ecology
- EAPASA (Reg EAP no. 2021/3298)
- SACNASP Pr.Sci.Nat. Reg: 155305 (Environmental Science; Zoological Science)

A full professional CV have been appended to this Report, as Appendix 1.

4.3 PROJECT BACKGROUND AND LOCATION

Trans Atlantic Diamonds (Pty) Ltd (TAD) intends to undertake prospecting activities for Chrome, Copper, Corundum, Diamonds (general), Garnet (abrasive), Gemstones, Gold Ore, Heavy Minerals (general), Iron Ore, Lithium Ore, Platinum Group Metals, Rare Earths, Silver Ore, and Titanium and Uranium Ore, within offshore Sea Concession Area 6C in the Northern Cape, to assess the viability of future mining operations. Refer to Annexure B for the Approved site plan. Sea Concession Area 6C is located approximately 4 to 5 km offshore of the Northern Cape Coast, about 11km west of the nearest inland town, Koinaas and 25 km south of Kleinsee (Figure 4.1, Table 4.1). The sea concession area is approximately 350 000 hectares.

Table 4.1 Coordinates of the concession area for the proposed prospecting.

Vertex	Latitude	Longitude
a	30.182314	16.168534
b	30.074266	15.978797
c	29.941495	15.886008
d	29.941499	15.695164
e	29.905389	15.660994
f	29.905369	17.081360
g	30.182299	17.171094
h	30.182314	16.168534

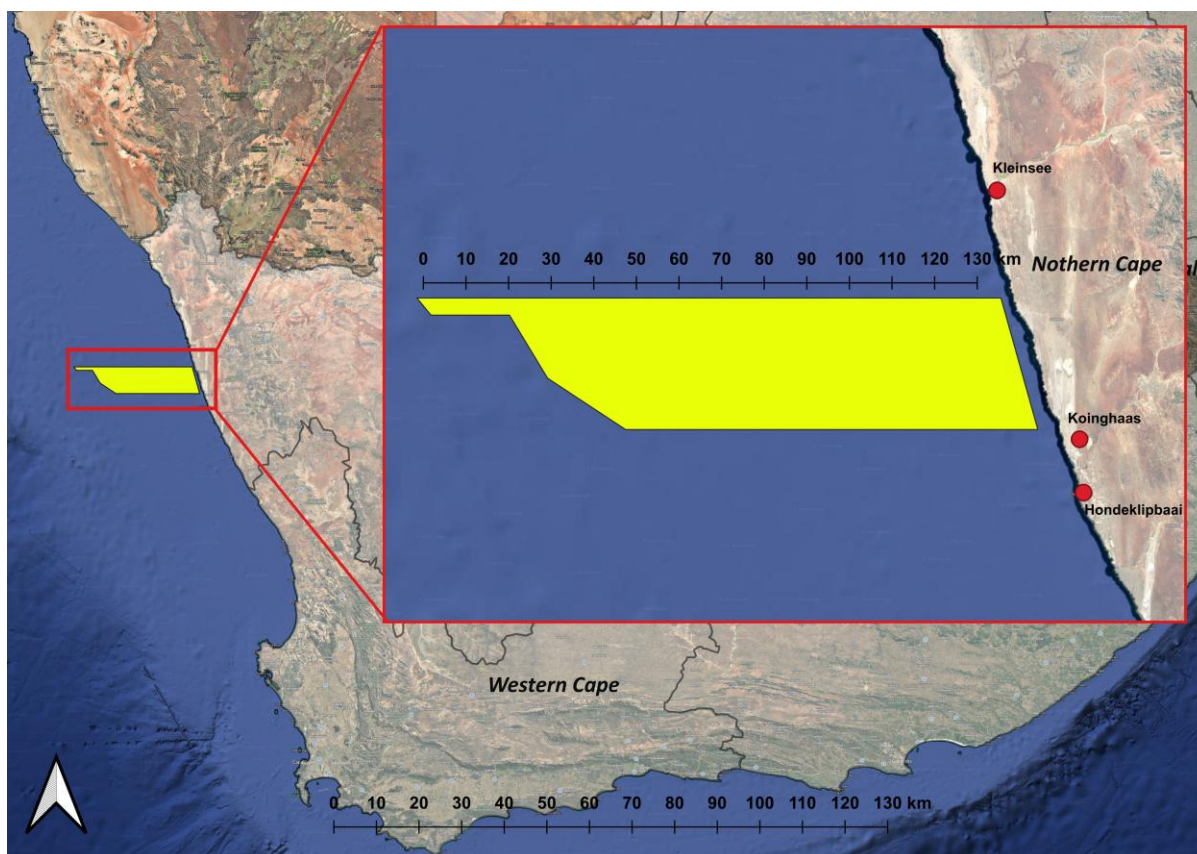


Figure 4.1 Location of offshore Sea Concession area 6C off the Northern Cape Coast. The concession starts approximately 5 km offshore of the High-Water Mark and extends to the 200 m isobath which is approximately 100 – 140 km offshore.

4.4 DESCRIPTION OF THE ASPECTS OF THE ACTIVITIES

Prospecting will be conducted using a dedicated survey vessel. Sampling will be conducted in four phases, combining both non-invasive and invasive sampling activities to detect the presence of specific sediment deposits which will contain the target minerals. Activities will be followed by a feasibility study and resource estimation. The non-invasive activities will include geophysical exploration (acoustic survey), data acquisition and analysis, while the invasive activities will include physical sampling (collection of core, drill and grab samples). No infrastructure will be required on land or in the sea. Prospecting operations are expected to occur sporadically over the entire extent of the concession area.

PHASE 1

Desktop Study:

A comprehensive literature review will be undertaken to investigate the depositional environments, sediment stratigraphy and geological units of the area. Data will be obtained from a variety of sources including previous explorations in neighbouring concession areas, published papers, data from field surveys, databases, etc. This review will allow the applicant to identify target sites that are likely to contain diamonds or other valuable minerals within the concession area. It will also enable the applicant to identify potential challenges and the best means to address these challenges with a view to

minimising environmental impacts and costs. This will allow for a more efficient and effective prospecting sampling programme.

Geophysical Exploration

Geophysical surveying will be undertaken to collect high-resolution acoustic and multibeam echosounder data along survey lines spaced 100 m to 1000 m apart throughout the concession area. The vessel can typically survey approximately 120 km/day in an offshore area. The geophysical survey is therefore anticipated to be undertaken within a broader operational window of up to two months to accommodate mobilisation, weather delays, sea-state constraints, and other logistical requirements, although the active survey period itself is expected to be shorter.

Surveys will be conducted using a dedicated survey vessel which will have a hull-mounted multibeam echo sounder (MBES) and a Topas sub-bottom profiler system that are designed to collect high-resolution acoustic data. As these devices are hull mounted, the vessel will not tow any cables and no physical or environmentally destructive impacts are anticipated for this sampling method. Potential noise or sound impacts on biota will, however, be considered. The geophysical survey allows the operator to produce a digital terrain model of the seafloor. The MBES provides depth sounding information on either side of the vessel's track across a swath width of approximately two times the water depth, while the sub-bottom profiler generates profiles up to 60 m beneath the seafloor, thereby giving a cross-section view of the sediment layers. The source sound level of the MBES is variable but will be a maximum of 221 dB re 1µPa @ 1m, with a frequency range of between 200 and 400 kHz. The sub-bottom profiler uses shallow (35 to 45 kHz) and medium penetration (1 to 10 kHz) "Chirp" acoustic pulses. This equipment has a variable power output and can therefore have the power ramped up in accordance with survey requirements and be contained within acceptable environmental noise levels. As such, it is also capable of "soft starts". The use of a magnetometer to detect magnetic signatures will also be required.

The information collected during the acoustic survey will be reviewed by the geologist and used to model the bathymetry of 6C to identify target areas for sampling, any areas that need to be avoided and to inform the appropriate core sampling and drilling method that must be implemented. This process can take approximately one month. The preferred alternative within the site is thus subject to change pending results from the geophysical survey.

PHASE 2:

Van Veen grab sampling

This is a popular method used to collect sediment samples for biological, environmental and seafloor characterisation studies (geotechnical studies). The device consists of a stainless-steel clamshell bucket that closes around and collects sediment from the seabed. A Van Veen grab with a sampling capacity of approximately 50 kg will be used to collect baseline environmental data on sediments and benthic macrofauna at between 20 and 50 sampling sites. The grab penetrates approximately 20 to 50 cm into the seabed

and collects surface sediment samples. A portion of each sample will be preserved (using formalin or ethanol) and sent to a laboratory for biological analysis, while another portion will be analysed to determine the physical characteristics of the sediments, including composition, grain size, and sediment strength. Biological analyses will be used to identify and characterise benthic macrofaunal communities (small animals such as worms, mussels, and crustaceans), while sediment analyses will provide information on the nature and geological characteristics of the seabed. The sampling programme will disturb a total seabed area of approximately 5 m² and will result in the collection of approximately 1.5 m³ of sediment. The information obtained will provide baseline data against which any future changes in benthic communities can be assessed following prospecting and, should the project proceed, mining activities. Grab sampling will be done at a rate of approximately 30 samples per day (maximum) and equate to two working days.

Core sampling

Geotechnical samples will be collected at 100-200 sites using either vibracoring, gravity coring or sonic coring. Geotechnical samples are physical samples of soil, sediment, or rock collected to assess the physical properties of the material. A core is a cylindrical tool used to penetrate the seafloor to collect sediment samples. These samples are analysed to determine the sea floor geology (types of material present, such as sand, gravel and/ or rock as well as the hardness and strength of rock), topography (for example trenches, slopes or elevated features on the seabed) and sediment stratigraphy (the layering of sand, mud and rock over time). This information is then used to engineer the drilling tool (for phase three of the prospecting activities – see below) and the future mining vessel. Geotechnical sampling is also used for resource evaluation, i.e. determining whether there are materials that can be mined in the area and whether it will be economically viable. The type of coring will depend on the geological formations of the seafloor.

The sonic corer is an advanced tool that uses high-frequency vibrations to help push a core barrel (a hollow tube) into the seabed. This allows it to sample not only loose sediments but also harder materials such as some types of rock. In contrast, gravity coring and vibracoring can only collect unconsolidated material, meaning loose sediments such as sand and mud.

Each core sample is about 10 cm in diameter and is typically drilled to a depth of 3–8 m below the seabed. Each core contains approximately 0.024 m³ of material. Overall, the sampling will disturb a very small footprint on the seabed, affecting a total surface area of about 1.57 m² and yielding approximately 4.71 m³ of material in total. There is no release or spillage of material into the ocean during sampling, as the material remains intact within the core tube and is brought back to the vessel for secure storage. No sediment processing is undertaken on the vessel, as all samples are transported to shore for analysis. Collecting around 200 cores will take approximately 10 working days. Exact sampling locations will be determined using results from geophysical surveys and recommendations from the marine ecology specialist study as part of the EIA.

PHASE 3

Drill sampling

Prospective target areas will be investigated using a specially designed drilling tool that can collect gravel and other seabed materials seabed. The material brought to the surface will be processed onboard a vessel using a processing plant, and the remaining fine material (tailings) will be discharged back into the sea. This can result in temporary sediment plumes in the water column. The formation and persistence of these sediment plumes depends mainly on the size of the particles and the prevailing ocean conditions. Coarser material such as sand settles quickly and produces short-lived plumes, while finer muddy sediments can remain suspended for longer periods.

Depending on the final tool design, the drill will impact an area of approximately 3 to 5 m² per sample. The average drilling depth is expected to be around 3 m, although the system is capable of drilling up to 12 m into the seabed if required. Each sample is expected to yield approximately 9 to 15 m³ of material.

Based on confirmation received via communication with the DMPR (pers. comms DMPR), this activity does not constitute bulk sampling in terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002). This is because it is undertaken solely for prospecting purposes, does not involve commercial extraction, and does not entail large-scale removal or dredging of the seabed.

Approximately 150 samples will be collected initially. A further 150 follow-up samples may be required, resulting in a total of 300 drilling samples. These will cover a total disturbed area of approximately 1 500 m² (based on a 5 m² drill footprint) and will be spaced roughly 300 m apart in a north–south direction. At a rate of about 30 samples per day, this phase would take approximately 10 days, excluding potential weather delays.

If follow-up results indicate a potentially viable resource, a more detailed phase of resource evaluation would be undertaken. This would focus on smaller defined areas of up to 500 m by 300 m, with additional sampling on a 50 m grid. Around 20 such resource development areas are expected, requiring approximately 1 200 additional samples and covering a total disturbed area of about 6 000 m² (again based on a 5 m² drill footprint). At a rate of 30 samples per day, this phase would take approximately 40 days.

Overall, the total seabed area disturbed across Phases 1, 2, and 3 is calculated to be 7,507 m² (0.75 ha / 0.007507 km²). However, as the sampling equipment may temporarily affect a slightly larger area during sampling, a conservative disturbance footprint of approximately 7,600 m² (0.76 ha) has been adopted. This represents a very small proportion (0,0002 %) of the total Concession Area 6C (~346 000ha/ 3 500km²). The information collected will be used to understand seabed conditions, evaluate mineral resources, and determine whether mining within Concession Area 6C is economically viable. It will also inform the design of the future mining vessel

PHASE 4:

Feasibility study and resource estimation

Should Phases 1, 2 and 3 yield positive results and the targeted features be identified, a feasibility study will be conducted to assess the likely magnitude of the resource and the economic viability of mining in the proposed prospecting area. This will be a desktop study and will consider the data collected as part of the prospecting activities. The outcome of this will be a Feasibility Study Report. The report will include data on the seafloor topography, sediment stratigraphy and geological units; distribution of potentially mineralised deposits; an evaluation of the drill samples; resource evaluation of areas that are mineralised; an estimate of the extent and size of the resource present; results and recommendations for future mining operations, and recommendations on mining vessel design and construction.

4.5 COMPOSITE MAP: LOCATION AND ENVIRONMENTAL SENSITIVITIES IN CONCESSION 6C

The environmental sensitivities of the concession area are shown in Figure 4.2 and Figure 4.3. No site-specific no-go areas or buffers have been identified at this stage. Any additional sensitive features identified during the geophysical survey, such as rocky reefs or other sensitive benthic habitats, will be delineated and avoided, where practicable, during planning of the seabed sampling activities.

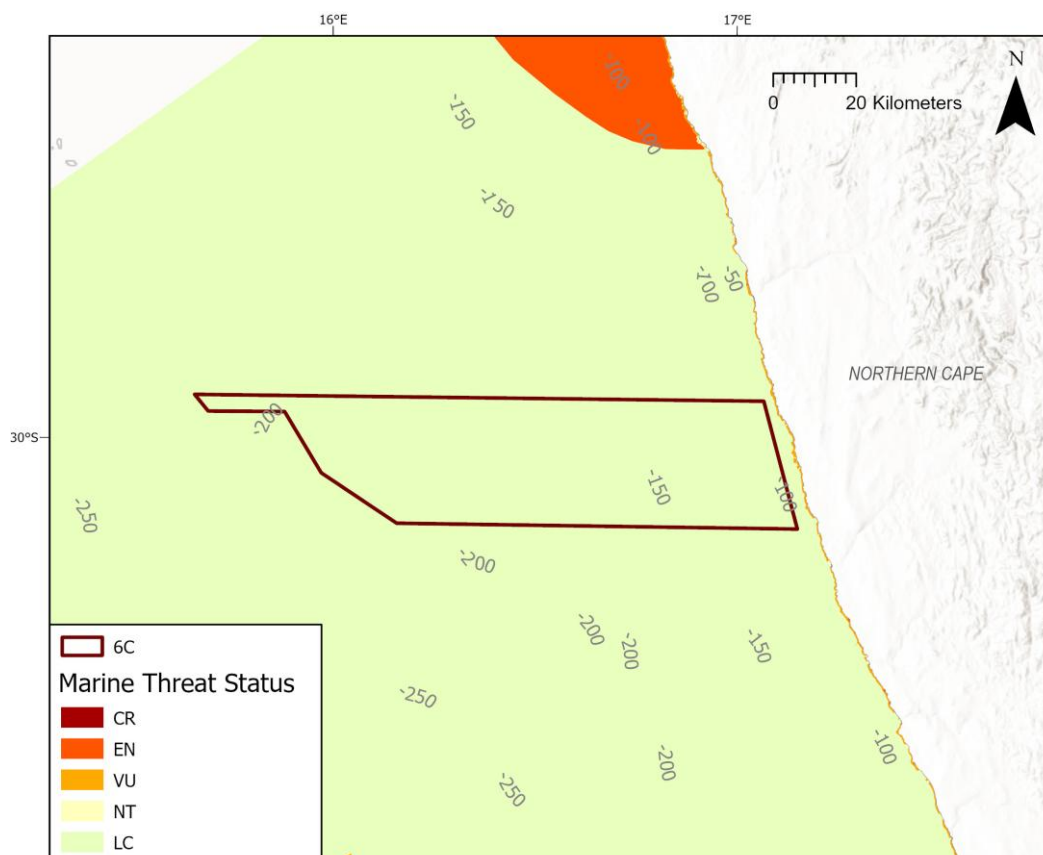


Figure 4.2 Marine Ecosystem Threat Status 2023 in relation to Concession Area 6C. CR = Critically Endangered, EN = Endangered, VU = Vulnerable, NT = Near Threatened, LC = Least Concern. Source: <https://bgis.sanbi.org/>.

