

**IN THE HIGH COURT OF SOUTH AFRICA
(WESTERN CAPE DIVISION, CAPE TOWN)**

Case No: _____ / _____

In the matter between:

CHRISTIAN JOHN ADAMS	First Applicant
STEENBERGS COVE SMALL SCALE FISHING COMMUNITY	Second Applicant
AUKATOWA SMALL SCALE FISHERIES COOPERATIVE	Third Applicant
WILFRED POGGENPOEL	Fourth Applicant
ROSEY SHOSOLA	Fifth Applicant
COASTAL LINKS LANGEBAAN	Sixth Applicant
SOLENE SMITH	Seventh Applicant
NORTON DOWRIES	Eighth Applicant
CAMELITA MOSTERT	Ninth Applicant
ANTHONY ANDREWS	Tenth Applicant
NICOLAAS BOOYSEN	Eleventh Applicant
REGAN JAMES	Twelfth Applicant
GREEN CONNECTION	Thirteenth Applicant
WE ARE SOUTH AFRICANS	Fourteenth Applicant

and

MINISTER OF MINERAL RESOURCES AND ENERGY	First Respondent
MINISTER OF ENVIRONMENT, FORESTRY AND FISHERIES	Second Respondent

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SEARCHER GEODATA UK LIMITED

Third Respondent

SEARCHER SEISMIC (AUSTRALIA)

Fourth Respondent

PETROLEUM AGENCY SOUTH AFRICA (PTY) LTD

Fifth Respondent

BGP "PIONEER"

Sixth Respondent

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WE ARE SOUTH AFRICANS	Fourteenth Applicant

and

MINISTER OF MINERAL RESOURCES AND ENERGY	First Respondent
MINISTER OF ENVIRONMENT, FORESTRY AND FISHERIES	Second Respondent

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SEARCHER GEODATA UK LIMITED

Third Respondent

SEARCHER SEISMIC (AUSTRALIA)

Fourth Respondent

PETROLEUM AGENCY SOUTH AFRICA (PTY) LTD

Fifth Respondent

BGP "PIONEER"

Sixth Respondent

FOUNDING AFFIDAVIT

I, the undersigned,

CHRISTIAN JOHN ADAMS

do hereby make oath and state:

- 1 I am an adult male residing at Steenberg's Cove, St Helena Bay, West Coast. I am duly authorised to bring this application and to depose to this affidavit on behalf of the small-scale fishers of Steenberg's Cove, also referred to as the Interim Relief fishers of Steenberg's Cove.
- 2 The contents of this affidavit are true and correct and, save where the context indicates otherwise, within my own personal knowledge and belief. To the extent that I make legal submissions in this affidavit, I do so on the advice of my legal representatives, whose advice I believe to be correct.
- 3 In this affidavit, I will use the following terms:
 - 3.1 "NEMA" is the National Environmental Management Act 107 of 1998;

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- 3.2 "EIA Regulations" refer to the Environmental Impact Assessment Regulations, 2014, GN R982 in GG 38282 of 4 December 2014;
- 3.3 "Listing Notice 1" refers to the Environmental Impact Assessment Regulations Listing Notice 1 of 2014, GN R983 in GG 38282 of 4 December 2014;
- 3.4 "MPRDA" is the Mineral and Petroleum Resources Development Act 28 of 2002;
- 3.5 "MLRA" is the Marine Living Resources Act 18 of 1998;
- 3.6 "ICMA" is the National Environmental Management: Integrated Coastal Management Act 24 of 2008;
- 3.7 "NEMBA" is the National Environmental Management: Biodiversity Act 10 of 2002;
- 3.8 An EMP is an environmental management programme or plan, whether submitted under the MPRDA or NEMA;
- 3.9 An EA is an environmental authorisation in terms of NEMA;
- 3.10 Small Scale Fishing Community is a community recognised as such in terms of s19 of the MLRA;
- 3.11 Small Scale Fisher is a member of a Small Scale Fishing Community as defined in s1 of the MLRA; and

3.12 Searcher is a collective reference to Searcher Geodata UK Limited and Searcher Seismic Australia, the third and fourth respondents in this application.

INTRODUCTION

- 4 Searcher is the holder of a Reconnaissance Permit granted in terms of section 74 of the MPRDA. On the strength of this Reconnaissance Permit, Searcher intends to conduct a seismic survey along the west and south-west coasts of South Africa.
- 5 The purpose of its seismic survey is to determine whether there are oil and gas deposits under the sea bed. Searcher will ascertain this through the firing of air guns at regular intervals, which will allow for a mapping of any deposits found to be present.
- 6 Searcher's activities will have a profound impact on marine and bird life in the Reconnaissance Permit area and beyond. They will also have a profound impact on the exercise by small-scale fishing communities of their rights, including their right to work and earn a living, their right to food and their cultural and traditional rights.
- 7 Despite this, Searcher has not made any meaningful attempts to engage small-scale fishers to ascertain how they will be affected by the seismic survey and whether and how these effects can be mitigated or otherwise managed. Searcher is expressly and directly obliged, in terms of both the MPRDA and NEMA, to consult meaningfully with all interested and affected parties, including the small-scale fishing communities. Without such consultation, Searcher cannot

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- appreciate and accommodate the extensive harm that its activities are likely to cause.
- 8 Despite now having been made aware of the impact that its activities will have, Searcher intends to proceed with its seismic survey in flagrant disregard of the irreparable harm that is likely to arise.
- 9 The commencement of the seismic survey, if it has not already started, is imminent. The applicants have informed Searcher of their legal challenge to the legality of its activities, as well as their challenge to the lawfulness of the underlying Reconnaissance Permit on which Searcher relies. The applicants have requested Searcher to provide an undertaking not to commence with its seismic survey until such time as these challenges have been adjudicated. Searcher has refused to provide this undertaking.
- 10 As a result, the applicants have no choice to approach this Court for urgent interdictory relief, pending the adjudication of their application for final relief.

OVERVIEW

- 11 On 22 April 2021, Searcher submitted an application for a reconnaissance permit to the Petroleum Agency South Africa (“**PASA**”) in terms of section 74 of the MPRDA. The application was accepted by PASA on 28 May 2021. The application was based on Searcher’s intention to undertake a multi-client speculative two-dimensional (2D) and/or three-dimensional (3D) seismic survey programme over a number of petroleum license blocks extending across the west and south-west coasts of Africa. In this affidavit, I will refer to Searcher’s project as “**the Seismic Survey**”.

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- 12 The Seismic Survey will be conducted by the vessel BGP Pioneer, which has arrived at port in Cape Town and, at the time of my signing this affidavit, was located close to the coastline of St Helena Bay, Western Cape. BGP Pioneer has been cited as the sixth respondent in this application.
- 13 The details of the Seismic Survey are contained in the EMP prepared on Searcher's behalf. I attached the executive summary of the EMP as annexure "FA1".
- 14 Searcher has not made the final EMP available to all interested and affected parties in an accessible format. Searcher is invited to provide the applicants and the Court the final EMP.
- 15 The Reconnaissance Permit area -
- 15.1 is approximately 297087 km² in extent;
- 15.2 is located offshore, approximately between the border between South Africa and Namibia at its northernmost point and Cape Agulhas at its southernmost point;
- 15.3 is approximately 20 km from the South African coastline at its closest point and beyond the South African Exclusive Economic Zone at its furthest; and
- 15.4 extends across water depths ranging from 100m to 4500m.
- 16 The area of influence:
- 16.1 encompasses the entire West Coast;

16.2 includes three districts, namely:

16.2.1 the City of Cape Town Metropolitan Municipality (Western Cape Province);

16.2.2 the West Coast District Municipality (Western Cape Province);
and

16.2.3 the Namakwa District Municipality (Northern Cape Province).

17 The Seismic Survey is directed at exploring for hydrocarbons such as oil and gas, prior to drilling and development. During seismic surveys, a seismic vessel towing near-surface sound sources uses high volume airguns to direct pulsed high-level, low frequency sounds toward the seabed at regular intervals. The signal penetrates the seabed and is reflected by rock formations in the basement. Multiple receivers then record the reflected signals. Geological formations can then be gleaned from an analysis of the returned signals.

18 This can be achieved through a two-dimensional or three-dimensional survey. Searcher's proposal for each is as follows:

18.1 The two-dimensional seismic survey would consist of low-density spaced survey lines in the Permit application area. This proposed survey would have a maximum total cumulative length of approximately 22 014 km. The total survey would have a maximum duration of 135 days production and 142 days including downtime.

18.2 The three-dimensional seismic survey's area of interest is approximately 58 250 km² in extent. It is situated roughly between the Orange River

mouth and Cape Columbine, with the inshore boundary located between approximately 140 kilometres and 320 kilometres offshore, within water depths beyond approximately 2,000 metres. The proposed 3D seismic survey would cover an area of up to approximately 10,000km² within the area of interest. The total 3D survey would have a maximum duration of 73 days production and 80 days including downtime.

19 The two-dimensional and three-dimensional surveys operate in different but overlapping areas:

19.1 The Permit and two dimension survey areas fall into the Southern Benguela and Southeast Atlantic Deep Ocean Ecoregion.

19.2 The proposed three dimension survey area is located entirely within the Southeast Atlantic Deep Ocean Ecoregion.

19.3 Searcher's own consultants – SLR Consulting – confirm in the EMP that "this latter region is characterised by a wide variety of ecosystem types covering both the inner, mid- and outer shelves, the Southeast Atlantic continental slope and the Cape Basin Abyss" (Executive Summary of Searcher's EMP at Section 5.2).

20 While the EMP acknowledges that the Seismic Survey overlaps with the commercial fishing sector, in particular the large-scale commercial operations, there is no acknowledgement of the profound effect that it will have (whether conducted as a two-dimensional survey, a three-dimensional survey or both) on the small-scale fisheries sector. The EMP asserts that there will be "no overlap with small-scale fishing sector" based on their misinformed view of the operations

of small-scale fishers. Moreover, the ocean environment is dynamic, with the result that any impact on the ocean extends far beyond the immediate area of operation. As such, impacts on the ocean are broader than impacts on land.

- 21 Given the substantial impact that such activities may have on marine and bird life in the Reconnaissance Permit area, as well as on the exercise by communities located adjacent to the Reconnaissance Permit area of their right to livelihoods, right to food, right to freedom of trade and their cultural and spiritual beliefs, Searcher was under a duty to consult meaningfully with the small scale sector and relevant bird and marine experts as interested and affected parties -

21.1 in terms of section 74(4)(a) of the MPRDA, in the course of meeting the requirements of and submitting the necessary information for the issue of the Reconnaissance Permit; and

21.2 in the course of obtaining environmental authorisation prior to the commencement of the Seismic Survey in terms of section 24(2)(a) of NEMA read with item 21B of Listing Notice 1.

- 22 Based on these consultations, it would have been possible to assess the social, economic and environmental impacts of the proposed Seismic Survey on West Coast communities and to assess whether this impact may be minimised or prevented through mitigation measures. The failure to do so means that an informed decision based on all relevant considerations could not be and was not taken.

- 23 However, because of Searcher's flawed understanding of the small-scale fisheries sector as a sector that only works close to the coastline and is "unlikely

to range beyond 3 nm (5.6 km) from the coastline”, the EMP declares that there will be no impact on this sector. In fact, we often venture 15 nm and further from the coastline because the snoek and some other species no longer comes closer to the shore as they used to. The report does not even acknowledge that we target snoek, the most central species to our livelihoods on the West Coast.

- 24 Searcher doesn't know this because it has not consulted with the applicants at any stage, nor has it even applied for the environmental authorisation required for the commencement of the Seismic Survey.
- 25 Searcher also doesn't really know what the impact of their survey will be on the environment. We have attached to this application a number of expert reports on different aspects of the environmental impact of the seismic survey. The experts are in agreement that alarmingly little is known about what the impact of this survey will actually be and, therefore, opine that allowing it to proceed is irresponsible. From what is known, it is reasonable to conclude that irreparable harm is likely.
- 26 The first respondent was obliged to refuse to grant the Reconnaissance Permit in the absence of any meaningful consultation, in terms of section 75(1)(c) read with section 75(2) of the MPRDA. Rather than insisting on this process as he is required to do in terms of section 74 of the MPRDA, however, the Minister of Mineral Resources granted the Reconnaissance Permit 6 December 2021.
- 27 Acting on the strength of this (unlawful) Reconnaissance Permit, and without securing environmental authorisation for its Seismic Survey, I understand that the Seismic Survey will commence imminently. I refer the Court to annexure



“FA2”, which purports to be a notification to interested and affected parties that Searcher has been granted a Reconnaissance Permit and that it intends to conduct a Seismic Survey on the strength of that permit.

28 A notice to mariners dated 1 December 2021 and attached hereto as “FA3” records that the Seismic Survey will commence “no earlier than 15th January 2022” and that Searcher will provide “key stakeholders” with seven days’ notice of actual commencement. To the best of my knowledge (and despite being one of the key stakeholders), no such notice has been provided.

29 I understand, however, that the relevant vessel is anchored in St Helena Bay and will soon make its way to be positioned for the commencement of the seismic blasts.

30 The Seismic Survey will cause irreparable harm to marine and bird life across the entire Reconnaissance Permit area and to various of our rights as small scale fishers. While Searcher purports to have developed measures to mitigate this harm, this is far from sufficient to prevent the substantial and irreparable harm that will arise. I address this in further detail below.

31 We therefore bring this application in two parts.

32 In part A, which is brought on an urgent basis, we seek an interim order interdicting the commencement, alternatively the continuation of the Seismic Survey pending -



- 32.1 the outcome of the applicants' appeal against the decision to grant the Reconnaissance Permit to Searcher in terms of section 96 of the MPRDA; and
- 32.2 the outcome of part B of this application.
- 33 In part B, the applicants seek an order in the following terms:
- 33.1 Insofar as is necessary, exempting the applicants in terms of section 7(2)(c) of the Promotion of Administrative Justice Act, 2000 from the obligation to exhaust their internal remedies and condoning any failure by the applicants to comply with section 96(1) of the MPRDA.
- 33.2 That it be declared that the first respondent's decision to grant a reconnaissance permit to the third and fourth Respondents is in breach of section 75(1)(c) of the MPRDA and is accordingly unlawful.
- 33.3 That the first respondent's decision to award the third and fourth respondents the Reconnaissance Permit is reviewed and set aside and substituted with the following: "the application for a Reconnaissance Permit in terms of section 74 of the MPRDA is refused."
- 33.4 In the event of the first respondent's decision to dismiss the applicants' appeal in terms of section 96 of the MPRDA, alternatively a failure of the first respondent to make a decision in relation to the applicants' appeal in terms of section 96 of the MPRDA, an order reviewing and setting that decision and substituting it with the following: "the appeal is upheld and

the Reconnaissance Permit is set aside”, alternatively that “the appeal is upheld and the Reconnaissance Permit is cancelled”.

33.5 That it be declared that the third and fourth respondents have breached their obligations arising from -

33.5.1 section 74(4) of the MPRDA; and

33.5.2 section 24(2)(a) of the National Environmental Management Act 107 of 1998 (“**NEMA**”) read with item 21B of Listing Notice 1 of the Environmental Impact Assessment Regulations 2021.

33.6 That the third and fourth respondent, and the sixth respondent and/or any other vessel so engaged by the third and fourth respondent to conduct seismic surveys under the reconnaissance permit, be finally interdicted from commencing, alternatively recommencing, the seismic survey of the west and south-west coast of South Africa unless and until the first respondent lawfully grants a Reconnaissance Permit in terms of section 75 of the MPRDA having been satisfied that -

33.6.1 the third and fourth respondents’ application for a Reconnaissance Permit fully complies with the application requirements in terms of section 74 of the MPRDA and section 24(2)(a) of NEMA read with item 21B of Listing Notice 1 of the Environmental Impact Assessment Regulations 2014; and

33.6.2 the third and fourth respondents consult meaningfully with all interested and affected parties; and

33.6.3 the third and fourth respondents obtain the requisite environmental authorisation for their proposed activities.

34 I address the following issues in support of the relief that the applicants seek:

34.1 The parties to the application;

34.2 Jurisdiction;

34.3 Urgency;

34.4 The history of the West Coast and our fishers;

34.5 Searcher's proposed activities and its purported engagement with interested and affected parties;

34.6 The applicable legal framework;

34.7 A summary of the proceedings in *Sustaining the Wild Coast NPC and others v Minister of Mineral Resources and Energy and others*, which proceedings concern the conduct of a seismic survey along the Wild Coast of South Africa;

34.8 The anticipated impact of the Seismic Survey;

34.9 Costs; and

34.10 The relief we seek.

PARTIES

- 35 I am the first applicant. I bring this application in my own interest, in the interest of other West Coast small scale fishers and in the public interest. Specifically, I bring this application in the interests of protecting our environment and use of natural resources in the areas where West Coast small scale fishers, like myself, operate.
- 36 The second applicant is the Steenberg's Cove small scale fishing community. Steenberg's Cove is a fishing village established in the late 17th century and the traditional fishers of our village continue to practice small-scale fishing to this day.
- 37 The third applicant is the Aukatowa Small Scale Fisheries Cooperative of Port Nolloth, a juristic entity established in terms of the Co-operatives Act 14 of 2005 and the MLRA. The co-op holds the small scale fishing right of the Port Nolloth small scale fishing community. Its chairperson, Mr Christiaan McKenzie resides at 3066, Maas Banker Street, Port Nolloth. The Co-op act in the interest of its members.
- 38 The fourth and fifth applicants are Wilfred Poggenpoel and Rosey Shosola, both traditional small scale fishers from Lamberts Bay. They act on their own behalf, on behalf of the small scale fishers of Lamberts Bay, on behalf of fellow small scale fishers of the West Coast, in the public interest in the interests of protecting the environment. .
- 39 The sixth applicant is Coastal Links Langebaan, a branch of the national small scale fishers network called Coastal Links. Coastal Links is a community based

organisation constituted in Langebaan in 2004 to advance the basic human rights of small scale fishers. Coastal Links Langebaan represents the interest of the small scale fishing community of Langebaan.

- 40 The Seventh and Eighth Applicants are Solene Smit and Norton Dowries, the chairperson and vice-chairperson of Coastal Links Langebaan. They bring this application in their own interest and in the interest of the Langebaan small scale fishers.
- 41 The Ninth Applicant is Camelita Mostert, a member of the small scale fishing community of Saldana. She brings this application in her own interest and in the interest of the fishers of Saldana.
- 42 The tenth and eleventh applicants are Anthony Andrews and Nicolaas Booyen, who are indigenous Guriqua community leaders from Lambert's Bay. Mr Andrews acts on his own behalf, on behalf of the West Coast Guriqua Council, in the interest of the Guriqua indigenous people including its fishers in Lamberts Bay, in the public interest, and in the interest of protecting the environment. Mr Booyen represents the interests of his community in Lambert's Bay and also acts in the interests of protecting the environment.
- 43 The twelfth applicant is Regan James, a small scale fisher from Hangberg, Hout Bay, and Chief of the Katz Koranna Royal House of the Koranna Khoi peoples. The Katz Koranna Royal House is one of the three royal houses that fall under the Koranna Tribe, a group of Khoi peoples. Mr James acts in his own interests, in the interests of the fishing community of Hangberg, as a member of the United Small-Scale Fishers Association ('USSFA'), in the interest of the Katz Koranna

Royal House, in the public interest, as well as in the interest of protecting the environment.

- 44 The thirteenth applicant is Green Connection NPC ((2021/773490/08), an environmental and social justice civil society organisation opposed to offshore oil and gas exploration and production activities (including seismic surveys), and which promotes sustainable livelihoods and the achievement of environmental rights. It acts in its own interest, in the public interest and in the interest of protecting the environment.
- 45 The fourteenth applicant is We Are South Africans, a private company with registration number 2020/479031/07. We are South Africans is a civil society movement that received numerous comments against the proposed seismic survey and acts in the public interest, on behalf of its members, on behalf of the environment, and on behalf of the many groups that sent We Are South Africans submissions against the seismic study.
- 46 The first respondent is the Minister of Mineral Resources and Energy, cited in his capacity as the Member of Cabinet responsible for the administration of the MPRDA. The first respondent's head office is situated at Building 2C, Trevenna Campus, % Meintjies and Francis Baard Street, Schoeman Street, Sunnyside, Pretoria.
- 47 Service on the first respondent will be in the care of the Office of the State Attorney, Floor 4 Liberty Life Centre, 22 Long Street, Cape Town.

- 48 The applicants seek no relief against the first respondent in Part A of this application, save for a costs order in the event of opposition. The applicants do, however, seek relief against the first respondent in Part B of the application.
- 49 The second respondent is the Minister of Forestry, Fisheries and the Environment, cited in her capacity as the Member of Cabinet responsible for the administration of the NEMA, the ICMA, the NEMBA and other specific Environmental Management Acts. The second respondent's head office is situated at Environment House, % Steve Biko and Soutpansberg Road, 473 Steve Biko, Arcadia, Pretoria
- 50 Service on the second respondent will be in the care of the Office of the State Attorney, Floor 4 Liberty Life Centre, 22 Long Street, Cape Town.
- 51 The applicants do not seek relief against the second respondent in Part A of this application, save for a costs order in the event of opposition to this application.
- 52 The third respondent is Searcher Geodata UK Limited, a private company registered in terms of the laws of United Kingdom, with registration number 05460266, and with its registered address at C/O Tmf Group 8th Floor, 20 Farringdon Street, London, United Kingdom, EC4A 4AB.
- 53 The fourth respondent is Searcher Seismic Australia, a private company, in Australia, whose further details are unknown to the applicants and with its head office located at Suite 1, Level 4, South Shore Centre, 85 South Perth Esplanade, South Perth, Western Australia 6151, Australia.

- 54 The third and fourth respondents have instructed Cliffe Dekker Hofmeyr Inc as their attorneys of record in these proceedings, which attorneys have confirmed that they will accept service of this application on the third and fourth respondents' behalf. I refer the Court to annexure **"FA4"** in this regard.
- 55 The fifth respondent is the Petroleum Agency South Africa (Pty) Ltd (**"PASA"**), a private company with limited liability duly incorporated and registered in terms of the company laws of South Africa under registration number 1999/015715/30. PASA is the official government agency responsible for the promotion and regulation of South Africa's petroleum resources, with its office located at Tygerpoort Building, 7 Mispel Street, Bellville 7530, Cape Town, South Africa.
- 56 The sixth respondent is the research vessel BGP Pioneer. The vessel is identified by its International Maritime Organisation number IMO 8709951 and presently sails under a Panama flag. The current location of the vessel is the West Coast of South Africa, within South African waters. The vessel, being a branch of the third and fourth respondent, is in the care of the third and fourth respondents' attorneys of record, Cliffe Dekker Hofmeyr Inc. BGP Pioneer is presently owned by BGP Geoexplorer Pte Ltd, Panama.

JURISDICTION

- 57 This court has jurisdiction to hear this matter.
- 58 Searcher's permit covers a geographic area of coastline that traverses the west coast of the Western Cape and the Northern Cape and extends beyond the Exclusive Economic Zone to outside of the territorial waters of the Republic. The harm that will materialise, as detailed in this affidavit, will be inflicted upon the

waters, environment and small scale fisher communities that traverse the west coast of the Western Cape.

- 59 Further, the vessel that is contracted to perform the seismic survey for Searcher, the BGP Pioneer, is presently docked in Cape Town or in the waters that traverse the west coast of the Western Cape.

URGENCY

- 60 This matter is self-evidently urgent. The terms of the permit authorise Searcher to commence the seismic survey activities on 15 January 2022. We still have no clarity, however, as to the precise date on which the Seismic Survey will commence, if it has not already commenced. BGP Pioneer has arrived at port in Cape Town and, at the time of my signing this affidavit, was located close to the coastline of St Helena Bay, Western Cape. It is unknown if Searcher and BGP Pioneer have either already started to fire air guns into the sea at regular intervals, or will start doing so imminently. This will cause irreparable harm to the marine and bird life in the Reconnaissance Permit area, as well as to the food security and livelihoods of communities, including communities that hold traditional artisanal fishing rights along the shoreline.

- 61 The fisher applicants were unaware of Searcher's plans to conduct the Seismic Survey before 7 January 2022 (and some fishers became aware at a later stage). On that date, researchers and organisations who support our communities started posting news about the Searcher and the Seismic Survey on fisher whatsapp groups. The earliest message, and so the earliest any of the fisher applicants learned of these plans, was on 7 January 2022.

62 Upon becoming aware of the imminent Seismic Survey, we started to engage with our attorneys of record on the information that was available about the Seismic Survey, and what could be done to protect our rights. Most of us come from poor communities and do not have resources such as air time and data readily and freely available to communicate and exchange information with our attorneys and each other. Moreover, given that many of the applicants are small-scale fishers, and depend on fishing for our livelihoods and to feed our families, it was also necessary for us to go out to sea when we could. At those times we were unavailable to consult.

63 Following our initial discussions with our attorneys of record, they started to engage with experts in the relevant fields, who were required to read through lengthy documents in order to provide their views. Given the extent and breadth of the impact of the Seismic Survey, these processes required some time. They were, however, completed as quickly as practically possible.

64 We also sought to find ways to assert our rights without the need to approach this Court on an urgent basis. We instructed our attorneys to request Searcher for an undertaking not to commence its activities until it obtains environmental authorisation and the legal challenge to the lawfulness of its activities has been finalised. I refer in this regard to annexure “FA5”, which is a letter dated 13 January 2022 in which the applicants’ attorneys requested that the undertaking be provided by 14 January 2022.

65 Our attorneys further requested that the seven-day notice period referred to in the notice of 1 December 2021 be given to them. Searcher did not provide a response to this request.

- 66 On 15 January 2022, our attorneys drew the letter of 13 January 2022 to the attention of Searcher's attorneys of record, in the attached letter marked **"FA6"**.
- 67 In response to that letter (dated 14 January 2022 and received on 15 January 2022), our attorneys received the attached letter marked **"FA7"**, in which Searcher's attorneys refused to provide the requested undertaking. Searcher's attorneys contended that Searcher had secured all the necessary regulatory approvals and was therefore entitled to commence the Seismic Survey.
- 68 Our attorneys responded to Searcher's attorneys on 16 January 2022, setting out the reasons as to why Searcher has not secured the necessary environmental approvals, and repeating the request for an undertaking until this matter is finalised. A copy of this letter is attached as **"FA8"**.
- 69 Searcher's attorneys responded on 17 January 2022, indicating that they were taking urgent instructions on the matter, but still refusing to provide an undertaking not to commence with the Seismic Survey as planned. A copy of that letter is attached as **"FA9"**.
- 70 They responded on 20 January 2021, in the attached letter marked **"FA9A"**, in which they repeated Searcher's refusal to provide the requested undertaking.
- 71 Should Searcher commence the Seismic Survey in the absence of meaningful consultation and without having secured the necessary authorisations, the harm that will ensue will be irreversible and immediate. With each blast of the airgun, the damage to the marine and bird life and the consequent harm to our cultural and spiritual beliefs, our livelihoods and our food security will accumulate and intensify.

- 72 I further note that the route that BGP Pioneer proposed to follow - namely, a route from north to south down the coast - tracks the migratory route of snoek that move from north to south along the West Coast during the same time.
- 73 It is imperative that Searcher and BGP Pioneer be interdicted from commencing the seismic blasting. It is also imperative that if they have already commenced seismic blasting, they will be interdicted sooner than later, given the cumulative and enduring harm that the blasting will cause.
- 74 An appeal in terms of section 96 of the MPRDA is being prepared and will be lodged with the Minister of Mineral Resources and Energy in due course. The appeal seeks the setting aside, alternatively, the cancellation of the permit. Further, an application to suspend the permit, in terms of section 96(2) and section 90, read with section 47, of the MPRDA, will be made to the Minister seeking the suspension of the permit pending the outcome of the appeal.
- 75 The regulations governing the MPRDA appeal process allow the first respondent a period of approximately 60 days to consider the appeal after giving the relevant parties and role players an opportunity to make submissions on the appeal. To the best of my knowledge, there is no provision for an appeal to be disposed of on an expedited basis.
- 76 Given the urgency and imminence of the harm of Searcher's activities, it is unlikely that the Minister will suspend the permit before this Court has an opportunity to hear Part A of this application and before irreversible harm is done. By the time the Minister considers the appeal and application to suspend, based

on the submissions of all parties, the damage would be done and the harm would have fully materialised.

77 Further, the Minister has stated publicly that attempts to interdict these types of seismic surveys should be considered "apartheid and colonialism of a special type". I refer in this regard to annexure "FA10", a tweet from the official account of the South African Government as posted on the social media platform Twitter on 9 December 2021 in which these statements were made. The post is still available on the platform. I view that statement as the Minister publicly siding with entities like Searcher who seek to bypass environmental authorization and to commence activities on questionable permits.

78 As a result, even if the appeal and application to suspend are considered by the Minister in an extraordinarily short period, we believe that the outcomes will not be fair and objective.

79 Therefore, without this court's intervention and granting interim relief to myself and the other applicants, we will be unable to obtain substantial redress in the ordinary course.

THE HISTORY AND SIGNIFICANCE OF THE WEST COAST

80 The West Coast of South Africa lies at the heart of the history of the Western Cape and Northern Cape of South Africa, at the heart of the people of this region. When one hears the words 'the West Coast' it does not only refer to the Atlantic coastline and the ocean that stretches from the Namibian border in the North to the place that is often referred to as the Southern tip of Africa, the Cape of Good Hope, but the term 'the West Coast' refers to a distinctive socio-cultural ecology

that has shaped and continues to shape so much of what it means to be South African today.

81 I have been told that even Van Riebeeck recognised the fishing skills of the indigenous peoples of the Cape when the Dutch colonialists arrived at the Cape in 1652 and set up a provisioning station. In his diaries he observed that the local Khoi and San fishers were expert fishers, using all manner of skills to catch fish. So impressed was he that within three days of his arrival he issued an edict that the fish that the locals caught must be used to provision the new station. And so began a lengthy tradition of local fishermen providing fish for the establishment at the Cape.

82 This tradition grew rapidly. Malay slaves brought unique fishing skills that entwined with the skills of indigenous peoples over time. Within the next century, the Cape of Good Hope came to depend on the fish provided by the local fishers of the Saldanha, Langebaan and St Helena Bay on the West Coast. The snoek and 'hotnot vis' (now known as 'Cape Bream') and the array of other traditional line fish caught along this coast was used to provide rations for the labour force developing the burgeoning agricultural industry in the hinterland of the Cape. The workers of the Cape came to depend on snoek as their primary food source.

83 Following the freeing of slaves in 1840, small fishing hamlets sprung up along the West Coast as people sought to survive independently by living off the rich marine resources of our coastline. This was the beginning of the many traditional white coated fishermen's cottages of the West Coast. These images are now used to sell expensive property along this coastline to the rich, but this way of life and the West Coast culture was the culture of my forebears.

- 84 The cultural history of the West Coast carries the memories of the earliest occupation of our country: the French occupation of the islands off the West Coast and their taking of our fish, our seabirds, our guano, and more. Of the Cape's dependence on our forefathers to provide fish to feed the workers growing wheat and livestock, of the multitude of snoek sent to Mauritius as '*rantsoenvis*' for the slaves working the sugar cane fields of that country. So important and so rich is this link between the provision of snoek to the people of Mauritius, that to this day, the Mauritians celebrate a fish festival to remember this tradition and their historical dependence on the local fishers of the Cape.
- 85 This is the cultural heritage of the West Coast. This is my cultural heritage. I was born in 1978 into a family of proud fishermen and women. I am a fourth generation fisherman of the West Coast. My maternal family originated in Mamre, descendents of this mix of Khoi, San and Malay early inhabitants and workers of this coastline. My great grandfather and great uncles used to travel by ox-wagon and later by donkey along the gravel road from Mamre to the coast at Ganzekraal to catch fish. My uncles and cousins settled along this coastline. The catching of fish is a part of my cultural heritage. It is how my forefathers and mothers survived. It is in our blood, in our genes.
- 86 My grandfather and uncles taught me to fish and to harvest a wide range of marine resources along this coast including lobster, abalone, limpets, black and white mussels. They taught me to jive for mussels in the sand along these shores, a tradition that many young children from the West Coast fishing villages learnt, as they learnt to dive for lobster and to throw in a line for a fish.

87 I remember catching my first lobster on my own when I was 5 or 6 years old. I recall my grandfather making me put it back and telling me that the shell was too soft, that it was a female lobster carrying eggs and that we could not eat this particular lobster as we needed it to give birth to many more lobsters. This was how I was taught from a young age to care for the marine resources of the West Coast. The descendants of these early fishers have been and continue to be the real guardians of our marine resources, despite being forcibly removed from the sea during the apartheid years and often prevented from fishing in areas that were designated as 'for whites only' during apartheid.

88 I grew up in a family of fishermen who caught snoek and fisherwomen who harvested a range of inter-tidal resources, cleaned fish and '*vlekked snoek*' and made '*ingelaaide*' snoek for us at Easter, a very special West Coast tradition that is still practiced today. Easter is a time for eating fish, and the West Coast is famous for the many traditional fish recipes. Curried fish is still sought after and sold by leading supermarkets throughout South Africa at Easter, as this cultural tradition continues.

89 I grew up believing that the sea must be respected and that it was part of us. At the start of the fishing season a church service would be held in each of the fishing villages along the coastline, blessing the village boats and asking that God would watch over the fishers. I grew up knowing that the communities of the West Coast depended on the sea for their lives and livelihoods and that the sea and fishing was what made us who we are, as people of the West Coast.

90 The livelihoods of the fishers of the West Coast have always been tough. I know that I come from a long line of fishermen who have struggled to feed their families



and cope with the many ways in which fishing has been controlled by the colonial and apartheid government. My family tells stories of how my grandfather fought for the fair treatment of fishermen in his day and this tradition of fighting for the rights of fishing communities has continued in my family. This has not been able to stop the steady marginalisation of West Coast fishing in the face of industrialisation, apartheid and the development of other industries along our coastline.

91 Whilst my grandmother encouraged me and my cousins to finish school and not join the growing fishing industry on the West Coast, as she knew that a fishing life was a life of struggle, the sea always called me and throughout my school years and in the following years, I fished over weekends and at every opportunity. Finally when I was 30, like nearly all of my cousins, the call of the sea was too strong and I started fishing full time for my livelihood. I joined the hundreds of small-scale traditional, artisanal fishers around our coastline who feed their families and make a modest livelihood from providing fish for coastal communities.

92 I support my son and my partner through fishing. I depend entirely [100%] on fishing for my livelihood. I live in the fishing village of Steenberg's Cove, which is one of the earliest fishing villages which has always had strong links with inland communities like Mamre and the fishers from Mamre have always come to fish here.

93 I refer the Court to annexure "FA11" which records the high level of dependence on fishing for the livelihood of communities on the West Coast. That data is

confirmed in the confirmatory affidavit of Mr Brett Pringle, which will be filed together with this affidavit.

94 For the fishing communities of the West Coast, who became known as predominantly 'Coloured' during the colonial and apartheid years, our heritage of fishing is a definitive part of our culture and the culture of this region of the Western Cape. In fact I always wonder why this cultural heritage is not formally recognised as the history books are filled with stories about the importance of this part of the Cape, the tourism industry in the Western Cape uses our West Coast fishing culture to attract tourists from far and wide and even our architecture is copied by property developers and holiday makers who have bought up much of the coastal land that our forefathers owned. Recreational fishing and the fishing culture of the West Coast has been the mainstay of the economies of many of the towns along this coastline.

95 We continue to practice many of the old traditions that reflect the importance of the sea in our lives and our culture. For example, the customary practice of blessing the fishing boats at the start of each fishing season continues. In my circle of fishermen, and with the crew with whom I work, when a fisher passes away we will always go down to the edge of the sea to bid our farewells and ask God to take that fisher home. We light candles and place them on the water and know that the soul of that fisher is going home. For many of us, the sea is our spiritual home. It is what makes us, and is everything that we are. In my culture, we say "die kinders kom van die see", which means that the children have been nurtured and fed, literally, from the sea.