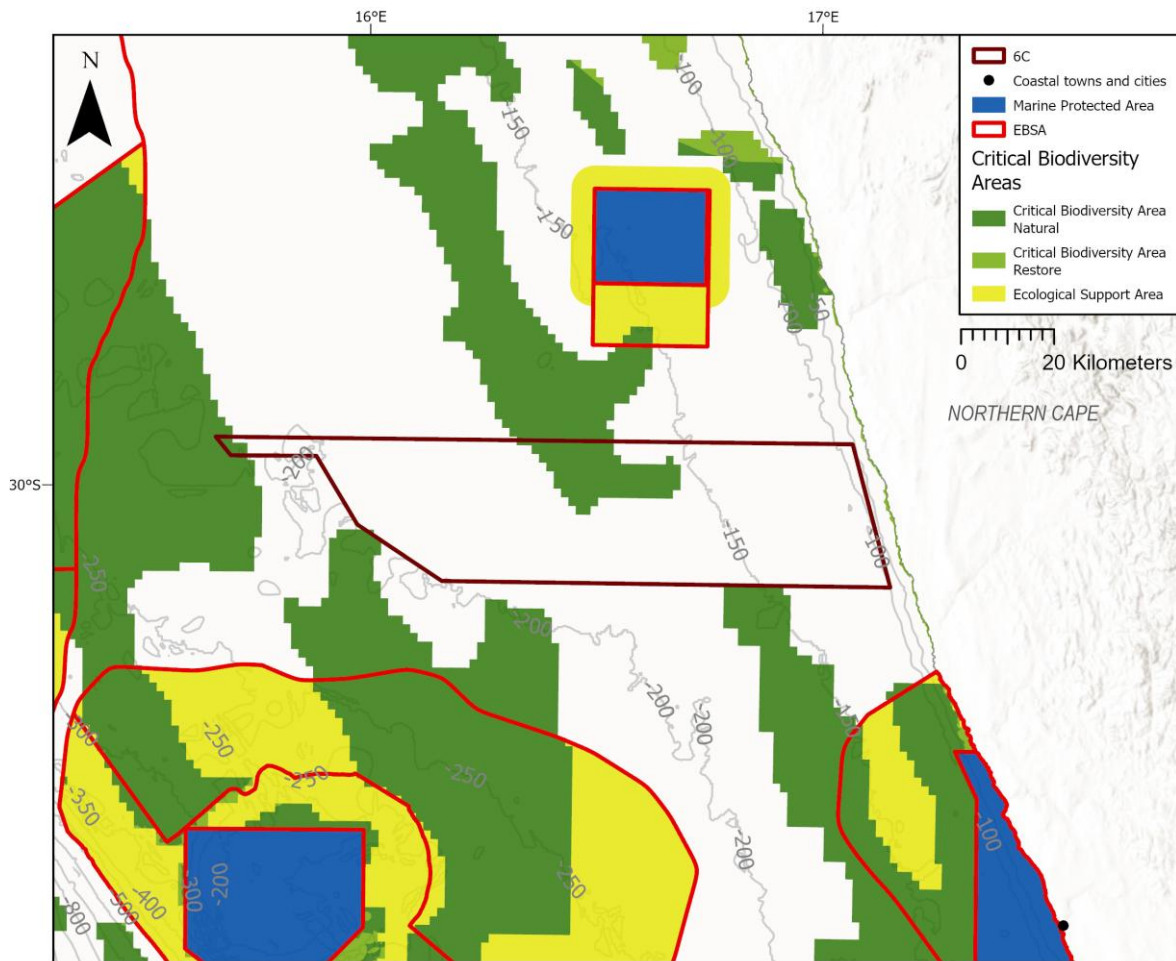


Figure 4.3. Critical Biodiversity Area, Marine Protected Area and Ecologically or Biologically Significant Marine Areas designations in proximity to Concession Area 6C. Source: Harris et al. (2022).

4.6 PROJECT PHASING

4.6.1 PLANNING, DESIGN AND ESTABLISHMENT PHASE

The planning, design and establishment phase comprises all activities undertaken prior to offshore prospecting (Table 4.2). These include desktop geological and environmental investigations, review of available literature and existing datasets, stakeholder engagement, environmental awareness training, appointment of key personnel (e.g. the ECO and specialists), identification of preliminary target areas, implementation of environmental management measures, and mobilisation of the survey vessel and equipment. The findings of the desktop investigations and subsequent geophysical surveys are used to refine sampling locations and, where practicable, avoid environmentally sensitive areas.

4.6.2 OPERATION PHASE

The operational phase commences once all pre-operational requirements have been met and includes the geophysical survey, Van Veen grab sampling, seabed coring, and drill sampling undertaken to characterise the seabed and evaluate the mineral resource (Table 4.2).

4.6.3 DECOMMISSIONING AND CLOSURE PHASE

The decommissioning and closure phase commences once prospecting activities have been completed and includes demobilisation of the survey vessel and equipment, completion of all required environmental monitoring and reporting, and close-out of the project in accordance with the EA and EMPr (Table 4.2).

Table 4.2 Summary of Environmental Management Measures by Project Phase.

Project Phase	Environmental Management Aspects	Environmental Management Outcomes
5. PLANNING, DESIGN AND ESTABLISHMENT PHASE	Environmental awareness training	Environmental awareness training for staff to ensure understanding of EMPr compliance.
	Interested and Affected party (I&APs) notification	Notify I&APs prior to the commencement of prospecting activities to ensure awareness, transparency, and effective communication.
	Protection of benthic and sensitive habitats	Limit seabed sampling, drilling, and tailings disposal to localised, temporary disturbances while avoiding sensitive habitats and preventing significant or long-term impacts on benthic biodiversity and ecosystem function.
	Protection of submerged prehistoric archaeological, maritime archaeological and palaeontological resources	Avoid or minimise impacts on submerged prehistoric archaeological resources, maritime archaeological resources, and palaeontological (fossil) resources, and ensure that any heritage resources identified during prospecting activities are appropriately protected, recorded and managed.
	Management of employment, procurement and economic opportunities	Maximise local socio-economic and scientific benefits through employment, procurement, skills development, and effective management and use of environmental and scientific data.
6. OPERATIONAL PHASE	Overall environmental management	Ensure effective environmental management through compliance with the EA, EMPr, and applicable legislation, supported by ongoing monitoring and reporting of environmental performance.
	Ongoing I&AP liaison and coordination, including marine users and the fishing sector	Maintain effective stakeholder communication throughout operations to facilitate coordination, minimise conflicts, and address concerns in a timely manner.
	Staff, public and other sea users' health, safety and emergency management	Ensure the health and safety of personnel, sea users, and the public through compliance with applicable legislation, industry standards, and emergency preparedness procedures.
	Management of impacts on tourism and recreation	Minimise disruption to tourism and recreational activities through effective planning, communication, and management of prospecting operations.
	Management of impacts on sense of place and wellbeing	Minimise impacts of prospecting activities on the sense of place and well-

Project Phase	Environmental Management Aspects	Environmental Management Outcomes
		being of affected communities and stakeholders.
	Protection of marine megafauna from vessel operations	Avoid injury and mortality of marine megafauna by minimising vessel-related impacts and limiting operational disturbances to short-term, localised, and non-significant effects.
	Protection of benthic and sensitive habitats	Limit seabed sampling, drilling, and tailings disposal to localised, temporary disturbances, avoiding sensitive habitats and preventing significant or long-term impacts on benthic biodiversity and ecosystem function.
	Protection of submerged prehistoric archaeological, maritime archaeological and palaeontological resources	Avoid or minimise impacts on submerged prehistoric archaeological resources, maritime archaeological resources, and palaeontological (fossil) resources, and ensure that any heritage resources identified during prospecting activities are appropriately protected, recorded and managed.
	Pollution management	Prevent marine pollution through appropriate management of waste, hazardous substances, and spill risks to protect water quality, marine biodiversity, and human health.
	Management of employment, procurement and economic opportunities	Maximise socio-economic benefits by promoting fair, local, and South African participation in employment, procurement, and skills development where feasible.
7. DECOMMISSIONING AND CLOSURE PHASE	Survey/ sampling vessel to leave area	Ensuring that the prospecting area is safe for other maritime users.
	Information sharing: contribution to environmental and scientific knowledge	Maximise environmental and scientific benefits through the effective collection, management, documentation, and appropriate sharing of environmental and scientific data.
	Final waste disposal	Ensure all waste is removed from the vessel and responsibly disposed of to prevent pollution and long-term environmental impacts.
	Closure	Ensure appropriate closure of the prospecting programme through stakeholder notification and compliance with applicable closure requirements.

5 FINANCIAL PROVISIONING

5.1 DETERMINATION OF THE AMOUNT OF FINANCIAL PROVISION.

5.1.1 DESCRIBE THE CLOSURE OBJECTIVES AND THE EXTENT TO WHICH THEY HAVE BEEN ALIGNED TO THE BASELINE ENVIRONMENT DESCRIBED UNDER THE REGULATION.

The closure objectives have been developed with due consideration of the baseline environmental conditions and the nature of the proposed offshore prospecting activities. The receiving environment comprises an offshore marine ecosystem where no permanent infrastructure will be established and where the proposed activities will result in only temporary and highly localised disturbance to the seabed. In recognition of the dynamic nature of the marine environment, particularly the natural redistribution and recovery of soft sediments through prevailing oceanographic processes, the closure objectives focus on preventing pollution, removing or appropriately managing any remaining navigational hazards, ensuring the responsible disposal of waste, completing the required regulatory closure processes, and making environmental information available to support future environmental management and scientific research. The closure objectives are therefore aligned with the baseline environment and are intended to ensure that no unacceptable residual environmental impacts remain following completion of the prospecting programme.

5.1.2 CONFIRM SPECIFICALLY THAT THE ENVIRONMENTAL OBJECTIVES IN RELATION TO CLOSURE HAVE BEEN CONSULTED WITH LANDOWNER AND INTERESTED AND AFFECTED PARTIES.

As the proposed prospecting activities are located offshore, there are no landowners associated with the project area. The environmental objectives relating to closure have been, and continue to be, communicated to Interested and Affected Parties (I&APs) through the Public Participation Process undertaken as part of the Basic Assessment process. A pre-consultation process was undertaken in June 2026 to provide government authorities, stakeholders and members of the public with an opportunity to register as I&APs and submit preliminary comments on the proposed project. The Draft Basic Assessment Report (BAR), including the proposed closure objectives and associated environmental management measures, has been made available for public review and comment for a 30-day period from 25 July 2026 to 25 August 2026. Comments received during the public participation process were considered and, where appropriate, were incorporated into the final BAR and EMPr. Accordingly, the environmental objectives relating to closure have been made available for consultation with all relevant Interested and Affected Parties.

5.1.3 PROVIDE A REHABILITATION PLAN THAT DESCRIBES AND SHOWS THE SCALE AND AERIAL EXTENT OF THE MAIN MINING ACTIVITIES, INCLUDING THE ANTICIPATED MINING AREA AT THE TIME OF CLOSURE.

It is well established in marine science and generally accepted in the context of offshore marine environments that recovery occurs naturally over time through dynamic physical processes, including sediment movement and redistribution, particularly within soft sediment habitats. Active rehabilitation of the seabed is therefore generally neither necessary nor logistically feasible due to the depth and nature of the receiving

environment. The proposed prospecting activities are temporary in nature and do not involve the establishment of permanent infrastructure or long-term occupation of the site. At closure, the survey vessel will leave the concession area and no infrastructure, equipment or materials will remain on the seabed. The cumulative physical disturbance associated with grab sampling, coring and drilling is estimated to be approximately 7 600 m² (0.76 ha), representing approximately 0.0002% of the 350 000 ha concession area. This disturbance is expected to recover naturally over time through normal marine sediment transport and redistribution processes.

As no active rehabilitation measures are possible or required in this context, a detailed rehabilitation plan as contemplated in Appendix 3 of GNR 1147 cannot be meaningfully developed in the same manner as for land-based prospecting or mining activities. The purpose of such a plan is to prescribe physical rehabilitation measures, timeframes and responsibilities, which are not applicable where no direct rehabilitation interventions can be undertaken. Nevertheless, closure measures, monitoring requirements and environmental management actions applicable to the proposed prospecting programme have been incorporated into the BAR and EMPr to ensure that the concession area is left in a safe and environmentally acceptable condition following completion of the prospecting activities.

5.1.4 EXPLAIN WHY IT CAN BE CONFIRMED THAT THE REHABILITATION PLAN IS COMPATIBLE WITH THE CLOSURE OBJECTIVES.

The rehabilitation approach is compatible with the closure objectives because the proposed prospecting activities are temporary, highly localised and do not involve the establishment of permanent infrastructure. It is generally accepted that active rehabilitation is neither necessary nor feasible within the offshore marine environment, as habitat recovery occurs naturally through dynamic physical processes, including sediment transport, redistribution and natural infilling. Accordingly, the closure objectives focus on removing the survey vessel, preventing pollution, ensuring the responsible disposal of waste, leaving no navigational hazards, completing the required regulatory closure processes, and allowing the affected seabed to recover naturally. This approach is considered appropriate for the nature and scale of the proposed prospecting activities and is consistent with current scientific understanding of offshore marine environments.

5.1.5 CALCULATE AND STATE THE QUANTUM OF THE FINANCIAL PROVISION REQUIRED TO MANAGE AND REHABILITATE THE ENVIRONMENT IN ACCORDANCE WITH THE APPLICABLE GUIDELINE.

An amount of R170 000.00 has been set aside as financial provision for the management of environmental incidents, emergency response, pollution remediation and any other environmental liabilities that may arise from the proposed prospecting activities.

It should be noted that the R170,000.00 represents the financial provision to be held with the DMPr and does not represent the total financial resources available to the Applicant should additional resources be required to address an environmental incident or undertake remediation.

Furthermore, application of the Department of Mineral Resources' Guideline for the Evaluation of the Quantum of Closure-Related Financial Provision confirmed that none of the prescribed closure components are applicable to the proposed offshore

prospecting activities and, accordingly, no rehabilitation liability is generated. This is because the proposed activities are temporary, do not involve permanent infrastructure, and the limited and localised seabed disturbance is expected to recover naturally. Refer to Appendix 10 for the detailed Financial Quantum Determination.

In addition to the financial provision, the Applicant has made separate operational budget provision for implementation of the approved EMP and has separate contingency funding available to respond to major environmental incidents, should these occur. The Applicant has also made separate financial provision for Concession Areas 7C and 10B, which will be available, where necessary, during the concurrent prospecting campaign.

Accordingly, the financial provision is considered appropriate and sufficient for the nature, scale and environmental risk profile of the proposed prospecting activities.

5.1.6 CONFIRM THAT THE FINANCIAL PROVISION WILL BE PROVIDED AS DETERMINED.

Funding for the proposed prospecting activities, including the required financial provision, will be provided by Trans Atlantic Diamonds (Pty) Ltd and has been provided for in the Prospecting Work Programme and associated financial documentation submitted to the DMPR. Supporting proof of funds and financial guarantees have been submitted through the SAMRAD system, and the Applicant has also demonstrated its ability to provide the required financial provision through payment of the prescribed financial provision for Concession Areas 7C and 10B into the designated DMPR account. Accordingly, it is confirmed that the required financial provision will be provided as determined.

6 POLICY AND LEGISLATIVE CONTEXT

Table 6.1 Key legislation and requirements to be considered and complied with during prospecting activities in Concession Area 6C.

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE WHERE APPLIED	HOW DOES THIS DEVELOPMENT COMPLY WITH AND RESPOND TO THE LEGISLATION AND POLICY CONTEXT.
MAIN LEGISLATION		
National Environmental Management Act, 1998. NEMA sets out a number of governing environmental principles that should be taken into account and applied by all organs of state when making decisions that significantly affect the environment. It provides the minimum requirements for the procedures for investigating, assessing and communicating the potential impacts of activities on the environment and society and for the granting of Environmental Authorisation for any activity. It requires that any activity should not only be environmentally sustainable, but economically and socially as well. The cultural, social, economical, psychological, developmental and physical needs of people should be considered along with the environment.	Throughout the entire prospecting process	A Basic Assessment Process has been undertaken in accordance with NEMA to obtain Environmental Authorisation prior to the commencement of prospecting activities. The proposed prospecting programme has been assessed to promote environmentally, socially and economically sustainable development, and Interested and Affected Parties (I&APs) have been consulted throughout the assessment process. The Applicant must further comply with the Duty of Care in terms of Section 28 of NEMA by taking reasonable measures to prevent, minimise and rectify any pollution or environmental degradation that may arise during prospecting, and implement all mitigation and management measures contained in the approved EMPr.
Environmental Impact Assessment (EIA) Regulations, 2014 (as amended). The EIA regulations, 2014 (as amended) promulgated in term of Chapter 5 of NEMA controls certain listed activities. These activities are published as Listing Notice (LN) 1 in Government Notice (GN) No. R983 (as amended) as LN 2 in GN No.R 984 (as amended) and as LN 3 in GN No. R985 (as amended). These activities are prohibited until Environmental Authorisation (EA) has been granted by the competent authority. Activities triggered under LN 1 and 3 requires that a Basic Assessment be conducted, while activities triggered under LN 2 requires that a Scoping and Environmental Impact Assessment Report be conducted.	Throughout the entire prospecting process	The proposed project triggers Listing Notice (LN) 1. A Basic Assessment Process will be undertaken and a Basic Assessment Report and stakeholder consultation report submitted as part of the application for EA. No activity will commence before EA has been granted by the Competent Authority.
Mineral and Petroleum Resources Development Act, 2002. In terms of this Act, a Prospecting Right must be obtained before any prospecting activities may commence	Throughout the entire prospecting process	The Applicant must obtain a valid Prospecting Right and Environmental Authorisation prior to commencing prospecting activities. Prospecting must be undertaken in accordance with the approved Prospecting Work Programme (PWP), EMPr, conditions of the Prospecting Right and Environmental Authorisation, and all applicable provisions of the MPRDA.
ADDITIONAL LEGISLATION TO BE CONSIDERED AND ADHERED TO		
International Agreements and Obligations		
International Regulations for Preventing Collisions at Sea (Colregs 1972) These regulations refer to navigational rules that need to be adhered to by maritime vessels to minimise the likelihood of collisions.	Operation Phase	To prevent collision with other maritime vessels during survey operations, the operation vessel should adhere to this regulation, implement a safety zone and effectively signal this to other vessels.

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE WHERE APPLIED	HOW DOES THIS DEVELOPMENT COMPLY WITH AND RESPOND TO THE LEGISLATION AND POLICY CONTEXT.
National Legislation		
Constitution of South Africa This is the supreme law that provides the legal framework for the existence of the Republic of South Africa.	Throughout the entire prospecting process	The conducting of prospecting activities in the area shall be done in such a manner that avoids significant environmental impacts. In instances where this cannot be avoided, impacts must be minimised or mitigated in order to protect the environmental rights of South Africans.
National Environmental Management: Protected Areas Act Provides for the formal declaration and management of protected areas to conserve biodiversity, protect natural and cultural resources, and maintain ecological integrity. It requires management plans to guide conservation and land-use decisions.	During coring, drilling and grab sampling	Prospecting activities in Concession Area 6C must ensure that operations do not contravene the provisions or management objectives of any nearby declared protected areas, and the proponent must confirm that activities occur outside protected area boundaries and comply with any applicable restrictions or management measures established under the Act.
National Environmental Management: Biodiversity Act 10 of 2004. Governs biodiversity management and the protection of threatened species and ecosystems through regulations and permits. It gives effect to international agreements, supports planning tools and regulates alien and invasive species.	Throughout the entire prospecting process	Prospecting activities in Concession Area 6C must avoid, minimise and, where necessary, remedy impacts on biodiversity, including threatened species and ecosystems, and comply with applicable biodiversity management measures under the Act. The Applicant must take biodiversity planning tools, including Critical Biodiversity Areas (CBAs), into consideration and undertake activities in a manner that supports the protection and ecological functioning of areas of biodiversity importance. The EMPr must be implemented throughout the prospecting programme, with appropriate mitigation measures applied to minimise biodiversity disturbance and support natural recovery.
National Biodiversity Framework A national-level strategic policy document that provides a coordinated framework to guide the management, conservation, and sustainable use of South Africa's biodiversity.	Throughout the entire prospecting process	Guides the prospector to consider biodiversity priorities and avoid sensitive habitats when planning and conducting prospecting activities in the offshore environment.
National Environmental Management: Integrated Coastal Management Act (ICMA) 24 of 2008 Provides for the integrated management of South Africa's coastal environment and promotes the protection, conservation and sustainable use of coastal resources. The Act recognises the interconnected nature of coastal ecosystems and provides a framework for managing activities that may affect coastal waters, coastal public property and other components of the coastal environment. It establishes principles for integrated coastal management, including the need to avoid, minimise and remedy adverse environmental impacts and to apply a precautionary approach where there is uncertainty regarding potential environmental harm.	Throughout the entire prospecting process	The proposed prospecting activities occur within South Africa's coastal waters as defined by ICMA, and must therefore comply with the applicable requirements of the ICMA. Accordingly, the Applicant must undertake the prospecting activities in a manner that avoids, minimises and remedies adverse impacts on the marine environment, while promoting the sustainable use and protection of coastal and marine resources. The applicant must avoid or minimise impacts on sensitive coastal and marine environments and implement appropriate measures to protect these ecological resources. Furthermore, the Applicant must take reasonable measures to prevent pollution or degradation of the marine environment and implement appropriate measures

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE WHERE APPLIED	HOW DOES THIS DEVELOPMENT COMPLY WITH AND RESPOND TO THE LEGISLATION AND POLICY CONTEXT.
		for the management of sediment disturbance, marine fauna, vessel operations, hazardous substances, waste and pollution incidents. The Applicant must also comply with the requirements relating to discharges and dumping at sea. No waste or other material may be dumped at sea unless undertaken in accordance with the applicable legal requirements and any required permit.
Animals Protection Act (Act 71 of 1962) Consolidates and amends laws relating to the prevention of cruelty to animals.	Operation Phase / During coring, drilling and grab sampling	Ensures that all operations avoid unnecessary harm or distress to marine animals encountered during survey activities.
National Environmental Management: Air quality Act, 2004. The offshore area of activity and the South African Exclusive Economic Zone (EEZ) does not fall within any municipal or provincial jurisdiction. There is thus a no formal means by which an application can be made for incineration from vessels in the offshore area. This activity is, however, permitted in terms of the International Convention for the prevention of pollution from ships, 1973/1978 (MARPOL) to which South Africa is a signatory.	Throughout the entire prospecting process	South Africa is a signatory of the International Convention for the prevention of pollution from ships, 1973/1978 (MARPOL). As such, all vessels have the responsibility to ensure that they prevent, minimise and mitigate potential pollution by vessels. To manage the potential impact of air pollution by vessels, all contractors and employees will be subjected to an environmental awareness campaign.
Marine Pollution Act (Prevention of Pollution from Ships; Act 2 of 1986) Provides for the protection of the sea from pollution by oil and other harmful substances discharged from ships.	Operation Phase	Requires that all vessels and equipment prevent oil or pollutant discharges, with appropriate spill response measures in place during offshore operations.
Convention for the prevention of pollution from ships, 1973/1978 (MARPOL).	Throughout the entire prospecting process	Convention for the prevention of pollution from ships, 1973/1978 (MARPOL). As such, all vessels have the responsibility to ensure that they prevent, minimise and mitigate potential pollution by vessels. While a waste management license is not required for offshore waste management activities, such as those related to sewage, the generation of potential waste will be minimised through ensuring employees are subjected to the appropriate environmental awareness campaigns before commencement. All waste generated will be disposed of in a responsible and legal manner.
The Marine Living Resources Act (Act 18 of 1998) Provides for sustainable management of marine living resources, protection of marine ecosystems and biodiversity, the declaration of Marine Protect Areas with activity restrictions, and regulation of commercial, subsistence, and recreational fishing.	Planning and Design Phase / Operation Phase	Requires the prospector to avoid over-exploitation or disturbance of marine species, comply with fishing restrictions, and conduct activities without harming protected ecosystems.

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE WHERE APPLIED	HOW DOES THIS DEVELOPMENT COMPLY WITH AND RESPOND TO THE LEGISLATION AND POLICY CONTEXT.
Sea Birds And Seals Protection Act (Act 46 of 1973) Prohibits the harassment, disturbance, killing, or capture of seabirds and seals.	Operation Phase	Prohibits disturbance of seabirds and seals during survey operations, necessitating mitigation measures such as exclusion zones and careful vessel maneuvering.
National Environmental Management: Waste Act, 2008. Provides the framework for sustainable waste management through reduction, recycling, safe disposal, licensing of waste activities, hazardous waste control, and contaminated land remediation.	Throughout the entire prospecting process	Waste generated during prospecting operations in Concession Area 6C must be managed in accordance with the Act, including the safe storage, handling, and disposal of general and hazardous waste from vessels, and ensuring that no waste is discharged into the marine environment.
Hazardous Substances Act (Act 15 of 1973) Provides for the classification, control, and regulation of hazardous substances and products that may pose risks to human health or safety.	Planning and Design Phase / Operation Phase	Ensures safe storage, handling, and disposal of hazardous substances used in coring, drilling, or other sampling activities to prevent environmental or health risks.
Marine Spatial Planning Act of 2019 Makes provision for marine spatial planning system in South Africa so that the environment can be accessed by all users of the ocean, to facilitate responsible use of the ocean and conservation for future generations.	Planning and Design Phase	When planning the prospecting survey, areas of biological significance need to be taken into account and avoided.
Maritime Zones Act (No 15 of 1994) The Act defines the maritime zones of South Africa which include the contiguous zone, territorial waters, the maritime cultural zone, the exclusive economic zone and the continental shelf. South Africa has the right to exercise and implement all laws within the contiguous zone.	Throughout the entire prospecting process	Concession Area 6C lies within the territorial waters. Any offshore are subject to National law and should be adhered to.
National Heritage Resources Act, 25 of 1999. Sets the framework for protecting and managing heritage resources, which includes cultural, archaeological (including shipwrecks), and palaeontological resources.	During coring, drilling and grab sampling	A marine heritage impact assessment (including marine archaeological, submerged prehistoric archaeological and palaeontological resources) has been conducted to ensure that there are no substantial impacts on heritage sites. No prospecting activities shall take place within 50 m of any identified heritage resources such as shipwrecks.
Carbon Tax Act 15 of 2019 A taxpayer is liable to pay a carbon tax where it conducts any activities set out in Schedule 2 of the Carbon Tax Act and emits GHG emissions above the listed thresholds. Tax liability may be reduced through using the various allowances available and in some instances, the tax is only payable where the allowances are exceeded.	Throughout the entire prospecting process	The client has the responsibility to ensure that they pay carbon tax should they emit emissions above the listed thresholds or ensure that they reduce their emissions.
The Climate Change Act (Act 22 of 2024) Supports South Africa's transition to a low-carbon, climate-resilient economy and society, promoting an effective climate change response in line with sustainable development principles. Provides guidance across all levels of government, sectors, and stakeholders in terms of climate change adaptation efforts in South Africa in the short to medium-term. Financial institutions must integrate environmental considerations into their	Throughout the entire prospecting process	The client has the responsibility to ensure that they integrate environmental considerations and mitigation measures to reduce the impacts of climate change as a result of any operations they conduct into their decision-making frameworks and business plans.

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE WHERE APPLIED	HOW DOES THIS DEVELOPMENT COMPLY WITH AND RESPOND TO THE LEGISLATION AND POLICY CONTEXT.
decision-making frameworks and contribute to climate change mitigation and resilience. The paper acknowledges that financial institutions can play an important role in mobilizing finance to mitigate the impacts of climate change in South Africa and supporting a just transition to a low carbon economy.		
Promotion of Access to Information Act (Act 2 of 2000) Gives effect to the constitutional right of access to information held by the state or by another person when required to exercise or protect rights, and assigns related powers and duties to the Information Regulator.	Throughout the entire prospecting process	Requires the provision of relevant environmental and planning information to the public and authorities, supporting transparency during the public participation process.
Promotion of Administrative Justice Act (Act 3 of 2000) Gives effect to the constitutional right to lawful, reasonable and procedurally fair administrative action, including the right to written reasons for such action.	Throughout the entire prospecting process	Guarantees that decisions regarding approvals, permits, or refusals are made lawfully and with proper reasoning, ensuring fair administrative procedures.
The Occupational Health and Safety Act No. 85 of 1993 The Act governs health and safety at all workplaces. It is focused on the health and safety of persons at work and places the responsibility on employers “to do everything reasonably practical” to protect the welfare of their employees The Act requires that every company with more than 20 employees has to have a health and safety committee, which should be tasked with identifying potential hazards, examining the causes of any workplace incidents, investigating employee complaints and consulting with health and safety inspectors. The Act also directs employers to provide and establish precautionary measures and systems to prevent workplace injuries.	Throughout the entire prospecting process	The client has to ensure that they adhere to the conditions set out in this act throughout the entire process. They also have to appoint a Health and Safety Officer to supervise the health and safety performance of the company, as well as to represent the employer and management at Health and Safety Committee meetings.
Companies Act 71 of 2008 The aim of this act is to: provide for the incorporation, registration, organisation and efficient management of companies, the capitalisation of profit companies, and the registration of offices of foreign companies carrying on business within the Republic; record-keeping and reporting by companies;	Throughout the entire prospecting process	The client must ensure that this act is adhered to throughout the entire process.
Relevant Provincial Legislation		
Northern Cape Nature Conservation Act 9 of 2009 This Act provides for the conservation and sustainable management of the Northern Cape's indigenous biodiversity and regulates activities involving protected species. It regulates activities involving protected species and habitats through a system of permits and conservation measures.	Planning and Design Phase	Guides site selection and operational planning to align with provincial biodiversity priorities, including the Biodiversity Spatial Plan for marine and coastal ecosystems.
Northern Cape Provincial Biodiversity Spatial Plan This is a provincial biodiversity planning tool that identifies terrestrial and freshwater biodiversity priority areas to support conservation planning and	Planning and Design Phase	This spatial plan should be taken into account during the plan and design phase to inform areas for prospecting and activities should be adjusted accordingly.

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE WHERE APPLIED	HOW DOES THIS DEVELOPMENT COMPLY WITH AND RESPOND TO THE LEGISLATION AND POLICY CONTEXT.
sustainable land-use decision-making. Includes Critical Biodiversity Areas and Ecological Support Areas to inform sustainable development.		
Northern Cape Spatial Planning and Land Use Management Act 16 of 2013 The Act provides the legal framework for spatial planning, land use management, and sustainable development within the Northern Cape Province. The Act regulates land use applications and promotes orderly, integrated, and environmentally sustainable development.	Planning and Design Phase	Requires alignment of prospecting activities with provincial spatial planning, including zoning considerations and coastal development frameworks.
Northern Cape Coastal Management Programme A programme which provides a strategic framework for the integrated management, protection, and sustainable use of the Northern Cape coastal zone. It aims to balance environmental conservation with social and economic development while promoting the responsible use of coastal and marine resources.	Planning and Design Phase / Throughout the entire prospecting process	Provides a framework and objectives for sustainable coastal management, ensuring that offshore prospecting activities avoid impacts on sensitive coastal and nearshore resources.
The Northern Cape Provincial Spatial Development Framework (Act 16 of 2013) The framework provides the province's long-term spatial vision to guide sustainable land use, infrastructure investment, and economic development. It promotes the efficient use of natural resources while supporting environmental protection, integrated planning, and coordinated spatial development. Furthermore, the framework also identifies strategic development priorities to facilitate sustainable economic growth and improve spatial resilience across the province.	Throughout the entire prospecting process	This legislative framework should be taken into account to promote growth and development of local communities and should be considered during the planning and design phase.
Namakwa Special Economic Zone The Namakwa Special Economic Zone is a strategic development initiative aimed at promoting investment, industrialisation, and economic growth within the Namakwa District. The SEZ focuses on sectors such as mining, mineral beneficiation, renewable energy, and associated infrastructure to stimulate regional development and job creation.	Throughout the entire prospecting process	Provides objectives to support investment in the regional mining sector and creating downstream economic development.
The Mining and Biodiversity Guideline (2013) Outlines six principles that should be applied during any stage of the mining for decision-making. The document uses biodiversity information for decision-making throughout the mining cycle	Throughout the entire prospecting process	This should be employed to provide a practical guideline when making decisions regarding impacts to biodiversity with respect to the prospecting activities.

7 PLANNING, DESIGN AND ESTABLISHMENT PHASE

7.1 OVERVIEW

The holder of the EA and the Contractor are reminded that their compliance with Sections 6, 8 and 9 will be subject to monitoring and auditing, which must be carried out in accordance with Sections 3.9 and 3.10, and using the information and guidance provided in Section 2 and Section 3.

7.2 ENVIRONMENTAL AWARENESS TRAINING

Impact management outcome: Provide environmental awareness training to ensure all staff are aware and understands the individual responsibilities in terms of this EMP to ensure effective implementation and compliance.

Essential Management Actions/Mitigation Measures (Method of implementation)	Person responsible for Implementation	Timeframe of Implementation
a) All personnel must receive environmental awareness training, in accordance with the Environmental Awareness Training Method Statement, prior to commencing work. b) Environmental awareness training must include as a minimum the following: i. The conditions of the EA, the requirements of the EMP, and the roles and responsibilities of personnel in ensuring compliance; ii. The environmental sensitivities of the concession area, including protected and sensitive marine species and submerged prehistoric archaeological, maritime archaeological and palaeontological resources, the potential impacts of the prospecting activities on these resources, and the mitigation measures and procedures required to avoid or minimise impacts; iii. Marine megafauna observation, reporting and interaction procedures; iv. Emergency preparedness and response procedures, including spill prevention, containment, clean-up, reporting, and the correct use of spill response equipment; v. Waste management procedures, including pollution prevention, the safe handling, storage and disposal of waste and hazardous substances, and measures to protect the marine environment and sensitive species from pollution. vi. Procedures for reporting environmental incidents, complaints and non-conformances; and vii. Procedures to be followed when operating within or near environmentally sensitive areas. c) Refresher environmental awareness training must be provided as required, including where new personnel join the vessel or where environmental incidents or non-compliances indicate that additional training is necessary. d) Environmental and safety notices relevant to the prospecting activities must be displayed in appropriate locations onboard the survey vessel, where practicable. These should include, as a minimum: i. Emergency contact details and emergency procedures;	Contractor/ ECO	Prior to boarding the vessel and a refresher course prior to each subsequent prospecting activities.

Impact management outcome: Provide environmental awareness training to ensure all staff are aware and understands the individual responsibilities in terms of this EMPr to ensure effective implementation and compliance.

Essential Management Actions/Mitigation Measures (Method of implementation)	Person responsible for Implementation	Timeframe of Implementation
ii. Spill response procedures; iii. Waste segregation and disposal requirements; and iv. Pollution prevention requirements, including the prohibition of littering. e) Records of all environmental awareness training and inductions must be maintained and made available on request. f) Training material must be available in languages understood by the personnel attending the training. g) Environmental toolbox talks or briefings must be conducted, where appropriate, throughout the survey programme to reinforce key environmental requirements and communicate any changes to environmental procedures or site-specific risks.		

7.3 INTERESTED AND AFFECTED PARTIES (I&APs) NOTIFICATION

Impact management outcome: Notify registered and relevant I&APs of the commencement of prospecting activities to promote stakeholder awareness, transparency and communication, and to enable affected parties to anticipate and respond to survey activities.			
Essential Management/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation	of
a) Prior to commencement of the prospecting survey, the EA Holder must notify key stakeholders and registered I&APs, in writing, of the commencement of the prospecting activities. b) The notification should, where applicable, include: i. A brief description of the project and the location (including the coordinates of the proposed survey area); ii. Contact details of the EA Holder, Contractor, FLO and ECO; iii. A high-fidelity operational schedule indicating the anticipated commencement dates, duration, and planned drilling locations, including their proximity to the Kleinsee mariculture and other potentially affected marine users, where this information is available and operationally feasible to provide. The schedule must provide sufficient detail to enable potentially affected users, including land-based operations at Kleinsee, to monitor activities and, where necessary, implement precautionary operational measures such as temporarily adjusting water intake thresholds; iv. The applicable safety exclusion zone(s) and operational safety requirements around the survey vessel(s); and v. Should emphasise the temporary, offshore and localised nature of the prospecting activities to reduce misconceptions regarding impacts. c) The following stakeholders should be notified: i. Registered I&APs; ii. Relevant local municipality and authorities; iii. The South African Heritage Resources Agency (SAHRA) and the Northern Cape Provincial Heritage Resources Authority (NCHRA); iv. DFFE (including Fisheries Research and the Vessel Monitoring, Control and Surveillance (VMS) Unit); v. South African Maritime Safety Authority (SAMSA); vi. South African Navy (SAN) Hydrographic Office; vii. Relevant port authorities or harbour control; viii. National Sea Rescue Institute (NSRI); ix. Relevant tourism stakeholders; x. Adjacent and overlapping prospecting or mining right holders; and xi. Fishing organisations and associations, including (contactable via liaison@fishsa.org): - o SA Marine Linefish Management Association (SAMLMA); - o South African Tuna Association (SATA); - o South African Tuna Longline Association (SATLA);	EA Holder	20 days prior to commencement of operations or as stipulated in the EA	

Impact management outcome: Notify registered and relevant I&APs of the commencement of prospecting activities to promote stakeholder awareness, transparency and communication, and to enable affected parties to anticipate and respond to survey activities.