96 I was brought up knowing that to be a fisher means to provide for one's family and one's community. I was taught by my grandparents that if we give generously to our neighbours who have not got fish, the ocean will give back to us. This is a value that has been entrenched in the fishing communities of the west coast and can still be seen in the tradition of sharing of fish, particularly harders and snoek, across households and communities. During snoek season the coastal communities share their fish with their relatives living on farms in the wheatlands and districts of Malmesbury, Picketberg, Lutzville. Sharing of fish is a custom that runs very deep in our culture. Although this has been affected by modern ways of living and also the poverty of many fishers, it still continues today. Especially at Christmas and during the snoek season. It is custom for West Coast fisher households to swap fish for vegetables or other goods. This reciprocity is a West Coast value.

97 Living close to the sea, living with the sea and sharing what we get from the sea is a custom and a value that I was taught as a child. I see now that with COVID, and climate change, the world is realising that people everywhere should live in harmony with nature and live a more simple life, buying their food from people who produce it locally. We have been approached by famous Chefs and restaurants who want to buy local, to buy West Coast fish. Our local fish is now becoming more famous than ever. There is even a South African mobile APP called ABALOB that is now world famous that will tell a tourist which one of us caught the fish that he is eating on his plate in Cape Town and will show them a picture of us and a map of where Steenberg's Cove is along the West Coast. This is funny to us as we have always eaten locally and have always lived with nature, with the sea.



- 98 Small-scale traditional, artisanal fishers in the Western Cape have played a critical role in the struggle against apartheid and in the struggle for democracy in South Africa. The fishing industry in this country is synonymous with the dispossession of the rights of the peoples of the West Coast. Many of the communities of the West Coast were dispossessed of their land and their livelihoods were controlled by racially based spatial planning and fishing laws.
- 99 Prior to 1994, small-scale and subsistence fishing were not legally recognised in the fishing laws of this country. Black and Coloured fishers had to work for white owned fishing companies. Many of the traditional fishers provided the labour that enabled the fishing industry in this country, based on the West Coast, to become the world famous fishing industry that it has become. In fact the coastal communities of this country still provide most of the labour for our fishing industry along this coastline.
- 100 The West Coast, St Helena Bay where Steenberg's Cove is located, has been and continues to be the heart of the commercial fishing industry. The Irving and Johnson (I&Js) and Oceana's and Sea Harvests were all based along the West Coast. St Helena Bay is regarded as where it all began as it grew into the home of the pelagic fishing industry. It is still the home of pilchards and sardines, of the iconic tinned fish for which South Africa's fishing industry is famous.
- 101 Post apartheid, when the new democratic government came in, they ignored us artisanal smallscale fishers and the new MLRA only made provision for the commercial recreational and subsistence fishers. In fact for the past 100 years we have been ignored and marginalised and this continues today. We are still waiting for our rights however in 2004 small-scale fishers up and down the West

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Coast started protesting and highlighting our plight as we were excluded from the new fishing rights allocation policy which discriminated against small-scale artisanal fishers and catered mainly for the large, commercial industry.

102 In 2005 Masifundise Development Trust, an NGO working with rural coastal communities and the Legal Resources Centre, supported us in taking our case to the Equality Court and the High Court. We told the Equality Court that the fact that the MLRA does not recognise small scale fishers is not only discriminatory, but infringes upon our rights to food, to freedom of trade and to culture. In 2007 the Equality Court ordered the then Minister of Environment and Tourism who was responsible for fishing rights allocation to develop a new policy that would recognise our social and economic rights.

103 The development of the policy was a very rigorous and participatory process that took many years. The Small Scale Policy was finally gazetted in 2012, and the MLRA amendment to recognise small scale fishers expressly in 2014.

104 Unfortunately, the implementation has been painfully slow and riddled with corruption and other problems, and today the Western Cape small scale fishers are still on the Interim Relief permits that the Court granted us in 2007 pending the implementation of the framework that will finally recognise and secure our social and economic rights.

105 While we still await that day that we will finally have the recognition we have struggled for, it now looks like our ocean will be carved up and handed out to companies before we get to access it. Like Carmelita Mostert of Saldana says in

her affidavit, it looks like when they finally give us a plate there will be no food on it.

106 We are still awaiting recognition of our rights however the process has started and the second respondent Minister of DFFE has allocated small-scale fishing rights to over 100 small-scale fishing co-operatives and in the Northern Cape, two of the small-scale fishing co-operatives are fishing in terms of these rights. While we are still fishing on our interim relief permits, our access rights have been recognised and my application as a small-scale fishers was successful.

107 In terms of our interim relief permits, and as small scale communities, we are granted baskets of species according to where we are located and other factors taken into account by the Department of Forestry, Fisheries and the Environment. Many of us on the West Coast can access traditional line fish species. In fact, the second respondent, in the 2020 Status of the Fisheries: Traditional Line Fish report prepared by the Department of Forestry, Fisheries and the Environment (an extract of which is attached as annexure "FA12"), stated that "the traditional, commercial linefish rights expire in 2020 and the small-scale fishing sector will be given priority in the subsequent linefish rights-allocation process" (p37 my emphasis). The Department of Forestry, Fisheries and the Environment thus proposed an increase in the fishing allowances granted to small-scale fishing from 13% to 50% commencing in 2021 in order to boost economic possibilities for coastal communities. It is therefore incomprehensible why the EMP, while at least mentioning 'low' impact on traditional line fishers, ignore the small scale sector entirely.

108 The fishers of the West Coast have always traveled far and wide up and down our West Coast, 'chasing the fish' to enable our livelihoods and provide food security for our communities. The snoek season is part of this tradition. Fishers from all over the Cape migrate to the coast and as the snoek migrates down our coastline every season, from Port Nolloth to Lamberts Bay, to Elands, to Ysterfontein and down to the Cape Point. Hundreds of fishermen catch this fish which has become the staple food of many of the communities not only along this coastline but also on the Cape Flats. Snoek is famous – not only for being rantsoen vis that was sent to Mauritius to feed the workers there but also for being sold by the 'smous' (marketer) in the old days throughout the region. To this day the snoek sellers of the Cape can be found on many street corners in Cape Town during the snoek season. Not only do many fishermen of the Cape feed their families with snoek, but many women make a living from '*vlekking snoek*' and tourists come to our landsites and traditional harbours such as Kalk Bay, Lamberts Bay and St Helena Bay to watch the speed at which West Coast fisher women gut and clean these fish, known as '*vlekking*' the fish. As Rosie Shosola explains in her supporting affidavit, the snoek run is the lifeblood of the Lamberts Bay community. This is a tradition and custom that is also an inseparable part of our culture as West Coast Coloured people.

109 In general we travel between 20-30 km offshore to catch snoek during the months from about March to September. Some years the snoek season is longer and it can stretch from the end of February to the end of November. This year it was particularly long and some crew even caught snoek as late as December.

- 110 The snoek migrates along our coastline – straddling and starting in Namibia and hits Port Nolloth first at the beginning of the season and then travels south, along the coastline – offshore. It goes to Doringbaai, Lambertsbaai, Elandsbaai and then comes towards St Helena Bay, then off Dassen Eiland we catch a lot, off Saldanha and then towards the Cape Point. It then turns around and sometimes travels back up. In the latter part of the season we often find the females with roe, showing us that it is now breeding.
- 111 The fishers with whom I fish have a deep knowledge of the ocean ecosystem. I know that like me, this knowledge has been passed down over several generations of fishers. We know the sea in so many ways: we can tell what fish will be available by looking at the sky, by smelling the wind, by feeling the wind against our faces. We know this West Coast and the way that sea and the weather interact here as if it was part of us.
- 112 The fishers from Steenberg's Cove know St Helena Bay like a farmer knows his land. We know each rock and reef, we know the curl of the waves in different places and how different winds shape the waves and the currents at different times of the tide and seasons. We get a lot of mist along our coastline. Often we have to navigate our boats home in thick mist with not more than a metre's visibility in front of our boats yet the traditional line fishers from my village, like their forefathers, have learnt to find their way on the water in these conditions. We have learnt to judge the depth of the water from its colour and the sound of the waves, we know this territory because it is part of us. This traditional knowledge is part of our culture, it is who we are. We did not learn this knowledge

at university but as a culture, the West Coast traditional fishers hold the knowledge of generations of ocean guardians

THE SEISMIC SURVEY

113 I was not consulted about the application by Searcher for a reconnaissance permit. I did not know about the application at all.

114 I have been very aware of some of the other mining applications along our coast although I have not been contacted directly by the consultants for these companies but through my contact with several researchers and support organisations, such as the One Ocean Hub research team at UCT, I have been informed about several mining applications in our waters. For example, I am very concerned about the Belton trading application and recently there was an application for a floating gas station that would have been right in the middle of our fishing grounds in St Helena Bay. I heard about the TOSACO oil and gas application in 2021 from the fishers in the Northern Cape on social media as they were very worried about how this would impact their fishing and so I was also worried knowing that it would then also affect the snoek.

115 As a fisher leader, I have been warning the government for years that their neglect of including us as small scale fishers in their planning processes and their decision-making over the ocean will end in the destruction of our sector. In the public hearings on the Marine Spatial Planning Bill in 2017, I told the committee that the proposed Bill

seeks to further dispossess small scale fishers and small scale fishing communities [...] You come here with a presentation telling us that one economy

is more important than the other. So what you mean is that if our government decides that the gas and the oil economy is more important than the fishing economy — and we are already seeing this happening outside here — that the fishing economy will cease to exist. That is what this bill is telling me. [...] The constitution demands that you consult with the public and now that you have, will it actually be taken into consideration? I don't think so because we have made hundreds of submissions before Parliament. We have written hundreds of thousands of words of public comments and nowhere do we see any movement happening for the betterment of the lives of small scale fishers. [...] So where are we going to fish? You come, you consult, you tick your box, you leave and it doesn't matter because we don't see you again. Yet the decisions you make have a huge impact.

116 My comments were recorded in a Groundup article attached marked **FA13**.

117 I also warned the drivers of Operation Phakisa and the Ocean Economy Master Plan at a meeting on 7 July 2021 that

we are very worried as small-scale fishers that we have not been part of this process up to now and that we are only now being allowed to participate in this process [...in which] everything in this Ocean Economy Master Plan has been put forward to us in a very very fast manner. What we are seeing already is that there is a huge disconnectthe small scale fishing policy has been there for many many years but we do not see the same amount of speed [in implementing that] than how you are going about implementing this Ocean Economy Master Plan [...] it continues to worry me as a small scale fisher. Where will we end up? Are we going to be murals for people to look at and to say there was once a

thriving small scale fishing sector, but due to the OEMP, due to the Marine Spatial Planning Bill, due to Operation Phakisa, it no longer exists? Is this what we want to be left with? [...] I want us to stop there and to take stock of what is happening and how fast and how far you have gone without the fishers [...].

118 However I did not know anything about this Seismic Survey planned by Searcher.

I heard about it on a whatsapp group with other fishers that I am on that is organised by the One Ocean Hub Coastal Justice Network. Later I heard that my mother, as a member of my fisher organisation, the collective, was on a list of persons that the company says they consulted but my mother says she did not notice any email or sms from this company. A confirmatory affidavit deposed to by my mother will be filed soon after the launch of this application.

119 I saw the map of the proposed area on whatsapp and I was shocked as I saw immediately that this overlapped with our key fishing areas for species such as snoek. I am extremely concerned as to what the impact of this survey will be. I am very frustrated that we have not been consulted as this survey will impact all aspects of our fisheries.

120 I have observed that many of the developments along our coastline and at sea have a huge impact on the ocean. I have noticed many changes in the climate that are now also impacting our fisheries. The changes in the wind direction have a big influence on our catches, it influences the currents and how close to the shore the fish swim and the abundance of fish. It influences the number of days we can go to sea.

121 We are witnessing the impact of large scale industrial developments along our coast and increasingly, in our waters. We believe that this will have a lasting negative impact on our fish stocks that we depend on for our food and livelihoods. We know that our snoek will be impacted by seismic noise and it will alter the course of the snoek, especially during these important months of summer and autumn. We cannot afford for our snoek catches to be impacted. This is a risk that must be avoided as it will impact all the fishing communities and the many people who depend on the snoek value chain for their livelihoods.

122 Not only does this pose a risk to the actual catching of our fish, but it poses a risk to our culture and who we are as fishers of the West Coast. Our ability to feed our families and our communities, to extend a helping hand to our neighbours who are struggling, depends on us having a good catch. If we cannot continue this custom, it will impact not only the physical health of our communities, but also the social fabric and customs that make up who we are as a people. For this reason we do not understand why our government is giving permits that will impact our way of life and our livelihoods negatively and we do not understand why we are not consulted about this.

THE APPLICABLE LEGAL FRAMEWORK

The relevant constitutional rights

123 The following constitutional rights are central to the determination of this application:

123.1 Section 9 of the Constitution, which entrenches the right to equality.

Searcher's engagement with the well-resourced, predominantly white,

commercial fishing sector and the failure to engage with the poor, under-resourced, predominantly Coloured small scale fishers amounts to unfair discrimination against the applicants.

123.2 Section 24 of the Constitution, which provides that everyone has the right to an environment that is not harmful to their health or well-being and to have that environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that -

123.2.1 prevent pollution and ecological degradation;

123.2.2 promote conservation; and

123.2.3 secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

123.3 Section 27(1)(b) of the Constitution, which entrenches the right of access to sufficient food and water. The Seismic Survey constitutes a regressive measure that would have the effect of diminishing the enjoyment of the right to food, particularly in respect of fishing folk and communities who rely on the ocean as their primary food source.

123.4 Section 30 of the Constitution, which provides that everyone has the right to use the language and participate in the cultural life of their choice.

123.5 Section 31 of the Constitution, which provides that persons belonging to a cultural, religious or linguistic community may not be denied the right with other members of that community -

123.5.1 to enjoy their culture, practice their religion and use their language; and

123.5.2 to form, join and maintain cultural, religious and linguistic associations and other organs of civil society.

123.6 Section 33(1) of the Constitution, which provides that everyone has the right to administrative action which is lawful, reasonable and procedurally fair.

The relevant statutory provisions

The National Environmental Management Act

124 NEMA was enacted to give effect to section 24 of the Constitution. To this end, section 2 of NEMA sets out the principles of national environmental management, which principles inform the interpretation and application of NEMA and all other legislation that regulates environmental management:

124.1 The disturbance of ecosystems and loss of biological diversity is to be avoided or, where they cannot be altogether avoided, are minimised and remedied (section 2(4)(a)(i));

124.2 Pollution and degradation of the environment are to be avoided or, where they cannot be altogether avoided, are minimised and remedied (section 2(4)(a)(ii));

124.3 The disturbance of landscapes and sites that constitute the nation's cultural heritage are avoided or, where it cannot be altogether avoided, is minimised and remedied (section 2(4)(a)(iii));

124.4 A risk-averse and cautious approach is applied, which takes into account the current knowledge about the consequences of decisions and actions (section 2(4)(a)(vii)); and

124.5 The negative impacts on the environment and on people's environmental rights are anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied (section 2(4)(a)(viii)).

125 Section 2(4)(f) of NEMA further provides that the participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured.

126 In terms of section 2(4)(g), decisions must take into account the interests, needs and values of interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.

127 Finally, section 2(4)(i) requires that the social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment.

- 128 Section 24 of NEMA regulates environmental authorisations, the purpose of which is to give effect to the general objectives of integrated environmental management. Accordingly, the requirement for environmental authorisation for certain activities enables the proper consideration, investigation and assessment of the potential consequences and impacts of certain activities on the environment.
- 129 Section 24(2)(a) of NEMA empowers the Minister of Mineral Resources, or a Member of the Executive Council with the concurrence of that Minister, to identify activities that may not commence without environmental authorisation from the competent authority. These activities are referred to as "listed activities".
- 130 In terms of section 24F(1)(a) of NEMA, no person may commence a listed activity unless the competent authority has granted an environmental authorisation. The import of this provision is that, even where an entity holds a permit to conduct a particular activity (in this case, the permit granted to Searcher), that activity may not commence without environmental authorisation.
- 131 Item 21B of Listing Notice 1 provides that environmental authorisation is required prior to the commencement of *"any activity including the operation of that activity which requires a reconnaissance permit in terms of section 74 of the Mineral and Petroleum Resources Development Act, as well as any other applicable activity as contained in this Listing Notice or in Listing Notice 3 of 2014, required to exercise the reconnaissance permit, excluding (a) and desktop study; and (b) any aerial survey."*

132 Item 21B was introduced into Listing Notice 1 through an amendment to the EIA Regulations that took effect on 11 June 2021. This does not affect Searcher's obligation to obtain environmental authorisation prior to the commencement of the Seismic Survey. This obligation arose at the time that Listing Notice 1 was amended and must be complied with before Searcher commences the Seismic Survey.

133 In terms of section 24F, read with section 49A, of NEMA, it is an offence to commence a listed activity without having obtained environmental authorisation, and a person found guilty of such an offence is liable to a fine not exceeding R10 million, or to imprisonment for a period not exceeding 10 years, or to both such fine and imprisonment. Additional penalties may be imposed in terms of section 34 of NEMA.

134 The process for applying for environmental authorisation is set out in Chapter 4 of the EIA Regulations. For Listing Notice 1 activities, a basic assessment process must be followed. Regulation 19, which applies to the submission of basic assessment reports and supporting documents, requires applicants to submit to the competent authority -

134.1 a basic assessment report, inclusive of any specialist reports, an EMP, a closure plan in the case of a closure activity and where the application is a mining application, the plans, report and calculations contemplated in the Financial Provisioning Regulations, which have been subjected to a public participation process of at least 30 days and which reflects the incorporation of comments received, including any comments of the competent authority; or

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134.2 a notification in writing that the relevant documents will be submitted within 140 days of receipt of the application by the competent authority, as significant changes have been made or significant new information has been added to the documents which changes or information was not contained in the original documents consulted on during the initial public participation process and that the revised documents will be subjected to another public participation process of at least 30 days.

135 Regulation 40 of the EIA Regulations provides that the purpose of public participation is to provide access by all potential or registered interested and affected parties to all information that reasonably has or may have the potential to influence a decision with regard to an application, and to allow all interested and affected parties a period of at least 30 days to submit comments on all of the documents.

136 In terms of Regulation 40(3), while an entity applying for environmental authorisation has discretion whether to provide an opportunity for comment prior to the submission of an application, there is no discretion around the duty to consult meaningfully once the application has been submitted; the requirement of public participation is peremptory.

137 As I address below, Searcher has not applied for environmental authorisation for the Seismic Survey, nor has it conducted any public participation process in terms of NEMA.

The Mineral and Petroleum Resources Development Act

138 In addition to the public participation obligations arising from NEMA in the context of an application for environmental authorisation, the MPRDA also imposes an obligation on applicants for reconnaissance permits to consult with interested and affected parties. There are two aspects to this obligation:

138.1 The first is section 5A, which prohibits the conduct of reconnaissance operations without, inter alia, environmental authorisation. In terms of section 38A(2), an environmental authorisation issued by the Minister of Mineral Resources and Energy prior to the issuing of a permit or the granting of a right in terms of the MPRDA. This environmental authorisation is to be secured in terms of the EIA Regulations, which I have outlined above;

138.2 In addition, section 74(4) of the MPRDA obliges the designated agency that receives an application for a reconnaissance permit (in this case, PASA), to notify the applicant for a reconnaissance permit to consult, inter alia, with any interested and affected party and to include the result of the consultation in the relevant environmental reports required by NEMA.

139 The discharge of the obligation in terms of section 74(4) of the MPRDA to consult with interested and affected parties, is directly relevant to sections 75(1)(c) read with section 75(2) of the MPRDA:

139.1 In terms of section 75(1)(c), two of the prerequisites for the issue of a reconnaissance permit are that the reconnaissance will not result in



unacceptable pollution, ecological degradation or damage to the environment, and that environmental authorisation is issued.

139.2 Section 75(2) of the MPRDA provides that the Minister of Mineral Resources must refuse to issue a reconnaissance permit if any of the requirements set out in section 75(1) is not met.

140 It follows that -

140.1 Searcher bore a duty to consult with interested and affected parties in the course of its application for a reconnaissance permit, the process of which incorporates an application for environmental authorisation (and the associated public participation obligations as outlined above); and

140.2 The Minister of Mineral Resources was obliged, in the absence of environmental authorisation and in the absence of a meaningful consultation process, to refuse to grant the Reconnaissance Permit.

141 Section 96 of the MPRDA grants a right of appeal against any decision taken in terms of the MPRDA to any person whose rights or legitimate expectations have been materially and adversely affected by the decision. The appeal is to be lodged within 30 days of the appellant becoming aware of the administrative decision. This provision allows for an appeal against the decision to grant the Reconnaissance Permit in terms of section 74 of the MPRDA.

142 Section 7(2)(c) of the Promotion of Administrative Justice Act 3 of 2000 ("PAJA") provides an exception to the obligation to pursue internal remedies and states that a court or tribunal may, in exceptional circumstances and on application by

the person concerned, exempt such person from the obligation to exhaust any internal remedy if the court or tribunal deems it in the interest of justice.

143 In addition, section 90 of the MPRDA empowers the Minister of Mineral Resources to cancel or suspend a reconnaissance permit in accordance with the procedure prescribed in section 47 of the MPRDA.

144 Section 47(1) provides that the power to suspend or cancel a reconnaissance permit may be exercised where the holder of the permit -

144.1 is conducting any reconnaissance, prospecting or mining operation in contravention of the MPRDA;

144.2 breaches any material term or condition of such right, permit or permission;

144.3 is contravening any condition in the environmental authorisation; or

144.4 has submitted inaccurate, false, fraudulent, incorrect or misleading information for the purposes of the application

145 I now turn to provide a brief overview of the relevant international law obligations.

South Africa's obligations arising from international law

146 South Africa is bound by a number of international human rights law instruments and principles of customary international law, which must be taken into account in interpreting and applying the respondents' legal obligations. These include the following:



146.1 The right to *“the enjoyment of the highest attainable standard of physical and mental health”* in terms of article 12(1) of the International Covenant on Economic, Social and Cultural Rights (“ICESCR”). It is widely recognised, including in article 12(2)(b) of the ICESCR, that the right to health extends beyond access to health care services to include the underlying determinants of health, including healthy environmental conditions;

146.2 The right to food, which is entrenched in article 11 of the ICESCR, as part of the right to an adequate standard of living. Article 11(2) specifically recognises the right to be free from hunger and imposes a series of obligations on state parties to achieve this right;

146.3 The right to work (as opposed to the rights at work), which are protected by articles 6 to 8 of the ICESCR. These provisions explicitly include the right of everyone to gain a living by work that they freely choose or accept, as well as a right for all people to make a decent living for themselves and their families through their work. This right is a precondition for the enjoyment of other fundamental rights, as well as being an inherent part of the right to dignity. This right applies to all workers in all settings, in both formal and informal employment sectors. The right to work is also guaranteed under the African Charter on Human and People’s Rights;

146.4 The right to take part in cultural life, in terms of Article 15(a) of the ICESCR;
and

146.5 The right to a clean, healthy and sustainable environment. Although this right is not explicitly recognised in an international treaty, This is protected under customary international law.

147 The South Africa government is further bound by a number of duties arising from instruments governing specific aspects of the environment, including the following:

147.1 The Convention on the Conservation of Migratory Species of Wild Animals, South Africa is bound in terms of article II section 4(b) to prevent, remove, compensate for or minimise threats to the movement of more than 50 marine and coastal species, including fin whales, sei whales, humpback whales, south Atlantic right whales, loggerhead turtles and leatherback turtles. As I address below, several of these species will be adversely affected by the Seismic Survey;

147.2 The Convention on Biological Diversity, which mandates states parties to *“regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use.”* State parties are further mandated to *“promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas”* (article 8);

147.3 The Convention Concerning the Protection of the World Cultural and Natural Heritage. South Africa became a party to this convention in 1997 and bears obligations to protect its ten inscribed world heritage sites,

including the Cape Floral Region (including the Langebaan Lagoon), which is a UNESCO World Heritage Site. The Operational Guidelines for the implementation of this convention inform the designation and protection of world heritage sites, prescribing that parties *"shall ensure that Environmental Impact Assessments, Heritage Impact Assessments, and/or Strategic Environmental Assessments be carried out as a prerequisite for development projects and activities that are planned for implementation within or around a World Heritage property"*;

147.4 Article 1 of The Convention for the Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region ("**Abidjan Convention**") outlines the convention's geographical coverage, which is "the marine environment, coastal zones and related inland waters falling within the jurisdiction of the States of the West and Central African Region, from Mauritania to Namibia inclusive..." of the contracting parties. South Africa is a contracting party.

147.5 Article 13 of the Abidjan Convention states:

"As part of their environmental management policies, the Contracting Parties shall develop technical and other guidelines to assist the planning of their development projects in such a way as to minimize their harmful impact on the Convention area.

"Each Contracting Party shall endeavour to include an assessment of the potential environmental effects in any planning activity entailing projects within its territory, particularly in the coastal areas that may cause substantial pollution of, or significant and harmful changes to, the Convention area.

"The Contracting Parties shall, in consultation with the Organization, develop procedures for the dissemination of information concerning the assessment of the activities referred to in paragraph 2 of this article."

147.6 The Benguela Current Convention "is a multi-sectoral inter-governmental initiativeinter-governmental, initiative between Angola, Namibia and South Africa. It promotes the vision of the Benguela Current Large Marine Ecosystem... sustaining human and ecosystem well-being for generation after generation."

147.7 This convention also states that an EAIA must be undertaken if there are likely adverse impacts on the marine and coastal environment. Article 4 outlines the general General Principles:

1. The Parties shall be guided by the following principles:
 - (a) The cooperation, collaboration and sovereign equality principle;
 - (b) sustainable use and management of the marine resources;
 - (c) the precautionary principle;
 - (d) prevention, avoidance and mitigation of pollution;
 - (e) the polluter pays principle; and
 - (f) protection of biodiversity in the marine environment and conservation of the marine ecosystem.
2. In giving effect to the objective of this Convention and to the principles in paragraph the Parties shall -
 - (a) take all possible steps to prevent, abate and minimise pollution and take the necessary measures to protect the marine ecosystem against any adverse impacts;
 - (b) undertake environmental impact assessment for proposed activities that are likely to cause adverse impacts on the marine and coastal environments;
 - (c) apply management measures based on the best scientific evidence available;
 - (d) establish mechanisms for intersectorial data collection, sharing and exchange thereof;
 - (e) where possible, reverse and prevent habitat alteration and destruction;
 - (f) protect vulnerable species and biological diversity; and
 - (g) take all possible steps to strengthen and maintain human and infrastructural capacity.

147.8 The International Whaling Convention, which recognises the importance of sound for the survival of cetaceans and the physical and behavioural damage that may be caused by anthropogenic underwater noise. This



convention specifically recognises the applicability of the precautionary principle and the obligation to reduce the effects of underwater noise despite their not being full scientific certainty as to its effects.

THE INTERDICTION AGAINST THE SEISMIC SURVEY IN THE WILD COAST

148 On 28 December 2021, the Makhanda High Court granted an interim interdict against a seismic survey that was underway in the Wild Coast of South Africa. The seismic survey was to be conducted by Shell Exploration and Production BV as the operator of an exploration right held by Impact Africa Limited. For ease of reference, the respondents in that application are referred to herein as “**Shell**”.

149 As is the case in these proceedings, Shell had not consulted with all interested and affected parties and had therefore not taken into account the irreparable harm that would arise from its seismic survey. The anticipated harm, as in the case of the Seismic Survey to be conducted by Searcher, was extensive, affecting marine and bird life as well as the spiritual and cultural rights and the livelihoods of communities living in the Wild Coast and dependent on the sea for the exercise of their rights. The mitigation measures that Shell had included in its EMP were wholly insufficient to address the harm that would arise.

150 The Makhanda High Court emphasised the importance of meaningful consultation, which must provide a real opportunity to interested and affected parties - including the holders of customary fishing rights - to make informed representations. Shell's failure to follow an adequate process of meaningful consultation, the Court held, would render its exploration right unlawful and

invalid and formed the basis for the award of an interim interdict pending, inter alia, an application for the review of that right.

151 In the light of the irreparable harm that would likely arise and in the light of no alternative remedy, the Court found that the balance of convenience favoured the applicants and ordered Shell to cease its seismic survey.

152 A copy of the judgment of the Makhanda High Court is attached as **FA14**.

THE ANTICIPATED IMPACT OF THE INTENDED SEISMIC SURVEY

153 The assessment of cumulative impacts is required in terms of the NEMA EIA Regulations, 2014 and would be a requirement of any specialist study that was part of an EIA and/or EMP.

154 In outlining these impacts for the Court, the applicants rely on evidence from the following experts:

154.1 Prof Merle Rozanne Sowman, who assesses the EMP's analysis of the cumulative impact of the Seismic Survey;

154.2 Dr Alexander Winkler, who deals with the anticipated impact of the Seismic Survey on fish fauna;

154.3 Professors Harris, Olbers and Wright, who address the physiological and ecological impacts of seismic survey activities on marine wildlife, with

specific reference to the Reconnaissance Permit area and the vulnerable and endangered species known to occur in that area;

154.4 Prof Moeniba Isaacs, who addresses the political and social issues faced by small-scale fishing communities, including the impact of the Seismic Survey on livelihoods and food security;

154.5 Dr Alistair McInnes, writing on behalf of BirdLife South Africa, who deals with the impact of the Seismic Survey on important threatened seabird populations;

154.6 Dr Lynne Shannon, who considers the anticipated effect of the Seismic Survey on zooplankton;

154.7 Prof Colleen Moloney, who provides further insight into the impact on zooplankton; and

154.8 Terry Mackenzie How, who provides an opinion on how the EMP deals with the sound from the seismic source.

155 In her supporting affidavit, Professor Merle Rozanne Sowman highlights that the cumulative impacts on the seismic survey in the context of past, current and planned seismic surveys have not been adequately assessed in the draft EMP nor the accompanying specialist studies. In relation to the assessment of the

cumulative impact, Sowman observes that the specialist reports deals with this impact on a very superficial level - in that there is no mention of other specific activities in the affected area or any explanation regarding what other activities were considered and how the assessment was undertaken and the ratings determined.

156 Furthermore, the fisheries specialist considered cumulative impacts only in terms of concurrent activities and only in relation to other possible seismic surveys in this impact rating.

157 Moreover, Professor Sowman attaches a map which shows the overlap of various other exploration, oil and gas production activities as well as prospecting and mining activities taking place and that this was not given due weight in the two specialist reports she assessed. In her expert opinion, the EMP does not reflect an adequate understanding and assessment of the nature, extent and significance of these cumulative environmental impacts of the seismic survey.

158 Professor Sowman also indicates that in the EMP and relevant specialist studies, the information used to inform the cumulative impact assessment is limited and does not provide a reliable assessment of the "the total impact that a series of developments, either present, past or future, will have on the environment within a specific region over a particular period.

159 Professor Sowman states the EMP does not reflect an adequate understanding and assessment of the nature, extent and significance of cumulative environmental impacts associated with SEARCHER's 2D and 3D seismic survey. It is only when the cumulative impacts of all these activities in the same

geographical marine area have been assessed and evaluated, will it be possible to determine impact significance with any confidence and assess what mitigation measures are possible and feasible to meet statutory obligations in terms of NEMA.

160 Consequently, Professor Sowman submits that there is inadequate and insufficient information on which to base a decision which would ensure that the requirements of the environmental right (section 24 of the Constitution) and the NEMA principles and EIA Regulations would be satisfied.

Marine Life and the birds

161 A report prepared by experts Harris et al, which is filed with this application, examined Searcher's draft EMP – despite the paucity of information available at this juncture – and concluded:

"Based on peer-reviewed scientific literature, it is clear that physical damage to marine animals... have been directly linked to the kind and level of sound emitted during this nature of seismic surveys. (Page 2 of the Harris Report, beginning at line 1.)

162 In particular, Harris et al say the damage may include: *"soft tissue trauma damage, embolisms, damage to organs used in balance and orientation, concussions, haemorrhaging, decompression sickness and both temporary and permanent threshold shifts to hearing ability have been directly linked to the kind*

and level of sound emitted during this nature of seismic surveys." (Page 2 of the Harris Report, beginning at line 2.)

163 Further, Harris et al explain that marine animals use sound in a variety of ways critical to their life cycles, with various physical and behavioural responses to acoustic disturbance having been documented, and submit that the Seismic Survey is likely to cause harm in the following ways (in addition to what I have referred to above):

163.1 there is plausible evidence to suggest that seismic survey activities are likely to affect the conservation status and recovery of populations of vulnerable and threatened species including IUCN Red list species such as humpback and southern right whales;

163.2 some species display physiological stress responses and behavioural changes to seismic activities, which have negative impacts on the survival of individuals as well as the overall population growth and survival of a species, especially for threatened species that are already at risk of extinction;

163.3 evidence suggests that there are distinct avoidance responses in marine mammals, likely to affect the "fitness" of an affected animal;

163.4 there is a genuine conservation concern for beaked whales, that are particularly sensitive to anthropogenic noise, including seismic surveys;

163.5 The only existing field study in South Africa of seismic activities in our waters showed that the endangered, endemic African penguin avoided

preferred feeding sites when a seismic survey was active nearby. This is of particular concern as the species has had a 70% decrease in numbers over the past decade, is stressed by prey depletion, and for which the prospect of extinction is significant;

163.6 The phenomenon of energy-cost (from stress and avoidance behaviour) is of particular concern for some of the species expected to be encountered in the survey area (particularly the humpback whales and southern right whales) who are at risk of the airgun noise affecting their behaviour or interfering with the communication between mother and calf, which could impact on their condition and affect their survival during a vulnerable time (especially for lactating mothers and their calves) on their long migration to feeding grounds in Antarctica.

163.7 Research has shown significant mortality in zooplankton up to 1.2 km away from a survey array, raising concern that a 500 m buffer for other animals there are unable to move away from the sound is far too small to ensure that damage is not inflicted, even if they were able to evade it.

163.8 A key concern in respect of impacts on fish assemblages is a lack of research focused on confounding effects and multiple stressors, therefore potential impacts of seismic surveys that have been previously identified may be reflective of underestimation or overestimation and would depend on the type of interaction. I note that this reiterates the importance of considering the cumulative impact of several reconnaissance, exploration and mining activities in the same area.

163.9 Since 10 September 2021, thousands of dead and/or dying Cape fur seals (*Arctocephalus pusillus pusillus*), have washed ashore along the south and west coasts. The cause of these die-offs remains unknown but malnourishment appears to be the most widely accepted reason. Additional stress from seismic activity at this time is inadvisable. The EMP failed to mention this mass die-off event.

163.10 The proposed seismic survey activities are highly likely to both disturb and have an adverse effect on Marine Protected Areas (MPA), Critical Biodiversity Areas (CBA) and Ecologically or Biologically Significant Areas (EBSAs), and their associated fauna, situated adjacent to, within and surrounded by the reconnaissance permit area.

164 In respect of mitigation measures proposed in the EMP, Harris et al conclude as follows:

164.1 "Soft starts" as proposed for mitigation for seismic impacts are unlikely to be adequate for the many species that are prevalent in the area over the austral summer months and are unable to avoid the array or leave the area due to their lower mobility, such as smaller turtles, penguins, invertebrates, some fish species and zooplankton.

164.2 Monitoring studies show that even with trained observers up to 44% of humpback whales in an area went undetected, casting doubt on the effectiveness and success of Marine Mammal Observer (MMO) sightings of the largest species (humpbacks) as a mitigation measure, indicating that it is most likely that whales go undetected, the detection rate for



smaller species would be expected to be much lower, obviating the effectiveness of visual observations to prevent harm to these species.

164.3 The efficacy of Marine Mammal Observers (MMO) is likely to be low due to the nature of the offshore marine environment in the survey area (frequent high swells and winds affecting surface visibility), putting species who are missed by MMO's and PAM operators at extreme risk, particularly at night or during adverse weather conditions.

164.4 Reliance on PAM alone at night cannot be an effective mitigation measure given that reliance on Observers to do visual sightings to supplement the PAM monitoring during the day as a mitigation measure, and consequently that surveys should not occur between sunset and sunrise each day if a genuine attempt of maximum avoidance of cetaceans is the objective of this mitigation measure.

164.5 In the EMP, there is no reference or provision made regarding buffer areas around Marine Protected Areas, Critical Biodiversity Areas and Ecologically or Biologically Significant Areas or for areas identified with biological importance and significance. Therefore, it is assumed that the vessel can actively work within 1 km of the MPA boundaries, while ignoring EBSA's and CBA's altogether, thus giving no consideration to the biological importance of these areas or the likely impact at such close range. Although 2D surveys are proposed for these adjacent areas, the cumulative zone of impact for Permanent Threshold Shift (PTS) and Temporary Threshold Shift (TTS) for physiological injury is between 500 - 5000m respectively.

165 A number of the species occurring in the survey area, referred to in the EMP and in the report by Harris et al, are protected in terms of South African law, in addition to being "red listed" in international instruments. Under NEMBA, marine species that are threatened or protected are listed (GN 476 of 30 May 2017). This includes the leatherback sea turtle and the African penguin which are listed as critically endangered, and the loggerhead sea turtle which is endangered. Various species of whales are listed as protected. The State has a duty to protect these species and to ensure that activities authorised by it do not further endanger their survival.

166 In terms of the Threatened or Protected Marine Species Regulations, read together with section 57(2) of NEMBA and the species list, harassing of these listed species is a prohibited activity. Under the Regulations, "harassing" means "behaviour or conduct that threatens, disturbs or torments a live specimen of a listed threatened or protected marine species, including...". Based on the findings of the experts, I submit that seismic activities constitute harassment of these species and are unlawful.

167 Principal Researcher Lynne Shannon from the Department of Biological Sciences at the University of Cape Town, whose affidavit and report are filed with this application, indicates that the seismic survey will further endanger the already endangered african penguin that frequents the West Coast. These penguins have been shown to suffer disrupted foraging within 100km radius of the seismic activity.

168 Furthermore, Shannon notes that although the birds return to their favoured foraging areas once seismic activities cease, the longer-term impacts on the



birds (their stress levels, behaviour and implications of increased foraging effort required to fulfill nutritional requirements, and ultimately the influence these factors have on breeding success and survival) is not known. On this basis, she concludes that the poor knowledge available as to the extent of both species-level and ecosystem-level impacts of the proposed seismic activity, makes the adoption of the precautionary approach in this instance, crucial.

169 BirdLife South Africa has written a report dated 19 January 2022, which is filed with an affidavit by Dr Alistair McInnes with this application. In the report, BirdLife indicates that the behavioural avoidance by coastal diving seabirds has been understated by the EMP because the seismic area of influence overlap with foraging habitat and threatened seabird species and because of the timing and duration of the study.

170 Moreover, BirdLife indicates that the African Penguin, the Cape Gannet and the Cape Cormorant are listed in the Agreement on the Conservation of African-Eurasian Migratory, which obliges South Africa to take measures to restore populations of these species to a favourable conservation status, which includes prohibiting their harassment and deliberate disturbance that would be significant to their conservation.

171 However, they conclude, the mitigation measures suggested in the EMP "will not be effective in reducing the impacts" that they describe in their report.

172 Dr Alexander Claus Winkler provides an expert opinion, filed with this application, on likely effects and proposed mitigatory actions specifically related to linefish suggested by the EMP. He points out that the EMP did not include in-depth

scientific reviews of the effects of seismic surveys of fish that were published in 2017 and 2019.

173 A study published in 2021 in the Journal of Current Biology that highlights the direct lasting behavioural effects of seismic surveys on the rhythmic behavioural foraging patterns of cod in the North Sea, and this was not considered in the EMP.

174 He continues that the EMP accepts the possibility of direct impacts of local fish fauna but dismisses the potential direct effects on benthic species due to the depth at which they occur. The EMP thus fails to acknowledge and interrogate the potential secondary effects associated with fish behavioural disruption. They also don't acknowledge that both hake and snoek perform rhythmic diel foraging migrations off the seafloor at night and onto the sea floor during the day. Given that the survey will be conducted during both the day and night it is likely that these "benthic" fish species will migrate higher up the water column at night bringing them within distances that may expose them to direct injury and mortality impacts.

175 He concludes that there are some severe shortfalls in the EMP that are a consequence of ignoring new literature, technological advances and a growing global concern around the subtle indirect effects of noise pollution on marine ecosystems.

Acoustics

- 176 Mr Terry MacKenzie Hoy is a consulting acoustics engineer. He prepared a report assessing the EMP's analysis of the acoustic impact of the survey and its mitigation. It is filed with this application.
- 177 Mr Hoy indicates that, in his expert opinion, the indication by the EMP that sound from the seismic source towed behind the survey vessel travels in a linear form and disperses within the survey area., is misleading. In fact, he says, sound in the ocean is affected by pressure, salinity, temperature and temperature gradients and can travel many kilometers from the source.
- 178 He further finds that some of the mitigation measures will not be effective at all and others only partially effective, and thus that the mitigation measures will not reduce the impact of sound from the seismic gun on the marine life to the extent claimed.

Food Security

- 179 Professor Moenieba Isaac's affidavit, which will be filed together with this affidavit, indicates that snoek is one of the species of fishes that the small-scale fishers catch and that it provides income to sustain the community and it is also an important food source for the impoverished communities along the West Coast. In this regard, Professor Isaac highlights that snoek is an important food source and it is an excellent solution for food insecurity and malnutrition because it is rich in macro and micronutrients. Furthermore, snoek is a good source of protein for children as it is vital for their growth and their underdeveloped digestive systems often cannot process more starchy staple foods. Fish in the

human diet is essential to secure human health needs as it contains sufficient protein containing all essential vitamins.

180 Professor Isaacs concludes that granting the permit to conduct seismic surveys on the west coast will be at the expense of the livelihoods of impoverished and marginalised small-scale fishers as keystone species like snoek are critical to fisher livelihoods, income and food and nutrition security.

181 As is clear in the supporting affidavits that will be filed together with this affidavit, most of the fish that that small-scale fishers catch are for consumption and the remainder is for sale to the community. Fish is therefore a critical food source for families in the small-scale fishing communities.

Livelihoods

182 In a supporting affidavit to this application, the fourth applicant, Mr Wilfred Poggenpoel laments that the proposed activities by Searcher will significantly impact the lives and livelihoods of the fishing community in Lamberts Bay, where the fishing life has been going on for over 100 years. Mr Poggenpoel indicated that climate change has begun to change the ability to catch their fish and he is worried that the Seismic Survey will further impact the ability to catch and that the fishing industry on the West Coast could collapse. I hold similar concerns about the availability of fish in Steenberg's Cove and across the West Coast. In this regard it is important to note that the small-scale fishers from across the west coast are all reliant on the same snoek stock for our livelihoods,

183 **The** Seismic Survey planned for January to May coincides with the snoek, yellowtail, rock lobster and tuna season. Particularly in the case of snoek, they



would ordinarily swim directly through the Seismic Survey area and will likely try to avoid that area as a result of the Seismic Survey. This will have a profound impact on the snoek stock, and if we are not able to fish snoek to support ourselves and our families, the effect will be nothing short of devastating for our communities. To manage this impact, the small-scale fishing vessels would need to go further into the sea to look for the fish, which will increase the financial and safety risks of small-scale fishers, whose boats are not adequately equipped for the deep waters.

184 In another supporting affidavit, Ms Rosey Shoshola bewails about the seismic activity. She sets out how the sea is very important to her cultural life, livelihood and her identity. She emphasises that the sea enables her to make a daily living. To her, the sea is everything as it provides the community, including her, with food, with work for the adults as well as the youth.

185 She emphatically demonstrates in her affidavit that the sea is important especially to women, whose livelihoods poignantly This is important because of the high rates of unemployment in the country and the fact that people do not necessarily have transferable skills.

Cultural Rights

186 Mr Booysen indicates how he and his community are reclaiming their Khoi and San identity. Additionally, states that the ocean is not only important for fishing. It is also a spiritual place for the community. He emphasises that when children are sick, the elders take them to the sea for spiritual healing. In the sea, the elders cleanse the children in the sea waters and make them drink the water. He

believes that the sea heals their diseases. He recalls how he was taken to the sea by his grandmother and as a result has not suffered any illness. He attributes this to the healing provided for by the ritual in the sea.

187 Furthermore, he believes that the sea is sacred to them as his family members died at sea and they believe that the ocean is the resting place for their bodies and should be treated with the utmost respect and caution. He believes that the seismic activity will impact on these rights.

188 Mr Andrews in his affidavit tells the Court that the sea and its marine resources symbolise an important part of history and heritage. He explains his ancestors' traditions of building boats and fishing equipment for purposes of catching marine resources for survival of the community. The practice continues today and is closely connected with livelihood and gathering food.

189 Ms Shoshola accentuates the point even further. She articulates that the sea is very important in her culture. It is a healing medium. She continues and states that when people are in pain or wounded, they wash them in the sea water and it assists in restoring their health. To her, the sea is an inseparable part of her identity and the people of the West Coast.

190 This point about culture is typified by Mr Christiaan McKenzie in his supporting affidavit, where he says they grew up in the sea and that they were all brought up from the sea. He continues to say that the sea is in our veins, it is our blood.

191 Given the profound impact that the Seismic Survey will have on small-scale fishing and on the communities who rely on small-scale fishing for their livelihoods, the consultation process could not be complete without our

participation and input. This is borne out by the fact that the EMP contains incorrect information, arising precisely from the failure to consult us. The starkest example of this is the assessment in the EMP that there will be no impact on small-scale fishing. This is patently incorrect.

SEARCHER'S OBLIGATIONS AND FAILURE TO CONSULT

192 Section 75(1)(c) of the MPRDA further requires an applicant for a reconnaissance permit to establish that the reconnaissance activities will not result in unacceptable pollution, ecological degradation or damage to the environment and that environmental authorisation for the reconnaissance activities has been issued. The Environmental Impact Assessment Regulations, 2014, GN R982 in GG 38282 of 4 December 2014 (“**EIA Regulations**”) prescribe the public participation procedure that ought to be followed in applying for environmental authorisation.

193 In terms of section 75(2), the Minister must refuse to issue a reconnaissance permit if the applicant does not meet all of the requirements set out in section 75(1).

194 Accordingly, meaningful consultation is necessary as a self-standing requirement in terms of section 74(4) of the MPRDA as well as forming a fundamental part of the environmental authorisation process. In both processes, all interested and affected parties are to be afforded the opportunity to be heard. Searcher was therefore obliged to properly consult with interested and affected parties, which includes the appellants.



- 195 It appears from Annexure 3.4 of the EMP, attached here as annexure "FA18" of Searcher that there was consultation with South African Deep-Sea Trawling Industry Association, Irvin & Johnson, Capricorn Marine Environment (Cap Marine). in the form of a focus group.
- 196 From this, it can be seen that no-one from the small-scale fishing sector nor even the traditional line fish sector were included in this focused group.
- 197 I never received notification of the public participation process back in August 2021 and I did not receive the notification to the focus group which happened online on 26 August 2021 and this is the same for the co-applicants in this matter. The minutes of this meeting are attached to the EMP.
- 198 To this end, there was no consultation with all interested and affected parties and thus a failure to meet the requirements of public participation.
- 199 The purpose of the consultation is related to the impact of granting the reconnaissance permit. Further, it is to provide the community with the necessary information on everything that is to be done so that the community can make an informed decision in relation to the representation to be made.
- 200 Further the consultation process and its results is an integral part of the fairness process because the decision cannot be fair if the administrator did not have full regard to precisely what happened during the consultation process in order to determine whether consultation was sufficient to render the grant of the application procedurally fair.

201 We have been historically silenced by the government and the larger fishing industry and it is important through public participation that we are given a chance to be heard.

202 The right to be able to participate is constitutive of dignity as citizens, in that we know that we will not only have a chance to speak, but also enjoy the assurance that we will be listened to. This is especially important for us who feel politically and economically disadvantaged at present because we lack higher education, access to resources and strong political and commercial connections.

203 We were not given an opportunity to be heard. No consultation took place with us as small-scale fisheries.

INTERIM INTERDICT

204 This application seeks an urgent interim interdict in Part A pending an internal appeal and a review application in Part B. I demonstrate, below, that we meet the requirements for an interim interdict.

We have clear rights

205 The relationship that we have with the sea forms an integral part of our culture and our livelihood. Not only does the sea provide us with nutrition sustenance, it also allows us to provide for our families through the little income we can derive from fishing in the waters. Moreover, it allows us to commune and connect with our loved ones who once trod the same path as us.

206 Our relation to the sea is an important part of our lives and our identities and our fishing and harvesting practices, which strike an ecological balance between our



needs and the need to protect marine life. We have worked to maintain this harmonious relationship through generations in our families and our efforts continue to date.

Cultural Rights

207 Our rights to culture under sections 30 and 31 of the Constitution will be adversely affected by this proposed seismic survey. As discussed above, these cultural rights are fundamental to our identity.

Right to environment

208 Our rights in section 24 pertaining to an environment that is not harmful to our health and well-being will also be affected.

209 The proposed seismic survey will have an adverse effect on the environment. We have the right under section 31(1)(e) of NEMA to act in the interest of protecting the environment.

210 An important element to the right envisioned in section 24 of the Constitution includes an environment that is not harmful to our health.

Administrative Rights

211 Our rights to a just administrative action in section 33 of the Constitution will also be impacted. We believe that the reconnaissance permit was granted in contravention of NEMA and we will seek to review that administrative decision in Part B.



Right to Food

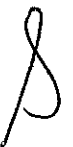
212 Moreover, our rights to access to food as protected by section 27(1)(b) will also be affected by this seismic survey.

213 We rely on our fishing expeditions for food, either directly from our catch, or indirectly through the income that we earn from selling our catch. While there is an obligation on the State to not interfere with our existing rights to access to sufficient food under section 27(1)(b) of the Constitution, the State also has an obligation to stop or, at a minimum, not grant permission to activities which will negatively impact our sources of food. Moreover, the respondent at a bare minimum has a negative obligation to not infringe upon the right provided for by the Constitution.

214 In this case, by allowing Searcher to blast the area where our fishing is carried out, and consequently, where our food is located, the State's action has impacted on our access to sufficient food.

215 Having granted Searcher the permission to blast this specific area where we obtain our food, the State is inadvertently and inevitably infringing on the rights enshrined in the Constitution as informed by its international obligations under the ICESCR.

216 Insofar as the states' actions constitute a regression of socio-economic rights, such a regressive step requires special justification.



Right to work

217 As fishermen, we inevitably rely on the sea to earn a livelihood. Our work and livelihoods are entirely dependent on the sea, to the extent that even a change in weather affects our ability to, and the amount we can earn. The sea is the source of life-saving sustenance.

218 Section 22 grants every citizen "the right to choose their trade, occupation or profession freely". Under its international obligations pursuant to the ICESCR, the right to work under section 22 should be read to specifically include "the right of everyone to the opportunity to gain his living by work which he freely chooses or accepts" (Article 6) and requires States parties to ICESCR to "take appropriate steps to safeguard this right." The right to work is similarly guaranteed under the African Charter on Human and Peoples' Rights.

219 The right to work has been authoritatively interpreted by the United Nations Committee on Economic, Social and Cultural Rights ("CESCR") most specifically, in its General Comment 18 and General Comment 23. This right is clearly guaranteed under the ICESCR to "everyone" and all workers whether they are employed in "informal" or "formal" forms of employment. The CESCR is emphatic that the right is to be guaranteed to "all workers in all settings".

220 The proposed seismic activities of Searcher Seismic will affect several fishing communities who rely on the sea in those specific territories to earn their livelihoods. Several of the affected fishers have no transferable skills that are required by the existing job market. Many of them cannot read or count.



Consequently, the fishers can earn a livelihood, and feed their families as breadwinners, only through fishing.

221 It is worth noting that the majority of these communities are from disadvantaged backgrounds, with limited to no access to resources that will allow them to transfer jobs easily.

222 The CESCER explicitly states that the right to work is “essential for realising other human rights and forms an inseparable and inherent part of human dignity.”

223 Many of the fishers affected have known no other work than fishing, having learned it from their parents and generations before them. Fishing is intricately linked to their identities, to their personhood and dignity. Many of them have expressed that without fishing they would not know who they are.

Consultation

224 I have addressed Searcher’s failure to consult with small-scale fishers above. Our right to consultation arises from the MPRDA, NEMA and the constitutional protection of just administrative action. Our right to be consulted before adverse decisions are taken is essential in the protection of our rights enumerated above.

Our apprehension of irreparable harm is reasonable

225 Should an interim interdict not be granted and should the blasting go ahead in the absence of an environmental authorisation as planned, we contend that there will be irreparable harm on for a number of reasons:



225.1 First, the harm that will be caused to our ocean and the marine resources and life, especially the endangered species;

225.2 Second, the infringement of our culture and tradition and our relationship with the seas;

225.3 Third, our source of food and access to food will be taken away and this will lead to hunger;

225.4 Fourth, the cumulative long-term impact on the marine resources and the birds;

225.5 Fifth, our access to job creation and livelihoods.

225.6 Lastly, Searcher's activities hinders the right to exercise our culture and traditions. The harm that this will cause to our cultural rights cannot be quantified and ultimately impacts on our right to dignity.

226 Further, Searcher has failed to even consult with us even though there is a great potential that the seismic survey will cause irreparable harm to our rights as discussed above.

227 Once the blasting of the sea commences, the damage could be irreversible. The Constitutional Court's interpretation of section 24 of the Constitution is such that harm to individual marine animals falls within its remit.

228 In the absence of an environmental authorisation under NEMA, it is also difficult to see how or if any environmental damage or harm caused by the Seismic Survey can in fact be mitigated. As mentioned above.



229 Further, the ultimate intention of the exploration process - to ultimately pave the way for drilling for oil and gas - cannot be ignored, particularly so soon after COP26 when countries committed to more ambitious nationally determined contributions by the end of 2022.

230 Ultimately, this Court should have regard to the precautionary principle and halt the harm.

The balance of convenience

231 The applicants contend that the balance of convenience favours granting the interim interdict.

232 We have established that a NEMA authorisation is a requirement, or at least that it is likely this Court finds that it is a requirement in Part B. If this Court permits the companies to proceed with their seismic blast programme, this will be entirely unlawful and cause unknown harm to the environment that would be prevented or mitigated if a NEMA process had been followed.

233 The NEMA process will provide for significantly more procedural protection for the applicants and other indigenous communities. It will also provide for more robust substantive considerations, including heritage, culture, socio-economic rights, climate change, and importantly protection of our sensitive marine areas.

234 Significantly, the Department of Forestry, Fisheries and Environment this year affirmed that importance of assessing the impact of noise on marine environments in the Karpowership decision to refuse to grant an environmental



authorisation in the context of a gas to power project, attached hereto as **FA15**, at p 16 that:

“...(ii) The actual and potential impacts on the environment as well as socio-economic conditions could be properly evaluated (particularly insofar as small-scale fisheries are concerned), especially because of the lack of a proper underwater noise Impact study and the contradictory information that was made available. iii. The effects of activities on the environment could not receive adequate consideration because one of the major impacts, underwater noise generation, was not fully investigated...”.

235 Furthermore, our rights to be consulted have been adversely impacted and our right to be able to publicly participate have also been infringed.

236 It could be that the NEMA process results in a refusal to award an authorisation, which means that there will be no seismic survey. Or it could be that more robust mitigation protections are in place. Either way, it is clear that the environment and communities will be better protected and harm either prevented or mitigated. Permitting a project to go ahead in the absence of an environmental authorisation negates this very purpose of the environmental authorisation process.

237 It is also important to remember that Searcher's activities would be criminal under both MRPDA and NEMA. The fact that they may be able to subsequently defend against future charges due to mens rea is all the more reason to grant the interdict before harm occurs.

238 The applicants contend that these considerations outweigh any prejudice that would be suffered by Searcher in the event of an interim interdict being granted.



We have no alternative remedy

239 There is simply no alternative remedy to an interim interdict or a final interdict available to the applicants.

240 The relevant state regulators have been asked to intervene. Further, an internal appeal has been submitted to the first respondent. The outcome of that appeal is yet to be determined. I am afraid that the applicants cannot wait for the outcome of the appeal as it may take a long time and in the meantime the seismic activities will infringe upon our constitutional rights and harm the environment.

241 Further, I am aware of statements made in the media by the first respondent, Mr Gwede Mantashe (in his official capacity), that an attempt to interdict seismic surveying is "*We consider the objections to these developments as apartheid and colonialism of a special type, masqueraded as a great interest for environmental protection.*" (see "FA10"). The first respondent has publically taken a position against any challenges to activities of oil and gas corporations, demonstrating a bias against those who seek to ensure that any prospecting, exploration, reconnaissance and mining activities are lawful. As a result, I contend, the prospects of having our internal appeal considered objectively by the first respondent is substantially diminished.

242 Section 7(2)(c) of the PAJA creates an exception to the obligation to pursue internal remedies in exceptional circumstances and if it is in the interests of justice. I contend that the first respondent's public comments have compromised him and therefore must constitute exceptional circumstances. If we, the applicants, have no hope of an objective consideration of our appeal, it must be



in the interests of justice that we are exempted from the obligation to pursue the internal appeal.

243 As I have addressed above in the section on urgency, the applicants have repeatedly asked Searcher to provide an undertaking not to commence with the Seismic Survey pending the outcome of these proceedings, and Searcher has persistently refused to do so.

244 As such, there is simply no alternative remedy available to the applicants, save for approaching this court for an urgent interim interdict.

245 We are not able to prevent the companies from commencing as we have had to do with mining companies because the activities are not on our land.

246 Subsequent criminal prosecution - even a private prosecution - will not cure the damage done to the environment, to our livelihoods and our constitutional rights. Especially where Searcher will have a credible defence that it lacked *mens rea* in committing the offence if their criminal conduct is not stopped by this Court.

PROSPECTS OF SUCCESS IN PART B REVIEW

247 Part B of this application seeks a review and setting aside of the first respondent's decision to grant Searcher a permit. My contention is that that decision contravened the MPRDA, is unlawful, and must be set aside.

248 Section 74(4) of the MPRDA provides that the designated agency who accepts an application for a reconnaissance permit must notify the applicant, Searcher in this case, within 14 days of receipt of the application, to consult in the prescribed manner with, inter alia, all interested and affected parties and to include the



results of such consultations in the relevant environmental reports required in terms of NEMA. This was not done.

249 Section 75(1)(c) of the MPRDA further requires an applicant for a Reconnaissance Permit to establish that the reconnaissance activities will not result in unacceptable pollution, ecological degradation or damage to the environment and that environmental authorisation for the reconnaissance activities has been issued. This was not done.

250 In terms of section 75(2) of the MPRDA, the first respondent must refuse to issue a reconnaissance permit if the applicant does not meet all of the requirements set out in section 75(1). The first respondent granted the permit regardless.

251 As a result, I contend that, at least at face value, the decision to grant Searcher a permit is reviewable because:

251.1 The environmental reports required by section 74(4) of the MPRDA and section 24 of NEMA were simply not requested by the designated authority nor submitted by Searcher. This is a failure on the part of both the designated agency and Searcher. As a result of this failure, a mandatory procedure was not followed and the decision maker failed to consider relevant considerations in making the decision to grant Searcher the permit.

251.2 As a result of the failure to consult with myself and my co-applicants, the information before the decision maker was patently one sided. As has been demonstrated throughout this affidavit, the decision to grant Searcher a permit materially affected our rights. Without an opportunity to

be consulted and heard, we were denied our rights to procedurally fair decision making.

251.3 I have demonstrated above, under the section on harm, that Searcher's activities will lead to ecological degradation and damage. In terms of section 75(2) of the MPRDA, the first respondent was obliged to refuse Searcher's application for the permit if the requirements of section 75(1)(c) were not met. In this case, those requirements were not met. By granting Searcher the permit, despite the application for the permit not complying with section 75(1)(c), the minister made an error in law and the decision to grant the permit is unlawful.

251.4 Lastly, as a result of the defects mentioned above, the decision that the first respondent made in granting Searcher the permit was not a decision that a reasonable decision maker in the first respondent's position would have made.

COSTS: SECTION 32 OF NEMA AND BIOWATCH

252 I, and the other applicants, bring this application in the interests of protecting our environment and use of natural resources in the areas where West Coast small scale fishers, like myself, operate. Further, the purpose of this application is to vindicate constitutional rights contained in the bill of rights.

253 Attempts were made by our attorneys to dissuade the Searcher from continuing its Seismic Survey and its attorneys were specifically informed of the patent defects with Reconnaissance Permit and Searcher's non-compliance with NEMA. The response we were met with was simply that Searcher was under no



obligation to cease its activities and that we must do what we feel we must. I refer in this regard to annexures "FA7" to "FA9A".

254 The attitude adopted by Searcher demonstrates, and continues to demonstrate, that Searcher disregards the serious damage and degradation that its activities will cause to the environment and to our livelihoods.

255 Further, the first and second respondents' failure to ensure compliance with environmental legislation meant that entities, like Searcher, can obtain reconnaissance permits without complying with compulsory environmental legal requirements. Both Searcher and the first and second respondents are complicit.

256 It is a result of Searcher's disregard, and the state's failure to discharge its duties under the MPRDA and NEMA, that we are forced to bring this application.

257 Within this context, this litigation falls within the protections of section 32 of NEMA. I contend that I, and the other applicants, have acted reasonably out of a concern for the public interest and in the interest of protecting the environment, as has been detailed above. Further, we have made due efforts to use other means reasonably available to obtain the relief sought, which was to no avail. I deal more with these attempts in the section of urgency.

258 As a result, I contend that in the event that this application is not successful, this court should find that the applicants fall within the protections contemplated by section 32 of NEMA and should not order costs against us, either individually or collectively.

259 In the event that Part A of this application is successful, I contend that section 32(3) of NEMA is applicable for the recovery of the applicants' legal costs and the costs incurred to investigate this matter and in the preparation of this matter.

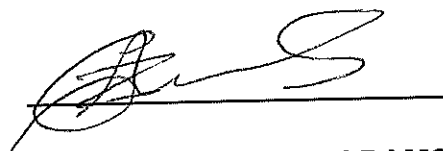
260 The extent of the respondents' transgression is vast, importantly, the first respondent's failure to discharge his duties under the MPRDA and Searcher's disregard for my and the other applicants' constitutional rights. As a result of this vastness, Part A of this application had to be investigated, communities and experts consulted, and legal papers drafted within a matter of days. Many who have assisted us have not charged a fee.

261 Moreover, the respondents were made aware of the judgment of the Makhandia High Court in Shell, in which the Court found that Shell's failure to consult was unlawful and justified the granting of an interim interdict. In the light of that finding, we submit that Searcher's refusal to provide an undertaking to stop its activities pending the outcome of part B of this application is wholly unreasonable, necessitated this litigation and justifies an order for costs on a punitive scale.

262 Should this court be satisfied that a case has been made, and that orders be granted against Searcher, I contend that the applicants should be granted a favourable cost order in terms of section 32(3) of NEMA. Given the attitude adopted by Searcher in its refusal to desist from its activities despite being made aware of the numerous irregularities with its permit and failure to obtain environmental authorisation, especially within the context of the damage and degradation that its activities will have on the environment and our livelihoods, I contend that a fair and suitable scale of costs would be as between attorney and client. Given the extent and complexity of this matter, I contend that the

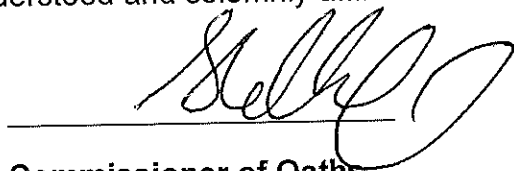
employment of three counsel was not only appropriate, but actually necessary and I would ask for those costs to include the costs of three counsel.

WHEREFORE we seek an order in terms of the notice of motion.



CHRISTIAN JOHN ADAMS

Thus done and signed before me at Cape Town. on this the 21 day of January 2022, the deponent having acknowledged that the contents of this oath is understood and solemnly affirms that the contents hereof are true and correct.



Commissioner of Oaths

Full Names:

Capacity :

Address:

SHELLEY CARMEN ORGILL
Candidate Attorney
Commissioner of Oaths
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ENVIRONMENTAL MANAGEMENT PLAN FOR PROPOSED SPECULATIVE 2D AND 3D SEISMIC SURVEYS OFF THE WEST AND SOUTH-WEST COASTS OF SOUTH AFRICA

Prepared for: Searcher Geodata UK Limited

Authority Ref: 12/1/038



SLR Project No: 720.19162.00001

Revision No: D

September 2021



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DOCUMENT INFORMATION

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Project Manager	Jeremy Blood
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D	September 2021	Final EMP issued to PASA	NA

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EXECUTIVE SUMMARY

1 INTRODUCTION

1.1 PROJECT BACKGROUND AND LOCATION

On 30 April 2021, Searcher Geodata UK Limited (Searcher) applied for a Reconnaissance Permit to the Petroleum Agency SA (PASA) in terms of Section 74 of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA). The application, which provides for the undertaking of a multi-client speculative two-dimensional (2D) and three-dimensional (3D) seismic survey programme over a number of petroleum licence blocks off the West and South-West Coasts of South Africa (see Figure 1), was accepted by PASA on 18 May 2021. Searcher's proposed seismic survey programme includes the undertaking of either the 2D or the 3D seismic survey or a combination thereof, acquired back-to-back, over the 2021 / 2022 Austral Summer.

The Reconnaissance Permit Area is approximately 297 089 km² in extent and is located offshore roughly between the South African - Namibian border and Cape Agulhas, approximately 20 km from the coast at its closest point and beyond the South African Exclusive Economic Zone (EEZ) its furthest (approximately 280 km offshore at its closest point), in water depths ranging from approximately 100 m to over 4 500 m.

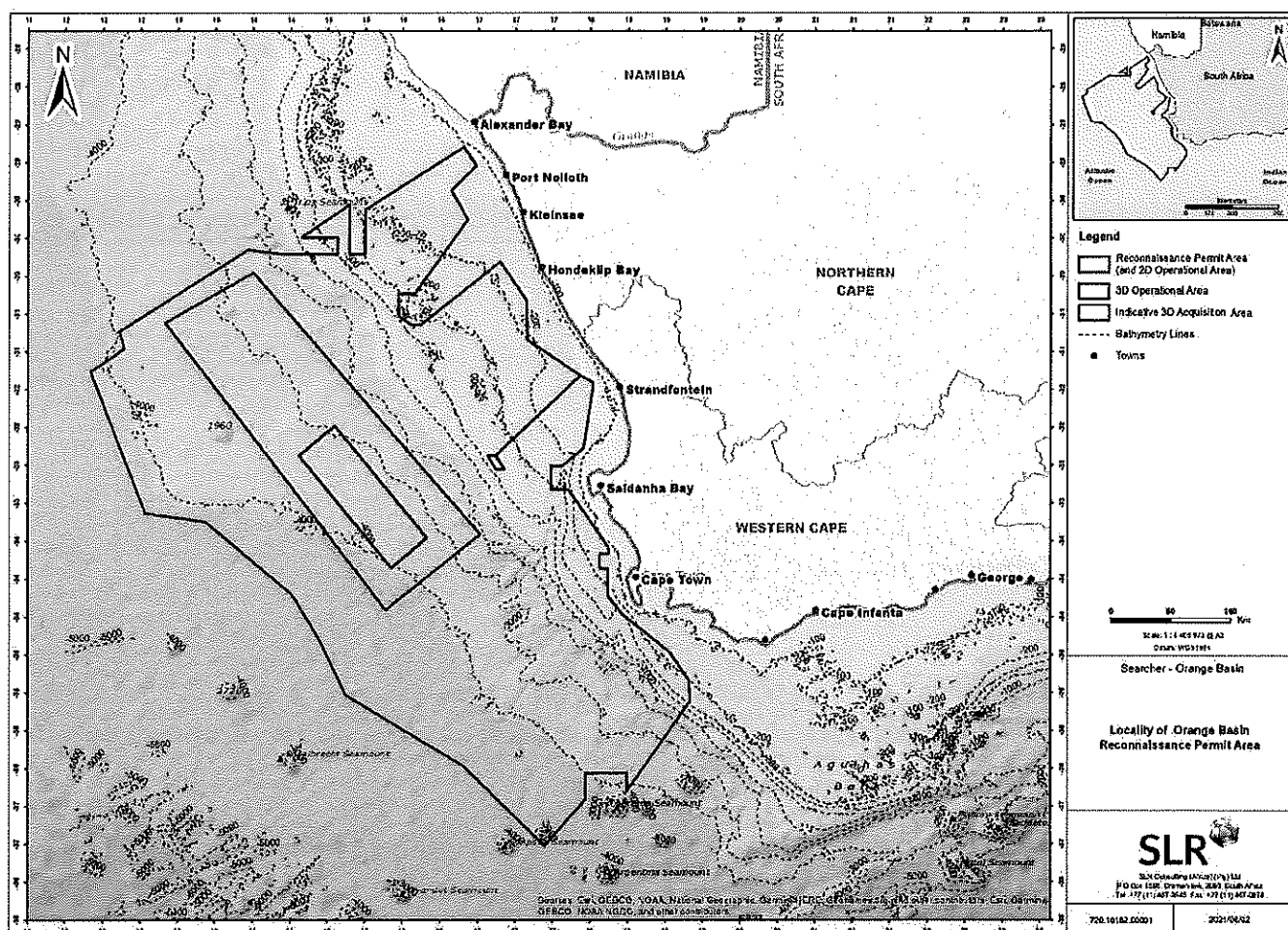


FIGURE 1: LOCALITY OF THE RECONNAISSANCE PERMIT AREA AND PROPOSED 2D / 3D OPERATION AREAS, AS WELL AS THE INDICATIVE 3D ACQUISITION AREA

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At the time the Reconnaissance Permit Application was submitted to PASA, there was no requirement in the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) to apply for an Environmental Authorisation when applying for a Reconnaissance Permit, and as such PASA requested that Searcher '*develop a plan for managing potential environmental impacts that may result from the proposed operations and notify and consult with affected parties*' and submit it to them for consideration by the Minister of Mineral Resources. For this application, the plan is referred to as an "Environmental Management Plan (EMP)". Although the Department of Forestry, Fisheries, and the Environment (DFFE) subsequently published amendments to the EIA Regulations 2014, which now requires Environmental Authorisation for Reconnaissance Permit Applications, the transitional arrangements apply. Thus, this Reconnaissance Permit Application will be dealt with in terms of the previous Regulations that were in place at the time of application submission.

Searcher appointed SLR Consulting (South Africa) (Pty) Ltd (SLR) to compile this EMP and undertake the required public participation process for the proposed project.

1.2 PURPOSE OF THIS EMP

This EMP has been compiled as part of the Reconnaissance Permit application submitted in terms of Section 74 of the MPRDA and as requested by PASA. Although not a legal requirement (as noted above), this EMP also fulfils the requirements of a Basic Assessment Report, as specified in Appendix 1 of the EIA Regulations 2014 (as amended). It has been informed, where applicable, by comments received from Interested and Affected Parties (I&APs) during the public participation process undertaken on the draft report. It should be noted that all significant changes to the draft report are underlined and in a different font (Times New Roman) to the rest of the text.

This report is submitted to PASA, as the delegated authority, for consideration and review. PASA will then make a recommendation to the Department of Mineral Resources and Energy (DMRE), who will make the final decision on whether to grant or refuse the Reconnaissance Permit.

2 EMP PROCESS

After the Reconnaissance Permit application was accepted by PASA, one technical modelling study and two specialist studies were commissioned to address the key issues that required further investigation and detailed assessment. These include:

- Technical Modelling Studies:
 - Underwater Acoustics Modelling Study.
- Specialist Studies / Assessments:
 - Biodiversity and Ecosystem Services Impact Assessment.
 - Commercial Fisheries Impact Assessment.

The specialist studies and other relevant information / assessments were integrated into a draft version of this EMP, which was distributed for a 30-day review and comment period from 10 August to 9 September 2021. During this period, copies of the draft EMP were made available on the SLR website and a data free website (no data costs) for download. The Executive Summary was made available in both English and Afrikaans for download and for collection at the public libraries in Saldanha Bay, Lamberts Bay and Port Nolloth. A total of eight written submissions were received during the review and comment period.

An online focus group meeting was held with the Commercial Fishing Industry (via Microsoft TEAMS) during the draft EMP disclosure period (26 August 2021) to present the project and discuss issues or concerns.

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All written comments received have been collated and, where relevant, responded to in a Comments and Responses Report. A summary of the key issues / concerns is provided below.

- Impact on commercial fishing (specifically demersal trawl).
- Impact on fish spawning and recruitment.
- Additional research is required to fully understand the effects of seismic surveys.
- Employment opportunities.