Essential Management/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
○ Mariculture farm operators, including Kleinsee Mariculture CC and Diamond Coast Aquaculture (Pty) Ltd; ○ Large Pelagic Small, Medium and Micro Enterprises (SMME); and ○ Local fishing communities in Kleinsee, Hondeklipbaai and other affected areas. d) The EA Holder must appoint a Fishing Liaison Officer (FLO) to facilitate communication with the fishing and mariculture sector. The FLO must provide updates on vessel activities, as required, and advise on appropriate actions should fishing gear or fishing vessels be encountered within the survey area.		

7.4 PROTECTION OF BENTHIC AND SENSITIVE HABITATS

Impact management outcome: To ensure that seabed sampling, drilling and tailings disposal result only in localised and temporary disturbance to benthic habitats, with sensitive habitats avoided and the CBA Natural area excluded from the prospecting footprint, no significant impacts on biodiversity features of concern, and no long-term loss of benthic ecosystem structure or function.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) A pre-survey verification of sensitive marine habitats (such as rocky reefs and kelp habitats) before intrusive sampling is mandatory. b) Exclusion buffer zones must be implemented around sensitive habitats identified during geophysical surveys. The recommended exclusion buffer zone is 500 m. c) All sensitive benthic habitats identified during geophysical surveys should be avoided, including exclusion zone buffers (500 m recommended) around such habitats. d) The CBA Natural area must be clearly demarcated as a no-go area and be excluded from the prospecting footprint entirely, prior to prospecting. No prospecting may occur in the CBA. e) Potential discharges must be planned and managed to ensure that tailings are not discarded onto potentially sensitive habitats.	Geologist / ECO / Contractors	Prior to commencement of prospecting activities

7.5 PROTECTION OF SUBMERGED PREHISTORIC ARCHAEOLOGICAL, MARITIME ARCHAEOLOGICAL AND PALAEOLOGICAL RESOURCES

Impact management outcome: Avoid or minimise damage to submerged prehistoric archaeological resources (e.g. prehistoric stone artefacts and tools), maritime archaeological resources (e.g. shipwrecks), and palaeontological (fossil) resources, including older fossil material from ancient geological deposits (e.g. Cretaceous fossil wood, Cenozoic shelly macrofauna, fossil bones and teeth) and younger shells from more recent marine deposits (the Last Transgression Sequence), and ensure that any heritage resources identified during prospecting activities are appropriately protected, recorded and managed.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) The EA Holder must share the Environmental Authorisation (EA), Final BAR and EMPr with the South African Heritage Resources Agency (SAHRA), prior to project commencement, by uploading these to the SAHRIS Case application (SAHRA Case ID: 29490). b) The EA Holder must, prior to commencement of prospecting activities, obtain the necessary permit(s) from the South African Heritage Resources Agency (SAHRA), in terms of the National Heritage Resources Act (Act No. 25 of 1999), for the collection, disturbance or removal of fossil material that may be encountered during prospecting activities. c) A Method Statement must be prepared describing the procedures for the identification, handling, recording, retention and, where applicable, collection of any submerged prehistoric archaeological or palaeontological material identified within recovered prospecting samples. d) All relevant personnel (ECO, relevant Contractor personnel and geological staff), particularly those operating the classifier and screening equipment, must receive heritage awareness training to enable them to recognise, examine and appropriately report potential heritage resources. Training must specifically cover: i. Identifying potential maritime archaeological resources (e.g. shipwrecks and related artefacts) during geophysical surveys and other prospecting activities. ii. Examining grab, core and drill samples (including material retained on the oversize screen during drill sampling) recovered during prospecting, to recognise potential submerged prehistoric archaeological material (e.g. stone artefacts) and palaeontological material, including fossil wood, fossil shells, fossil bones and teeth, unusual shells, and other significant fossil remains. iii. The procedures to be followed if any suspected heritage resources are identified during geophysical surveys or during the processing and examination of recovered prospecting samples. e) The EA Holder must take note of the provisions of Section 51(1) of the NHRA relating to offences and penalties for non-compliance with the Act.	Contractor/ ECO/ NCHRA/ SAHRA	During planning phase prior to survey commencing

7.6 MANAGEMENT OF EMPLOYMENT, PROCUREMENT AND ECONOMIC OPPORTUNITIES

Impact management outcome: To optimise the positive socio-economic and scientific outcomes of the prospecting programme by promoting local and South African participation in employment, procurement and skills development where feasible, and by ensuring that environmental and scientific data generated during the project are appropriately managed and utilised.

Recommended/Best Practice Optimisation Measures	Person responsible for Implementation	Timeframe of Implementation
a) Employment opportunities, procurement requirements and opportunities for local and regional businesses to provide goods and services should, where appropriate, be communicated to stakeholders. b) The Applicant should manage stakeholder expectations by clearly communicating the limited and temporary nature of employment opportunities associated with the prospecting phase. c) The Applicant must implement procurement in a fair, transparent and non-discriminatory manner in accordance with applicable legislation, the Mining Charter (where applicable), contractual obligations, and the Applicant's B-BBEE and supplier development policies. d) Where suitably qualified, available and commercially competitive, preference should be given to South African, and where feasible, local and regional suppliers and service providers, particularly for vessel provisioning, logistics and associated services. e) Where training and capacity-building opportunities are available, they should be offered in a fair and transparent manner using clear selection criteria, with preference given, where feasible, to suitably qualified candidates from local and regional communities.	EA Holder	Prior to the commencement of prospecting activities

8 OPERATIONAL PHASE

8.1 OVERVIEW

The following section outlines the management outcomes and actions that must be implemented during the operational phase to manage and mitigate potential impacts.

The holder of the EA and the Contractor are reminded that their compliance with Sections 6, 8 and 9 will be subject to monitoring and auditing, which must be carried out in accordance with Sections 3.9 and 3.10, and using the information and guidance provided in Section 2 and Section 3.

8.2 OVERALL ENVIRONMENTAL MANAGEMENT

Impact management outcome: Ensure effective environmental management to achieve compliance with the EA, EMPr and applicable legislation, and to facilitate effective monitoring and reporting of environmental performance.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) Constrain the spatial extent of prospecting activities and associated impacts to the approved prospecting footprint. b) The EA Holder, Contractor and all vessel personnel must comply with the conditions of the EA, the requirements of the EMPr, applicable Method Statements, and all relevant environmental legislation. c) Environmental compliance must be monitored throughout the operational phase by the ECO. d) Environmental incidents, non-conformances and, where relevant, corrective actions should be photographed, where practicable, to support environmental records, reporting and compliance verification.	Contractor / ECO/ All Vessel Personnel	Throughout Operational Phase

8.3 ONGOING I&AP LIAISON AND COORDINATION, INCLUDING MARINE USERS AND THE FISHING SECTOR

Impact management outcome: Maintain effective communication with relevant stakeholders, particularly marine users and fisheries, throughout the operational phase to minimise potential conflicts, facilitate coordination of activities, communicate operational updates where appropriate, and ensure that complaints and concerns are addressed in a timely manner.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) The EA Holder, Contractor and/or FLO, as appropriate, must establish and maintain a direct communication and operational alert protocol with key stakeholders and registered I&APs, particularly marine users and mariculture operators who may be affected by the prospecting activities. The protocol must provide timely updates on survey activities and facilitate communication throughout the prospecting programme. Liaison should occur where operationally necessary, including where changes to the survey programme may affect other sea users, where interactions or potential conflicts arise, or where information sharing would assist in minimising disruption to fishing, navigation or other lawful marine activities. b) The following may be relevant stakeholders and should be kept informed as and where applicable: i. Registered I&APs; ii. Relevant local municipality and authorities; iii. SAHRA and NCHRA; iv. DFFE (including Fisheries Research and the VMS Unit); v. SAMSA; vi. SAN Hydrographic Office; vii. Relevant port authorities or harbour control; viii. NSRI; ix. Relevant tourism stakeholders; x. Adjacent and overlapping prospecting or mining right holders; and xi. Fishing organisations and associations, including (contactable via liaison@fishsa.org): - o SAMLMA; - o SATA; - o SATLA; - o Mariculture farm operators, including Kleinsee Mariculture CC and Diamond Coast Aquaculture (Pty) Ltd; - o Large Pelagic SMME; and - o Local fishing communities in Kleinsee, Hondeklipbaai and other affected areas.	Contractor ECO / EA Holder / FLO	Throughout Operational Phase

Impact management outcome: Maintain effective communication with relevant stakeholders, particularly marine users and fisheries, throughout the operational phase to minimise potential conflicts, facilitate coordination of activities, communicate operational updates where appropriate, and ensure that complaints and concerns are addressed in a timely manner.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
c) Ensure that the vessel master records any sightings of, communications with, or interactions involving other vessels, including any incidents or potential conflicts relating to navigation, right of passage, access to marine resources, or interactions with fishing gear. d) The ECO must maintain a Complaints and Communications Register recording all complaints, enquiries and other stakeholder communications received. All complaints must be investigated and responded to as soon as reasonably practicable. Where a response requires information from personnel onboard the survey vessel, the response must be provided as soon as reasonably practicable following receipt of the required information or, where necessary, the vessel's return to port. e) Any disputes arising with adjacent or overlapping prospecting or mining right holders that cannot be resolved through engagement should be referred to the DMPR or the Petroleum Agency of South Africa (PASA), as applicable.		

8.4 STAFF, PUBLIC AND OTHER SEA USERS' HEALTH, SAFETY AND EMERGENCY MANAGEMENT

Impact management outcome: Ensure the health and safety of personnel, other sea users and the public through compliance with applicable health, safety and maritime legislation, recognised industry standards and emergency preparedness procedures.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) The EA Holder and Contractor must comply with all applicable occupational health and safety, maritime safety and emergency management legislation, as well as recognised industry standards and vessel-specific safety management systems. b) The survey and sampling vessels must be certified as seaworthy and operated in accordance with applicable statutory requirements and recognised international maritime standards. c) Appropriate navigational equipment, communication systems, collision avoidance measures and safety equipment must be maintained in accordance with applicable legal requirements and vessel certification requirements. d) The required safety exclusion zone around the survey vessel(s) must be maintained in accordance with applicable maritime legislation and navigational requirements. e) Measures to minimise disruption to fisheries and other marine users must be implemented in accordance with Section 8.3. f) Emergency response procedures appropriate to the proposed activities must be in place prior to commencement of operations and implemented throughout the prospecting programme. These procedures must address, as applicable, medical emergencies, fires, spills, vessel incidents, evacuation and other foreseeable emergencies. g) Suitable personal protective equipment (PPE) must be available, maintained and worn where required. h) Current emergency contact details must be readily available onboard the vessel. i) Emergency drills and exercises must be undertaken in accordance with the vessel's approved safety management system and applicable legislative requirements. j) No smoking within hazardous storage areas. k) Adequate fire-fighting equipment must be available at hazardous substance storage areas.	Contractor/ ECO	Prior to commencement of activities and throughout Operational Phase

8.5 MANAGEMENT OF IMPACTS ON TOURISM AND RECREATION

Impact management outcome: Minimise disruption to tourism and recreational activities through appropriate planning, communication and management of prospecting operations.		
Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) The Prospecting activities must be confined to the approved concession area and footprint. b) All vessels must comply with applicable environmental management and operational requirements to prevent pollution or unnecessary disturbance of the marine environment. c) Relevant tourism stakeholders and local authorities must be informed of the timing and duration of prospecting activities prior to commencement.	EA Holder/ Contractor/ ECO	Throughout Operation Phase
Best Practice Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
d) The Prospecting activities should, where feasible, be scheduled outside peak tourism periods, particularly the Namaqualand flower season (August–October). e) The Applicant should maintain communication with local tourism operators and tourism authorities regarding the progress and duration of offshore activities. f) Information provided to stakeholders should emphasise the temporary, offshore and localised nature of the prospecting activities to reduce misconceptions regarding impacts on tourism and recreation. g) Where feasible, survey vessels should minimise unnecessary lighting at night and avoid prolonged stationary presence near the coastline.	EA Holder/ Contractor/ ECO	Throughout Operation Phase

8.6 MANAGEMENT OF IMPACTS ON SENSE OF PLACE AND WELLBEING

Impact management outcome: Minimise impacts on the sense of place and well-being of affected communities and other stakeholders arising from the prospecting activities.		
Best Practice Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) Project information materials should clearly explain the temporary nature of the prospecting activities, the limited spatial extent of the survey area and the outcomes of specialist environmental studies. b) Regular project updates should be provided to key stakeholder groups particularly prior to the commencement of offshore activities. c) Where feasible, the Applicant should communicate the findings of specialist studies and environmental monitoring programmes in an accessible and non-technical format to improve transparency and build trust. d) Any future applications for exploration or mining activities should be subject to separate environmental assessment and stakeholder engagement processes, and this should be clearly communicated during the prospecting phase.	EA Holder/ Contractor/ ECO	Throughout Operation Phase

8.7 PROTECTION OF MARINE MEGAFaUNA FROM VESSEL OPERATIONS

Impact management outcome: Avoid injury and mortality of marine megafauna resulting from vessel operations, including vessel strikes, underwater noise and artificial lighting, and ensure that any disturbance arising from geophysical survey or prospecting activities (including drilling) is limited to short-term, localised and reversible behavioural effects, with no significant interference with migration, feeding or breeding behaviour, and no measurable ecological or population-level impacts.		
Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) The Joint Nature Conservation Committee (JNCC) Guidelines for Minimising the Risk of Injury to Marine Mammals from Geophysical Surveys (2017) represent international best practice and shall be implemented throughout all geophysical survey and other prospecting operations (including drilling). The following measures are consistent with the JNCC Guidelines, together with recommendations by Mason (2017) and Koper and Plön (2012), and must be implemented: i. Employ a minimum of two independent, designated and appropriately qualified Marine Mammal and Seabird Observers (MMSOs), experienced in the identification of marine mammals, seabirds and turtles. The appointed MMSOs must implement the mitigation measures and observation protocols contained in the JNCC Guidelines, the EA and this EMPr throughout all daylight survey operations. ii. The survey vessel shall be equipped with Passive Acoustic Monitoring (PAM), operated by at least two suitably trained PAM operators. PAM must be used where survey operations are undertaken during periods of darkness, fog or other poor visibility. The appointed PAM operators must implement the	MMSO/ PAM operator/ Vessel operator/ ECO/	Throughout Operational Phase

Impact management outcome: Avoid injury and mortality of marine megafauna resulting from vessel operations, including vessel strikes, underwater noise and artificial lighting, and ensure that any disturbance arising from geophysical survey or prospecting activities (including drilling) is limited to short-term, localised and reversible behavioural effects, with no significant interference with migration, feeding or breeding behaviour, and no measurable ecological or population-level impacts.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
mitigation measures and monitoring protocols contained in the JNCC Guidelines, the EA and this EMPr whenever PAM is in use. iii. The appointed MMSOs and PAM operators may be the same individuals, provided that a minimum of two suitably qualified personnel are available to fulfil these functions. One of the appointed personnel may also fulfil the role of the ECO, provided that all responsibilities can be effectively discharged. iv. Monitor a 500 m mitigation zone around the vessel before and during surveys. v. Undertake pre-survey visual and/ PAM observations for 30 minutes in water depths <200 m and 60 minutes in water depths >200 m. PAM must supplement visual observations in deeper water to improve detection of deep-diving species. vi. Commence all applicable acoustic sources (geophysical sampling and drilling) using an approved soft-start (ramp-up) procedure. Where equipment design limits conventional soft starts (e.g. certain sub-bottom profilers), the closest practicable equivalent procedure shall be adopted. vii. Soft starts” must be carried out for equipment with source levels greater than 210 dB re 1 µPa at 1 m over a period of 20 minutes to give adequate time for marine mammals, turtles and seabirds to leave the vicinity. Where this is not possible, the equipment must be turned on and off over a 20-minute period to act as a warning signal and allow cetaceans to move away from the sound source. viii. Delay commencement or recommencement of acoustic operations until marine mammals, diving seabirds and turtles have moved beyond the 500 m mitigation zone, with a minimum 20-minute delay from the last detection before initiating the soft start, in accordance with the JNCC guidelines. ix. Suspend operations if any marine mammals/ turtles/ seabirds show affected behaviour within 500 m of the survey vessel or equipment until the animals have vacated the area x. In accordance with the JNCC guidelines, there is no requirement to halt an ongoing survey should marine animals enter the mitigation zone once full-power operations have commenced. xi. Record all observations of, encounters with, or incidents involving marine mammals, seabirds, turtles, seals and other notable marine fauna, including species, location, distance from the vessel, swimming direction, behaviour and any observable responses to survey activity. Seabird attraction and feeding behaviour around the survey vessel must also be recorded. xii. Suspend survey operations immediately should any injury or mortality of marine fauna be observed. xiii. Prepare an MMSO survey close-out report for submission to DFFE and make marine fauna observation data and acoustic source information available, upon request, to the Marine Mammal Institute (MMI), DFFE and DMPR. xiv. Maintain dedicated visual watches for marine fauna during all vessel operations. xv. Where practicable, avoid scheduling geophysical surveys during the peak migration periods of cetaceans and baleen whales (i.e., humpback and southern right whales) from their feeding grounds into low		

Impact management outcome: Avoid injury and mortality of marine megafauna resulting from vessel operations, including vessel strikes, underwater noise and artificial lighting, and ensure that any disturbance arising from geophysical survey or prospecting activities (including drilling) is limited to short-term, localised and reversible behavioural effects, with no significant interference with migration, feeding or breeding behaviour, and no measurable ecological or population-level impacts.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
latitude waters (i.e., beginning of June to end of November) and ensure that migration paths are not blocked by acoustic survey operations. xvi. The quietest practicable drilling method must be employed. b) Reduce the lighting to a minimum compatible with safe operations whenever and wherever possible to reduce nocturnal faunal attraction. c) Position light sources, if possible and consistent with safe working practices, in places where emissions to the surrounding environment can be minimised i.e., aim lighting downward rather than out to sea. d) Plan procedures for how to care for downed seabirds and ensure that personnel are adequately trained in this regard. e) Monitor the presence of seabirds and identify mortalities, even when birds do not land on the vessel, especially in foggy conditions and at night. f) Report ringed/banded birds to the appropriate ringing/banding scheme (details are provided on the ring). a) Vessel transit speed to not exceed 12 knots (22 km/hr), except within 25 km of the coast where it must be kept to less than 10 knots (18 km/hr), with further speed reductions where marine megafauna are present. g) Where practicable, avoid scheduling geophysical surveys during the peak migration periods of cetaceans/ baleen whales (i.e., humpback and southern right whales) from their feeding grounds into low latitude waters (i.e., beginning of June to end of November) and ensure that migration paths are not blocked by acoustic survey operations.		