After closure of the review and comment period, the draft report was updated into this final EMP based on the public participation process, giving due consideration to the comments received. The Comments and Responses Report is attached as Appendix 3.6 to this report.

After DMRE has reached a decision, all I&APs on the project database will be notified of the outcome of the application. DMRE's decision will be uploaded onto the SLR website for information purposes.

3 NEED AND DESIRABILITY

There is global concern of the need to reduce carbon emissions and achieve carbon neutrality by 2050. South Africa is committed to a "just" transition to a net-zero and climate resilient society, whereby the need to reduce emissions is balanced with the need to grow the economy and create jobs, so that the needs of vulnerable groups are addressed. There is a drive from national and provincial Government to stimulate development and grow the economy of South Africa with a strong focus on job creation in all sectors, whilst protecting the environment. The COVID-19 pandemic has deepened the economic crisis in South Africa and, as a result, inequality is expected to widen and poverty to deepen. To facilitate this economic growth, there is a need to ensure that there is sufficient capacity in the country's energy supply by diversifying the primary energy sources within South Africa. In this regard, South African Government policy currently supports exploration for indigenous oil and gas resources and currently promotes the use of natural gas as part of the energy mix up to 2030 (per the IRP, 2019).

Although the use of oil and gas is not fully aligned with other National plans and policies, which identify the need to reduce the reliance on fossil fuels and shift to lower-carbon electricity generation options in order for South Africa to reduce GHG emissions and meet commitments in this regard, natural gas is included in the energy mix of the country to serve as a transition or bridge on the path to a carbon-neutral goal (as per the Paris Agreement) and provide the flexibility required to complement renewable energy sources. In addition to the use of natural gas for electricity generation, the many other uses (e.g. transportation fuels, asphalt, and feedstocks for making the chemicals, polyurethane, solvents, plastics and other synthetic materials) will also need to see adaptation and mitigation during this transition period.

It is acknowledged that the proposed exploration project would not result in the production of oil and gas, but rather the generation of information on possible indigenous resources. By gaining a better understanding of the extent, nature, and economic feasibility of extracting these potential resources, the viability of developing indigenous gas resources would be better understood.

The proposed exploration has no direct influence on South Africa's reliance on fossil fuels and whether consumers use more or less oil or gas, nor on which types of fossil fuels contribute to the countries' energy mix. The proposed project will not necessarily change how fossil fuels are used and has no direct influence on GHG emissions that would arise from the consumption of fossil fuels. These aspects are influenced by South Africa's energy and climate change related policy, the financial costs of the various energy sources and consumer choices in this regard.

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The proposed project will potentially allow South Africa to optimise its own indigenous resources to provide its identified oil and gas needs, rather than having to import, as at present. It won't necessarily change how fossil fuels are used in the short- to medium-term in the transition to the goal of carbon neutrality by 2050. These National strategic policy issues fall beyond the scope of this EMP.

4 PROJECT DESCRIPTION

4.1 SEISMIC SURVEYS

Marine seismic surveys are an essential part of exploring for hydrocarbons. They provide information on the depth, position, and shape of underground geological formations. The principles of marine seismic acquisition are illustrated in Figure 2.

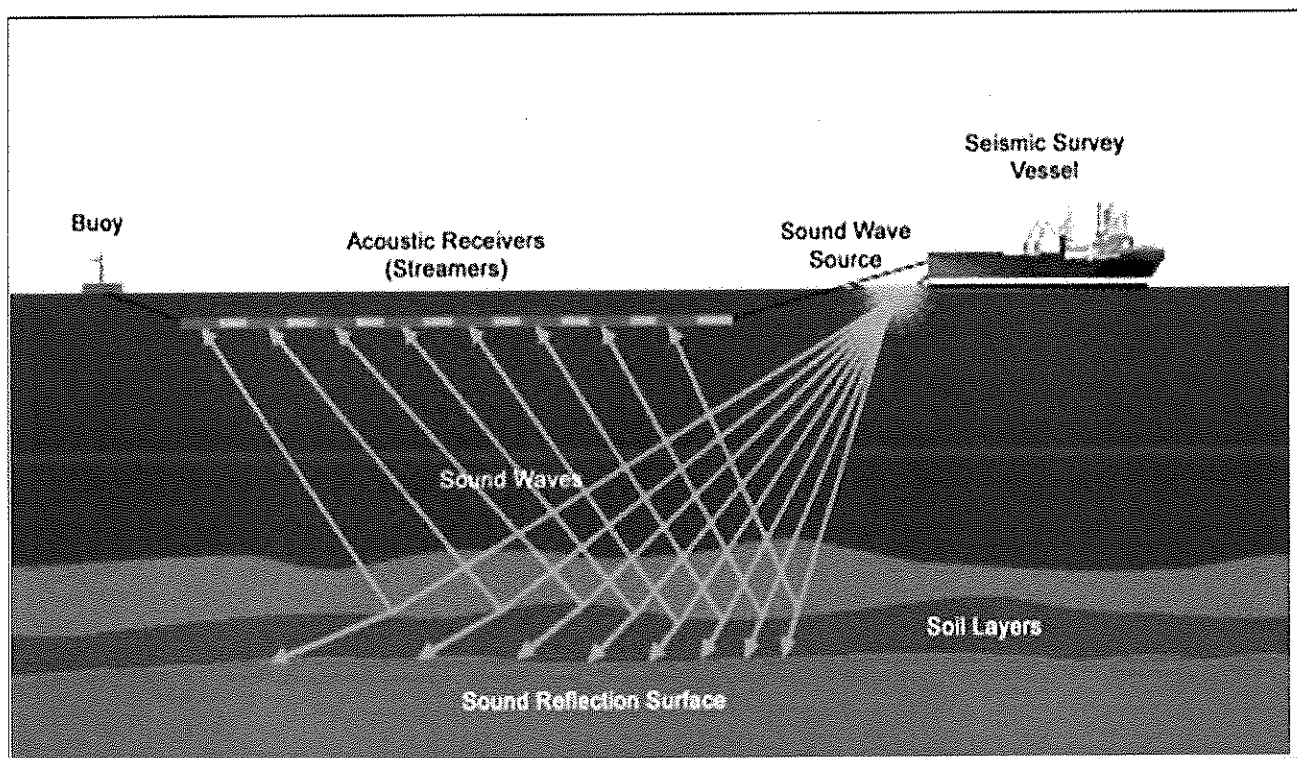


FIGURE 2: PRINCIPLES OF OFFSHORE SEISMIC ACQUISITION SURVEYS

Source: <https://www.tes.com/>

During seismic surveys, high-level, low frequency sounds are directed towards the seabed from near-surface sound sources towed by a seismic vessel. The acoustic signal emitted into the water column penetrates the seabed, then is reflected by the rock formations in the basement. The reflected signals are recorded by multiple receivers (or hydrophones) towed in a single or multiple streamer configuration. Analyses of the returned signals allow for interpretation of subsea geological formations.

A seismic acquisition campaign can be carried out in two or three dimensions (2D or 3D).

4.2 PROJECT SCOPE AND ACTIVITIES

For this project, Searcher is proposing to undertake either the 2D or the 3D seismic survey or a combination thereof (to a cumulative maximum of 180 days), acquired back-to-back, over the 2021 / 2022 Austral Summer.

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- The proposed 2D survey would consist of low-density spaced survey lines within the overall Reconnaissance Permit application area. The proposed 2D seismic survey would have a maximum total cumulative length of approximately 22 014 km (see Figure 3). The 2D survey will take in the order of 135 days for production or 142 days inclusive of downtime.
- The area of interest for the proposed 3D seismic survey is approximately 58 250 km² in extent and is situated roughly between the Orange River mouth and Cape Columbine, with the inshore boundary located between approximately 140 km and 320 km offshore in water depths beyond approximately 2 000 m. The proposed 3D seismic survey would, however, only cover an area of up to approximately 10 000 km² within the area of interest (see Figure 1). The 3D survey will take in the order 73 days for production or 80 days inclusive of downtime.

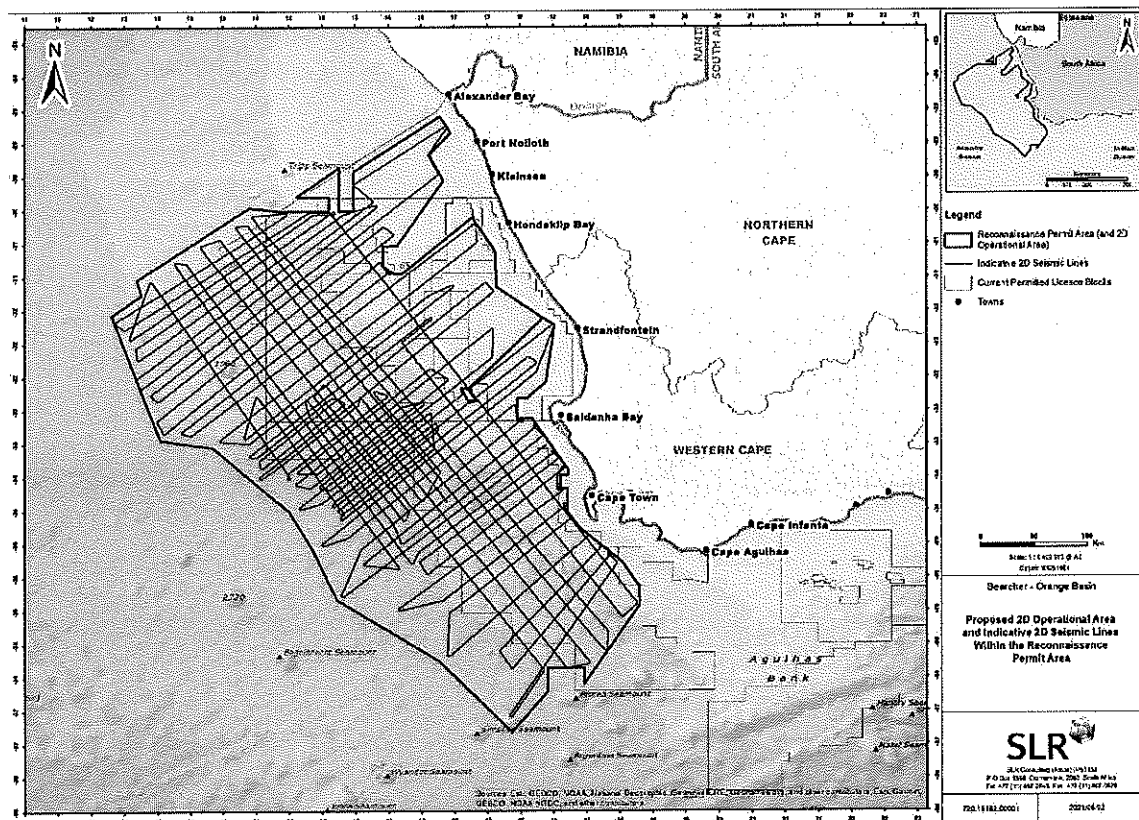


FIGURE 3: RECONNAISSANCE PERMIT AREA (PROPOSED 2D OPERATIONAL AREA) AND INDICATIVE 2D SEISMIC LINES

Note: After consultation with the commercial fishing sector, Searcher agreed to amend the proposed 2D survey plan to avoid key fishing areas in the south-east of the reconnaissance permit area (see Figure 16).

4.3 TECHNICAL CHARACTERISTICS OF THE SEISMIC ACQUISITION

The main technical characteristics of the proposed 2D and 3D seismic surveys are summarised in Table 1 below.

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TABLE 1: CHARACTERISTICS OF SEISMIC ACQUISITION OPERATIONS (INDICATIVE)

Seismic Source	
Type of Energy Source	Pressurised air
No. of seismic source arrays	2D: 1 3D: 3
No. of seismic sources	2D: up to 36 3D: up to 36
Spacings between source arrays	2D: N/A 3D: up to 60m
Towing depth of source	Approximately 8 m
Source volume	≤ 3 400 cubic inches each
Operational pressure	≤ 2 000 psi
Source interval	2D: up to 37.5 m interval between consecutive shot-points 3D: up to 18.75 m interval between consecutive shot-points
Hydrophone Streamers	
Types of streamer	Solid
Number of streamers	2D: 1 3D: up to 18
Length of streamers	2D: up to 12 000 m 3D: up to 12 000 m
Spacings between streamers	3D: up to 150 m
Max spread	2D: N/A 3D: up to 1350 m
Depth of streamers	15 m

4.4 MAIN PROJECT COMPONENTS FOR SEISMIC SURVEYING

The main project components include the following:

- **Seismic survey vessels:** There will be a single survey vessel for each survey equipped with seismic sources and streamers. Under the Convention on the International Regulations for Preventing Collisions at Sea (COLREGS, 1972, Part B, Section II, Rule 18), a seismic survey that is engaged in surveying is defined as a *"vessel restricted in its ability to manoeuvre"*, which requires that power-driven and sailing vessels give way to a vessel restricted in her ability to manoeuvre. Vessels engaged in fishing are required to, so far as possible, keep out of the way of the seismic operation. It is also considered to be an "offshore installation" in terms of the Marine Traffic Act, 1981 (No. 2 of 1981), and as such it is protected by a 500 m exclusion zone.
- **Support and escort vessels:** The proposed 2D / 3D surveys would be supported by one escort vessel. The escort vessel will assist in monitoring for and alerting other vessels (e.g. fishing, transport, etc.) about the survey and the lack of manoeuvrability of the survey vessel. At a minimum, one Fisheries Liaison Officer (FLO) person speaking English and Afrikaans will be on board either the survey or the escort vessel to facilitate communication in the local language with the fishing (or other) vessels that are in the area.
- **Helicopter:** Crew changes will occur by support or survey vessel calling to port. If necessary, a helicopter maybe used to transfer personnel to and from the survey vessel and Cape Town or Saldanha Bay. However, due to the helicopter low carrying capability this is unlikely to occur.
- **Onshore logistics base:** The onshore logistics base will be in either the Port of Cape Town or the Port of Saldanha Bay. The preferred alternative is Cape Town. The service infrastructure required to provide the

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necessary onshore support is already in place in Cape Town and Saldanha. Thus, no additional onshore infrastructure should be necessary for this project.

5 RECEIVING ENVIRONMENT

5.1 BIOPHYSICAL ENVIRONMENT

The water depths in the Reconnaissance Permit and 2D operational area ranges from approximately 100 m to over 4 500 m, whereas water depths within the 3D acquisition area are greater than 2 000 m. Major bathymetric features on the continental shelf on the West and South Coasts include (Figure 4): Tripp Seamount (in Namibian waters), Orange River Cone (of Shelf), Child's Bank, Southeast Atlantic Seamounts (consisting of Protea and Argentina Seamounts, and Mount Marek), Cape Canyon and Cape Point Valley.

Winds are one of the main physical drivers of the nearshore Benguela Region. Most winds in summer come from the south to south-south-east. Winter remains dominated by southerly to south-easterly winds, but the closer proximity of the winter cold-front systems results in a significant south-westerly to north-westerly component.

Most of the South-West Coast is classified as exposed, experiencing strong wave action. Winter swells are strongly dominated by those from the south-west to south-south-west. During the summer there is a slightly more pronounced southerly swell component and swells tend to be smaller on average.

The Reconnaissance Permit area is primarily located within the Southern Benguela system, although the southern portion of the area falls within the Agulhas Retroflexion area. A major feature of the Benguela Current is coastal upwelling. The eastern boundary of the Reconnaissance Permit area is located on the western edge of these upwelling events and although waters are expected to be comparatively warm and nutrient poor, seasonal upwelling can be expected. This upwelling is associated with extremely high seasonal production of phytoplankton and zooplankton, and can result in low-oxygen water moving up onto the inner shelf and into nearshore waters. The proposed 3D survey area is located well offshore of these upwelling events.

5.2 BIOLOGICAL OCEANOGRAPHY

The Reconnaissance Permit and 2D survey areas fall into the Southern Benguela and Southeast Atlantic Deep Ocean Ecoregion, whereas the proposed 3D survey area is located entirely within the Southeast Atlantic Deep Ocean Ecoregion, and is characterised by a wide variety of ecosystem types covering both the inner, mid- and outer shelves, the Southeast Atlantic continental slope and the Cape Basin Abyss. The 2018 National Biodiversity Assessment rated the South Atlantic bathyal and abyssal unconsolidated habitat types that characterise depths beyond 500 m, as being of 'Least Concern', with only those communities occurring along the shelf edge (500 m) being considered 'Vulnerable' (see Figure 5).

Various pelagic and demersal fish species are known to spawn in the inshore regions of the southern Benguela (see Figure 6). The major spawning areas of the small pelagic shoaling species are on the continental shelf and along the shelf edge from Lambert's Bay to Mossel Bay. The eggs and larvae are carried around Cape Point and up the coast in northward flowing surface waters. At the start of winter every year, the juveniles recruit in large numbers into coastal waters across broad stretches of the shelf between the Orange River and Cape Columbine to utilise the shallow shelf region as nursery grounds before gradually moving southwards in the inshore southerly flowing surface current, towards the major spawning grounds east of Cape Point. There is, therefore, some overlap of the eastern sections of the proposed 2D survey area with the northward egg and larval drift of

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commercially important species, and the return migration of recruits (see Figure 6). The proposed 3D survey area lies well offshore of the northward egg and larval drift. Ichthyoplankton abundance in the inshore portions of the 2D survey area is thus likely to be seasonally high.

Small pelagic species include the sardine/pilchard, anchovy, chub mackerel, horse mackerel and round herring. These shoaling species generally occur within the 200 m contour and thus likely to be encountered in the 2D survey area. The fish most likely to be encountered on the shelf, beyond the shelf break and in the offshore waters of the Reconnaissance Permit Area are the large migratory pelagic species, including various tunas, billfish and sharks.

Three species of turtle occur along the South-West Coast, with the Leatherback being the most likely to be encountered in the offshore waters of west South Africa. Their abundance in the survey area is unknown but expected to be low. Loggerhead and Green turtles are expected to occur only as occasional visitors.

Most of the pelagic seabird species in the region reach highest densities offshore of the shelf break (200 – 500 m depth), with highest population levels during their non-breeding season (winter). Fourteen species of seabirds breed in southern Africa, including Cape Gannet, African Penguin, four species of Cormorant, White Pelican, three Gull and four Tern species. The breeding areas are distributed around the coast with islands being especially important. The closest breeding islands to the project area are Bird Island at Lambert's Bay and the Saldanha Bay Islands. Most of the breeding seabird species forage at sea with most birds being found relatively close inshore (10 - 30 km). Cape Gannets, however, are known to forage within 200 km offshore, and African Penguins have also been recorded as far as 60 km offshore. The proposed 2D survey area thus lies within the foraging areas of these species, but the proposed 3D area is well offshore of seabird foraging areas.

Thirty-three species or sub-species/populations of cetaceans (whales and dolphins) are known or likely to occur in the waters of the West and South-West Coasts. The most common species within the project area (in terms of likely encounter rate not total population sizes) are likely to be the long-finned pilot whale, sperm whale, southern right and humpback whale.

The Cape fur seal is the only species of seal resident along the West Coast. There are a number of Cape fur seal colonies within the broader survey area: at Buccu Twins near Alexander Bay, at Cliff Point (~17 km north of Port Nolloth), at Kleinzee (incorporating Robeiland), Strandfontein Point (south of Hondeklipbaai), Paternoster Rocks and Jacobs Reef at Cape Columbine, Vondeling Island, Robbesteen near Koeberg, Seal Island in False Bay and Geyser Rock at Dyer Island, Quoin Point and Seal Island in Mossel Bay. Non-breeding colonies and haul-out sites occur at Doringbaai south of Cliff Point, Rooiklippiers, Swartduin and Noup between Kleinzee and Hondeklipbaai, at Spoeg River and Langklip south of Hondeklip Bay, on Bird Island at Lambert's Bay, at Paternoster Point at Cape Columbine and Duikerklip in Hout Bay. These colonies all fall inshore and to the east of the Reconnaissance Permit Area.

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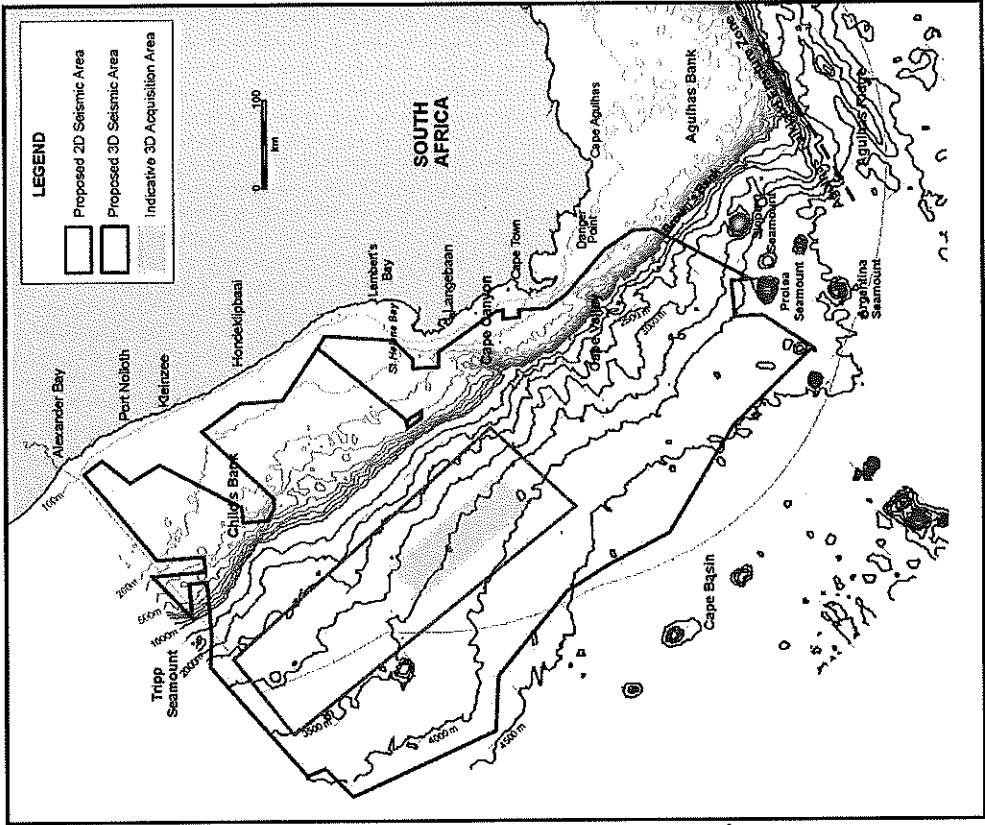


FIGURE 4: PROPOSED PROJECT IN RELATION TO BATHYMETRY AND SEABED FEATURES OF THE WEST AND SOUTH-WEST COASTS

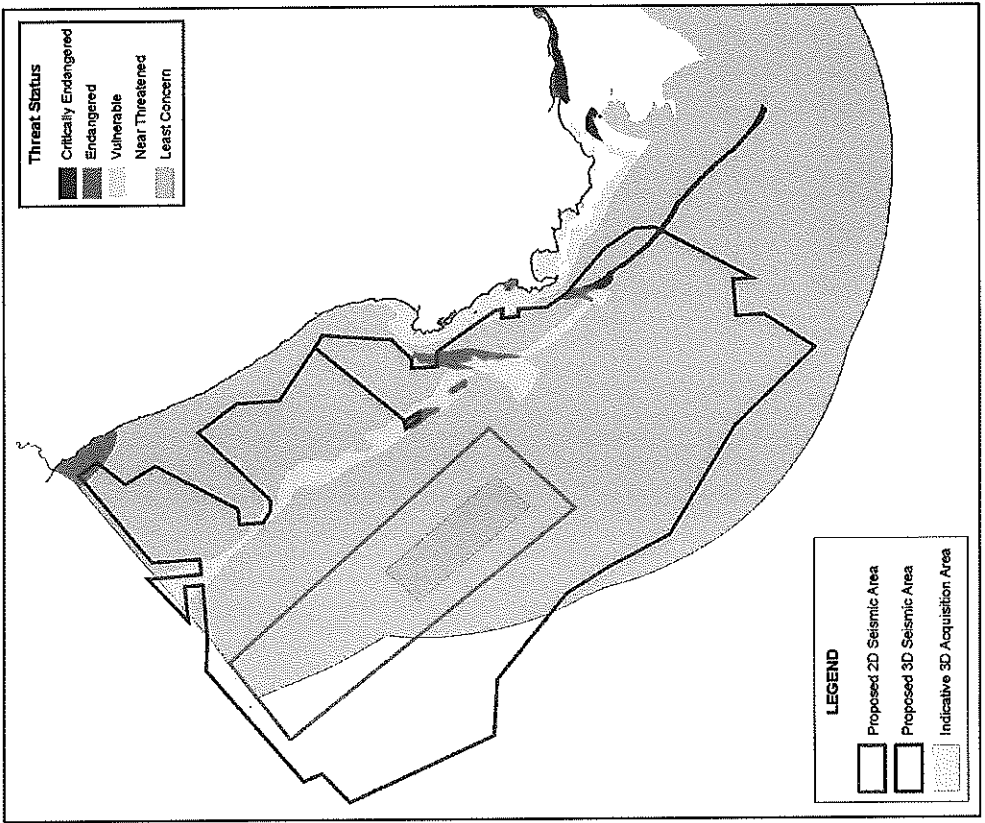


FIGURE 5: PROPOSED PROJECT IN RELATION TO ECOSYSTEM THREAT STATUS ON THE SOUTH COAST

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Approved Marine Protected Areas (MPAs) and Ecologically or Biologically Significant Areas (EBSAs) within the broad project area are shown in Figure 7. There are six offshore MPAs that are located adjacent to the Reconnaissance Permit area, namely the Orange Shelf Edge MPA, Child's Bank MPA, Benguela Muds MPA, Cape Canyon MPA, Robben Island MPA and the Southeast Atlantic Seamounts MPA. Although the Reconnaissance Permit Area surrounds the Benguela Muds MP, it is excluded from the permit area. No seismic survey operations would be undertaken within these MPAs. The Reconnaissance Permit area also overlaps areas mapped as Critical Biodiversity Area 1 (CBA 1) and Critical Biodiversity Area 2 (CBA 2) (see Figure 8).

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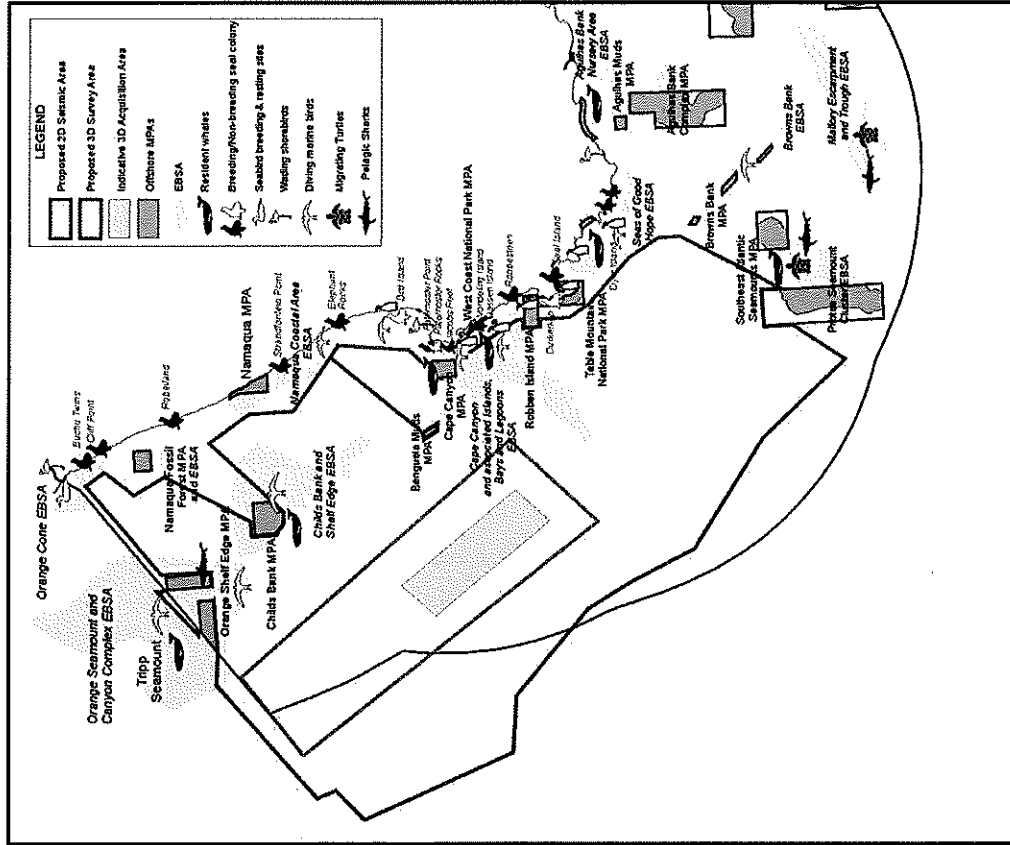


FIGURE 7: PROPOSED PROJECT IN RELATION TO MPAS AND EBSAS OFF THE WEST AND SOUTH-WEST COASTS

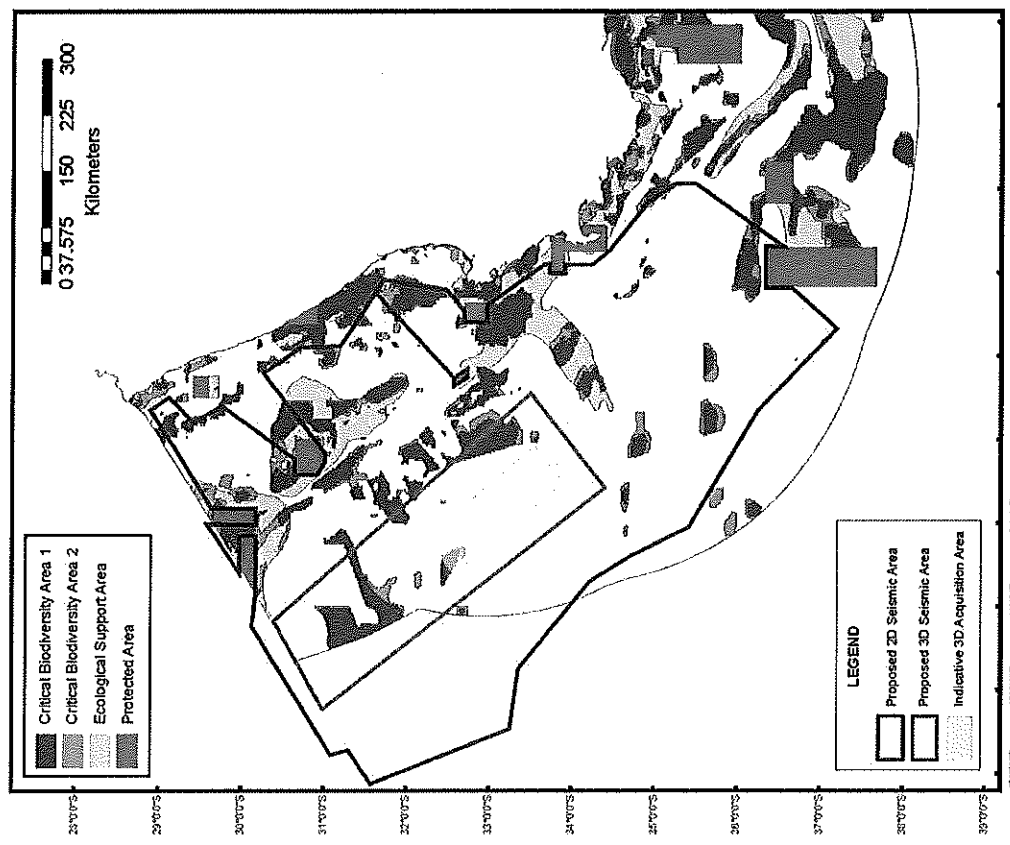


FIGURE 8: PROPOSED PROJECT IN RELATION TO CBAS OFF THE WEST AND SOUTH-WEST COASTS

5.4 SOCIAL CONTEXT AND HUMAN UTILISATION

The project's area of influence encompasses the entire West Coast, includes three districts, namely the City of Cape Town Metropolitan Municipality (Western Cape Province), the West Coast District Municipality (Western Cape Province) and the Namakwa District Municipality (Northern Cape Province).

The 2D survey area overlap with seven commercial fishing sectors (% of national catch indicated in brackets), including demersal trawl (57.8%), midwater trawl (18%), demersal longline (73.7%), small pelagic purse-seine (7.8%), large pelagic longline (21.4%), tuna pole-line (97.1%) and traditional line fish (0.5%). The 3D survey area only overlaps with one sector, namely the large pelagic longline sector (2.5%). There is no overlap with small-scale fishing sector, which is unlikely to range beyond 3 nm (5.6 km) from the coastline. Refer to Figures 9 to 14 for the proximity of the proposed project in relation to the key fishing sectors.

The majority of the international shipping traffic is located on the outer edge of the continental shelf, and as such a significant amounts of ship traffic can be anticipated expected to pass through the Reconnaissance Permit area.

Figure 15 shows the proposed project in relation to existing wells (exploration, appraisal and production), submarine cables and offshore ammunition dumps.