8.8 PROTECTION OF BENTHIC AND SENSITIVE HABITATS

Impact management outcome: To ensure that seabed sampling, drilling and tailings disposal result only in localised and temporary disturbance to benthic habitats, with sensitive habitats avoided and the CBA Natural area excluded from the prospecting footprint, no significant impacts on biodiversity features of concern, and no long-term loss of benthic ecosystem structure or function.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) A pre-survey verification of sensitive marine habitats (such as rocky reefs and kelp habitats) before intrusive sampling is mandatory. b) Exclusion buffer zones must be implemented around sensitive habitats identified during geophysical surveys. The recommended exclusion buffer zone is 500 m. c) All sensitive benthic habitats identified during geophysical surveys should be avoided, including exclusion zone buffers (500 m recommended) around such habitats. d) The CBA Natural area must be clearly demarcated as a no-go area and be excluded from the prospecting footprint entirely, prior to prospecting. No prospecting may occur in the CBA. e) Potential discharges must be planned and managed to ensure that tailings are not discarded onto potentially sensitive habitats.	Geologist / ECO / Contractors	Throughout Operation Phase
Recommended/ Best Practice Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) Annual benthic biodiversity monitoring could be undertaken to assess changes in ecological conditions and identify whether cumulative impacts may be increasing over time. The findings could be used to inform the need for additional mitigation measures, where required.		

8.9 PROTECTION OF SUBMERGED PREHISTORIC ARCHAEOLOGICAL, MARITIME ARCHAEOLOGICAL AND PALAEOLOGICAL RESOURCES

Impact management outcome: Avoid or minimise damage to submerged prehistoric archaeological resources (e.g. prehistoric stone artefacts and tools), maritime archaeological resources (e.g. shipwrecks), and palaeontological (fossil) resources, including older fossil material from ancient geological deposits (e.g. Cretaceous fossil wood, Cenozoic shelly macrofauna, fossil bones and teeth) and younger shells from more recent marine deposits (the Last Transgression Sequence), and ensure that any heritage resources identified during prospecting activities are appropriately protected, recorded and managed.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) The monitoring, identification and handling of any submerged prehistoric archaeological, maritime archaeological and palaeontological resources must be undertaken in accordance with the approved Method Statement. b) All heritage resources encountered shall be avoided and protected. c) The Applicant must take note of the provisions of Section 51(1) of the NHRA relating to offences and penalties for non-compliance with the Act. d) If heritage resources are uncovered during the course of the development, activities should stop in the locality of the find. A suitably qualified professional archaeologist, maritime archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the potential heritage resource. SAHRA must be notified for further recommendations before works in the affected area may resume. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required subject to permits issued by SAHRA; i. Read together with the above, if any heritage resources or evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils or other categories of heritage resources are found during the proposed development, SAHRA DAU (Nokukhanya Khumalo/Natasha Higgitt 021 202 8660) must be alerted as per section 35(3) of the NHRA. Non-compliance with section of the NHRA is an offence in terms of section 51(1)e of the NHRA and item 5 of the Schedule. ii. Read together with the above, if unmarked human burials are uncovered, the SAHRA DAU (Nokukhanya Khumalo/Natasha Higgitt 021 202 8660), must be alerted immediately as per section 36(6) of the NHRA. Non-compliance with section of the NHRA is an offence in terms of section 51(1)e of the NHRA and item 5 of the Schedule. iii. Read together with the above, if any shipwrecks or associated shipwreck artefacts are identified on the seafloor, a suitably qualified maritime archaeologist must be appointed to inspect the finds. The discovery must also be reported to the SAHRA for them to advise on the appropriate management actions. iv. A 50 m prospecting exclusion zone must be established around any significant finds. Prospecting must cease immediately within this exclusion zone, and the area must be treated as a no-go area until further instruction is provided.	ECO / Contractors/ Geologist / Appointed Specialist	Throughout Operational Phase

Impact management outcome: Avoid or minimise damage to submerged prehistoric archaeological resources (e.g. prehistoric stone artefacts and tools), maritime archaeological resources (e.g. shipwrecks), and palaeontological (fossil) resources, including older fossil material from ancient geological deposits (e.g. Cretaceous fossil wood, Cenozoic shelly macrofauna, fossil bones and teeth) and younger shells from more recent marine deposits (the Last Transgression Sequence), and ensure that any heritage resources identified during prospecting activities are appropriately protected, recorded and managed.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
v. Shipwrecks and associated shipwreck remains are generally large, visible features on the seabed. Measures must therefore be implemented during the geophysical surveys to identify and avoid these sites before any destructive sampling is undertaken. e) Grab, core and drill samples, as well as material retained on the oversize screen during drill sampling, must be monitored for the occurrence of fossil material and pre-colonial archaeological artefacts. f) Where fossil material is identified within recovered prospecting samples, representative specimens should, where practicable and subject to the necessary permits and approvals, be retained and made available to the appointed suitably qualified palaeontologist for identification, recording and assessment. Where considered significant, the specimens must be deposited in an appropriate curatorial institution (e.g. the Iziko South African Museum). The palaeontologist must further prepare a report for the Company and SAHRA. g) Where pre-colonial archaeological artefacts are identified within recovered prospecting samples, representative specimens should, where practicable and subject to the necessary permits and approvals, be retained and made available to the appointed suitably qualified archaeologist for identification, recording and assessment. Where considered significant, the artefacts must be deposited in an appropriate curatorial institution (e.g. the Iziko South African Museum). The archaeologist must further prepare a report for the Company and SAHRA. h) The ECO must liaise with the appointed palaeontologist and/or archaeologist regarding the progress of fossil and artefact collection and the scheduling of specialist evaluations. i) Particular attention should be given to the identification of extralimital Agulhas/Algoa subfossil shell species within loose shell material from the Last Transgression Sequence, as these require a high level of taxonomic expertise. Where appropriate, recovered cores should be made available for detailed scientific investigation (for example, as part of a B.Sc. Honours or M.Sc. research project), including radiocarbon dating where appropriate. Lagoonal deposits intersected during coring may be of particular scientific importance as they can provide valuable information on past sea-level changes along the West Coast. j) The following information must be recorded for all fossil, archaeological and shipwreck material collected: the date of collection, vessel name, company name, sample number, collector's name, coordinates, water depth, sample subsurface depth, a brief description of the recovered material, and a photographic record of the find. This information should be accompanied by: i. A copy of the graphic log of the sample drill hole showing the vertical sequence of units and the estimated location of the fossil in the sequence; and		

Impact management outcome: Avoid or minimise damage to submerged prehistoric archaeological resources (e.g. prehistoric stone artefacts and tools), maritime archaeological resources (e.g. shipwrecks), and palaeontological (fossil) resources, including older fossil material from ancient geological deposits (e.g. Cretaceous fossil wood, Cenozoic shelly macrofauna, fossil bones and teeth) and younger shells from more recent marine deposits (the Last Transgression Sequence), and ensure that any heritage resources identified during prospecting activities are appropriately protected, recorded and managed.

Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
ii. A map of the fossil finds in the particular sampling area, such as a contoured multibeam bathymetric image showing the context of samples in relation to the bedrock topography and sediment bodies. k) During operations, personnel may submit queries and photographs electronically to the appointed palaeontologist and/or archaeologist for evaluation and prompt feedback. Collected fossil and archaeological specimens must be securely stored by Trans Atlantic Diamonds until they are transferred to the appointed specialist or an approved curatorial institution, as applicable.		

8.10 POLLUTION MANAGEMENT

Impact management outcome: Prevent pollution of the marine environment while protecting water quality, marine habitats, marine fauna and human health through the appropriate management of waste, hazardous substances and spill risks, in compliance with MARPOL and other applicable legislation.		
Essential Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) Ensure compliance with the International Convention for the Prevention of Pollution from Ships (MARPOL), all applicable national legislation, and any other relevant regulations, policies and guidelines relating to the prevention of marine, air and other forms of pollution. b) Contractor personnel and vessel staff must receive Environmental Awareness Training covering waste management, pollution prevention, spill prevention and response, including the immediate containment and clean-up of spillages to minimise contamination of the marine environment, the protection of the marine environment and sensitive species from pollution, and the appropriate handling and disposal of waste. c) A Shipboard Oil Pollution Emergency Plan (SOPEP) must be available and implemented on all vessels throughout the operational phase. d) Deck drainage must be routed to a separate oily water drainage and collection system for treatment to ensure compliance with the MARPOL discharge standard of 15 ppm. e) All hydraulic systems must be adequately maintained, and hydraulic hoses and fittings must be regularly inspected for leaks and signs of wear. f) No waste or pollutants may be discharged into the marine environment. The Applicant shall be responsible for the cost of any remedial action required as a result of pollution, in addition to any penalties or fines imposed by the relevant authority. g) General waste must be disposed of at a licensed waste disposal or recycling facility, while hazardous waste must be disposed of at a licensed hazardous waste disposal facility. Records and waste disposal certificates for general, hazardous and recycled waste must be maintained. h) The prospecting vessel must maintain a certified oil spill contingency plan and appropriate spill response equipment capable of providing a rapid response to spills under the expected operating conditions. i) All hazardous substances must be stored in suitable containers in accordance with the approved Method Statement and be accompanied by the relevant Safety Data Sheets (SDS). j) Diesel, fuel, oils, lubricants and hydraulic fluids must be stored in appropriate storage tanks or containers designed for the intended purpose. k) All hazardous substance storage areas must be bunded with sufficient capacity to contain any leaks or spills. l) Spill response kits appropriate to the nature and scale of the hazardous substances onboard must be readily available at all times.	Contractor/ ECO	As and when required throughout Operational Phase

Impact management outcome: Prevent pollution of the marine environment while protecting water quality, marine habitats, marine fauna and human health through the appropriate management of waste, hazardous substances and spill risks, in compliance with MARPOL and other applicable legislation.

- m) Personnel responsible for handling hazardous substances and responding to spills must be appropriately trained in the safe handling of hazardous substances and the correct use of spill response equipment.

Recommended/Best Practice Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) Develop and implement a Waste Management Plan based on the waste hierarchy principles. b) Process areas should be bunded, where applicable, to ensure that drainage water is directed to a closed drainage system. c) Drip trays should be used to collect run-off from equipment located outside bunded areas, with the collected contents directed to the closed drainage system. d) Low-toxicity, biodegradable detergents should be used for cleaning deck spillages. e) The use and storage of hazardous substances should be minimised, and non-hazardous or less hazardous alternatives should be used where practicable.		

8.11 MANAGEMENT OF EMPLOYMENT, PROCUREMENT AND ECONOMIC OPPORTUNITIES

Impact management outcome: To optimise the positive socio-economic benefits of the prospecting programme by promoting fair, local and South African participation in employment, procurement and skills development where feasible.

Recommended/Best Practice Optimisation Measures	Person responsible for Implementation	Timeframe of Implementation
a) Ensure items in Section 7.6 are implemented. b) Implement procurement and supplier development commitments in accordance with the approved procurement procedures and maintain records of local, regional and national procurement expenditure, including B-BBEE-related procurement expenditure, where applicable, to demonstrate economic contributions arising from the project. c) Implement and document all training commitments and maintain records of participants, training provided, outcomes achieved and B-BBEE-related procurement expenditure. Training programmes should focus on transferable skills that remain valuable beyond the prospecting phase.	EA Holder	Planning and Operational Phase

9 DECOMMISSIONING AND CLOSURE PHASE

9.1 SURVEY/ SAMPLING VESSEL TO LEAVE AREA

Impact management outcome: Ensuring that the prospecting area is safe for other maritime users.		
Recommended/Best Practice Optimisation Measures	Person responsible for Implementation	Timeframe of Implementation
a) Upon completion of the prospecting activities, ensure that the sampling area is left in a condition that does not pose a risk to navigation or other lawful marine users. b) Where practicable, recover any items lost overboard during the operational phase that could not be retrieved at the time, provided that the environmental benefits of recovery outweigh the potential environmental impacts and health and safety risks associated with retrieval (if applicable). c) Where unrecovered items may constitute a seafloor or navigational hazard, the following actions must be implemented: i. Record the location, date and cause of the loss, details of the item, and the prevailing weather and sea conditions. ii. Notify SAMSA and the SAN Hydrographer. iii. Request that the South African Navy Hydrographer issue a Notice to Mariners, where appropriate.	Contractor/ ECO	Upon completion of prospecting activities

9.2 INFORMATION SHARING: CONTRIBUTION TO ENVIRONMENTAL AND SCIENTIFIC KNOWLEDGE

Impact management outcome: Maximise the environmental and scientific benefits arising from the prospecting programme by ensuring that environmental and scientific data are appropriately collected, managed, documented and, where appropriate, shared to support future environmental management, scientific research and marine spatial planning.		
Recommended/Best Practice Optimisation Measures	Person responsible for Implementation	Timeframe of Implementation
a) Environmental and scientific data collected during the prospecting programme must be recorded, stored and managed in accordance with applicable legal, permitting and reporting requirements. Subject to confidentiality and intellectual property requirements, appropriate non-sensitive environmental and scientific datasets, including marine mammal observations, seabed imagery, habitat mapping, biodiversity records and survey data, should be made available in a usable format (e.g. geo-referenced format) to relevant government authorities (including the DFFE), research institutions (including the South African National Biodiversity Institute (SANBI)) and conservation organisations to support environmental management, scientific research, marine spatial planning, biodiversity mapping and the refinement of CBAs.	Contractor/ ECO/ EA Holder/ Vessel Personnel / Palaeontologist/ Archaeologist	Upon completion of prospecting activities

9.3 FINAL WASTE DISPOSAL

Impact management outcome: Ensure that all waste generated during the prospecting programme is removed from the vessel and disposed of responsibly, such that no pollution or long-term environmental impacts remain following completion of the survey.

Best Practice Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) Remove all waste, hazardous substances and surplus materials from the survey vessel upon completion of the prospecting programme. b) Segregate, transport and dispose of all waste in accordance with MARPOL, applicable legislation and the approved waste management procedures. c) Dispose of general waste at a licensed waste disposal or recycling facility and hazardous waste at a licensed hazardous waste disposal facility. d) Retain all waste disposal certificates, hazardous waste manifests and recycling records as proof of lawful disposal. e) Ensure that no waste, hazardous substances or other pollutants are intentionally discharged into the marine environment during demobilisation or completion of the prospecting programme. f) Ensure that all temporary storage areas, containers and waste handling equipment are emptied, cleaned where necessary, and removed from the vessel or disposed of in accordance with applicable requirements.	Contractor/ ECO	Upon completion of prospecting activities

9.4 CLOSURE

Impact management outcome: Ensure that the prospecting programme is appropriately concluded through stakeholder notification and compliance with applicable closure requirements.

Best Practice Management Actions/Mitigation Measures	Person responsible for Implementation	Timeframe of Implementation
a) Upon completion of the survey programme, the EA Holder must notify the relevant stakeholders and registered I&APs in writing that the survey vessel(s) have completed the prospecting activities. See Section 8.3. b) Notify the SAN Hydrographic office when the campaign is complete so that the Navigational Warning can be cancelled. c) Where required by the DMPR, apply for closure and submit the relevant closure documentation, which may include: i. A final layout plan; ii. A Closure Plan; iii. An Environmental Risk Report; iv. A Final Audit Report; and v. A completed application form to transfer environmental responsibilities and liabilities, if such transfer has been applied for.	EA Holder/ Contractor/ ECO	Upon completion of prospecting activities

10 REFERENCES

Harris LR, Holness SD, Sink KJ, Majiedt P, Driver A (2022) National Coastal and Marine Spatial Biodiversity Plan, Version 1.2 (Released 12-04-2022): Technical Report. Nelson Mandela University, Department of Forestry, Fisheries and the Environment, and South African National Biodiversity Institute, South Africa.

JNCC (2017) JNCC guidelines for minimising the risk of injury to marine mammals from geophysical surveys. Joint Nature Conservation Committee, Aberdeen, United Kingdom.

Mason S (2017) Offshore Seismic Survey/s in the Orange Basin Deep Block, West Coast, South Africa. Environmental Impact Assessment. Report Prepared for Impact Africa Limited by SRK Consulting.

Koper RP, Plön S (2012) The potential impacts of anthropogenic noise on marine animals and recommendations for research in South Africa. Endangered Wildlife Trust, Johannesburg, South Africa.

II DECLARATION

The proponent or applicant or holder of EA affirms that they will abide and comply with the prescribed impact management outcomes and actions as stipulated in Section 6, Section 8 and Section 9 of this EMPr and have the understanding that the impact management outcomes and actions are legally binding.

Signature of Proponent/ Applicant/ Holder of EA

Date:

The Contractor affirms that they will abide and comply with the prescribed impact management outcomes and actions as stipulated in Section 6, Section 8 and Section 9 of this EMPr and have the understanding that the impact management outcomes and actions are legally binding.

Signature of Contractor

Date:

I2APPENDICES

I2.1 APPENDIX I CV OF EAP

CURRICULUM VITAE

CHERUSCHA SWART

DATE OF BIRTH: 3 November 1988

NATIONALITY: South African

ACADEMIC QUALIFICATIONS

- MSc (Cum Laude) Zoology, Stellenbosch University, 2015 – 2017
- BSc (Hons) Biodiversity and Ecology, Stellenbosch University, 2013
- BSc Biodiversity and Ecology, Stellenbosch University, 2010 – 2012

SCIENTIFIC REGISTRATIONS:

- EAPASA – Environmental Assessment Practitioner: Number 2021/3298
- SACNASP – Pr.Sci.Nat. Environmental Science: 155305
- IAIAsa – Member: Membership number 7398

OTHER TRAINING

- Environmental Impact Assessments, Environmental Legal Compliance, Auditing and Monitoring Training Course, Cape Town, 2020, 2023, 2024 & 2025. Business Success Solutions in association with Janice Tooley Attorneys. Accredited with SACNASP and EAPASA.
- Practical Implementation of Environmental Auditing and Monitoring Training Course, Cape Town, 2024. Business Success Solutions in association with Umhlaba Environmental Consulting. Accredited with SACNASP and EAPASA.
- First Aid Level 1.