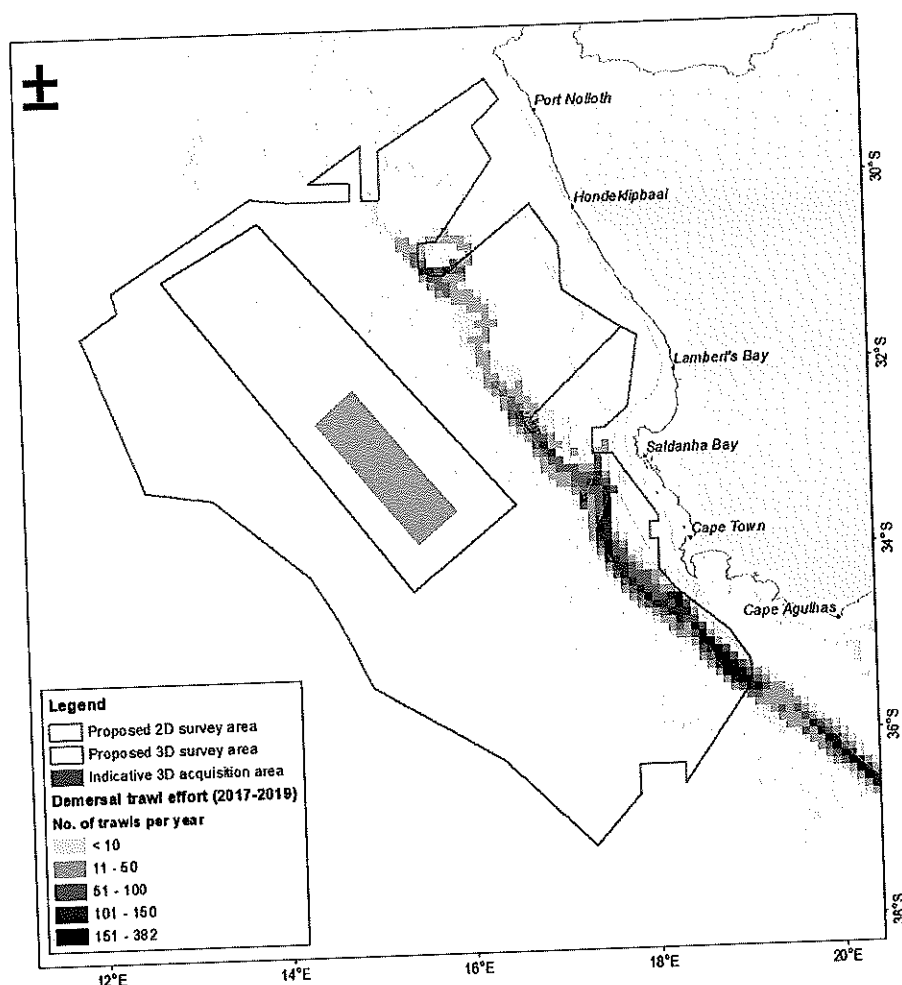


FIGURE 9: PROPOSED PROJECT IN RELATION TO THE SPATIAL DISTRIBUTION OF DEMERSAL TRAWL EFFORT (2017-2019)

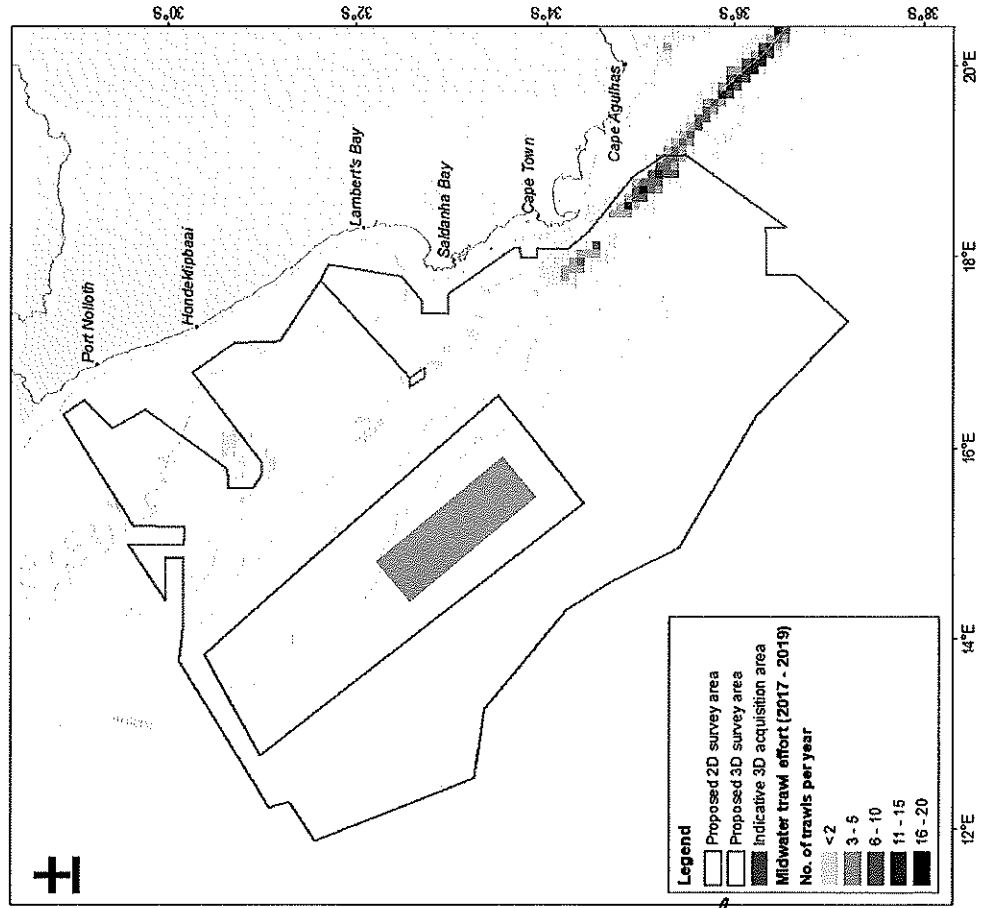


FIGURE 10: PROPOSED PROJECT IN RELATION TO THE SPATIAL DISTRIBUTION OF MID-WATER TRAWL EFFORT TARGETING HORSE MACKEREL (2017-2019)

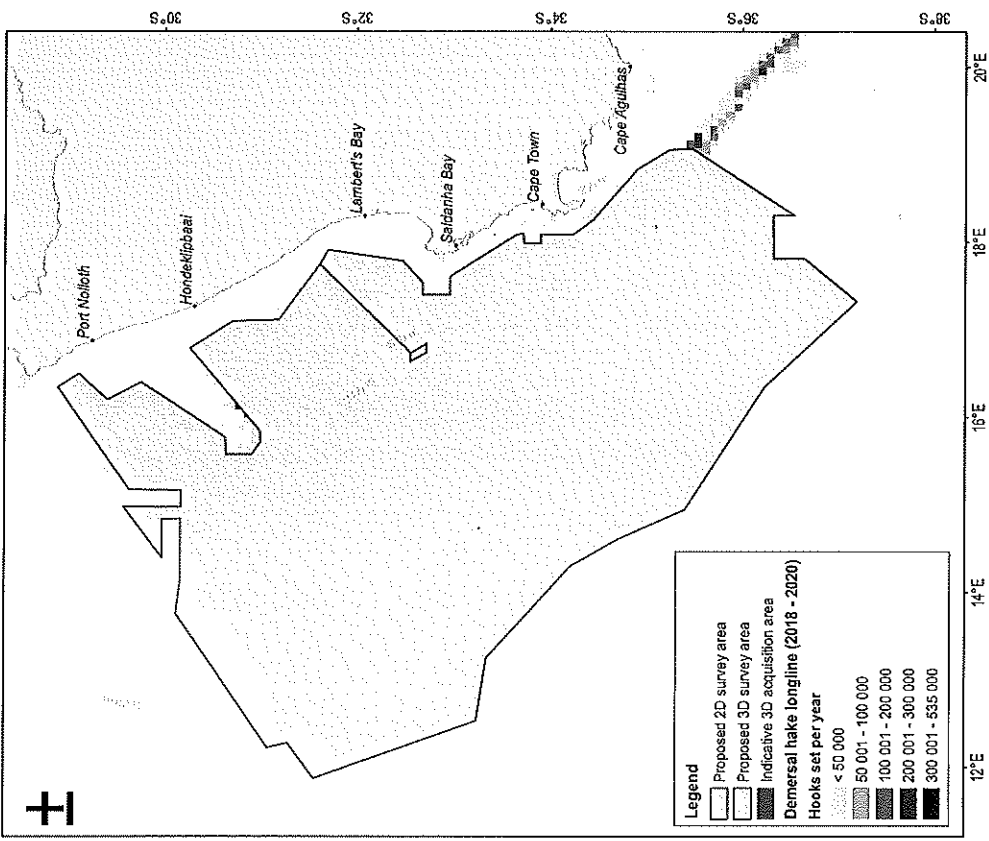


FIGURE 11: PROPOSED PROJECT IN RELATION TO THE SPATIAL DISTRIBUTION OF HAKE DEMERSAL LONGLINE EFFORT (2018-2020)

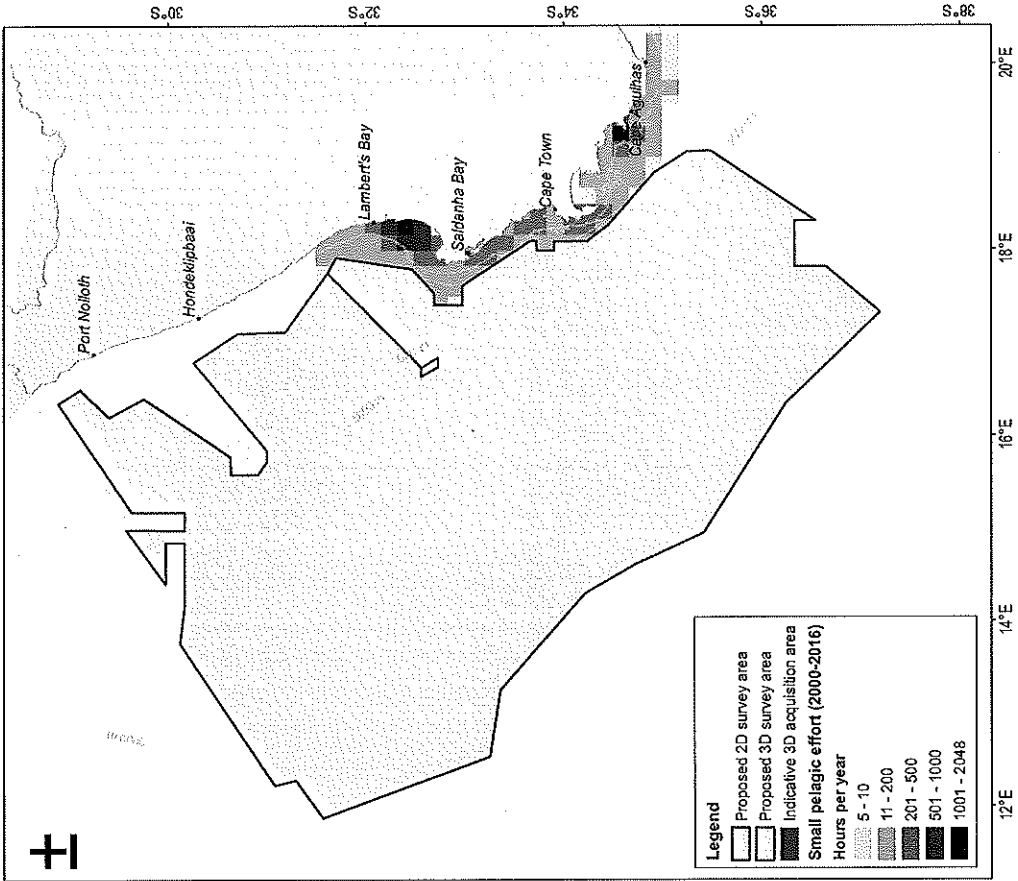


FIGURE 12: PROPOSED PROJECT IN RELATION TO THE SPATIAL DISTRIBUTION OF PURSE-SEINE EFFORT TARGETING SMALL PELAGIC SPECIES (2000-2016)

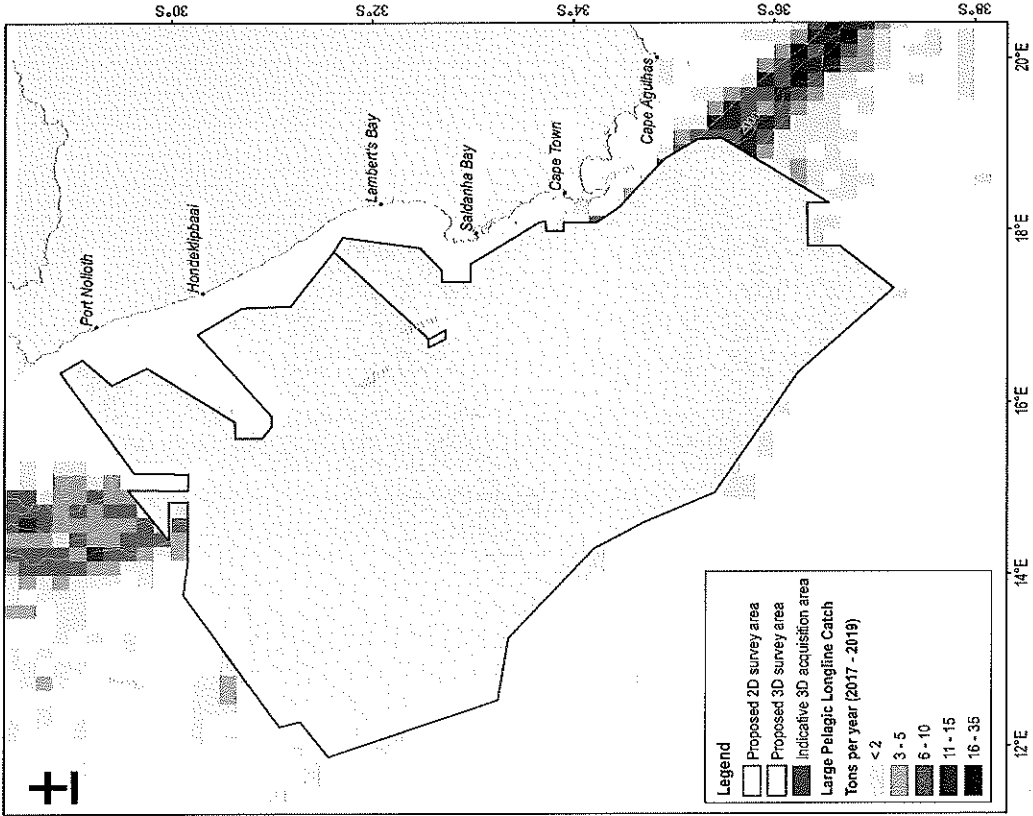


FIGURE 13: PROPOSED PROJECT IN RELATION TO THE SPATIAL DISTRIBUTION OF PELAGIC LONGLINE CATCH (2017-2019)

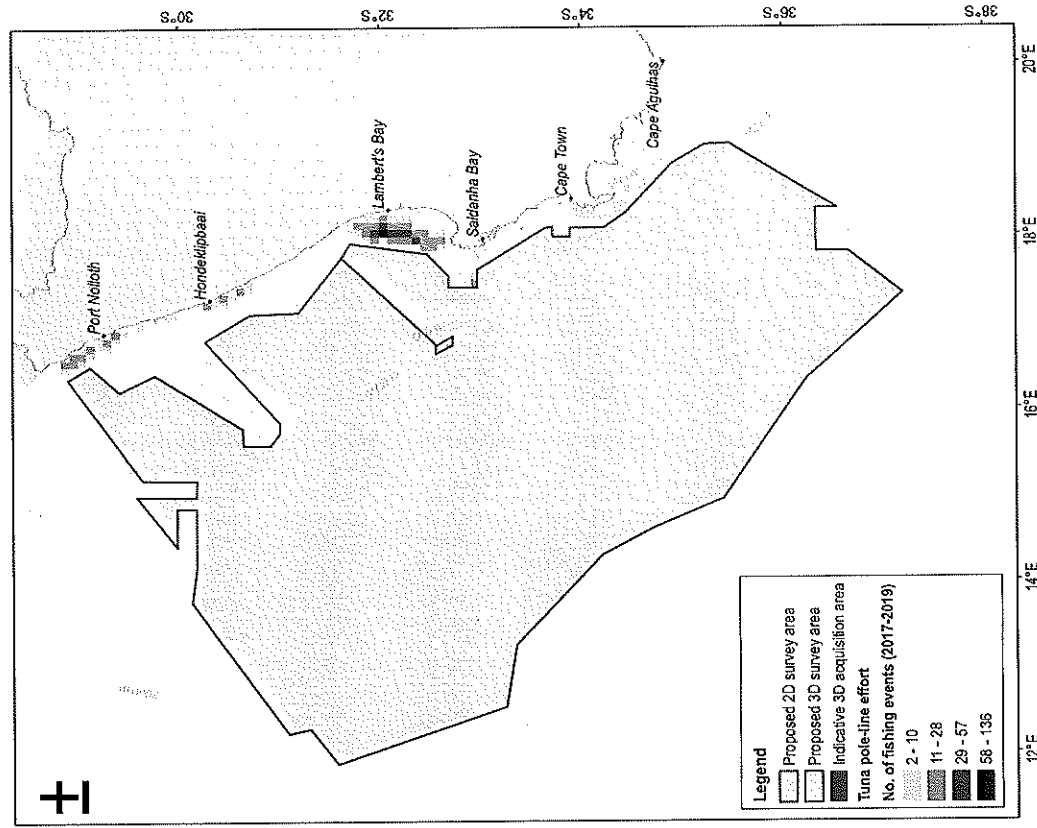


FIGURE 14: PROPOSED PROJECT IN RELATION TO THE SPATIAL DISTRIBUTION OF TUNA POLE EFFORT (2017-2019)

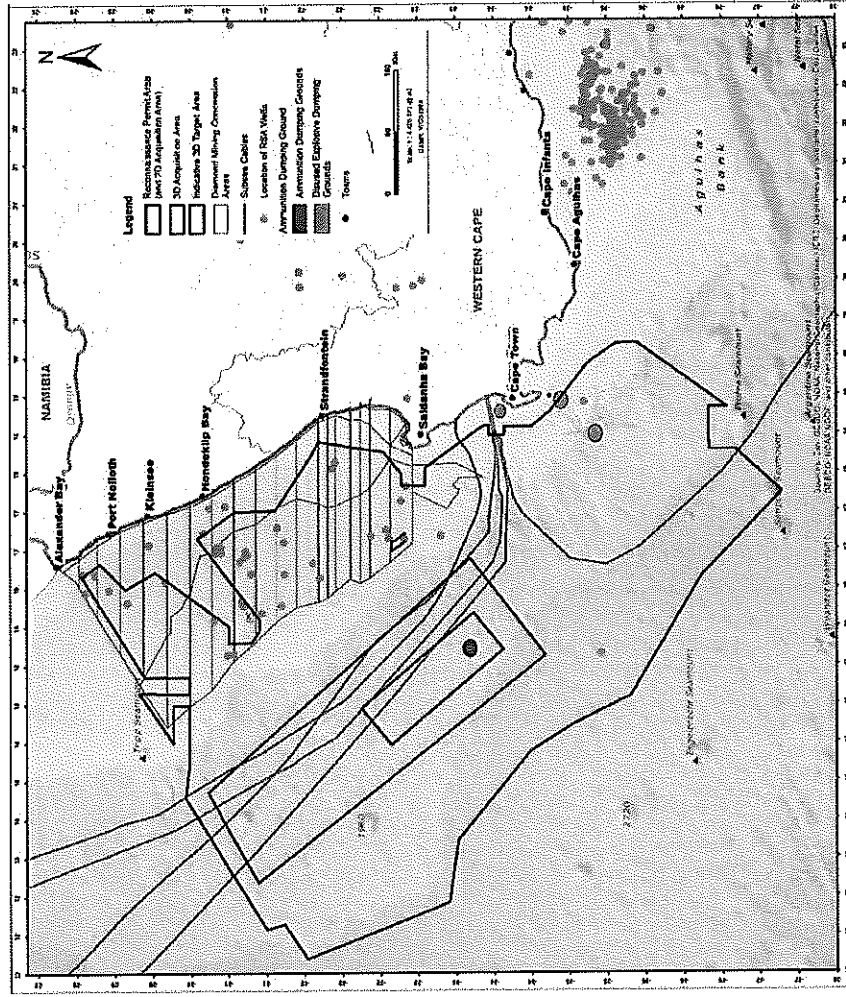


FIGURE 15: PROPOSED PROJECT IN RELATION TO DIAMOND MINING CONCESSION AREAS, EXISTING WELLS, SUBMARINE CABLES AND OFFSHORE AMMUNITION DUMPS

6 IMPACT ASSESSMENT SUMMARY TABLE

A summary of the assessment of potential impacts and proposed mitigation is provided in Table 2 below.

7 CONCLUSIONS

7.1 NORMAL OPERATION

7.1.1 Operation of Project Vessels: Emissions, Routine Discharges, Lighting and Noise

The majority of the impacts associated with the normal operation of the project vessels will occur in the vicinity of the 2D and 3D survey areas, which is the offshore marine environment, more than 20 km and 140 km offshore for the 2D and 3D surveys, respectively, removed from sensitive coastal receptors (e.g. key faunal breeding / feeding areas and bird or seal colonies). The Reconnaissance Permit area is, however, located adjacent to six MPAs and overlaps with various EBSAs and CBAs.

The dominant wind and current direction will ensure that any **air emissions and discharges** move mainly in a north-westerly direction away from the coast. These impacts will largely be regional (although generally localised at any one time), of short-term duration (up to six months) and of very low to low intensity, and are considered to range from **NEGLIGIBLE** to **VERY LOW** significance with mitigation. Key mitigation includes ensuring that the project vessels comply with MARPOL 73/78 standards.

De-ballasting of project vessels could lead to the introduction of exotic species and harmful aquatic pathogens to the marine ecosystem. The risk of impacts on marine biodiversity related to the introduction of alien species is, however, significantly reduced by adherence to the 2004 IMO guidelines governing discharge of ballast, which specifies minimum discharge distances from the nearest land. Considering the dynamic location of the survey area and compliance with the IMO guidelines for ballast water, the residual impact is considered to be of very low intensity in the short-term (due to invasive species not being able to establish) and of regional extent. Thus, the residual impact is of **NEGLIGIBLE** significance.

The **noise generated by the operation of the project vessels** falls within the hearing range of most fish and marine mammals, and would be audible for considerable ranges before attenuating to below threshold levels. However, underwater noise from vessels is not considered to be of sufficient amplitude to cause direct harm to marine life, even at close range. The impact related to vessel noise is considered to be of **VERY LOW** significance. No mitigation measures are proposed or deemed necessary.

Operational lighting used to illuminate the project vessels at night will increase ambient lighting in offshore areas, which may disturb and disorientate pelagic seabirds feeding in the area. Since the survey area is located with the main traffic route on the West Coast of South Africa, which experiences high vessel traffic, animals in the area should be accustomed to vessel traffic within a few days. The residual impact related to vessel lighting is considered to be of **VERY LOW** significance.

These impacts are not unique to the project vessels, but common to the numerous vessels that pass through South African coastal waters on a daily basis.

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TABLE 2: SUMMARY OF THE SIGNIFICANCE OF THE IMPACTS ASSOCIATED WITH THE PROPOSED SPECULATIVE SEISMIC SURVEYS OFF THE WEST AND SOUTH-WEST COASTS

Note: (1) Neg = Negligible; VL = Very Low; L = Low; M = Medium; H = High; VH = Very High; +ve = Positive.
(2) * indicates that no mitigation is possible and/or considered necessary, thus significance rating remains.
(3) ** indicates that although the significance rating of the impact remains the same, the intensity of the impact decreases due to the proposed mitigation.

No.	Activities	Aspects	Impacts on Main Receptors	Pre-Mitigation Significance	Key Mitigation / Project Controls	Residual Significance
1	OPERATION OF VESSELS (SURVEY AND SUPPORT) AND HELICOPTER					
1.1	Emissions to Atmosphere					
1.1.1	Emissions from the operation of the project vessels / helicopter	Increase of air pollutants	Local reduction in air quality	NEG	Compliance with MARPOL 73/78 Annex VI	NEG**
1.1.2			Contribution to global greenhouse gas emissions	NEG		NEG
1.2	Routine Operational Discharges to Sea					
1.2.1	Liquid and solid discharges to sea	Local reduction in water quality	Impact marine ecology/environment	VL	Compliance with MARPOL 73/78 Annexes I, IV and V	VL
1.2.1	Discharge of ballast water and vessel / equipment transfer	Potential introduction of alien invasive species	Impact of on marine biodiversity	VL	Compliance with IMO 2004 Ballast Water Management Convention	NEG
1.3	Underwater noise from project vessels transit					
1.3.1	Vessel operation	Increased underwater airborne noise levels	Impact on marine fauna	VL	None	VL*
1.4	Lighting from vessels					
1.4.1	Vessel operation (at night)	Increased ambient lighting	Impact on marine fauna	VL	Optimise lighting	VL**
1.5	Noise from helicopter					
1.5.1	Helicopter operations (although unlikely)	Increased ambient airborne noise levels	Impact on coastal and marine fauna	VL	- Avoid sensitive areas - Maintain specified altitudes	VL**

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No.	Activities	Aspects	Impacts on Main Receptors	Pre-Mitigation Significance	Key Mitigation / Project Controls	Residual Significance
2	SEISMIC ACQUISITION					
2.1	Underwater Noise from Seismic Source					
2.1.1	Seismic acquisition / seismic source	Increased underwater ambient noise levels	Impact on cetaceans	M	- Avoid key migration period (June to Nov incl.) and undertake survey from North to South - Pre-shoot watch (MMO & PAM) "Soft-start" procedures - MMO observation during surveying (daylight) - PAM during surveying (24/7) - Shut-downs	L
2.1.2						
2.1.3			Impact on seals	L	- Pre-shoot watch (MMO) "Soft-start" procedures - MMO observation during surveying (daylight) - Shut-downs	VL
2.1.4			Impact on turtles	M	- Pre-shoot watch (MMO) "Soft-start" procedures - MMO observation during surveying (daylight) - Shut-downs	L
2.1.5			Impact on penguins and feeding diving seabirds	L	- Pre-shoot watch (MMO) "Soft-start" procedures - MMO observation during surveying (daylight) - Shut-downs	VL
2.1.6			Impact on fish	M	- Avoid key spawning period - Pre-shoot watch (MMO) "Soft-start" procedures	L

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No.	Activities	Aspects	Impacts on Main Receptors	Pre-Mitigation Significance	Key Mitigation / Project Controls	Residual Significance
2.1.7	Seismic acquisition / operation of the seismic source	Increased underwater ambient noise levels	Impact on invertebrates	NEG	• MMO observation during surveying (daylight) • Shut-downs • "Soft-start" procedures • Shut-downs	NEG**
2.1.8			Impact on plankton	MED	• Revised survey plan • Avoid key spawning period - undertake survey from North to South	VL
2.1.9			Impact on demersal trawl, demersal longline and tuna pole-line	H	• Revised survey plan • Avoid key tuna pole fishing period - undertake survey from North to South	L
2.1.10			Impact on large pelagic longline	M	• Stakeholder notification • Navigational warning	M
2.1.11			Impact on mid-water trawl, small pelagic purse-seine	L	• Fisheries Liaison Officer (FLO)	VL
2.1.12					• Grievance mechanism	NEG
2.1.13			Impact on traditional line fish	NEG		
2.2	Temporary Safety Zone around Survey Vessel and Array					
2.2.1	Operation of seismic vessel	Temporary safety zone around survey vessel and array	Impact on tuna pole-line	H	• Revised survey plan • Avoid key tuna pole fishing period - undertake survey from North to South	L
			Impact on demersal trawl, demersal longline	M		L
			Impact on large pelagic longline	M	• Stakeholder / vessel notification	M
2.2.2			Impact on mid-water trawl	L	• Navigational warning	VL
			Impact on small pelagic purse-seine	VL	• Vessel lighting	VL
			Impact on traditional line fish	NEG	• Grievance mechanism	NEG
2.2.3			Disruption to commercial shipping	L		L
3	INTERACTION WITH THE LOCAL ECONOMY					
3.1	Employment and Business Opportunities					
3.1.1	Provision of services	Local employment and local business opportunities	Economic benefits for local service providers and suppliers	NEG +ve	• Contracting of local companies • Manage community expectations	NEG +ve

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No.	Activities	Aspects	Impacts on Main Receptors	Pre-Mitigation Significance	Key Mitigation / Project Controls	Residual Significance
4 UNPLANNED EVENTS						
4.1 Collisions with project vessels and equipment						
4.1.1	Ship strikes and entanglement	Obstruction on sea surface, seafloor or in water column	Health and safety impacts to coastal recreation and fishing	NEG	- Emergency Response Plan - Stakeholder information - Navigation warning - Implement a grievance mechanism	NEG**
4.1.2			Impacts on marine fauna	L	'Turtle-friendly' tail buoys - Reduced transit speed - Ensure all equipment used is thoroughly cleaned	L**
4.2 Accidental Release of Oil at Sea						
4.2.1	Vessel or equipment damaged and bunkering of fuel	Release of fuel into the sea and localised reduction in water quality	Impacts on marine ecology/environment	M	- Bunkering procedure - Shipboard Oil Pollution Emergency Plan – MARPOL Annex I	L
4.2.2			Impacts on commercial nearshore fishing (mariculture and small-scale)	L	Emergency Response Plan and notification	L
			Impacts on commercial fishing	VL	Spill training and clean-up equipment	VL
4.3 Loss of Equipment at Sea						
4.3.1	Accidental loss of equipment	Obstruction on seafloor or in water column	Impacts on marine ecology/environment	VL	- Maintenance and lifting procedures - Retrieve of lost objects / equipment, where practicable	VL**
4.3.2			Impacts on commercial fishing	VL	Notify PASA, SAMSA and the SAN Hydrographer	VL**

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7.1.2 Helicopter Operations

Crew changes will most likely occur by support or survey vessel calling to port. However, if necessary for personnel transfer, the helicopter may fly over or in close proximity to sensitive coastal receptors, such as seal and seabird breeding colonies, which could be affected by a flight path between the survey area and the airport. Although exposure during crew changes will be limited over the six-month survey duration and be of a temporary nature while the helicopter passes overhead, indiscriminate or direct low altitude flying over seabird and seal colonies or breeding cetaceans could impact fauna behaviour and breeding success. Specified flight paths that avoid of these sensitive receptors will reduce the impact intensity on marine fauna, but maintain the **VERY LOW** significance.

7.1.3 Seismic Acquisition

Seismic noise could impact marine fauna in a number of different ways, including physiological injury (e.g. PTS and TTS), disturbance and / or behavioural changes, masking of environmental sounds and communication, and effects on predator-prey relationships. Any impact to fish and fish behaviour could, in turn, impact commercial fisheries that operate in the area through the reduction in catch rates and/or an increase in fishing effort.

The maximum estimated zones of impact for PTS, TTS and behaviour for the various faunal groups are summarised in Table 3 below.

TABLE 3: ZONES OF IMPACT FROM SEISMIC PULSES FOR ALL FAUNAL GROUPS

Type of animal		Zones of impact – maximum horizontal distances from source to impact threshold levels (2D / 3D)				
		Immediate Impact from Single Pulses		Cumulative Impact from Multiple Pulses		Behaviour
		Injury (PTS) onset	TTS onset	Injury (PTS) onset	TTS onset	
Mammals	Cetaceans	240 / 270 m (VHF cetaceans)	450 / 500 m (VHF cetaceans)	500 / 800 m (LF cetaceans)	5 000 / 8 000 m (LF cetaceans)	4 600 / 4 000 m
	Seals	< 10 m	15 / 20 m	-	< 10 m	-
Type of animal		Mortality & Mortal Injury	Recovery Injury	Mortality & Mortal Injury	Recovery Injury	
Fish	Fish (with swim bladder)	140 / 160 m	140 / 160 m	40 / 60 m	80 / 200 m	high - moderate risk: tens to hundreds of meters) / low risk (thousands of meters)
Sea turtles		140 / 160 m	-	20 / 30 m	-	2 990 / 2 550 m
Notes:						
- VHF = Very High Frequency; LF = Low Frequency - A dash indicates the threshold is not applicable. - If the zone of impact for cumulative is smaller than that for the single pulse, then the marine species are likely to be more sensitive to pressure impact than energy impact.						

Thus, animals would need to be in relatively close proximity to the operating seismic source to suffer physiological injury (< 270 m for PTS and 500 m for TTS for a single seismic pulse), and with most being highly mobile, it is assumed that they would avoid sound sources at distances well beyond those at which injury is likely

to occur. The cumulative zones of impact would only apply where the animals may not move away from the area during surveying, e.g. from mid-ocean focal sites such as Child's Bank, Tripp Seamount or the Southeast Atlantic Seamounts. Although the cumulative zone of impact for the 3D survey extends to 800 m for PTS and to 8 000 m for TTS, the 3D survey area does not overlap with these sensitive mid-ocean focal sites. The cumulative zones for PTS and TTS for the 2D survey are 500 m and 5 000m, respectively. Behavioural effects, with a zone of impact up to 4 600 m for cetaceans, are generally short-term with duration of the effect being less than or equal to the duration of exposure, although these vary between species and individuals, and are dependent on the properties of the received sound.

With the implementation of the recommended mitigation, the residual impact on **marine fauna** ranges from **LOW** (cetaceans, turtles and fish) to **VERY LOW** (diving seabirds, seals and plankton / ichthyoplankton) to **NEGLIGIBLE** (invertebrates) significance. Key mitigation includes ensuring the seismic survey avoids the key cetacean migration period from June to November (inclusive); commencing the survey in the north and working southwards thereby avoiding (1) the feeding aggregations of baleen whales between St Helena Bay and Dassen and (2) the spring and summer spawning areas along the shelf edge and on the continental shelf south of St Helena Bay; implementing a 60-minute pre-watch period and "soft-start" procedure; monitoring the faunal activity within the mitigation zone when the seismic source is active; and terminating seismic shooting, as specified.

The proposed 2D survey area overlaps with the fishing grounds of seven **fishing** sectors (% of national catch indicated in brackets), including demersal trawl (57.8%), midwater trawl (18%), demersal longline (73.7%), small pelagic purse-seine (7.8%), large pelagic longline (21.4%), tuna pole-line (97.1%) and traditional line fish (0.5%). Whereas the 3D survey area only overlaps with one sector, namely the large pelagic longline sector (2.5%). After consultation with the commercial fishing sector, Searcher has amended its proposed survey plan by removing the southern inshore survey lines (except one small well tie-in) in order to avoid the key "ring fenced" fishing and spawning areas in the south-east of the reconnaissance permit area (see Figure 16). Non well tie-in lines in the northern key "ring fenced" fishing area have also been removed. With this revised survey plan and implementation of the mitigation measures, which will ensure good communication and coordination with the fishing sectors, the residual impact on the large pelagic longline is assessed to be of MEDIUM significance. The revised survey plan and the recommendation to commence surveying in the northern portion of the survey area would result in avoiding the busy tuna pole-line fishing grounds in the vicinity of the Cape Canyon during November and December, which would reduce the potentially high impacts on the demersal trawl, demersal longline and tuna pole sectors to LOW significance. Due to the minimal overlap with the fishing grounds and limited catch recorded, the impact on the midwater trawl and small pelagic purse-seine is assessed as VERY LOW, while the potential on the traditional line fish sector is NEGLIGIBLE. Although fishing activities will be temporarily excluded from the safety zone around the survey vessel and its array, fishing could continue in adjacent areas. There is no anticipated impact on the small-scale fishing sector, which is unlikely to range beyond 3 nm (5.6 km) from the coastline; thus, falling inshore of the proposed 2D survey area.

Similarly, **commercial shipping** would be excluded from portions of the survey area at any one time and may require these vessels to adjust their course slightly (detour) to avoid the survey vessel and lines being shot. Although the survey areas are located within a main traffic route that pass along the West Coast, with the implementation of the mitigation measures, which includes the broadcasting of a navigational warning for the duration of the survey, residual impacts on commercial shipping is assessed to be of **LOW** significance.

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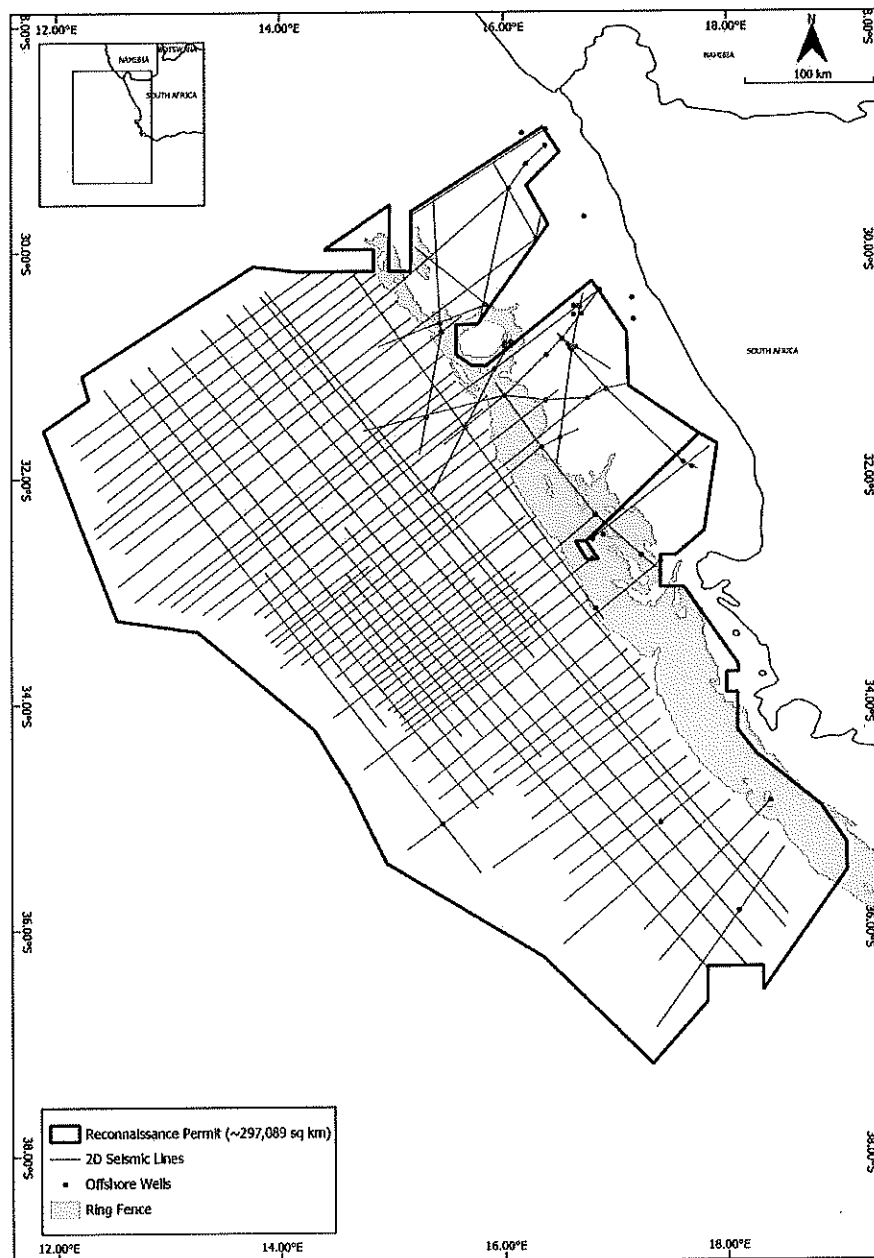


FIGURE 16: REVISED INDICATIVE 2D SURVEY PLAN TO AVOID KEY "RING FENCED" FISHING AND SPAWNING AREAS

Source: Searcher

7.1.4 Interaction with the Local Economy

The seismic activities will result in limited **economic benefits** with respect to the recruitment and the use of local service providers or suppliers. The demand for such local services will largely be limited to crew accommodation, meals, basic goods, and refuelling, provided in the selected supply port, Cape Town or possibly Saldanha. In addition, the workforce required for the exploration activities is expected to be 70 persons in total. Although the majority of these positions will be filled by international experts employed by the seismic contractor, there will be indirect employment via the contracting of local service providers and suppliers. The maximisation of opportunities for locals will result in a residual impact of **NEGLIGIBLE (positive)** significance. Due to the limited nature of this work, it is important to actively manage community expectations related to local procurement, local content, and local employment opportunities.