COUNTRY EXPERIENCE: South Africa

LANGUAGE PROFICIENCY: English (Excellent), Afrikaans (Excellent)

POSTAL ADDRESS: 8 Steenberg House, Silverwood Close, Tokai 7945

PHONE: +27-21-701 3420

E-MAIL: cher@anchorenvironmental.co.za

EMPLOYMENT HISTORY:

- 2026-current** — Team Lead Environmental Management: Anchor Environmental Consultants Part of SLR
- 2022-2026** — Senior Consultant & Head Environmental Assessment Practitioner in Environmental Impact Assessment Department: Anchor Environmental
- 2019-2022** — Consultant and Environmental Assessment Practitioner: Anchor Environmental
- 2018 – 2019** — Junior Consultant and Taxonomist: Anchor Environmental
- 2014 – 2017** — Assistant Research Consultant: Stellenbosch University
- 2014 – 2015** — Research Intern: National Research Foundation

SUMMARY PROFILE

Cheruscha holds a Master of Science (MSc) in Zoology and a Bachelor of Science (BSc) Honours degree in Biodiversity and Ecology from Stellenbosch University. She is a Registered Environmental Assessment Practitioner (EAP) with 14 years of research and consulting experience. Cheruscha is the Team Lead and Head EAP of the Environmental Management Department at Anchor Environmental Consultants, where she leads and manages a wide range of environmental projects. Her expertise includes Environmental Impact Assessments (EIAs), applications for prospecting rights, management plan development, auditing, environmental compliance monitoring, baseline and monitoring surveys, and specialist impact assessments, all undertaken across marine, coastal, and terrestrial environments. In addition, she has specialist expertise in marine invertebrate taxonomy and rocky shore surveys. Her project portfolio spans a wide range of sectors, including land-based and offshore prospecting, offshore mining, agriculture, land- and sea-based aquaculture, solar desalination, residential and commercial developments, conservation surveys for protected areas, and long-term monitoring of bays and ports along the South African coast. Cheruscha is the author of three peer-reviewed scientific publications and numerous scientific reports, with additional projects and publications currently in preparation.

SELECT PROJECT EXPERIENCE

Period	Country	Clients	Project, Tasks
2026	South Africa	WSP	Terrestrial Biodiversity Specialist; Principal Reviewer A terrestrial biodiversity specialist assessment was conducted for the proposed expansion of the Xintong Steel facility
2026	South Africa	Greenvolts Pty (Ltd)	Terrestrial Animal Species Specialist; Principal Reviewer A terrestrial animal species compliance statement was conducted for a solar PV development in Saldanha.
2026	South Africa	Trans Atlantic Diamonds	Environmental Assessment Practitioner Reapplication process: Basic Assessment Process and application for prospecting rights in the offshore sea concession area 11C, Western Cape
2026	South Africa	Denith Engineering (Pty) Ltd	Environmental Assessment Practitioner Applicability Checklist for the Proposed Crane Installation at the Royale Cape Yacht Club, Erf RE/10256, Cape Town
2025	South Africa	Gansbaai Marine (Pty) Ltd	Marine Field Scientist Marine Rocky Shore Survey to fulfil the requirements of Gansbaai Marine's Coastal Waters Discharge Permit, Western Cape.
2025	South Africa	Enviro-EAP	Independent Reviewer Peer review of the terrestrial animal species assessment for a proposed development in Riversdal, Western Cape

Period	Country	Clients	Project, Tasks
2026	South Africa	WSP	Terrestrial Biodiversity Specialist; Principal Reviewer A terrestrial biodiversity specialist assessment was conducted for the proposed expansion of the Xintong Steel facility
2025	South Africa	CK Rumboll & Partners	Terrestrial Biodiversity/ Animal Specialist; Principal Reviewer Terrestrial animal species compliance statement as part of an EIA for phase 2 of a low-cost housing development in Darling
2025	South Africa	Enviro-EAP	Independent Reviewer Peer review and amendments of terrestrial animal species assessment for the proposed development in Yzerfontein, Western Cape
2025	South Africa	Kovaks Investments 172 (Pty) Ltd	Terrestrial Biodiversity/ Animal Specialist; Principal Reviewer Terrestrial Biodiversity Assessment for the Proposed Residential Housing Development, near Rooipan Salt Pans, Yzerfontein, Western Cape.
2025	South Africa	Kovaks Investments 172 (Pty) Ltd	Terrestrial Biodiversity/ Animal Specialist; Principal Reviewer Terrestrial Animal Species Assessment for the Proposed Residential Housing Development, near Rooipan Salt Pans, Yzerfontein, Western Cape.
2025	South Africa	Enviro-EAP Pty (Ltd)	Independent Reviewer Peer review of the Animal Species Impact Assessment for the Mixed-Use Development, Yzerfontein, Western Cape.
2025	South Africa	Enviro-EAP Pty (Ltd)	Independent Reviewer Peer review of the Animal Species Impact Assessment for the Proposed Residential Development, St Helena Bay, Western Cape.
2025	South Africa	Enviro-EAP Pty (Ltd)	Independent Reviewer Peer review of the Animal Species Compliance Statement for the Proposed Citrusdal Housing Development, Citrusdal, Western Cape.
2025	South Africa	Enviro-EAP Pty (Ltd)	Independent Reviewer Peer review of the Animal Species Compliance Statement for a new dam, Clanwilliam District, Western Cape.
2025	South Africa	ATKV Sake (RF) Pty Ltd t/a ATKV Hartenbos	Terrestrial and Animal Specialist; Principal Reviewer Terrestrial Biodiversity, Plant and Animal Compliance Statement for the Proposed Dune Stabilisation at the ATKV, Hartenbos, Western Cape Province.

Period	Country	Clients	Project, Tasks
2026	South Africa	WSP	Terrestrial Biodiversity Specialist; Principal Reviewer A terrestrial biodiversity specialist assessment was conducted for the proposed expansion of the Xintong Steel facility
2025	South Africa	Overstrand Local Municipality	Specialist and Principal Reviewer Invasive Alien Plant Species Monitoring, Control and Eradication Plan for the Onrus Catchment, Western Cape Province.
2025	South Africa	Breede Valley Municipality (Western Cape)	Terrestrial and Animal Specialist; Principal Reviewer Animal Species Specialist Assessment for the Proposed Integrated Residential Development at Touwsrivier, Western Cape Province
2025	South Africa	Breede Valley Municipality	Terrestrial and Animal Specialist; Principal Reviewer Terrestrial Biodiversity Compliance Statement for the Proposed Integrated Residential Development at Touwsrivier, Western Cape Province
2025	South Africa	Breede Valley Municipality	Terrestrial and Animal Specialist; Principal Reviewer Site Sensitivity Verification (SSV) and Report for Terrestrial Biodiversity and Animal and Plant Species for the Proposed Integrated Residential Development at Touwsrivier, Western Cape Province
2025	South Africa	Private Client	Environmental Assessment Practitioner; Terrestrial and Animal Specialist Site Sensitivity Verification (SSV) and Report for the Proposed Solar-Power Desalination Plant Jacobsbaai & Saldanha Area, Western Cape.
2025	South Africa	V&A Waterfront	Environmental Assessment Practitioner; Project Manager Basic Assessment Process for a Mixed Use Development at the V&A Waterfront, Cape Town, Western Cape
2025	Namibia	Namwaste (Pty) Ltd	Animal Specialist Invertebrate Specialist Study for the Proposed Namwaste Management Facility, Arandis, Namibia
2025	South Africa	De Beers Marine (Pty) Ltd	External Environmental Auditor; Environmental Assessment Practitioner External Environmental Compliance Audit for prospecting right NC12189 PR in South African Sea Area 6C — Phase 2 Auditing the compliance of prospecting activities, during January 2022, with the conditions and management measures stipulated in the associated Environmental Authorisation and Environmental Management Programme.

Period	Country	Clients	Project, Tasks
2026	South Africa	WSP	Terrestrial Biodiversity Specialist: Principal Reviewer A terrestrial biodiversity specialist assessment was conducted for the proposed expansion of the Xintong Steel facility
2024	South Africa	De Beers Marine (Pty) Ltd	External Environmental Auditor External Environmental Compliance Audit for prospecting right NC12189 PR in South African Sea Area 6C — Phase 1 Auditing the compliance of prospecting activities, during the period 15 April 2021 to 31 December 2021, with the conditions and management measures stipulated in the associated Environmental Authorisation and Environmental Management Programme.
2024-2026	South Africa	Overstrand Local Municipality	Environmental Assessment Practitioner Estuarine Maintenance Management Plan (MMP) for the proposed dredging and future maintenance of the Onrus Estuary—Onrus Catchment to Coast (C2C) Programme
2024-2026	South Africa	Sunwater East London	Environmental Assessment Practitioner; Project Manager Scoping & Environmental Impact Assessment (EIA) for the proposed Solar Powered Desalination Plant in the Port of East London for Transnet National Ports Authority
2024/ 2025	South Africa	Department of Forestry, Fisheries and the Environment: Oceans and Coasts	Project Manager; Stakeholder Engagement Specialist Development of management plans for the South-East Atlantic and South-West Indian Seamounts Marine Protected Areas
2024	South Africa	Prism Environmental Management Services on behalf of property owner	Marine, Terrestrial and Animal Specialist Coastal Impact Assessment for the Proposed Property Development on two Erven in Wilderness, Western Cape.
2024	South Africa	Port Nolloth Sea Farms Ranching (Pty) Ltd	Environmental Assessment Practitioner Amendment of the Environmental Authorisation for the Port Nolloth Sea Farms ranching abalone holding and processing facility, south of Kleinsee.
2023	South Africa	Gansbaai Marine (Pty) Ltd	Marine Field Scientist Marine Impact Assessment to fulfil the requirements of Gansbaai Marine's Coastal Waters Discharge Permit

Period	Country	Clients	Project, Tasks
2026	South Africa	WSP	Terrestrial Biodiversity Specialist: Principal Reviewer A terrestrial biodiversity specialist assessment was conducted for the proposed expansion of the Xintong Steel facility
2023	South Africa	St Helena Bay Water Quality Trust	Report Editor and Reviewer The State of St Helena Bay: annual environmental monitoring and reporting campaign
2019 – present (ongoing)	South Africa	Saldanha Bay Water Quality Forum Trust	Marine Field Scientist; Co-author; Report Editor The State of Saldanha Bay and Langebaan Lagoon: Annual Monitoring and reporting campaign
2023/24	South Africa	GIZ	Co-author; Environment Legislation Section Green infrastructure options for improved waterway and catchment management for the City of Cape Town.
2023	South Africa	Impact Water Solutions and GIZ	Co-author; Environment Assessment Practitioner GIZ Green Hydrogen Desalination ESIA Scoping Study to provide strategic information on the technoeconomic, legal, environmental, and social applicability of desalination plants as water source for green hydrogen projects in South Africa.
2023	South Africa	Doug Jeffrey Environmental Consultants	Marine and Coastal Specialist Marine Specialist Study for the Residential Development in Oudekraal, Camps Bay: Site Sensitivity and Constraints Report
2023	South Africa	African Tuna	Specialist and Lead Author Feasibility study for the commercial harvesting of periwinkles and limpets on the west coast of South Africa
2023	Angola	SHELTER (on behalf of Eni Angola)	Specialist and Co-author Preparation of a Terrestrial and Coastal Biodiversity Action Plan (BAP) as part of the Angola Northern Gas Complex Onshore Plant Project
2022/2023	South Africa	Matzikama Kaolin	Environmental Assessment Practitioner; Project Manager; Stakeholder Engagement Specialist Scoping Assessment as part of an application for prospecting rights: Prospecting of kaolin in the Western Cape
2022/2023	South Africa	Xwena Kaolin	Environmental Assessment Practitioner; Project Manager; Stakeholder Engagement Specialist Scoping Assessment as part of an application for prospecting rights: Prospecting of kaolin and silica in the Western Cape

Period	Country	Clients	Project, Tasks
2026	South Africa	WSP	Terrestrial Biodiversity Specialist; Principal Reviewer A terrestrial biodiversity specialist assessment was conducted for the proposed expansion of the Xintong Steel facility
2022 – present (ongoing)	South Africa	I&J Danger Point	Environmental Assessment Practitioner; Stakeholder Engagement Specialist Abalone ranging right application & Risk Assessment
2022 – present (ongoing)	South Africa	Drylands Farms	Terrestrial and Animal Specialist; Environmental Assessment Practitioner Terrestrial Baseline Survey as part of prefeasibility for a proposed agricultural development on a mine in the Northern Cape of South Africa
2018 – present (ongoing)	South Africa	De Beers Marine Namibia	Taxonomist; Environmental Scientist; Co-author De Beers Marine Namibia Environmental Monitoring Programme in the Atlantic 1 Mining License Area: Annual Benthic Sampling Campaign
2021/2022	South Africa	SANEK Liquidators	Environmental Site Officer (ESO) Stonehurst mountain Estate Phase 4 Development — Compliance Monitoring
2021/2022	South Africa	SRK Consulting	Marine Specialist Marine Impact Assessment for the increase in manganese handling capacity at the Multi-Purpose Terminal, Port of Saldanha, Saldanha Bay, South Africa
2021/2022	South Africa	Trans Atlantic Diamonds	Environmental Assessment Practitioner Basic Assessment Process and application for prospecting rights in an offshore sea concession 10B in the Northern Cape Basic Assessment Process and application for prospecting rights in an offshore sea concession 7C in the Northern Cape Basic Assessment Process and application for prospecting rights in the offshore sea concession area 14C, Western Cape Basic Assessment Process and application for prospecting rights in the offshore sea concession area 11C, Western Cape Basic Assessment Process and application for prospecting rights in the inshore sea concession area 14A, Western Cape
2021	South Africa	Nomalungelo Faku	Specialist and Lead Author Feasibility study for a pearl farm in the greater Nelson Mandela metropolitan area

Period	Country	Clients	Project, Tasks
2026	South Africa	WSP	Terrestrial Biodiversity Specialist; Principal Reviewer A terrestrial biodiversity specialist assessment was conducted for the proposed expansion of the Xintong Steel facility
2021	South Africa	Cliff Path Action Group	Marine Specialist Marine Environmental Impact Assessment for the Proposed Pedestrian Path to Connect the two Parts of the Hermanus Cliff Path via Poole's Bay
2018 – 2021	South Africa	Mhlathuze Water	Lab Technician and Scientist Mhlathuze Water Environmental Monitoring Programme for the Richards Bay Offshore Outfalls Region
2019/2020	South Africa	Planet Capital and Cape Nordic Corporation	Environmental Assessment Practitioner Support; Stakeholder Engagement Specialist Basic Assessment Process for the Proposed Land-based Aquaculture Facility near Elands Bay on the West Coast of South Africa
2020	South Africa	Planet Capital and Cape Nordic Corporation	Animal Specialist; Field Scientist Proposed Land-based Aquaculture Facility near Elands Bay – Bat Specialist Impact Survey and Assessment
2020	South Africa	CSIR Coastal Systems Research Group	Taxonomist CSIR Coastal Systems Research Group: Identification of benthic invertebrate macrofauna.
2020	South Africa	Department of Environmental Affairs and Development Planning	Field Scientist; Stakeholder Engagement Specialist Berg Estuary Valuation Study: Value of The Berg Estuary and Importance of Management Interventions
2019	South Africa	Department of Agriculture, Forestry & Fisheries	Environmental Assessment Practitioner Support; Stakeholder Engagement Specialist Basic Assessment Process for the Proposed Sea-Based Aquaculture Development Zone in Algoa Bay, Eastern Cape
2019	South Africa	Doring Bay Abalone	Co-Author Draft Environmental & Risk Assessment for an Application for a Right to Engage in an Abalone Ranching Pilot Project
2019	South Africa	Mozal Aluminium Smelter	Taxonomist; Co-Author Estuarine Specialist Report for the Mozal Matola River Pipeline, Mozambique: Estuarine Impact Assessment

PUBLICATION RECORD

SWART C AND **ROBINSON TB** (2019) Horizon scanning for alien predatory crabs: insights from South Africa. *African Journal of Marine Science* 41(2): 125 – 135, DOI: 10.2989/1814232X.2019.1588782

SWART C, **VISSER V** AND **ROBINSON TB** (2018) Patterns and traits associated with invasions by predatory marine crabs. *NeoBiota* 39: 79 – 102. <https://doi.org/10.3897/neobiota.39.22002>

ROBINSON TB AND **SWART C** (2015) Distribution and impact of the alien anemone *Sagartia ornata* in the West Coast National Park. *Koedoe* 57 (1): DOI: 10.4102/koedoe.v57i1.1246

SEDICK S, **CLARK B**, **GIHWALA K**, **SWART C** (In prep.) The description of a new species of Nereis (Annelida, Nereididae) from the shallow waters of southern Namibia.

GIHWALA K, **BICCARD A**, **CLARK B**, **SWART C**, **MAKHOSONKE A**, **STEFFANI N**, **ROOS L** (In prep.). Anthropogenic disturbance and subsequent recovery of benthic habitats and associated macrofaunal communities in southern Africa.]

THESIS

SWART C (2017) An assessment of invasive predatory marine crabs and the threat they pose along the South African coastline. MSc Thesis, Stellenbosch University, 154 pp.