CJA

7.2 UNPLANNED EVENTS

Unplanned events may conceivably occur as a result of accidents or abnormal operating conditions, including a vessel collision and faunal strikes, accidental spills from bunkering or a vessel accident, and lost equipment.

Oil or diesel spilled in the marine environment will have an immediate detrimental effect on water quality. Being highly toxic, marine diesel released during an operational spill (e.g. during bunkering, vessel or equipment damage) will negatively affect any marine fauna in which it comes into contact. In the unlikely event of a spill, the intensity of the impact would depend on whether the spill occurred in offshore waters where encounters with pelagic seabirds, turtles and marine mammals would be low due to their extensive distribution ranges, or whether the spill occurred closer to the shore where encounters with sensitive receptors will be higher. Due to the dominant winds and currents, a diesel slick in the survey area would be blown in a north-westerly direction and away from sensitive coastal receptors. A small diesel spill would remain at the surface for less than 5 days (short-term) with no chance of it reaching sensitive coastal habitats. A spill within the port limits during bunkering / loading could, however, be easily managed and contained, and is less likely to pose a risk to the nearshore environment. A spill outside the port near the coast (e.g. in the unlikely event of a vessel collision) could reach the shore and mariculture activities through wave action and tidal currents. As the intensity of a nearshore spill may be higher than an offshore spill, the residual impacts on marine ecology and nearshore fishing (mariculture and small-scale) are considered to be of **LOW** significance, while the residual impacts on commercial fishing (offshore) are considered to be of **VERY LOW** significance. Key project controls include implementing the Shipboard Oil Pollution Emergency Plan and Emergency Response Plan.

The potential impacts associated with **lost equipment** to the seabed may initially crush benthic fauna, whereafter it would provide a localised area of hard substrate in an area of otherwise unconsolidated sediments. This would be of short-term duration as any lost object will likely sink into the sediments and be buried over time. Since the 2D survey area overlaps with demersal fishing grounds along the shelf break, snagging of demersal gear due to equipment that sinks to the seabed is considered possible. The loss of a streamer would also result in entanglement and collision hazards in the water column before they sink under their own weight. The residual impacts on marine fauna and commercial fishing are both considered to be of **VERY LOW** significance. Equipment and gear will be recovered, where possible, thereby reducing the likelihood of these impacts.

Movement of vessels between the survey area and the supply port may result in limited interaction with recreational and fishing boats that could lead to **vessel collisions** and related damage to vessels and death / injuries to humans. To be prepared for a collision event, the project will implement an emergency response system. As standard practice, an Emergency Response Plan and Medical Evacuation Plan will be implemented. Assuming compliance with port control and laws of the sea when navigating in the vicinity of the supply port, it is unlikely that collisions would occur and the potential residual impact is assessed to be of **NEGLIGIBLE** significance.

Faunal strikes with the project vessels or the towed array, although unlikely, may occur during vessel transit or surveying. The residual impact is considered to be of **LOW** significance with the use of 'turtle-friendly' tail buoys, ensuring that all equipment that has been used in other regions is thoroughly cleaned prior to and regularly during use (less likely to attract animals wanting to feed off organisms growing on the equipment) and reducing transit speed from 12 knots to 10 knots in the vicinity of sensitive marine fauna and within 25 km from the coast.

CJA S

7.3 CUMULATIVE IMPACT

The assessments of impacts of seismic sounds provided in the scientific literature usually consider short-term responses at the level of individual animals only, as scientific understanding of how such short-term effects relate to adverse residual effects at the population level are limited. Data on behavioural reactions to seismic noise acquired over the short-term could, however, easily be misinterpreted as being less significant than the cumulative effects over the long-term. Despite the density of seismic survey coverage over the past years in the South African offshore and particularly along the southern coast, the number of Southern right and Humpback whales around the southern African coast have increased, and their lingering on West Coast feeding grounds long into the summer, suggest that those surveys conducted over the past decades have not negatively influenced the distribution patterns of these two migratory species at least. Information on the population trends of resident species of baleen and toothed whales is unfortunately lacking, and the potential effects of seismic surveys on such populations remains unknown. Consequently, suitable precautionary mitigation measures must be implemented during seismic data acquisition to ensure the least possible disturbance of marine fauna in an environment where the cumulative impact of increased background anthropogenic noise levels has been recognised as an ongoing and widespread issue of concern.

There is the possible chance of an increase in disturbance and disruption to fisheries active in the area should additional exploration activities be undertaken during the same survey window period. There is also the possibility of cumulative benefits being accrued to local service providers and suppliers if multiple exploration activities become active either in parallel or in close sequence to each other. The need for ongoing support from local service providers and suppliers over multiple projects may see possible cumulative benefits over a longer period of time, but may also raise strong expectations.

Thus, should other speculative or proprietary seismic survey campaigns be undertaken concurrently with Searcher's proposed survey programme in the Orange Basin (although unlikely to be undertaken in the same area during the same survey window due to impacts on operation and data acquisition), cumulative impacts may be likely and there would need to be alignment in planning of such concurrent operations in order to avoid cumulative impacts.

7.4 RECOMMENDATION

All residual impacts related to normal operations, are of **NEGLIGIBLE** to **MEDIUM** significance with the implementation of the recommended mitigation measures. Based on the nature, duration (short-term) and extent (regional, although generally localised at any one time) of the proposed seismic survey and the findings of the specialist studies, SLR is of the opinion that there is no reason why the proposed project should not, with implementation of the project controls and proposed mitigation measures, receive a favourable decision and the issuing of a Reconnaissance Permit.

CJA 8

15 December 2021

Dear Sir/Madam

Notification of Effective Grant of Reconnaissance Permit

As per SEARCHER's commitments to Stakeholder consultation and engagement, under our Environmental Management Plan, for the Proposed Speculative 2D and 3D Marine Seismic Survey off the West and South-West Coasts of South Africa, (Orange Basin 2D/3D MSS) we wish to advise that our Reconnaissance Permit has been granted by Department of Mineral Resources and Energy (DMRE) and is effective dated 6 December 2021. We are currently awaiting final registration with the Mining & Petroleum Titles Registration Office.

SEARCHER propose to carry out multi-client activities relating to acquiring new seismic datasets to create a data base over South Africa's offshore areas.

The Reconnaissance Permit was granted on the approval of the submitted EMPr encompassing assessment of the potential impacts on marine fauna and fisheries active in the area along with identification of measures to avoid and mitigate these potential impacts, as provided from independent specialists. The approval process also included a formal 30-day public review and comment period with comments considered by the issuing authority prior to approving the Permit. SEARCHER also demonstrated that it has sufficient financial resources, technical competence and experience to carry out effective reconnaissance operations.

SEARCHER provides extensive global technical capability and expertise in acquisition, processing, interpretation and marketing of multi-client seismic data. With extensive geological exploration and production experience SEARCHER provide fully integrated datasets to international investors, assisting them to find value in their evaluations, and maximize uncertainty and risk reduction.

Please do not hesitate to contact us if you require further information.

Kindest Regards

Orange Basin 2D/3D MSS Operations Team

SEARCHER

Email: orangebasin@searcherseismic.com



NOTICE TO MARINERS

Orange Basin 2D/3D Marine Seismic Survey

2D Survey Programme:

As per SEARCHER's commitments to stakeholder consultation and engagement, under our Environmental Management Plan, for the Proposed Speculative 2D and 3D Marine Seismic Survey off the West and South-West Coasts of South Africa, (Orange Basin 2D/3D MSS) we wish to ensure that users of the sea are aware of the survey, associated navigational safety and the mechanism to follow for raising concerns.

The survey vessel M/V BGP Pioneer shall commence 2D acquisition no earlier than 15th January 2022. The actual commencement date is subject to the duration of previous work for the vessel and we will update key stakeholders 7 days prior to actual commencement and broadcast a navigational warning for the duration of the survey activities. The 2D survey is expected to take 55 days, excluding any downtime due to operational delays or rough sea conditions. The M/V BGP Pioneer will be towing a source array and 1 streamer cable, extending up to 12 km long, astern of the vessel and approx. 8m below sea surface.

The streamer cable/s will be marked at the end by a tail buoy.

The support vessel M/V Marianne-G will be present during the survey.

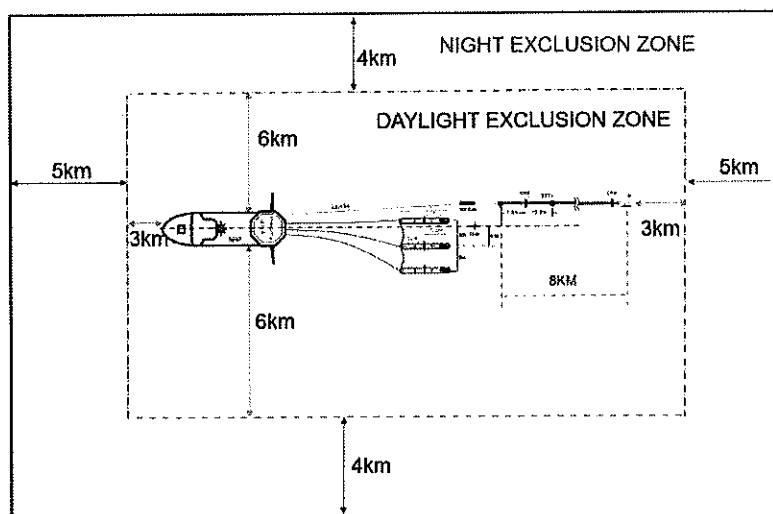
A Fisheries Liaison Officer will be onboard either the survey or support vessel for the duration of the project.

VHF Channel 16:

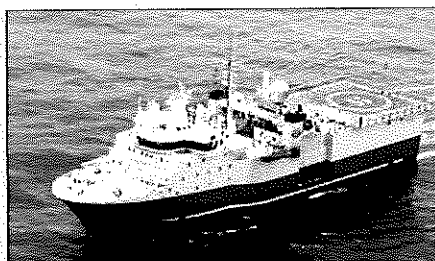
The vessel is severely restricted in her ability to stop or turn and needs a minimum all round clearance of 11km ahead & abeam and 17km astern (9NM).

If you are passing or plan to fish in the proximity of the area shown in Figure 1, could you please advise the survey vessel M/V BGP Pioneer of your position on VHF Channel 16.

Your assistance in this matter would be greatly appreciated and we apologize for any inconvenience caused.

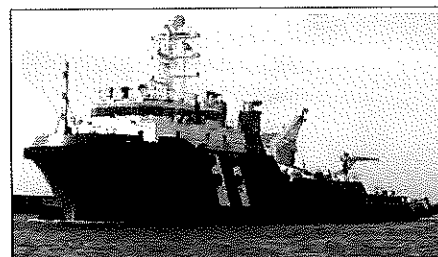


Survey Vessel:



Survey Vessel	: M/V BGP Pioneer
Flag	: Panama
Call Sign	: 3EGU3
Length	: 83.7m
Contact	: VHF 16

Support Vessel:



Support Vessel	: M/V Marianne-G
Flag	: Panama
Call Sign	: 3FTA9
Length	: 57.4m
Contact	: VHF 16

CJA

For further information or should you like to receive daily survey updates Contact: Seiche Ltd: M.Roffe@seiche.com

NOTIFICATION OF COMMENCEMENT

Orange Basin 2D/3D Marine Seismic Survey

Survey Programme:

Searcher Geodata UK Limited (Searcher) hereby provide notice given in terms of the approved Environmental Management Programme ("EMPr") of the acquisition phase of operations for the proposed Orange Basin Marine Seismic Survey (MSS) commencing no earlier than 15th January 2021. The actual commencement date is subject to the duration of previous work for the vessel and we will update key stakeholders 7 days prior to actual commencement and broadcast a navigational warning for the duration of the survey activities.

Searcher has been granted a Reconnaissance Permit in terms of Section 74 of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA) by the Petroleum Agency of South Africa (PASA) on 9th November 2021 (effective date 6 December 2021). The permit provides for the undertaking of a multi-client speculative two-dimensional (2D) and three-dimensional (3D) seismic survey programme over a number of petroleum license blocks off the West and South-West Coasts of South Africa to a cumulative maximum of 180 days.

Key Activity Information:

Searcher proposes to undertake either a 2D or a 3D seismic survey or a combination thereof, acquired back-to-back, over the 2021 / 2022 Austral Summer.

The Reconnaissance Permit Area is located offshore roughly between the South African - Namibian border and Cape Agulhas, approximately 20 km from the coast at its closest point and beyond the South African Exclusive Economic Zone (EEZ) its furthest (approximately 280 km offshore at its closest point), in water depths ranging from approximately 100m to over 4 500 m. The survey area and indicative survey lines presented in Figure 1.

The Reconnaissance Permit was granted on the approval of the submitted EMPr encompassing assessment of the potential impacts on marine fauna and fisheries active in the area along with identification of measures to avoid and mitigate these potential impacts, as provided from independent specialists. The approval process also included a formal 30-day public review and comment period with comments considered by the issuing authority prior to approving the Permit.

As stipulated in the approved EMPr the seismic vessel will be fitted with PAM technology, which detects animals through their vocalisations with dedicated 24-hour PAM observers, the survey operations will also be monitored by Marine Mammal Observers and Fisheries Liaison Officer will be onboard for duration of the survey to assist with on water communications.

About Searcher:

Searcher has a history of effectively conducting marine seismic surveys with successful environmental outcomes attained from rigorous operating rules, environmental risk assessment, planning and management. Searcher will ensure that the latest Good International Industry Practice is adopted for the survey operations.

Searcher are committed to open and honest communications about the planned activity and to listening to relevant stakeholder concerns.

Contact Details:

Should you have any queries in regard to the seismic operation, please contact:

OrangeBasin@SearcherSeismic.com

Protection of personal information:

By being registered in the Project database, it is assumed that you authorise Searcher to retain and use your Personal Information as part of a contact database for this and/or other Environmental and Social Impact Assessment (ESIA) and that you confirm your acceptance for Searcher to contact you regarding this and/or other ESIA processes. Searcher will not process your Personal Information, other than as permitted or as required by this ESIA process, Law or public policy. Searcher will use reasonable, appropriate security safeguards in order to protect Personal Information, and to reasonably prevent any damage to, loss of, or unauthorised access or disclosure of Personal Information, other than as required for ESIA processes or as required by any Law or public policy.

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CJA 2

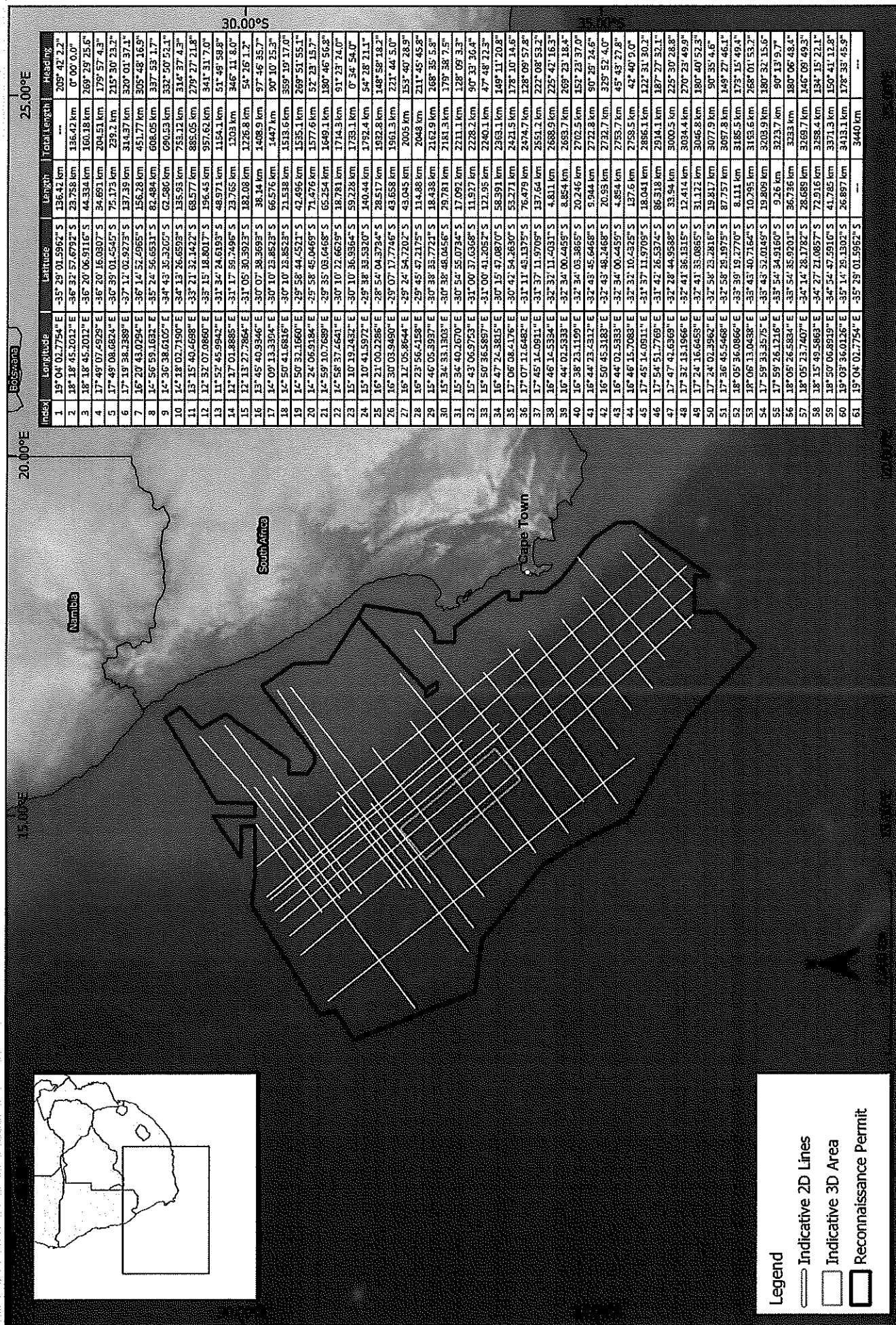
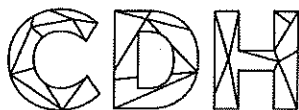


Figure 1—Proposed Activity Location Map with Indicative 2D lines and 3D Area



CLIFFE DEKKER HOFMEYR

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Our Reference	Roy Barendse
Account Number	N/A
Your Reference	N/A
Direct Line	+27 (0)21 481 6429
Direct Telefax	+27 (0)21 481 5263
Direct Email	roy.barendse@cdhlegal.com
Date	14 January 2022

Attention: WILMIEN WICOMB

By email: wilmien@lrc.org.za

Dear Madam

RE: Searcher Geodata UK Limited

- 1 We address you on behalf of Searcher Geodata UK Limited (our "client").
- 2 We refer to your letter dated 13 January 2022 addressed to our client ("your letter").
- 3 We do not intend to respond to each and every allegation made in your letter, our election not to do so should not be construed as an admission to the veracity of any of the allegations not dealt with herein.
- 4 At the outset, we note that at paragraph 1 of your letter under reply, you indicate that you represent "**a number of West Coast fishing communities**".
- 5 In this regard, kindly identify your clients in sufficient detail and provide us with a copy of your written mandate and/or powers of attorney to represent such clients by no later than close of business Monday 17 January 2022.
- 6 We note that you refer to representation of "We are South Africans" in paragraph 2 of your letter. In this regard please be advised that our client is in the process of uploading the Environmental Management Plan ("EMP") to a website location and as requested by "We are South Africans", they will receive notification once this process is complete. We trust that you will guide them accordingly.
- 7 We advise that our client's letter of 15 December 2021, as referred to in paragraph 3 your letter, was sent to all registered interested and affected parties in compliance with our client's approved environmental management plan, which approved environmental management plan prescribes that all interested and affected parties be notified of the commencement of the seismic survey 30 days prior to such commencement.

CHAIRPERSON TG Fuhrmann CHIEF EXECUTIVE OFFICER B Williams CHIEF FINANCIAL OFFICER ES Burger

DIRECTORS: JOHANNESBURG RS Alho M Aphiri JA Aukema G Barkhuizen-Barbosa R Beerman E Bester A Bezuidenhout P Bhagatjee BSS Baikanyo R Bonnet TE Brincker JJ Brink B Brown N Cara HLE Chang V Chaplin CWJ Charter CJ Daniel J Darling W de Waal L Erasmus P Erasmus JJ Feris TS Fletcher TG Fuhrmann F Gattoo MZ Gattoo J Govender L Granville I Hayes AJ Hofmeyr Q Honey B Jennings WH Jacobs T Jordaan R Kelly J King Y Kleitman AM le Grange FE Leppan CJ Lewis HJ Louw II Mahomed B Masuku NN Mchunu B Meyer WJ Midgley R Moodley A Moolman MB Mphahla MG Mphahla J Naidoo KT Nkaiseng P Nkuna BP O'Connor H Parak A Patel GH Pienaar V Pillay DB Pinnock TZ Rapuleng AG Reid C Rumsey H Schensema M Serfontein TP Smit L Smith S Spamer FP Swart T Tosen R Valayathum HR van der Merwe JG Webber M Werner JG Whittle DA Wilken B Williams MP Yeates

DIRECTORS: CAPE TOWN TN Baker TJ Brewis MR Collins A de Lange S Franks J Gillmer JW Green AM Helberg PB Hesseling S Immelman JAD Jorge A Kariem JA Krige IJ Lessing GC Lumb RE Marcus NS Mbambisa SI Meyer A Mhlongo T Moodley G Orrle CH Pienaar L Rhoadie MB Rodgers BJ Scriba DM Thompson CW Williams

EXECUTIVE CONSULTANTS: AC Alexander RD Barendse M Chenia HS Coetzee PJ Conradie J Latsky FT Newham JM Wits-Hewinson

CONSULTANTS: A Abercrombie JMA Evenhuis J Ewang Prof A Govindjee JH Jacobs EJ Kingdon FF Kolbe S Naidoo T van Schalkwyk

SENIOR ASSOCIATES: I Abdullah KF Anderson DR Balusik KA Biddulph JL Botha JC Cameron L Chance LY Coffea BP Cripps N Dhana T Dlamini DV Durand C Dutilleul T Erasmus NK Fletcher RA Geswindt AJ Gillam S Goncalves K Govindsamy A Govuza N Hancock B Hayath M Heppes C Hofmeyr GT Howard D Jago SJ Jamleson TC Jegels SM Kelly D Kruger N Loopoo B Mangale V Manko J Meyer T Mila L Mohale V Moodaley W Murray A Pienaar S Singh J Strydom C Thomas R Webster ER West K Weyers CA Wood C Yang

CLIFFE DEKKER HOFMEYR SERVICES PROPRIETARY LIMITED DIRECTORS: GC Badenhorst ES Burger JA Cassette AB Hoek MW Linington R Mouton B Williams

KIETI LAW LLP PARTNERS: NAIROBI S Ndolo⁵ C Wambua⁶ D Odhiambo⁶ S Olanga⁶ N Wagacha⁶

⁶British ⁵Dutch ⁶Kenyan ⁶Office Managing Partner

Cliffe Dekker Hofmeyr Inc. Reg No 2008/018923/21

CSA

- 8 We refer to paragraph 7 of your letter and confirm that –
- 8.1 Our client submitted its application for a reconnaissance permit in terms of section 74 of the Mineral Petroleum Resources Development Act 28 of 2002 ("**MPRDA**") on **30 April 2021**.
- 8.2 On 18 May 2021, the South African Agency for Promotion of Petroleum Exploration and Exploitation ("**the Petroleum Agency**") issued a letter in terms of section 74(2) of the MPRDA accepting our client's application.
- 8.3 Our client's application for a reconnaissance permit was therefore pending as at 11 June 2021 when the 2021 amendments to the Environmental Impact Assessment Regulations of 2014 came into effect ("**2021 EIA Regulations**").
- 8.4 Accordingly, the transitional arrangements contained in regulation 30 of the 2021 EIA Regulations applied to our client's application for a reconnaissance permit, and the statement contained in paragraph 7 of your letter is patently incorrect.
- 9 We are instructed to inform you, as we hereby do, that our client will not provide your clients with an undertaking to suspend commencement of the seismic survey, as sought in paragraph 12 of your letter under reply. Our client is in possession of all the required regulatory approvals to proceed with the seismic survey and as such, our client is under no legal obligation to suspend commencement of the seismic survey.
- 10 Our instructions are to oppose any proceedings that your client may institute in the High Court. In such event we ask that you kindly serve any process on our offices care of the writer.
- 11 We are taking further instructions on the remainder of the contents of your letter under reply. Our client fully reserves its right to respond to the allegations, statements, inferences and/or demands contained in your letter, in the appropriate forum and at the appropriate time.
- 12 All our client's rights are hereby fully reserved.

Yours faithfully



ROY BARENDSE
CLIFFE DEKKER HOFMEYR INC

CJA 

Cape Town Office

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PBO No. 930003292
NPO No. 023-004

LRC**Legal Resources Centre**

13 January 2022

- TO:** Searcher Seismic
 Per email: orangebasin@searcherseismic.com
- AND TO:** Honourable Minister of Mineral Resources and Energy
 Mr Gwede Mantashe
 Per email: Ms Vuyelwa Siyeka Vuyelwa.Siyeka@dmr.gov.za
- AND TO:** Director-General: Department of Mineral Resources and Energy
 Adv Thabo Mokoena
 Per email: Thabo.mokoena@dmr.gov.za /
mamabefu.modipa@dmr.gov.za
- AND TO:** The Petroleum Agency of South Africa
 Mr A Thovakale
 Per email: plu@petroleumagencyrsa.com
- AND TO:** Honourable Minister of Forestry, Fisheries and Environment
 Ms Barbara Creecy
 Per email: fshaik@environment.gov.za
- Re: Demand to Suspend Commencement of Seismic Blasting on West Coast**
1. We are instructed by a number of West Coast fishing communities who have an interest in preserving the natural environment of the West Coast, which is the source of their livelihoods.
 2. Richard Spoor Inc, Attorneys are also instructed by *We Are South Africans*, a civil society movement of South Africans that aims to connect and rebuild communities and to defend constitutional rights.
 3. It has been brought to our clients' attention that in a letter dated 15 December 2021, available on SLR's website, Searcher Seismic UK

CJA S

Limited ("Searcher") gave notice that the Department of Mineral Resources and Energy ("DMRE") had granted Searcher a Reconnaissance Permit pursuant to an application in terms of section 74 of the Mineral and Petroleum Resources Development Act. The Permit was effective from 6 December 2021. The permit itself has not been provided.

4. The letter announced that Searcher is permitted to undertake a seismic survey programme off the West Coast of South Africa from 15 January 2022.
5. We note that the letter is dated 15 December 2021, but it is not known to us who this letter was sent to and/or whether and where any other notification was published. We note further that the letter is dated the day before a public holiday in South Africa, the Day of Reconciliation, a day which marks the end of the working year and the beginning of the festive season for many members of the public. Consequently, this notice would have gone unnoticed by most interested and affected persons.
6. In terms of the Mineral and Petroleum Resources Development Act 28 of 2002, National Environmental Management Act 107 of 1998 ("NEMA") and their regulations, an environmental authorisation is a prerequisite for a Reconnaissance Permit.
7. In terms of Item 21B of the Environmental Impact Assessment Regulations ("EIA Regulations") Listing Notice 1 of 2014, Searcher's seismic survey programme is a listed activity and requires environmental authorisation prior to commencement. We understand that as at 11 June 2021, when the amendments to the Listing Notices took effect, Searcher did not have any pending application in terms of the EIA Regulations, and consequently, the transitional arrangements provided for in regulation 30 of the 2021 Amendment Regulations do not apply.
8. As a necessary part of both the permit application and the environmental authorisation process, Searcher was required to properly consult with interested and affected parties, including our clients. Searcher failed to do so when applying for the permit and has not yet consulted with such parties prior to commencement of its seismic survey programme.
9. In the recent judgment of the Makhanda High Court in *Sustaining The Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others*, the Court confirmed the right of interested and affected communities to be consulted meaningfully, which includes the opportunity

CSA S

to voice their concerns about the proposed project and to have those concerns adequately addressed. We are instructed that no meaningful consultation process took place.

10. In the absence of a valid environmental authorisation and Permit, Searcher's activities and operations pursuant to the Permit are unlawful.
11. Our clients intend to institute the necessary legal proceedings to challenge the decision to grant the Permit.
12. Our clients hereby demand that Searcher undertakes not to commence with the seismic survey programme unless and until an environmental authorisation has been granted under NEMA and until the proceedings brought by our clients are finalised.
13. Kindly furnish our clients with this undertaking by no later than 18h00 on 14 January 2022.
14. If Searcher fails or refuses to provide such an undertaking, we are instructed to bring an urgent application in the High Court to interdict Searcher from conducting any activities pursuant to and in terms of the unlawful Permit.
15. Our clients further reserve their rights to pursue any other avenue of recourse.
16. We note that the notice promises to "update key stakeholders 7 days prior to actual commencement." Kindly confirm that you will send any such notice to us at the following email addresses: wilmien@lrc.org.za and khanya@rsinc.co.za, as the legal representatives of our clients who are affected parties.
17. In order to facilitate communications, we require email addresses for the relevant contact persons of Searcher or its legal team.

Yours faithfully

LEGAL RESOURCES CENTRE
Per: Wilmien Wicomb

(Signed electronically)



Cape Town Office

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PBO No. 930003292
NPO No. 023-004

LRC**Legal Resources Centre**

15 January 2022

TO: Roy Barendse
Cliffe Dekker Hofmeyr Attorneys
Per email: roy.barendse@cdhlegal.com

Dear Mr Barendse

Re: Searcher Geodata UK Limited

On 13 January 2022, we addressed correspondence (annexed hereto marked "A") on behalf of our clients, a number of West Coast fishing communities, to Searcher Geodata UK Limited ('Searcher').

In it, our clients demanded an undertaking that Searcher not commence with the seismic survey programme off the West Coast of South Africa that had been planned to commence on 15 January 2022, unless and until an environmental authorisation has been granted under NEMA and until proceedings brought by our clients are finalised.

We have to date received no response to this correspondence.

It has since come to our attention that you are instructed by Searcher and we therefore bring this correspondence to your attention.

We request that you kindly confirm that your office will accept service of any documents on behalf of Searcher and, in addition, that you are willing to accept electronic service on the event of our clients instituting court proceedings.

Yours faithfully

LEGAL RESOURCES CENTRE
Per: Wilmien Wicomb

(Signed electronically)



CLIFFE DEKKER HOFMEYR

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Your Reference	N/A
Direct Line	+27 (0)21 481 6429
Direct Telefax	+27 (0)21 481 5263
Direct Email	roy.barendse@cdhlegal.com
Date	14 January 2022

Attention: WILMIEN WICOMB

By email: wilmien@lrc.org.za

Dear Madam

RE: Searcher Geodata UK Limited

- 1 We address you on behalf of Searcher Geodata UK Limited (our "**client**").
- 2 We refer to your letter dated 13 January 2022 addressed to our client ("**your letter**").
- 3 We do not intend to respond to each and every allegation made in your letter, our election not to do so should not be construed as an admission to the veracity of any of the allegations not dealt with herein.
- 4 At the outset, we note that at paragraph 1 of your letter under reply, you indicate that you represent "**a number of West Coast fishing communities**".
- 5 In this regard, kindly identify your clients in sufficient detail and provide us with a copy of your written mandate and/or powers of attorney to represent such clients by no later than close of business Monday 17 January 2022.
- 6 We note that you refer to representation of "We are South Africans" in paragraph 2 of your letter. In this regard please be advised that our client is in the process of uploading the Environmental Management Plan ("**EMP**") to a website location and as requested by "We are South Africans", they will receive notification once this process is complete. We trust that you will guide them accordingly.
- 7 We advise that our client's letter of 15 December 2021, as referred to in paragraph 3 your letter, was sent to all registered interested and affected parties in compliance with our client's approved environmental management plan, which approved environmental management plan prescribes that all interested and affected parties be notified of the commencement of the seismic survey 30 days prior to such commencement.

CHAIRPERSON TG Fuhrmann CHIEF EXECUTIVE OFFICER B Williams CHIEF FINANCIAL OFFICER ES Burger

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KIETI LAW LLP PARTNERS: NAIROBI S Ndolo^{4,5} C Wambua⁴ D Odhiambo⁴ S Otanga⁴ N Wagacha⁴

⁶British ⁴Dutch ⁵Kenyan ⁴Office Managing Partner

Cliffe Dekker Hofmeyr Inc. Reg No 2009/018923/21

CJA

- 8 We refer to paragraph 7 of your letter and confirm that –
- 8.1 Our client submitted its application for a reconnaissance permit in terms of section 74 of the Mineral Petroleum Resources Development Act 28 of 2002 ("MPRDA") on **30 April 2021**.
- 8.2 On 18 May 2021, the South African Agency for Promotion of Petroleum Exploration and Exploitation ("**the Petroleum Agency**") issued a letter in terms of section 74(2) of the MPRDA accepting our client's application.
- 8.3 Our client's application for a reconnaissance permit was therefore pending as at 11 June 2021 when the 2021 amendments to the Environmental Impact Assessment Regulations of 2014 came into effect ("**2021 EIA Regulations**").
- 8.4 Accordingly, the transitional arrangements contained in regulation 30 of the 2021 EIA Regulations applied to our client's application for a reconnaissance permit, and the statement contained in paragraph 7 of your letter is patently incorrect.
- 9 We are instructed to inform you, as we hereby do, that our client will not provide your clients with an undertaking to suspend commencement of the seismic survey, as sought in paragraph 12 of your letter under reply. Our client is in possession of all the required regulatory approvals to proceed with the seismic survey and as such, our client is under no legal obligation to suspend commencement of the seismic survey.
- 10 Our instructions are to oppose any proceedings that your client may institute in the High Court. In such event we ask that you kindly serve any process on our offices care of the writer.
- 11 We are taking further instructions on the remainder of the contents of your letter under reply. Our client fully reserves its right to respond to the allegations, statements, inferences and/or demands contained in your letter, in the appropriate forum and at the appropriate time.
- 12 All our client's rights are hereby fully reserved.

Yours faithfully



ROY BARENDSE
CLIFFE DEKKER HOFMEYR INC

CJA S

Cape Town Office

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 PO Box 36083 • Glosderry, Cape Town 7702 • South Africa
 Tel: (021) 879 2398 • Fax: (021) 423 0935 • Website • www.lrc.org.za
PBO No. 930003292
NPO No. 023-004

LRC**Legal Resources Centre**

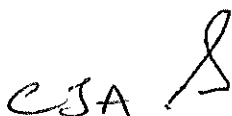
16 January 2022

TO: Roy Barendse
 Cliffe Dekker Hofmeyr Attorneys
 Per email: roy.barendse@cdhlegal.com

Dear Mr Barendse:

Re: West Coast Fishing Communities // Searcher Geodata UK Limited

- 1 We note your letter dated 14 January 2022 which we received on 15 January 2022.
- 2 While we understand that your client believes it has no legal duty to suspend activities, the West Coast fishing communities persist in seeking an undertaking to suspend its activities. This suspension will allow for the orderly and expeditious resolution of the legal questions at stake.
- 3 In particular, Searcher's assertion that it may blast the West Coast without an environmental authorisation is simply incorrect:
 - 3.1 Section 24F of the NEMA prohibits the commencement of a listed activity without an environmental authorisation.
 - 3.2 Activities conducted under reconnaissance permits became listed activities on 11 June 2021.
 - 3.3 Searcher argues that regulation 30 of the EIA Amendment Regulations of June 2021 is a relevant transitional arrangement.