CONFERENCES

2014 Poster Presentation: “Distribution and impact of the alien anemone *Sagartia ornata* in the West Coast National Park”. South African Marine Science Symposium, Stellenbosch University, Stellenbosch, 15– 18 July 2014

2015 Poster Presentation: National Research Foundation Research Day, Feb 2014; Second Prize

2017 Oral Presentation: “Horizon scanning for intertidal predatory crab invaders: South Africa as a case study”. South African Marine Science Symposium, Nelson Mandela University, Port Elizabeth, 4 – 7 July 2017

12.2 APPENDIX 2 SENSITIVITY MAPS

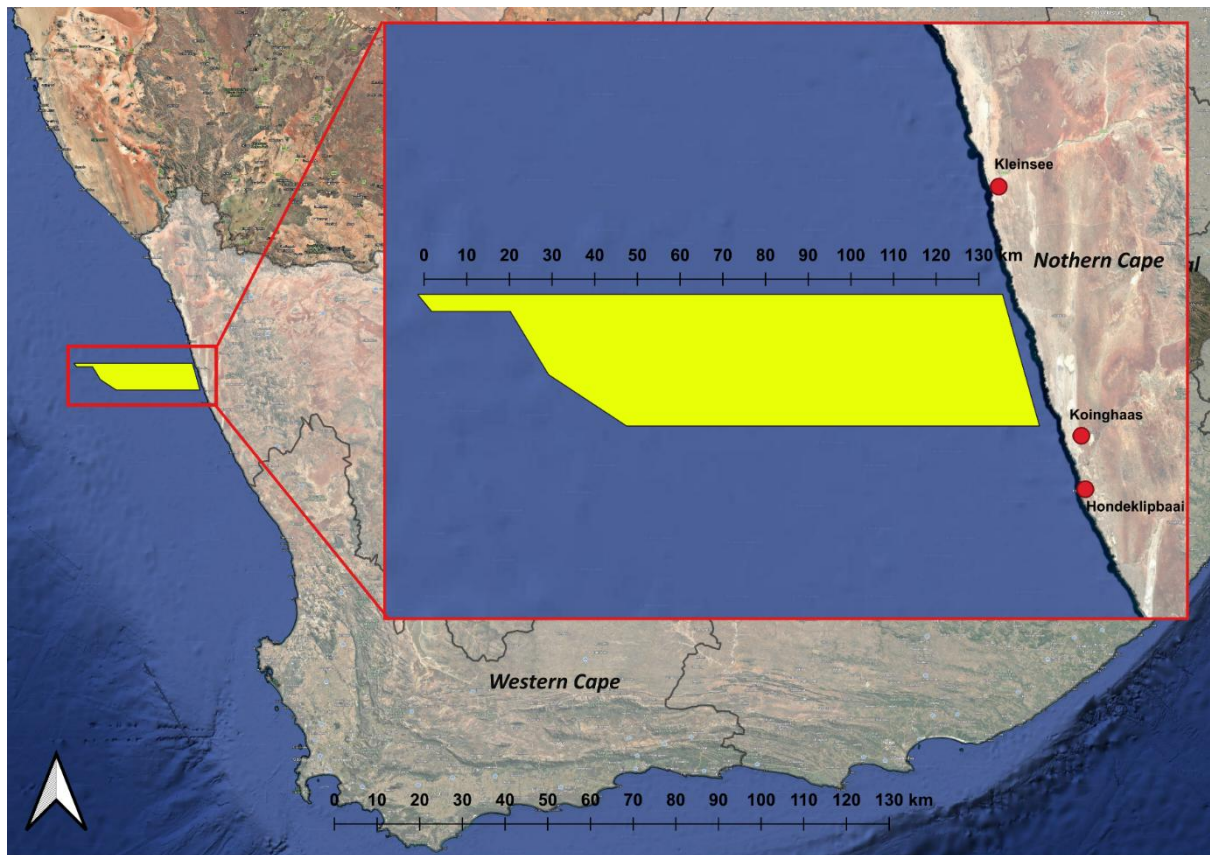


Figure 1. Location of offshore Sea Concession area 6C off the Northern Cape Coast. The concession starts approximately 5 km offshore of the High-Water Mark and extends to the 200 m isobath which is approximately 100 – 140 km offshore.

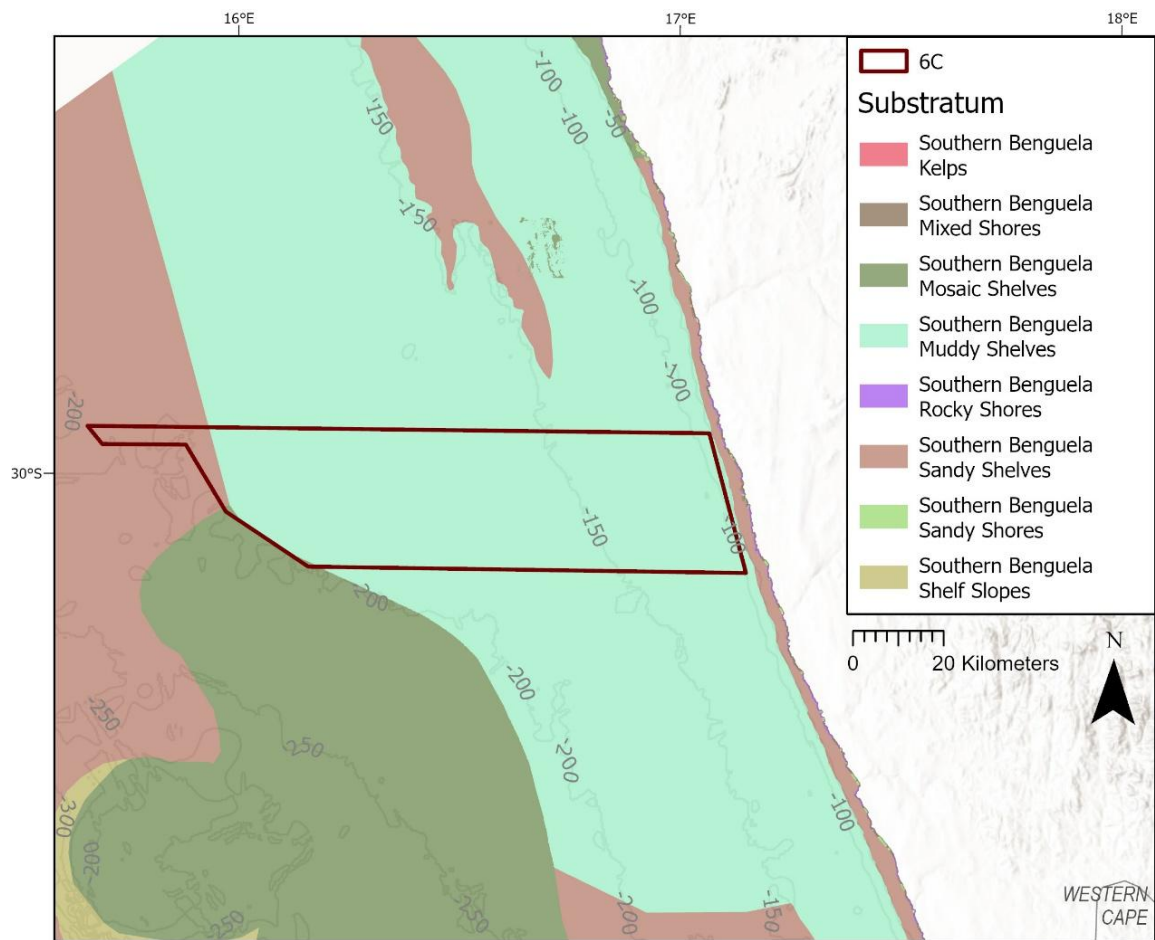


Figure 2. Marine substrate map of 6C, taken from the NBA Ecosystem Layer 2025 (Sink et al. 2026).

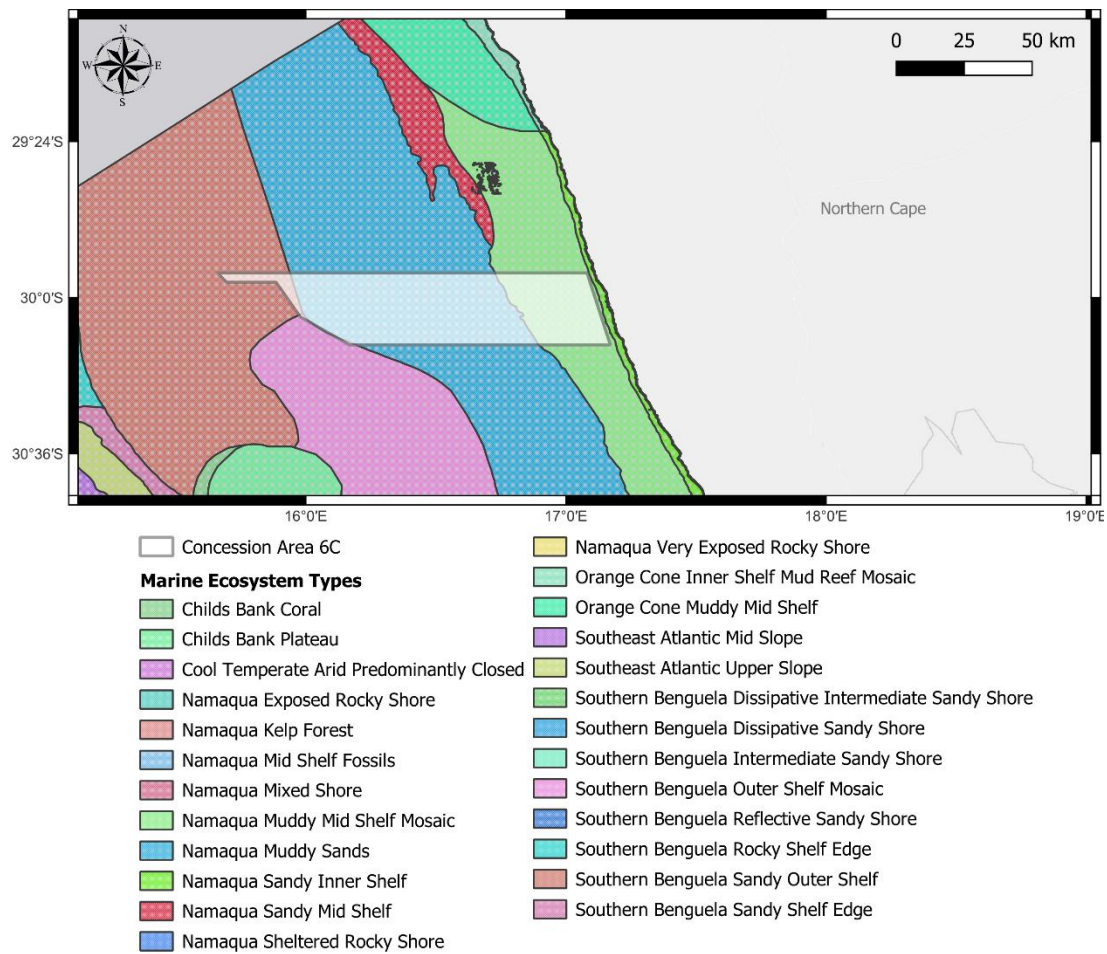


Figure 3. Marine ecosystem types found within and around Concession Area 6C as described by Sink et al. (2019b)

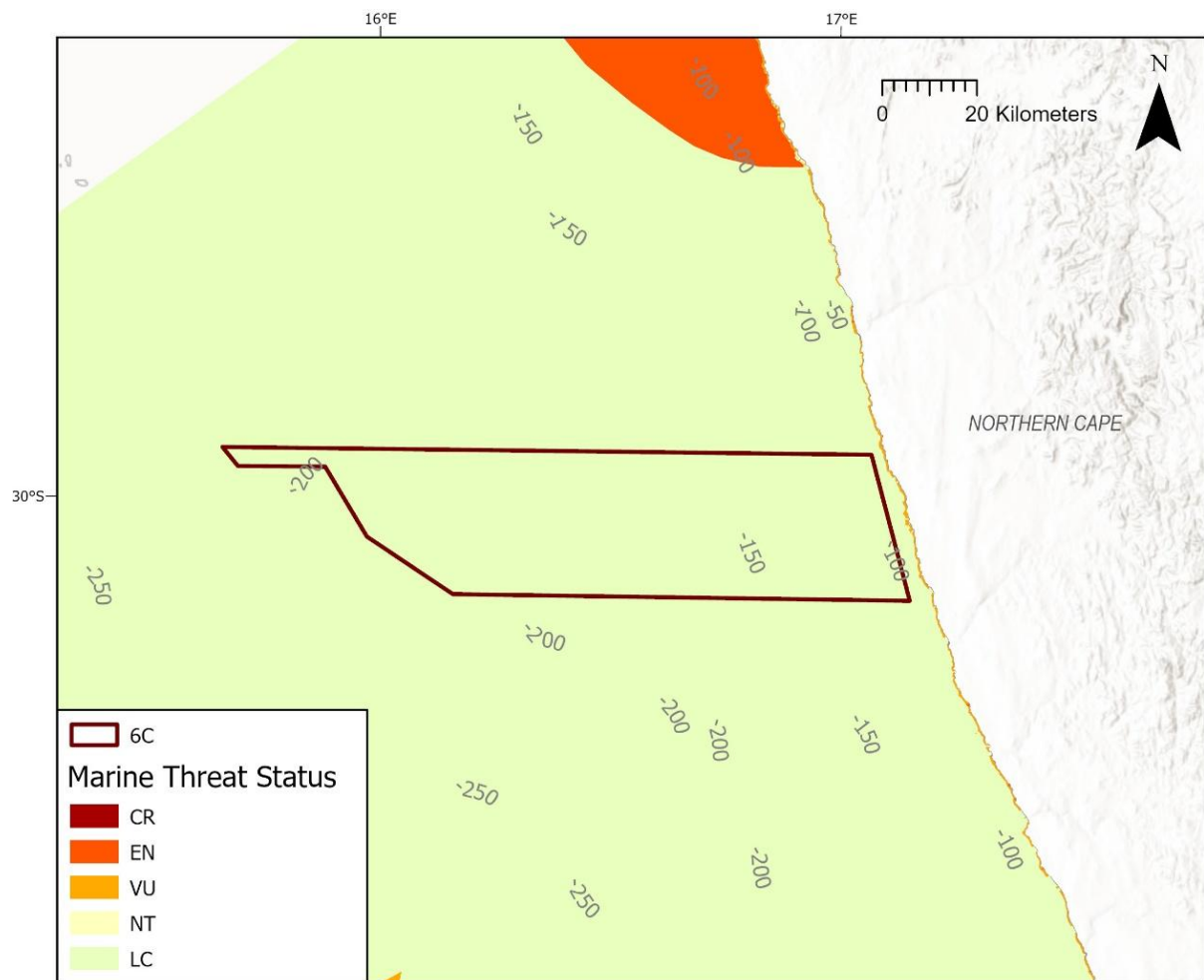


Figure 4. Marine Ecosystem Threat Status of the broader marine region surrounding and including Concession Area

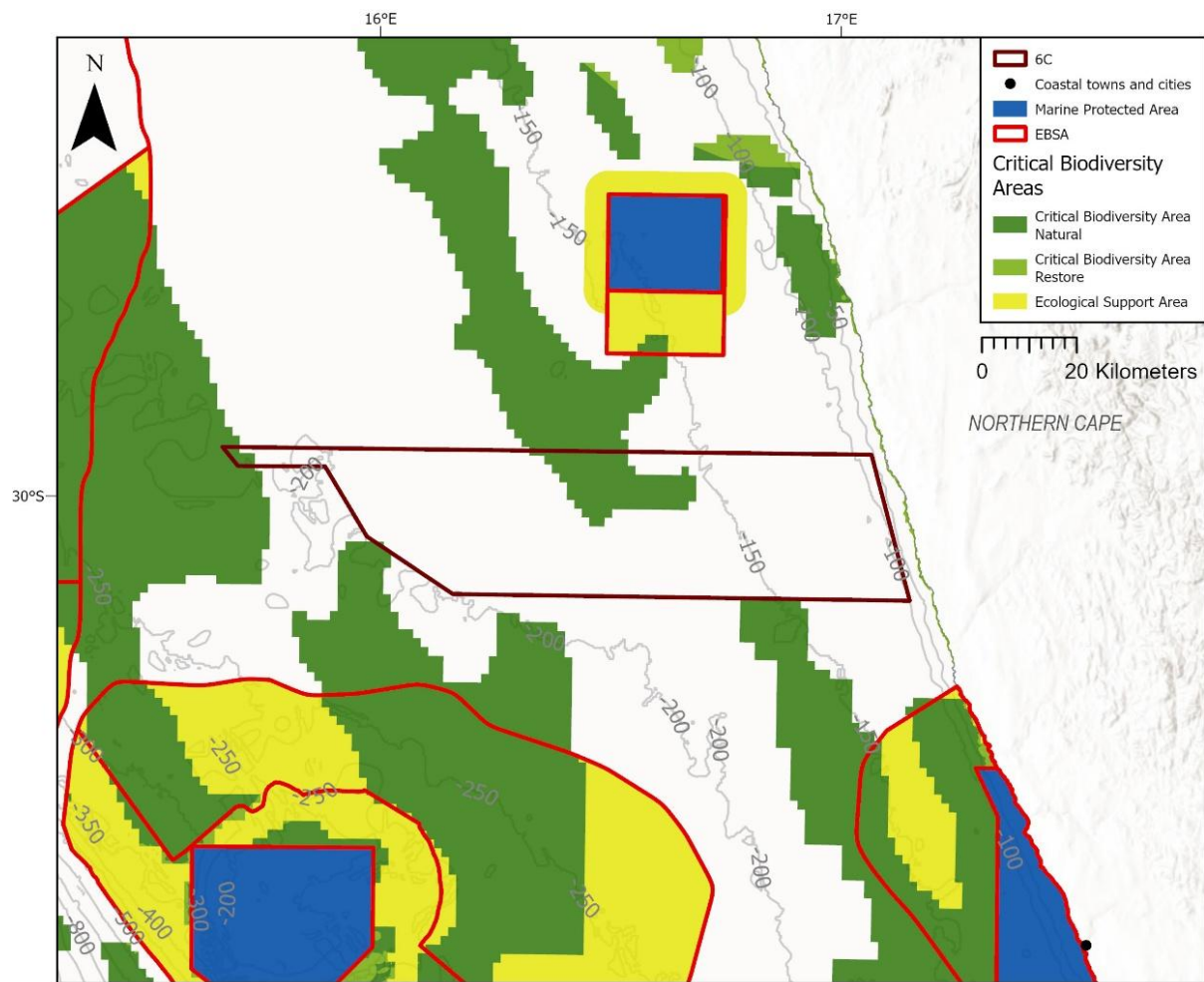


Figure 5. CBA, MPA and EBSA designations within the marine areas surrounding Concession Area 6C.

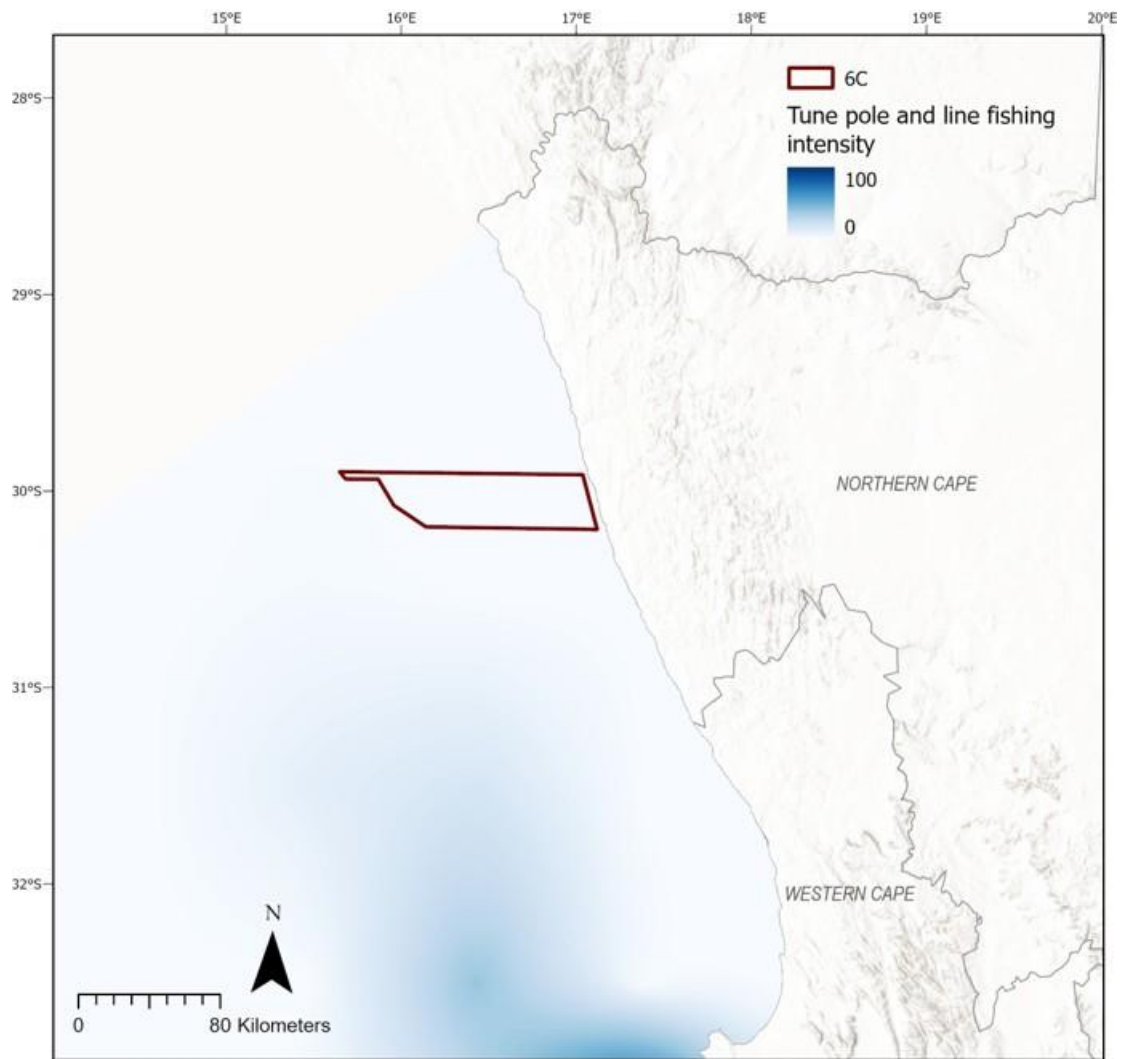


Figure 6. Tuna Pole and Line west coast fishing intensity (average annual effort 2010-2019, taken from NBA 2018 (Sink et al. 2019a).

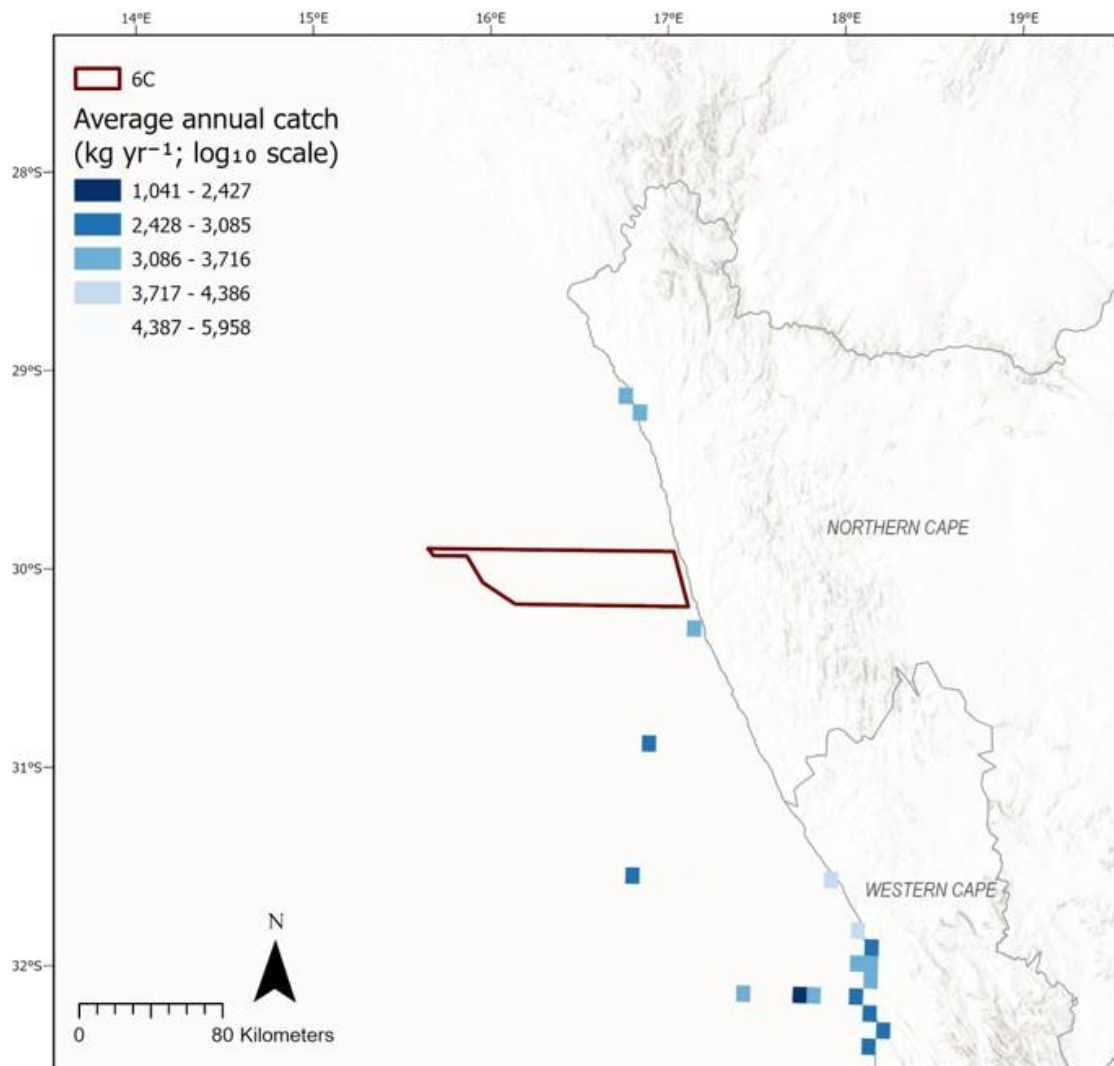
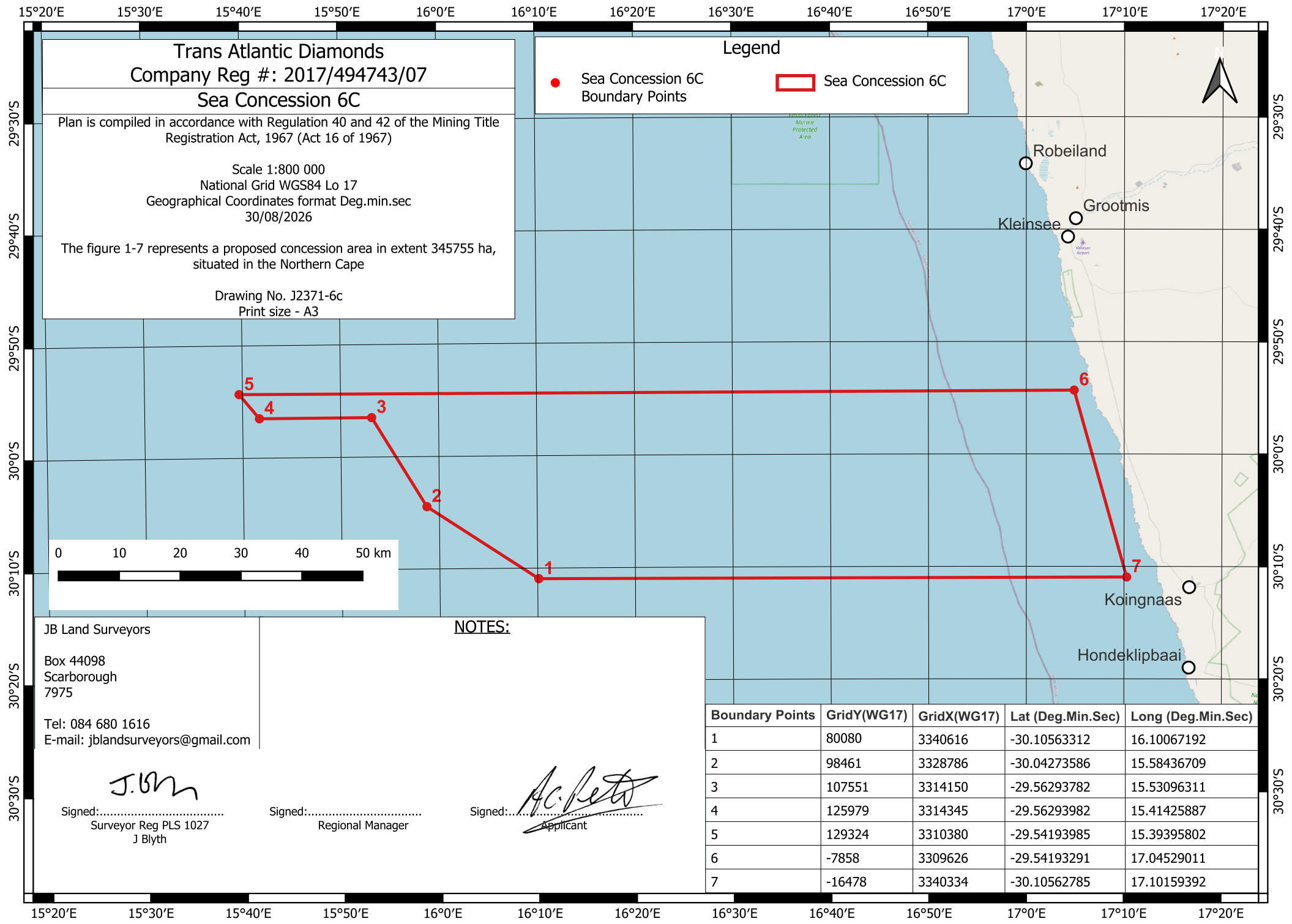


Figure 7. Commercial linefishing average annual catch (kg) (2010-2020) along the west coast, reported on the 5' National Marine Linefish reporting grid (Data sourced from DFFE). West Coast rock lobster.

I2.3 APPENDIX 3 COORDINATES FOR THE DEVELOPMENT AND ALL ASSOCIATED COMPONENTS



Trans Atlantic Diamonds
Company Reg #: 2017/494743/07

Sea Concession 6C

Plan is compiled in accordance with Regulation 40 and 42 of the Mining Title Registration Act, 1967 (Act 16 of 1967)

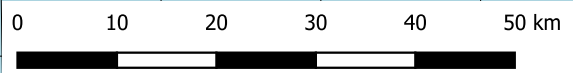
Scale 1:800 000
National Grid WGS84 Lo 17
Geographical Coordinates format Deg.min.sec
30/08/2026

The figure 1-7 represents a proposed concession area in extent 345755 ha, situated in the Northern Cape

Drawing No. J2371-6c
Print size - A3

Legend

- Sea Concession 6C Boundary Points
- ▭ Sea Concession 6C



JB Land Surveyors

Box 44098
Scarborough
7975

Tel: 084 680 1616
E-mail: jblandsurveyors@gmail.com

NOTES:

Signed: *J. Blyth*
Surveyor Reg PLS 1027
J Blyth

Signed:
Regional Manager

Signed: *A.C. Petro*
Applicant

Boundary Points	GridY(WG17)	GridX(WG17)	Lat (Deg.Min.Sec)	Long (Deg.Min.Sec)
1	80080	3340616	-30.10563312	16.10067192
2	98461	3328786	-30.04273586	15.58436709
3	107551	3314150	-29.56293782	15.53096311
4	125979	3314345	-29.56293982	15.41425887
5	129324	3310380	-29.54193985	15.39395802
6	-7858	3309626	-29.54193291	17.04529011
7	-16478	3340334	-30.10562785	17.10159392

12.4 APPENDIX 4 METHOD STATEMENT METHODOLOGY GUIDELINE

Overview

This section serves as a guideline on how method statements should be drafted. Section 6, Section 8 and Section 9 outline the management actions and desired outcomes for the various aspects of the project (e.g., noise, fire, heritage management, etc) and should be used to guide the preparation and drafting of the method statements.

To ensure that everyone can understand the method statements, they must be written in plain English. Consequently, a well-considered and well-written method statement that offers precise and succinct work plans can save a great deal of time and money and possibly even avert incidents and accidents.

The method statement needs to be development- and site-specific. Method statements that replicate information from specifications, other documents, or the EMPr are not acceptable because they don't show the person in charge of document approval that the contractor understands exactly what's expected of them.

The ECO must conduct an audit of the method statements' implementation. As a result, the method statements must include enough information and specifics to reassure the ECO that the works will be carried out correctly and that any potential incidents or accidents will be controlled.

Purpose

The purpose of the method statement is to:

- Outline the safe manner in which the task / activity is to be undertaken;
- Provide induction material for all undertaking the task / activity to understand;
- Meet legal requirements – hazard identification and control;
- Provide a programme against work, material, time, staff and anticipated problems are to be managed; and,
- Act as a tool in quality assurance.

The Method Statement shall cover applicable details with regard to:

- procedures;
 - materials and equipment to be used;
 - getting the equipment to and from site;
 - how the equipment/ material will be moved while on site;
 - how and where material will be stored;
 - the containment (or action to be taken if containment is not possible) of leaks or spills of any liquid or material that may occur;
 - Waste management system that will be implemented;
 - timing and location of activities;
 - compliance/ non-compliance with the EMPr;
 - In the case of for example the search and rescue of animals, a step-by-step explanation of how it will be done, equipment used, people to be consulted, contacted to assist, etc; and
-

- any other information deemed necessary by the ECO.

Scope

A method statement describes the scope of the intended task / activity in an easy-to-understand step – by – step manner. This is especially crucial to lessen the possibility of misunderstandings and ambiguity among the staff members who will be putting it into practice.

The method statement should clearly indicate:

- What — a brief concise description of the task / activity to be undertaken;
- Who — a brief concise description of the personnel involved with undertaking the task or activity;
- When — a brief concise description of the sequence of actions with due commencement and completion dates of the task / activity to be undertaken;
- Where — a brief concise description and map / drawing of the locality of the task / activity to be undertaken;
- Why — a brief concise description of the importance and requirement of the task / activity to be undertaken; and,
- How — a brief concise description of the methods to be implemented, materials and equipment to be used for the task / activity.

Minimum Requirements

The method statement should as a minimum address the following:

- Description
 - Provide a brief and concise description of the work to be undertaken;
 - Personnel Qualifications and Experience;
 - List all the details of qualifications and experience required for the completion of the task; and
 - Experience may cover previous work done in the area that may not require certificates or licences.
- Personnel, Duties and Responsibilities
 - Give details of the duties and specific responsibilities of supervisors and other personnel. For example, describe such things as daily toolbox talks and guidance provided by the Environmental Officer;
 - Training required to complete work; and
 - Make sure that all workers and their supervisors are trained in the procedures needed to complete the job safely and in an environmentally responsible way, especially when undertaking tasks for the first time or where new or changed work methods are utilised.

- Programme
 - Provide a clear and concise programme indicating all phases and time frames associated with the task.
 - Sequence and method
 - Indicate all steps associated with task at hand. This shall be done in a manner which is easily understandable and leaves no uncertainties to staff that are required to implement the task in the field.
 - Possible Hazards
 - Include all possible hazards such as: Hazardous substances, explosives, dust, etc ; Hazards to others in area ; and Rubbish, electrical, fills.
 - Resources/Plant/Equipment
 - List resources, plant and equipment that you will use on the job, e.g. ladders, scaffold etc.
 - Environmental
 - Indicate environmental management responsibilities;
 - Provide aspects and impacts associated with the activity;
 - Provide environmental guidelines; and
 - Specify employee training and involvement.
 - Waste management and reduction;
 - Buildings, machinery, soil;
 - Residual materials and waste;
 - Atmospheric emissions, noise and odour pollution;
 - Wastewater;
 - Accidents and accident prevention; and
 - Transport.
 - Health and Safety
 - List all safety controls such as Safety Data Sheets (SDS);
 - Warning Signs;
 - Personal protective equipment;
 - Storage of materials and equipment;
 - Fellow workers/public safety provisions; and Housekeeping
-

12.5 APPENDIX 5 ASPECTS, IMPACTS AND RISK ASSESSMENT REGISTER

[illegible]

13 ANNEXURES

13.1 ANNEXURE A: ENVIRONMENTAL AUTHORISATION

13.2 ANNEXURE B: PROSPECTING RIGHT



13.3 ANNEXURE C: APPROVED SITE LAYOUT



13.4 ANNEXURE D: APPROVED METHOD STATEMENTS

.



PART OF