- 3.4 This is incorrect.
- 3.5 Regulation 30 only applies to applications submitted in terms of the EIA regulations pending at June 2021. It is common cause that there was no pending application by Searcher under the EIA regulations. The pending application was for a reconnaissance permit under the MPRDA, which definitionally does not fall under regulation 30.
- 3.6 Regulation 30 does not come to Searcher's aid.
- 4 In addition, Searcher has offered no answer to why it did not obtain an environmental authorisation prior to receiving its reconnaissance permit as required by section 75(1)(c) of the MPRDA. Searcher failed to comply with a peremptory requirement to obtain a reconnaissance permit. The decision to award Searcher a reconnaissance permit was unlawful – patently.
- 5 It is simply no answer to argue that Searcher has an approved EMPr under the MPRDA. There is no basis under any law whatsoever for such applications to be made, much less approved, after December 2014. Particularly where the EMPr is only furnished to interested and affected parties on the eve of the blasting with no provision for comment to the regulator much less any provision for an appeal.
- 6 If Searcher commences blasting without an environmental authorisation, it will be acting unlawfully. Section 49A(1)(a) of the NEMA provides that commencing a listed activity without authorisation is a criminal offence. The permit it received was granted unlawfully.
- 7 We therefore urge Searcher to reconsider its decision to engage in unlawful blasting until part A of the communities' interdict application is heard. We request that you provide such undertaking by 16h00 on Monday, 17 January 2022.

CJA S

- 8 Should Searcher not offer this undertaking, our instructions are to persist in seeking an urgent interdict against Searcher's unlawful conduct with a punitive costs order and will serve such application on your offices. The communities are also considering laying criminal charges against Searcher and its directors should they commence with blasting activities without an environmental authorisation.
- 9 Should Searcher offer the undertaking, the communities are amenable to agreeing to an expeditious timetable for a court hearing. They have also authorised us to share their details with you during this period.
- 10 We look forward to hearing from you. We note that we are available to discuss this matter, and the timetables, telephonically should that be of assistance.

Yours faithfully

LEGAL RESOURCES CENTRE
Per: Wilmien Wicomb

(Signed electronically)

eJA S

LEGAL RESOURCES CENTRE
Aintree Office Park
Block D, Ground Floor
c/o Doncaster Road and Loch Road
Cape Town 7708

Our Reference	Roy Barendse
Account Number	N/A
Your Reference	N/A
Direct Line	+27 (0)21 481 6429
Direct Telefax	+27 (0)21 481 5263
Direct Email	roy.barendse@cdhlegal.com
Date	17 January 2022

Attention: WILMIEN WICOMB
By email: wilmien@lrc.org.za

Dear Madam

Searcher Geodata UK Limited // West Coast Fishing Communities

- 1 We acknowledge receipt of your letter dated Sunday 16 January 2022 at 17h35.
- 2 The contents of your letter are receiving our urgent attention and we anticipate being able to reply thereto as specifically invited, by close of business on Thursday, 20th instant.
- 3 We meanwhile repeat our request for you to disclose who your clients are and to provide the written powers of attorney/mandates as previously requested.
- 4 Our client's rights remain strictly reserved.

Yours faithfully



ROY BARENDSE
CLIFFE DEKKER HOFMEYR INC

CHAIRPERSON TG Fuhrmann **CHIEF EXECUTIVE OFFICER** B Williams **CHIEF FINANCIAL OFFICER** ES Burger

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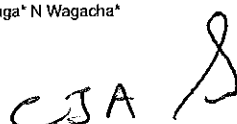
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KIETI LAW LLP PARTNERS: NAIROBI S Ndolo^a C Wambua^a D Odhiambo^a S Olanga^a N Wagacha^a

^aBritish ^aDutch ^aKenyan ^aOffice Managing Partner

Cliffe Dekker Hofmeyr Inc. Reg No 2008/018923/21





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Account Number	10169696
Your Reference	W Wicomb
Direct Line	+27 (0)21 481 6429
Direct Telefax	+27 (0)21 481 5263
Direct Email	roy.barendse@cdhlegal.com
Date	20 January 2022

Attention: WILMIEN WICOMB
By email: wilmien@lrc.org.za

Dear Madam

Searcher Geodata UK Limited // West Coast Fishing Communities

- 1 The above matter and previous correspondence refer.
- 2 The submissions and contentions contained in your letter were given due consideration.
- 3 Our instructions are that our client was in compliance with the legislative framework and the contentions contained in your correspondence are strongly disputed.
- 4 It remains of concern that you have still not disclosed the identities of your clients. Needless to say, this is information to which our client is entitled.
- 5 Our client's rights remain strictly reserved.

Yours faithfully

ROY BARENDSE
CLIFFE DEKKER HOFMEYR INC

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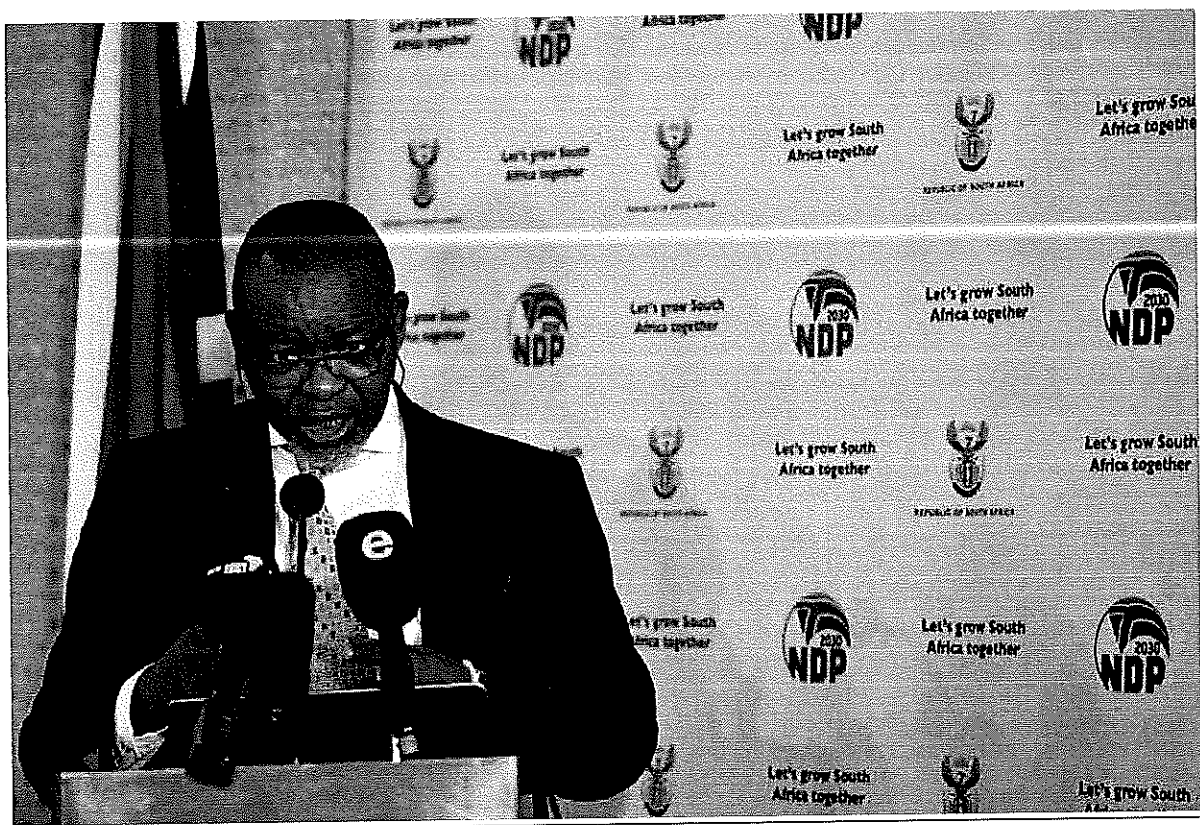
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South African Government

@GovernmentZA

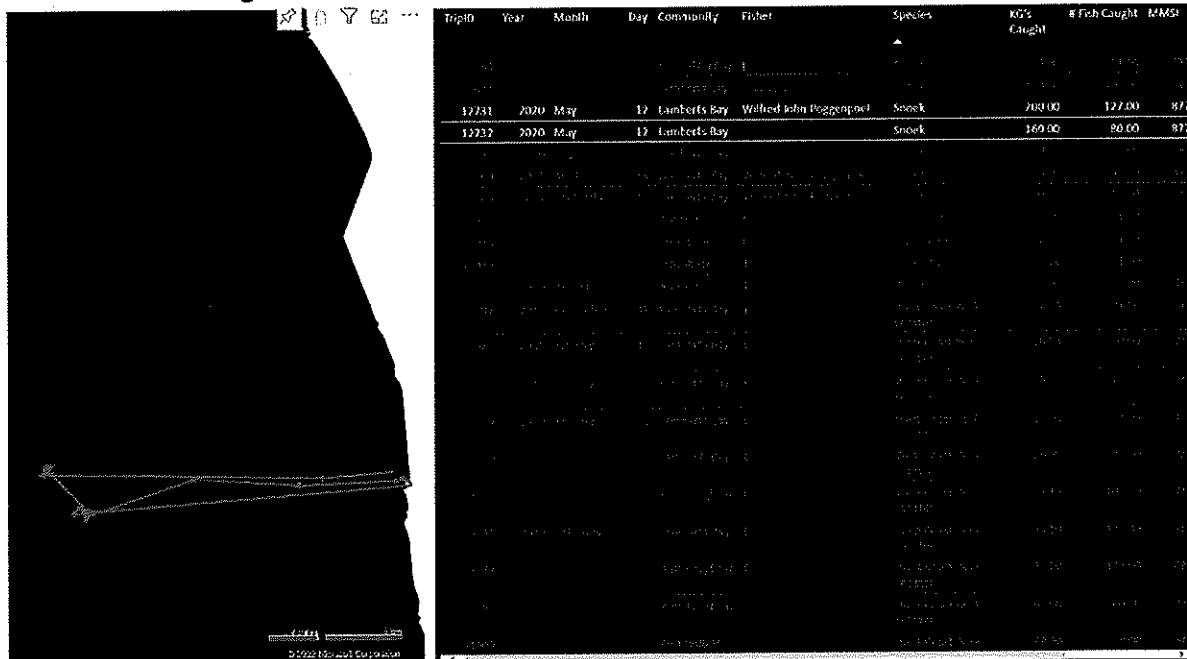
"We consider the objections to these developments as apartheid and colonialism of a special type, masqueraded as a great interest for environmental protection." - Minister Mantashe



2:00 PM · Dec 9, 2021 · Twitter for iPhone

eja S

Vessel's exceeding 20km offshore to conduct fishing activity
 Vessel track here goes to 24km offshore



Christian Adams data as an example

Year	Month	Community	Species	Kilograms harvested	Units harvested
2019	October	Saint Helena	Cape Breem		33.00
2020	February	Saint Helena	Cape Breem		43.00
2020	March	Saint Helena	West Coast Rock Lobster		44.00
2020	April	Saint Helena	Snoek		1,803.00
2020	May	Saint Helena	Snoek		1,379.00
2020	October	Saint Helena	Cape Breem	43.70	102.00
2021	February	Saint Helena	Cape Breem		30.00
2021	November	Saint Helena	Cape Breem	270.20	683.00
2021	December	Saint Helena	Cape Breem	501.70	1,206.00
2022	January	Saint Helena	Cape Breem	432.50	1,108.00
Total				1,248.10	6,431.00

Wildfred Poggenpoel data as an example

eJA 8

Year	Month	Community	Species	Kilograms harvested	Units harvested
2020	July	Lamberts Bay	Cape Bream	329.20	641.00
2020	July	Lamberts Bay	Cape Redfish (False Jacopever)	5.10	11.00
2020	July	Lamberts Bay	Gurnard	0.50	1.00
2020	August	Lamberts Bay	Cape Bream	636.00	1,384.00
2020	August	Lamberts Bay	Cape Redfish (False Jacopever)	14.60	24.00
2020	September	Lamberts Bay	Cape Bream	480.33	972.00
2020	September	Lamberts Bay	Cape Redfish (False Jacopever)	4.10	8.00
2020	October	Lamberts Bay	Cape Bream	228.93	458.00
2020	November	Lamberts Bay	Cape Bream	118.90	270.00
2020	December	Lamberts Bay	Cape Bream	271.82	549.00
2020	December	Lamberts Bay	Cape Redfish (False Jacopever)	3.96	7.00
2020	December	Lamberts Bay	Gurnard	13.68	24.00
2021	January	Lamberts Bay	Cape Bream	520.60	816.00
2021	January	Lamberts Bay	Cape Redfish (False Jacopever)	8.30	17.00
2021	January	Lamberts Bay	Gurnard	14.80	38.00
2021	February	Lamberts Bay	Cape Bream	125.70	222.00
2021	February	Lamberts Bay	Cape Redfish (False Jacopever)	2.00	4.00
2021	February	Lamberts Bay	Gurnard	0.70	2.00
2021	March	Lamberts Bay	Cape Bream	329.50	506.00
2021	April	Lamberts Bay	Cape Bream	152.80	241.00
2021	April	Lamberts Bay	Snoek	175.00	93.00
2021	July	Lamberts Bay	Cape Bream	123.40	202.00
2021	July	Lamberts Bay	Cape Redfish (False Jacopever)	5.30	10.00
2021	July	Lamberts Bay	Gurnard	7.00	19.00
2021	August	Lamberts Bay	Cape Bream	814.90	1,433.00
2021	August	Lamberts Bay	Cape Redfish (False Jacopever)	20.10	40.00
2021	August	Lamberts Bay	Gurnard	4.60	13.00
2021	August	Lamberts Bay	Jacopever	7.20	16.00
2021	September	Lamberts Bay	Cape Bream	248.60	513.00
2021	September	Lamberts Bay	Cape Redfish (False Jacopever)	0.98	2.00
2021	September	Lamberts Bay	Snoek	1,047.50	396.00
2021	September	Lamberts Bay	Yellowtail	17.74	5.00
2021	October	Lamberts Bay	Cape Bream	178.00	376.00
2021	October	Lamberts Bay	Snoek	1,084.00	346.00
2021	November	Lamberts Bay	Cape Bream	301.80	670.00
2021	November	Lamberts Bay	Cape Redfish (False Jacopever)	1.70	3.00
2021	November	Lamberts Bay	Snoek	252.00	84.00
2021	December	Lamberts Bay	Cape Bream	355.10	958.00
2022	January	Lamberts Bay	Cape Bream	142.85	329.00
Total				16,222.26	21,817.00

CJA S

The contribution of Snoek to communities along the West Coast

Year	Month	Community	Species	Kilograms harvested	Units harvested	Number of fishers	Kilograms sold through ABALOBI	Rands paid to communities through ABALOBI
2019	January	Hondeklip Bay	Snoek		18.00	4		
2019	March	Hondeklip Bay	Snoek		866.00	77		
2019	March	Lamberts Bay	Snoek	21.00	285.00	16	0.00	R5,890.03
2019	March	Port Nolloth	Snoek		1,044.00	118		
2019	April	Hondeklip Bay	Snoek		987.00	156		
2019	April	Lamberts Bay	Snoek	173.00	934.00	41	0.00	R6,361.40
2019	April	Port Nolloth	Snoek		1,973.00	270		
2019	May	Hondeklip Bay	Snoek		558.00	175		
2019	May	Lamberts Bay	Snoek	326.00	1,699.00	71	90.65	R15,460.89
2019	May	Port Nolloth	Snoek		2,497.00	304		
2019	June	Hondeklip Bay	Snoek		330.00	84		
2019	June	Lamberts Bay	Snoek	91.00	290.00	20	0.00	R2,880.00
2019	June	Port Nolloth	Snoek		277.00	115		
2019	August	Lamberts Bay	Snoek	150.00	100.00	3		
2020	April	Lamberts Bay	Snoek		411.00	33		
2020	April	Saint Helena	Snoek		1,803.00	49		
2020	April	Steenbergs Cove	Snoek		271.00	12		
2020	May	Lamberts Bay	Snoek	3,927.00	2,111.00	84	393.50	R12,194.06
2020	May	Saint Helena	Snoek		1,379.00	27		
2020	May	Steenbergs Cove	Snoek		1,866.00	52		
2020	June	Lamberts Bay	Snoek	811.00	482.00	49	385.56	R16,304.06
2020	June	Steenbergs Cove	Snoek		311.00	12		
2020	July	Lamberts Bay	Snoek		7.00	3		
2021	April	Lamberts Bay	Snoek	275.00	133.00	6	75.00	R9,940.03
2021	May	Lamberts Bay	Snoek	397.50	159.00	6	246.68	R11,780.00
2021	June	Lamberts Bay	Snoek	70.00	30.00	4		
2021	September	Lamberts Bay	Snoek	1,047.50	396.00	15	438.00	R23,610.00
2021	October	Lamberts Bay	Snoek	1,234.00	406.00	11	1,155.00	R30,160.00
2021	October	Langebaan	Snoek		70.00	2		
2021	November	Lamberts Bay	Snoek	252.00	84.00	6	252.00	R6,720.00
Total				8,780.00	21,777.00	1825	3,036.39	R141,510.47

The contribution of False Jacopever to communities along the West Coast

Year	Month	Community	Species	Kilograms harvested	Units harvested	Number of fishers	Kilograms sold through ABALOBI	Rands paid to communities through ABALOBI
2019	January	Lamberts Bay	Cape Redfish (False Jacopever)	0.50	1.00	2	0.50	R32.50
2019	February	Lamberts Bay	Cape Redfish (False Jacopever)	3.63	7.00	2	3.50	R227.50
2019	March	Lamberts Bay	Cape Redfish (False Jacopever)	1.46	1.00	4		
2019	May	Lamberts Bay	Cape Redfish (False Jacopever)	0.60	1.00	2	0.60	R39.00
2019	June	Blards Bay	Cape Redfish (False Jacopever)	2.20	5.00	4	1.34	R87.10
2019	June	Lamberts Bay	Cape Redfish (False Jacopever)	4.90	10.00	8	4.62	R267.20
2019	July	Lamberts Bay	Cape Redfish (False Jacopever)	15.00	34.00	20	58.38	R5,032.20
2019	August	Lamberts Bay	Cape Redfish (False Jacopever)	7.17	13.00	10	7.00	R435.00
2019	September	Lamberts Bay	Cape Redfish (False Jacopever)	3.00	6.00	6	1.00	R65.00
2019	December	Lamberts Bay	Cape Redfish (False Jacopever)	0.65	1.00	2	0.70	R45.50
2020	January	Lamberts Bay	Cape Redfish (False Jacopever)	613.20	26.00	13	10.70	R695.50
2020	February	Lamberts Bay	Cape Redfish (False Jacopever)	4.20	7.00	5	4.22	R274.30
2020	July	Lamberts Bay	Cape Redfish (False Jacopever)	10.90	23.00	27	3.06	R523.90
2020	August	Lamberts Bay	Cape Redfish (False Jacopever)	34.30	58.00	42	63.09	R4,100.85
2020	September	Lamberts Bay	Cape Redfish (False Jacopever)	17.30	37.00	17	17.52	R1,138.80
2020	November	Lamberts Bay	Cape Redfish (False Jacopever)	0.60	1.00	2		
2020	December	Lamberts Bay	Cape Redfish (False Jacopever)	3.96	7.00	12	3.28	R213.20
2021	January	Lamberts Bay	Cape Redfish (False Jacopever)	8.30	17.00	18	8.14	R529.10
2021	February	Lamberts Bay	Cape Redfish (False Jacopever)	2.00	4.00	9	1.40	R83.00
2021	April	Lamberts Bay	Cape Redfish (False Jacopever)	0.80	1.00	2	0.82	R53.30
2021	July	Lamberts Bay	Cape Redfish (False Jacopever)	5.30	10.00	9	5.32	R345.30
2021	August	Lamberts Bay	Cape Redfish (False Jacopever)	21.40	42.00	28	23.90	R1,553.50
2021	September	Lamberts Bay	Cape Redfish (False Jacopever)	0.93	2.00	6	0.48	R31.20
2021	November	Lamberts Bay	Cape Redfish (False Jacopever)	1.70	3.00	7	0.42	R27.30
2021	November	Steenbergs Cove	Cape Redfish (False Jacopever)	3.30	9.00	4	3.40	R221.00
Total				767.32	326.00	266	228.39	R16,042.55

The contribution of Cape Bream to communities along the West Coast

CJA

Year	Month	Community	Species	Kilograms harvested	Units harvested	Number of fishers	Kilograms sold through ABALOBI	Rands paid to communities through ABALOBI
2019	November	Lamberts Bay	Cape Breem	446.20	973.00	18	214.66	R12,831.60
2019	December	Lamberts Bay	Cape Breem	184.70	342.00	8	184.70	R10,782.00
2020	January	Lamberts Bay	Cape Breem	706.00	1,302.00	30	566.16	R33,301.58
2020	February	Lamberts Bay	Cape Breem	1,171.10	1,915.00	51	964.03	R55,280.06
2020	February	Potemoster	Cape Breem	137.00	386.00	9		
2020	February	Saint Helena	Cape Breem		43.00	4		
2020	March	Lamberts Bay	Cape Breem	660.60	1,204.00	24	579.40	R31,259.34
2020	April	Lamberts Bay	Cape Breem	157.90	236.00	6	157.90	R9,474.00
2020	June	Lamberts Bay	Cape Breem	80.00	50.00	2		
2020	July	Lamberts Bay	Cape Breem	552.10	994.00	36	416.92	R24,940.81
2020	August	Lamberts Bay	Cape Breem	933.10	1,967.00	73	933.76	R56,025.60
2020	September	Lamberts Bay	Cape Breem	777.23	1,502.00	53	657.15	R39,349.81
2020	September	Steenbergs Cove	Cape Breem	156.80	297.00	9	57.20	R3,432.00
2020	October	Lamberts Bay	Cape Breem	228.93	458.00	14	228.10	R13,696.00
2020	October	Saint Helena	Cape Breem	43.70	102.00	4		
2020	October	Steenbergs Cove	Cape Breem	1,609.86	3,060.00	128	655.19	R39,310.80
2020	November	Lamberts Bay	Cape Breem	132.40	292.00	14	129.04	R7,742.40
2020	November	Steenbergs Cove	Cape Breem	673.30	1,688.00	84	333.11	R19,986.60
2020	December	Lamberts Bay	Cape Breem	376.12	659.00	33	267.88	R16,072.80
2020	December	Steenbergs Cove	Cape Breem	219.70	500.00	22	149.14	R9,924.40
2021	January	Lamberts Bay	Cape Breem	520.60	816.00	42	516.71	R31,002.60
2021	January	Steenbergs Cove	Cape Breem	66.00	184.00	8	61.06	R3,662.60
2021	February	Lamberts Bay	Cape Breem	125.70	222.00	12	124.35	R7,075.26
2021	February	Saint Helena	Cape Breem		30.00	3		
2021	March	Lamberts Bay	Cape Breem	577.20	844.00	27	565.09	R33,508.27
2021	April	Lamberts Bay	Cape Breem	438.10	630.00	18	431.58	R25,762.80
2021	July	Lamberts Bay	Cape Breem	166.00	270.00	13	169.20	R8,812.00
2021	August	Lamberts Bay	Cape Breem	863.70	1,509.00	59	760.01	R44,367.60
2021	September	Lamberts Bay	Cape Breem	248.60	513.00	15	245.18	R14,710.80
2021	October	Lamberts Bay	Cape Breem	178.00	376.00	12	174.94	R9,476.40
2021	November	Lamberts Bay	Cape Breem	301.80	670.00	20	296.08	R16,999.30
2021	November	Saint Helena	Cape Breem	270.20	683.00	32	270.10	R13,094.50
2021	November	Steenbergs Cove	Cape Breem	297.64	786.00	32	264.22	R13,709.70
2021	December	Lamberts Bay	Cape Breem	387.00	1,033.00	33	338.95	R20,186.00
2021	December	Saint Helena	Cape Breem	501.70	1,206.00	57	317.38	R16,582.30
2021	December	Steenbergs Cove	Cape Breem	506.60	1,207.00	45	404.29	R22,429.80
2022	January	Lamberts Bay	Cape Breem	142.85	329.00	11	26.61	R1,596.60
2022	January	Saint Helena	Cape Breem	432.50	1,108.00	48	83.10	R4,986.00
2022	January	Steenbergs Cove	Cape Breem	242.50	698.00	24	57.11	R3,426.60
Total				21,807.77	42,529.00	1498	16,846.20	R978,936.76

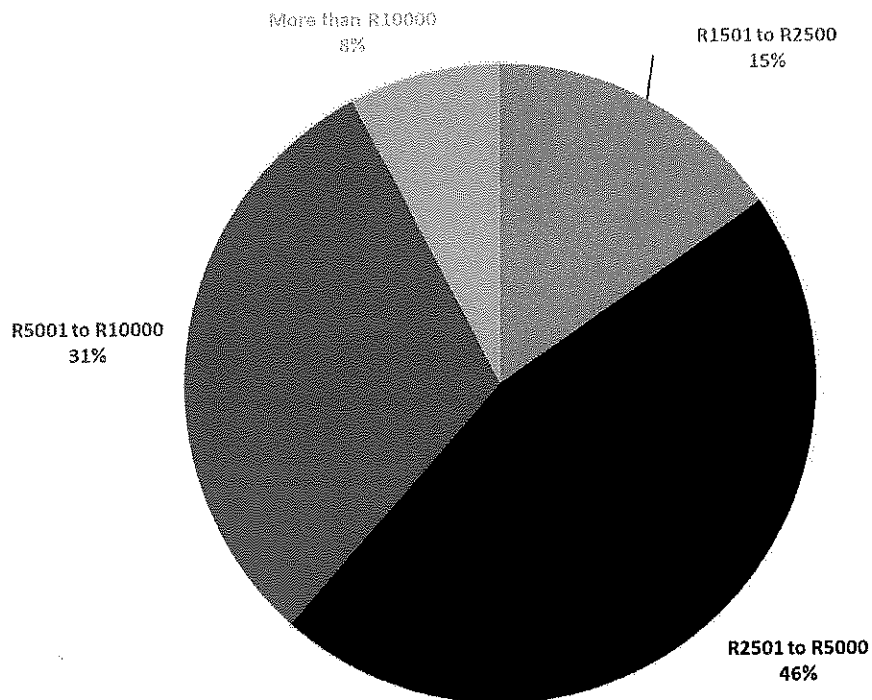
The contribution of West Coast Rock Lobster to communities along the West Coast

Year	Month	Community	Species	Kilograms harvested	Units harvested	Number of fishers	Kilograms sold through ABALOBI	Rands paid to communities through ABALOBI
2019	January	Lamberts Bay	West Coast Rock Lobster	72.80	258.00	17	70.15	R28,060.00
2019	January	Port Nolloth	West Coast Rock Lobster	80.20		8		
2019	February	Lamberts Bay	West Coast Rock Lobster	35.10	132.00	3	30.42	R12,168.00
2019	February	Port Nolloth	West Coast Rock Lobster	2,580.50		242		
2019	March	Port Nolloth	West Coast Rock Lobster	1,467.50	1.00	202		
2019	October	Port Nolloth	West Coast Rock Lobster	683.90		34		
2019	November	Lamberts Bay	West Coast Rock Lobster	299.10	400.00	8		
2019	November	Port Nolloth	West Coast Rock Lobster	3,803.70		196		
2019	December	Hondelup Bay	West Coast Rock Lobster	137.90	450.00	4		
2019	December	Lamberts Bay	West Coast Rock Lobster	315.63	680.00	23	182.44	R72,976.00
2020	January	Lamberts Bay	West Coast Rock Lobster	130.00	405.00	18	92.56	R37,024.00
2020	February	Lamberts Bay	West Coast Rock Lobster	29.80	82.00	4	29.80	R11,920.00
2020	March	Saint Helena	West Coast Rock Lobster		44.00	2		
2020	December	Lamberts Bay	West Coast Rock Lobster	1,004.20	3,442.00	122	651.72	R241,126.02
2022	January	Lamberts Bay	West Coast Rock Lobster	17.40	70.00	2		
Total				13,657.73	5,974.00	891	1,057.09	R403,274.02

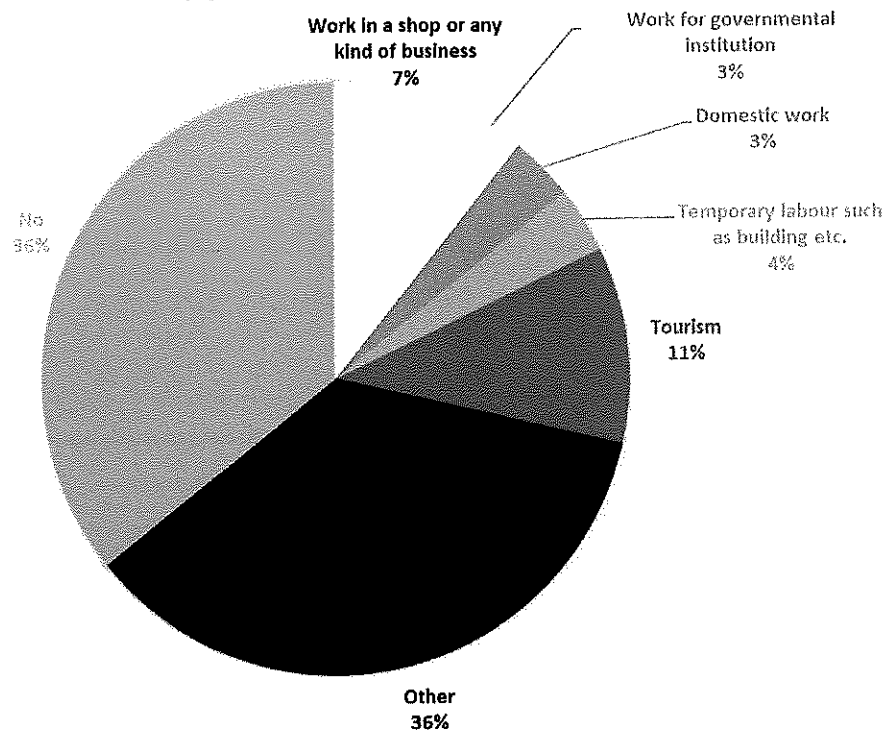
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Baseline survey information related to the West Coast

AVERAGE HOUSEHOLD MONTHLY INCOME OVER THE PAST YEAR

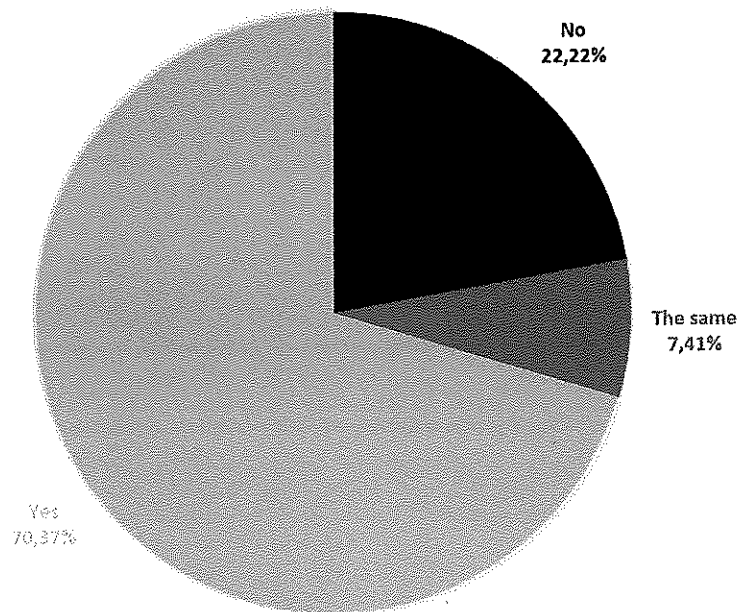


WITHIN HOUSEHOLDS, ARE THERE OTHER SOURCES OF INCOME OUTSIDE OF FISHING?

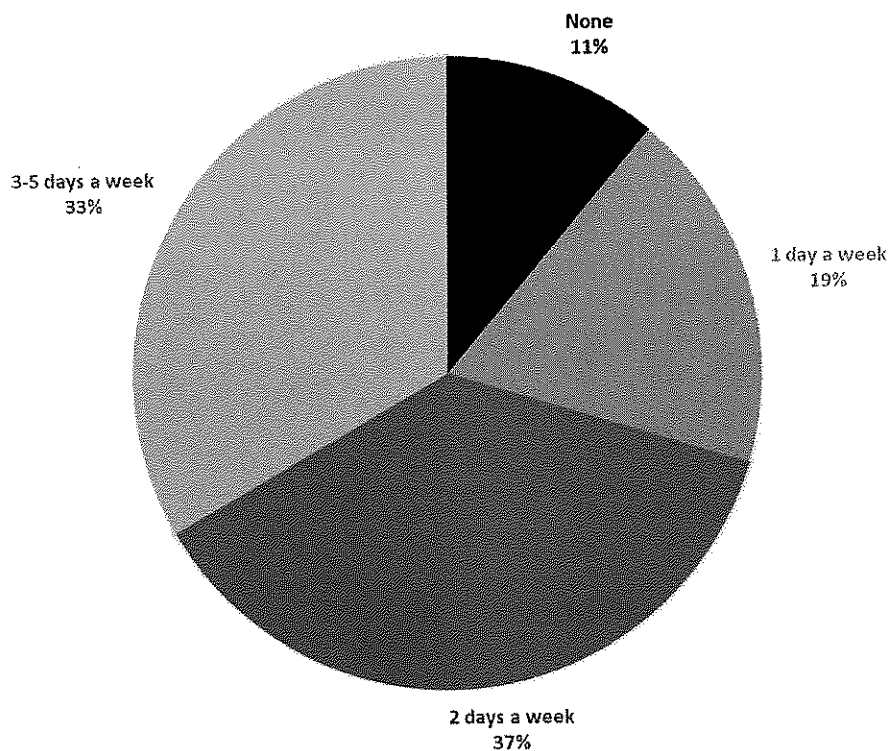


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**FISHERS WHO SAY IT IS HARDER TO FEED THEIR HOUSEHOLD NOW
THAN A YEAR AGO**

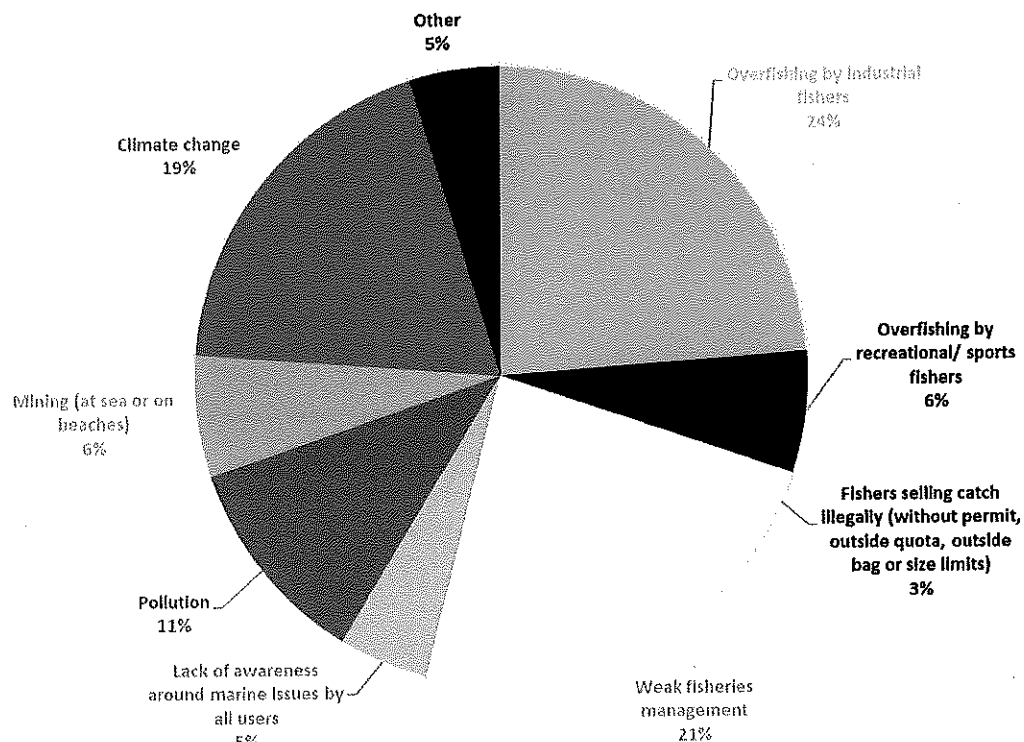


HOW OFTEN DO FISHER HOUSEHOLDS EAT FISH?

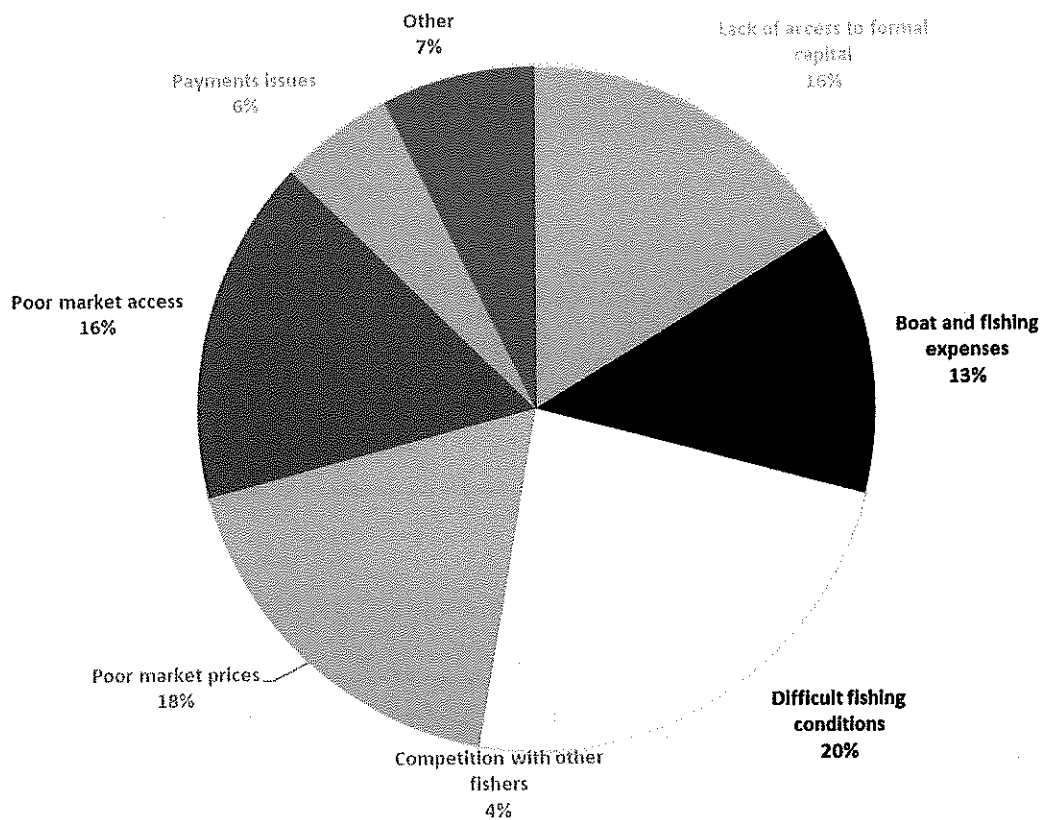


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WHAT ARE THE MAIN MARINE ISSUES FISHERMEN & FISHERWOMEN FACE?



WHAT ARE THE PRIMARY OBSTACLES FISHERS FACE IN THE FISHERY?



CJA S

STATUS OF THE SOUTH AFRICAN MARINE FISHERY RESOURCES **2020**



**environment, forestry
& fisheries**

Department:
Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

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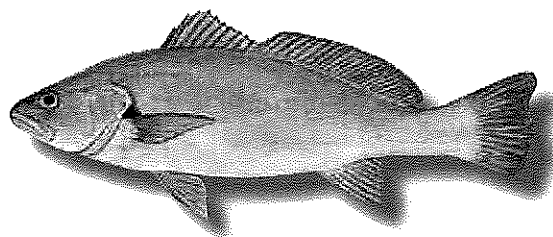
Acronyms and abbreviations

ASPM	Age-structured production model	KZN	KwaZulu-Natal
CAL	Catch-at-length	LMP	Linefish management protocol
CCAMLR	Convention for the Conservation of Antarctic Marine Living Resources	MLRA	Marine Living Resources Act
CCSBT	Commission for the Conservation of Southern Bluefin Tuna	MLS	Minimum legal size
CL	Carapace length	MPA	Marine protected area
CoG	Centre of gravity	MSY	Maximum sustainable yield
CPUE	Catch per unit effort	NMLS	National marine linefish system
DEFF	Department of Environment, Forestry & Fisheries	NPOA	National plan of action
EC	Exceptional circumstances	NRCS	National Regulator for Compulsory Standards
EEZ	Exclusive economic zone	OMP	Operational management procedure
EFZ	Exclusive fishing zone	ORI	Oceanographic Research Institute
FIAS	Fishery-independent abalone survey	PEI-EEZ	Prince Edward Island exclusive economic zone
FIMS	Fishery-independent monitoring survey	PMCL	Precautionary management catch limit
F_{MSY}	Fishing mortality that would produce MSY level	PSAT	Pop-up satellite archival tag
GERMON	Genetic structure and migration of albacore tuna project	PUCL	Precautionary upper catch limit
GIS	Geographic information system	RFMO	Regional fisheries management organization
GLM	General linear model	SB	Shell breadth
GLMM	General linear mixed model	SPOT	Smart position-only tag
GSI	Gonadosomatic index	SSB	Spawning stock biomass
ICCAT	International Convention for the Conservation of Atlantic Tunas	SSB_{MSY}	Spawning stock biomass at MSY level
ICSEAF	International Commission for the South East Atlantic Fisheries	SWIO	Southwest Indian Ocean
IFREMER DIO	French Research Institute for Exploration of the Sea, Indian Ocean Delegation	SWIOFP	Southwest Indian Ocean Fisheries Programme
IOTC	Indian Ocean Tuna Commission	TAB	Total allowable bycatch
IUCN	International Union for Conservation of Nature	TAC	Total allowable catch
IUU	Illegal, unreported and unregulated fishing	TAE	Total allowable effort
		TRAFFIC	The Wildlife Trade Monitoring Network
		TURF	Territorial user Rights in fisheries
		USA	United States of America
		WWF	World Wide Fund for Nature



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Linefish



Stock status	Unknown	Abundant	Optimal	Depleted	Heavily depleted
	Black musselcracker	Hottentot seabream Snoek	Yellowtail Santer Slinger Carpenter Roman	Silver kob Geelbek White stumpnose	Seventy-four Dagblad Red steenbras Dusky kob
Fishing pressure	Unknown	Light	Optimal	Heavy	
	Black musselcracker	Hottentot seabream	Snoek Yellowtail Santer Slinger Carpenter Roman	Silver kob Geelbek White stumpnose	

Introduction

Linefishing in South Africa is defined as the capture of fish with hook and line, but excludes the use of longlines. Together, the three sectors of the linefishery (commercial, recreational and small-scale) target between 95 and 200 of South Africa's 2 200 marine fish species. Species targeted in the linefishery display diverse life-history strategies, including many traits that cause these populations to be particularly vulnerable to overfishing e.g. long lifespans (>20 years), estuarine-dependence, sex change and aggregating behaviour. Furthermore, many of the species are endemic to South Africa. Target species of the linefishery include temperate, reef-associated seabreams (e.g. roman, hottentot seabream, santer and slinger), coastal migrants (e.g. geelbek and dusky kob) and nomads (e.g. snoek and yellowtail). More than 90% of the current linefish catch is derived from the aforementioned eight species.

Linefish species are typically predatory in nature and include several apex predators such as sharks, groupers, tunas and large seabreams. Most of the linefish caught are not targeted exclusively by this fishery, but form important components of the catch or the bycatch of other fisheries. Effective management of linefish resources that are shared among different fishery sectors can be complex.

The commercial linefishing sector is exclusively boat-based. The total number of registered vessels operating in this sector was estimated at 700 in the late 1990s, which accounted for 37% of all boats operating in marine fisheries in South Africa. From 2006 a maximum allocation of 455 boats has been maintained; however, the number of boats allocated per zone has varied. Linefishing is a low-earning, labour-intensive in-

dustry and therefore important from a human livelihood point of view. Employing an estimated 27% of all fishers, it has the lowest average employment income of all South African fisheries. Although the commercial linefishery has the largest fleet, it contributes only 6% of the total estimated value of all South African marine fisheries.

After the introduction of the towable skiboat in the late 1940s, the recreational boat-based sector expanded rapidly, with an estimated minimum number of 4 000 vessels. Landings from this open-access recreational fishery are not reported throughout the region, and for some areas and species the total catch from this sector could be equivalent to that reported by the commercial sector. The recreational linefishery has by far the largest number of participants (>450 000) of all fishery sectors in South Africa and consequently has great economic value. This is especially important to coastal regions dependent on the tourist trade, but also to industries associated with the small craft, outboard motor, fishing tackle and bait trades.

Recently, the small-scale sector was legally created to recognise those fishers who depend on marine living resources for direct food security – usually very poor coastal communities or those using simple traditional methods. There are an estimated 30 000 small-scale fishers active along the South African coastline and 85% of them harvest linefish.

History and management

The origins of linefishing in South Africa can be traced back to the fishing activities of indigenous Khoi people and European seafarers in the 1500s. Despite an abundance of fish, the fishery was slow to develop in the 1700s due to various restric-

tions implemented by the Dutch administration. These fishing restrictions were removed when the British captured the Cape Colony in 1795, and during the 1800s boat-based linefishing developed into a thriving industry.

Fishing effort in the Cape at the turn of the 19th Century was already considerable (between 0.12 and 0.37 boats per kilometre of coastline). This increased dramatically during the 20th Century and peaked in the 1980s and 1990s (>3 boats per kilometre of coastline). The sharp increase in fishing effort, together with an increase in operational range brought about by the introduction of motorised skiboats on trailers, the rapid development in fishing technology (echosounders, nylon line, etc.), and the additional offtake by other fishing fleets such as trawl and purse-seine, led to overfishing of most of the linefish resources around the coast during the last quarter of the 20th Century.

Despite its long history, the first comprehensive management framework for the linefishery was only introduced in 1985 when this fishery was formally recognised. However, successive research surveys indicated continuing declines of linefish resources. In December 2000, the Minister of Environmental Affairs and Tourism, taking cognisance of the critical status of many linefish stocks, declared linefish resources to be in an Emergency, as provided for in the Marine Living Resources Act (MLRA, Act 18 of 1998). Effort was reduced in the commercial sector and fixed at 450 vessels and the hake and tuna components were developed into separate sectors. To rebuild collapsed stocks and to achieve a sustainable level of catch, a linefish management protocol (LMP) was developed in 1999 in order to base regulations in the linefishery on quantifiable reference points. This remains the basis of linefish management.

Several regulations were put in place to manage fishing pressure on linefish resources. To accommodate the large number of users, launch sites and species targeted, and to allow flexibility of the operational range, the commercial linefishery is currently managed through a total allowable effort (TAE) allocation, based on boat and crew numbers. The recreational fishery is managed by a number of output restrictions, such as size and bag limits, closed areas and seasons (Table 6). The small-scale fishery will also be managed through a combination of size and bag limits, closed areas and seasons. However, this sector differs in that community-based management is the core principle on which the small-scale sector is based, and local communities are encouraged and empowered to promote sustainability. The level of commercial effort was reduced to the levels stipulated in the declaration of the emergency when linefish Rights were allocated in 2003 (for the medium-term) and in 2005 for the long-term fishing Rights. The TAE was set to reduce the total catch by at least 70%, a reduction that was deemed necessary to rebuild the linefish stocks. There has also been a reduction in recreational fishing pressure through the implementation of more realistic species-specific daily bag and size limits since 2005.

Although this appears to be a substantial reduction in the commercial linefish effort, it must be noted that trends in the catch information derived from the historic commercial landings for the period 1985–1998 indicated that a relatively small number (20%) of the vessels in the fishery accounted for the majority (80%) of the reported catches, and these

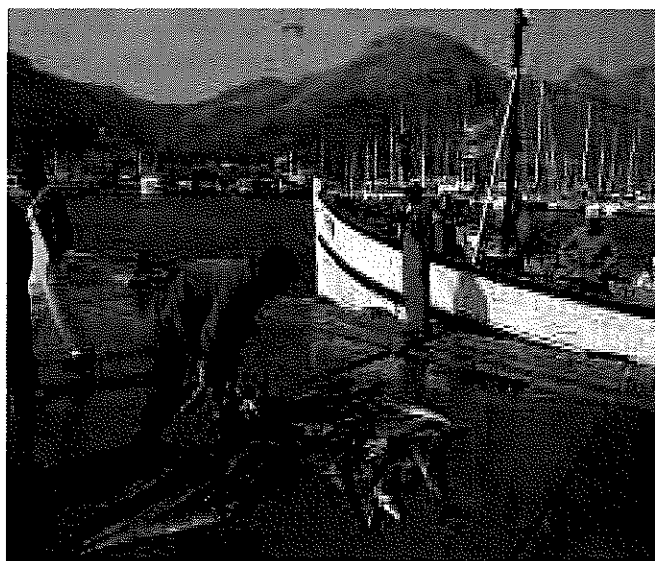
highly efficient vessels remained in the fishery. On the other hand, the number of Right Holders who activate their annual permits has steadily decreased in recent years (Table 7), indicating that the TAE might be exceeding the number of economically viable fishing units.

The first small-scale co-operative was launched in Port Nolloth in September 2018. More than 300 communities in the four coastal provinces have been identified as small-scale fishing communities. These community co-operatives will be given 15-year small-scale fishing Rights and each will be able to access a "basket" of species based upon their needs and location along the coast. The traditional, commercial linefish Rights expire in 2020 and the small-scale fishing sector will be given priority in the subsequent linefish Rights-allocation process. Furthermore, the number of recreational angling permits may have to be limited in order to accommodate the newly established small-scale fisheries sector so as not to compromise resource sustainability.

Many species allocated to the small-scale "baskets" are primary targets of the commercial and recreational linefish sectors, and these shared resources must be carefully monitored given the increased fishing pressure expected. A revision of the LMP is also underway to ensure the future sustainability of linefish stocks.

Research and monitoring

Monitoring of the boat-based linefishery in the Cape was introduced by Dr JDF Gilchrist in 1897, in the form of a shore-based observer programme that aimed to record statistics on catch and effort at all the fishing centres. Comprehensive per-species catch-and-effort data from the boat-based commercial fishery have been collected since 1985 and stored in the National Marine Linefish System (NMLS). A national observer programme was implemented from 2008 until 2010, in which scientific observers recorded catch-and-effort data and collected size frequencies per species from the boat-based fishery at access points around the country. A comparison between this information and the data handed in by the fishery confirmed the accuracy of the NMLS catch data, which is based on man-



datory catch reports by the fishery. Validating catch data is an important component of fisheries monitoring and the implementation of a new national observer programme is now required.

With the increased focus on formalising the small-scale fishery around the country, a national, shore-based monitoring programme was implemented from June 2012 to May 2013. Data from this programme were used to investigate whether fishing effort and catch were sustainable. Thus far, the data have been used to assess the stocks of seven of the most important target species along the Eastern Cape coast. Spawner-biomass-per-recruit analyses revealed that two of these species (bronze bream and stone bream) are sustainably fished, but that the population status of dusky kob is estimated to be at only 1.3% of pristine spawner biomass. These assessments need to be considered during the implementation of the small-scale fishery and in the selection of co-operatives' species baskets, as recovery of these stocks is essential for growing the potential revenue of fishers in this important sector.

In addition to fisheries-dependent data, which can only provide indirect measures of resource status, novel methods to investigate fish abundance and species composition are being employed. A comprehensive comparison of monitoring methods, including standardised angling, underwater visual census by divers and remote underwater video, suggests that the latter provides the most unbiased census method. After successful application of this method in selected areas, an even more sophisticated version, the stereo baited remote underwater video (sBRUV) technique has been used in a nationwide investigation of fishing hotspots and marine protected areas to determine fish abundance, species composition and size frequencies of reef-associated linefishes.

The biology of fishes caught in the linefishery has been remarkably well-studied considering the large variety of target species in comparison with other fisheries, as evident from the published linefish species profiles that contain information on life history, ecology and population status of 139 linefish species.

Marine protected areas (MPAs) not only provide reference areas for research on the effects of fishing and climate change but can enhance and sustain surrounding fisheries. A recent study has shown that, in some instances, this can be achieved without the commonly predicted negative effects on the fishery, in particular for depleted temperate-reef-fish stocks with complex life histories. This study showed that catch rates of fishers that targeted reef fish near the boundary of a newly-established marine reserve increased slowly at first and then more rapidly due to the export of larger fish and, five years later, spill-over of eggs and larvae.

Assessing the status of linefish stocks has been a priority in recent years. Drawing on the enormous body of data contained in the NMLS, the largest spatially referenced marine dataset in the world, a novel method to standardise catch-per-unit-effort (CPUE) data that accounts for targeting in the multi-species linefish sector has been developed. Following on, a comprehensive Bayesian state-space surplus production model framework (JABBA: Just Another Bayesian Biomass Assessment) was developed and its extension (JABBA-Select) was applied to the seven most important species, namely

slinger *Chrysoblephus puniceus*, carpenter *Argyrozona argyrozona*, hottentot seabream *Pachymetopon blochii*, snoek *Thyrskites atun*, yellowtail *Seriola lalandi*, santer *Cheimierius nufar* and silver kob *Argyrosomus inodorus* (Table 8).

The type of stock assessment applied is determined by the nature and quality of data available. In situations where traditional stock assessment methods are not applicable, alternative methods must be developed. For rare linefish species, such as red steenbras and dageraad that are caught infrequently and are subject to stringent bag and size limits, a novel approach based on encounter probabilities in the catch has been applied. Application of this robust method confirms the continuous decline of these once-abundant species to critically low levels (Figure 24). These two species are now of serious conservation concern and have been included on the IUCN Red List of Threatened Species list as Endangered. Furthermore, a unique spatio-temporally disaggregated model has been successfully applied to geelbek *Atractoscion aequidens* as this species undertakes a complex, size-dependent migration. Sector-specific assessments, such as that of white stumpnose *Rhabdosargus globiceps* which quantifies the relative contribution of the commercial and recreational fishing sectors to the species' decline in Saldanha Bay, seek to address equality issues that arise in a multi-sector fishery.

Current status

The results of stock assessments conducted in 2017 indicate that the drastic reduction of fishing effort from 2003 onwards resulted in the partial recovery of some species, such as the slinger, santer, hottentot seabream and carpenter (Figure 25). However, other important stocks such as silver kob are still being overfished, given the cumulative impact of the linefishery and inshore-trawl fishery on this species. The yellowtail assessment suggests that the stock is optimally exploited, while snoek remains underexploited. The annual catch of the nomadic yellowtail and snoek is dependent on their availability to nearshore linefishers and is, therefore, highly variable. Moreover, the inconsistent quality of yellowtail and snoek landed by the linefishery detracts from the optimal use of these important stocks. There is also considerable inter-fishery conflict around these species which are also caught by other fisheries (i.e. tuna pole-line, trawl and hake handline fishery in the case of snoek, and tuna pole-line and beach seine-net fisheries in the case of yellowtail).

The recovery of overexploited species hinges on the increased protection of juveniles and spawning stock inside MPAs and offshore refugia. In September 2018 the South African Cabinet approved the declaration of 20 new MPAs within the South African economic exclusive zone (EEZ) - a bold and positive step towards promoting sustainability of our marine resources. However, for some severely depleted linefish species such as seventy-four, red steenbras and dageraad, even the rigorous enforcement of all existing regulations may not be sufficient to induce a recovery, and more drastic measures might be required. Notably, numerous species that are important to shore- and estuarine-based subsistence fishing, such as dusky kob, are considered collapsed. Rebuilding these stocks will be crucial for small-scale fishing communities that rely on these resources.

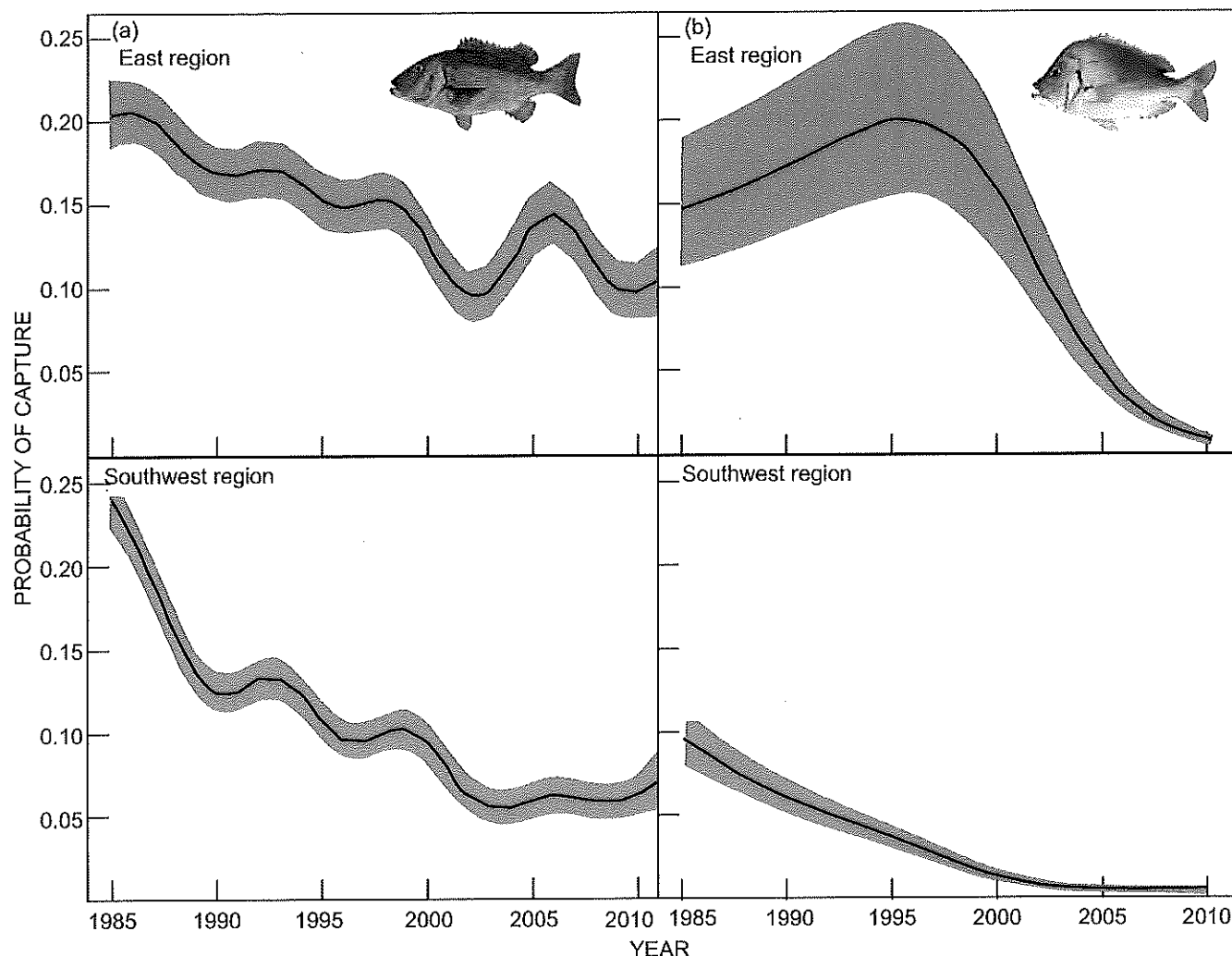


Figure 24: Time-series of standardised capture probability for (a) red steenbras *Petrus rupestris* and (b) dageraad *Chrysoblephus cristiceps* in commercial linefish catches for the period 1985–2011 along the South African East (top panel) and Southwest coasts (bottom panel)

Ecosystem interactions

The linefishery has the potential to be one of the most ecologically and economically viable fisheries in South Africa, due to the following factors: (i) the fishing method can be highly selective and bycatch of undersized fish and unwanted species can be avoided; (ii) the labour-intensive, low-technology, low-investment method maximises employment opportunities; (iii) the product is potentially of high quality and many species command a high price on local and international markets; and (iv) linefishing inflicts comparatively minimal impact on the broader ecosystem.

However, numerous studies suggest that trophic cascades in a coastal food web are dependent on the functional composition of both predator and herbivore communities, as well as on resource availability. The linefishery predominantly targets large, predatory species that occupy the upper trophic levels of the marine system. The systematic removal of these apex predators can therefore have a detrimental effect on the coastal functional ecology. Furthermore, the removal of large, fecund individuals may also weaken the genetic resilience of a species.

Of all South African marine fisheries, the linefishery suffers the most from external impacts. Linefish resources are at risk

of overcapacity as they are directly or indirectly exploited by numerous sectors. These include the traditional commercial, recreational and small-scale linefishery, as well as the inshore and offshore trawl fisheries, the tuna pole-line fishery, the inshore netfishery and the demersal shark longline fishery. The increased expectation of commercial access to linefish resources combined with the localised anticipation of community ownership of adjacent resources may impact linefish stocks to the detriment of all.

The bycatch of linefish species by the trawl fishery (inshore and offshore) is of considerable concern. Undersized linefish, caught as trawl bycatch, can be legally sold and consequently linefishers are frequently unable to obtain economically viable prices for their catches, given market saturation from trawl bycatch and mariculture product. Furthermore, trawl gear also damages habitat that may be critical to linefish life histories.

Many linefish species are piscivores that are heavily reliant on abundant small pelagic fish (sardine, anchovy, round herring, etc.) as a source of nutrients. The small pelagic fishery is the largest of all South African fisheries, by weight landed, and the sardine stock is currently considered to be depleted. Recent research has demonstrated the importance of sardine as a prey species for geelbek and has emphasised the need for conservative management of small pelagic fisheries, given the

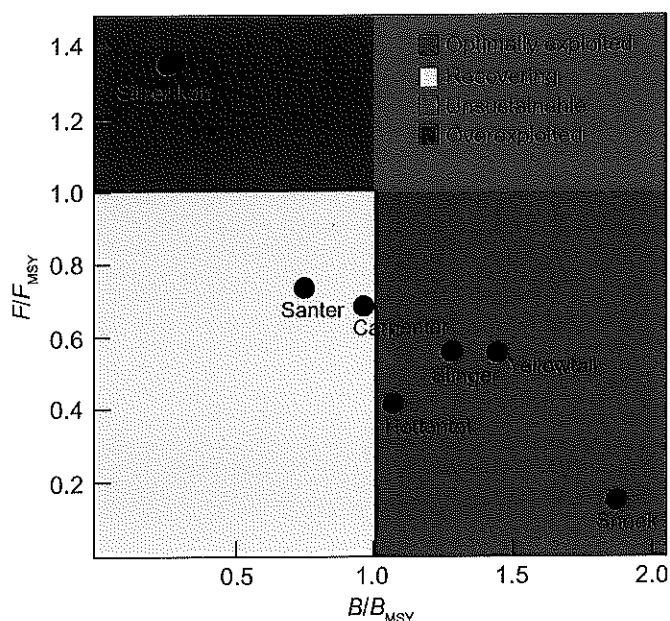


Figure 25: Kobe phase plot summarising the stock status estimates of fishing mortality relative to F_{MSY} and biomass relative to B_{MSY} for linefish species. Only results from stock assessments conducted by DEFF's Linefish Scientific Working Group (LSWG) in 2017 are included

dependence of many predatory species on small pelagic fish as forage. A functional relationship between sardine and geelbek (Figure 26) indicates that low levels of sardine biomass east of Cape Agulhas have a negative impact on geelbek CPUE in the southwest region in the following year. It is postulated that the juvenile geelbek survival rate is dependent on sufficient availability of prey, i.e. local sardine biomass. This dependency eventually manifests in geelbek CPUE in the southwest region after a minimum lag of one year, when the juvenile geelbek first recruit into the linefishery.

As many as 80 species caught in the linefishery are associated with estuaries and rely on these for feeding, refuge or reproduction. Consequently, the wellbeing of these fish stocks is linked to the ecological status of the estuaries. Reduced or regulated freshwater input, coastal development and pollution are altering estuarine habitats and threatening the wellbeing of dependent fish populations.

Conservation awareness among recreational anglers has increased dramatically in recent years. Many anglers now practice 'catch and release' and competitive angling formats are constantly adapting to minimise fish mortalities. That said, the number of recreational anglers remains high (in excess of 650 000 individuals) and a recent study found that although

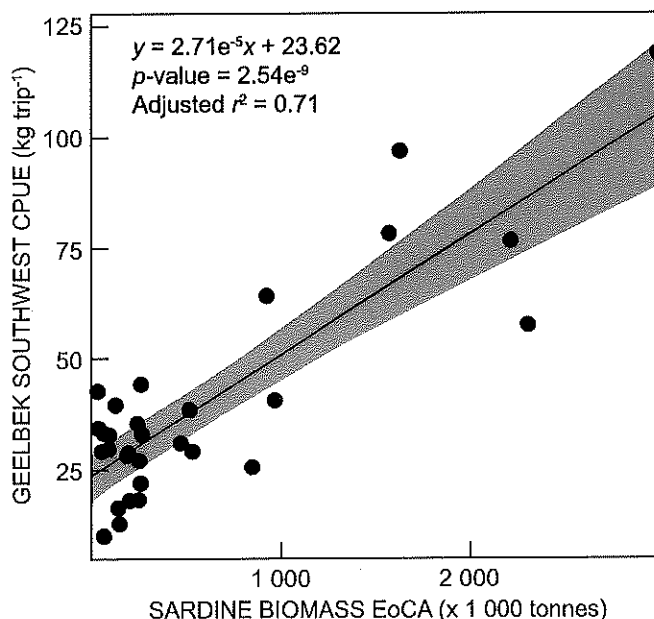


Figure 26: Scatterplot of geelbek southwest CPUE in year_{n+1} plotted against sardine biomass east of Cape Agulhas (EoCA) (x 1 000 t) in year_n, with the fitted linear regression, its associated statistical parameters and 95% confidence interval shown in grey

captured fish are often released, there may still be significant (up to 20% observed) post-release mortality due to barotrauma and hook damage.

Further reading

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Table 6: Annual total allowable effort (TAE) and activated commercial linefish effort per management zone from 2006 to 2019

Total TAE boats (fishers). Upper limit: 455 boats or 3 450 crew.			Zone A: Port Nolloth to Cape Infanta		Zone B: Cape Infanta to Port St Johns		Zone C: KwaZulu-Natal	
Allocation	455 (3 182)		301 (2 136)		103 (692)		51 (354)	
Year	Allocated	Activated	Allocated	Activated	Allocated	Activated	Allocated	Activated
2006	455	385	301	258	103	78	51	49
2007	455	353	301	231	103	85	51	37
2008	455	372	301	239	103	82	51	51
2009	455	344	300	222	104	78	51	44
2010	455	335	298	210	105	82	51	43
2011	455	328	298	207	105	75	51	46
2012	455	296	298	192	105	62	51	42
2013	455	289	301	189	103	62	51	38
2014**	455	399	340	293	64	58	51	48
2015**	455	356	340	291	64	61	51	45
2016**	455	378	340	274	64	59	51	45
2017**	455	329	340	232	64	60	51	37
2018**	455	324	340	232	64	50	51	42
2019**	455	306	340	218	64	50	51	38

** In the finalisation of the 2013 commercial Traditional Linefish appeals, the effort apportioned for the small-scale fisheries sector was allocated to the commercial sector. All the small-scale Rights were considered to be activated on allocation

Table 7: Annual catch (t) of the eight most important linefish species for the period 1985–2018

Year	Snoek	Yellowtail	Kob	Carpenter	Slinger	Hottentot seabream	Geelbek	Santer
1985	1 063	324	1 504	588	312	399	152	73
1986	3 143	817	2 016	768	268	811	262	99
1987	5 642	809	1 902	831	246	915	436	99
1988	4 919	722	1 822	877	132	953	482	57
1989	4 039	868	2 097	775	199	739	810	60
1990	7 892	585	2 540	1 228	262	542	513	86
1991	6 556	542	2 082	1 210	249	522	457	89
1992	5 692	591	1 799	873	305	496	530	114
1993	2 948	888	1 867	695	298	614	610	124
1994	7 759	868	1 348	638	217	815	468	82
1995	9 618	801	1 422	758	235	252	396	85
1996	7 063	497	1 415	879	179	276	384	80
1997	6 623	488	1 471	841	128	322	524	68
1998	7 872	565	1 331	518	114	408	684	64
1999	8 348	339	1 026	574	160	270	467	60
2000	6 543	320	1 093	441	186	234	894	75
2001	6 839	327	831	285	139	109	395	69
2002	3 837	242	784	231	101	79	315	48
2003	4 532	329	544	177	88	106	513	48
2004	7 278	883	720	228	184	254	672	87
2005	4 787	739	647	184	169	168	580	84
2006	3 529	310	800	159	192	87	419	79
2007	2 765	478	841	265	157	128	448	84
2008	5 223	313	715	226	194	120	403	82
2009	6 322	330	884	282	186	184	495	66
2010	6 360	171	838	263	180	144	408	69
2011	6 205	204	625	363	214	216	286	62
2012	6 809	382	441	300	240	160	337	82
2013	6 690	712	313	481	200	173	263	84
2014	3 863	987	289	522	201	192	212	74
2015	2 104	609	246	522	186	143	244	69
2016	1 681	475	277	713	211	211	250	66
2017	1 888	361	199	820	215	188	148	72
2018	2 095	654	213	728	174	215	214	69

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Table 8: Detailed status of the South African linefish resources assessed by the Linefish Scientific Working Group in 2017

Stock Assessment	Carpenter	Hottentot seabream	Santer	Silver kob	Slinger	Snoek	Yellowtail
MSY	1,004 t (807.5–1 319)	446.2 t (298.7–657.4)	147.7 t (111.1–199.4)	784.7 t (557.7–1 196)	347.5 t (273.7–521.5)	24 396 t (16 060–42 422)	1 087 t (757.2–2 613)
Total yield for stock	812.4 t (2015)	196.35 t (2015)	69.3 t (2015)	295.38 t (2015)	241.8 t (2016)	6 674.8 t (2015)	748.5 t (2016)
Relative biomass	$B_{2015}/B_{MSY} = 0.96$	$B_{2015}/B_{MSY} = 1.07$	$B_{2015}/B_{MSY} = 0.75$	$B_{2015}/B_{MSY} = 0.26$	$B_{2015}/B_{MSY} = 1.28$	$B_{2015}/B_{MSY} = 1.87$	$B_{2015}/B_{MSY} = 1.44$
Relative fishing mortality	$F_{2015}/F_{MSY} = 0.69$	$F_{2015}/F_{MSY} = 0.42$	$F_{2015}/F_{MSY} = 0.74$	$F_{2015}/F_{MSY} = 1.35$	$F_{2015}/F_{MSY} = 0.56$	$F_{2015}/F_{MSY} = 0.15$	$F_{2015}/F_{MSY} = 0.56$
Summary	Carpenter was severely overfished prior to 2000 which resulted in stock decline. However, results from all scenarios in the current assessment indicate that the carpenter stock is rebuilding following many years of decreased fishing mortality ($F < F_{MSY}$). The current biomass is estimated as 38% (25–53%) of the unfished biomass level and the stock is considered optimally exploited. Further recovery is expected under current fishing mortality levels.	Results from the base case scenario indicate a 90.1% probability that the hottentot stock is above the target biomass ($B/B_0 = 0.4$) and that the stock is being fished below F_{MSY} . The most pessimistic scenario estimates this probability to be marginally less (89.6%) and the most optimistic approaches certainty (99.7%). The stock could likely sustain an increase in fishing mortality of approximately 20% without there being a significant risk of overexploitation.	Results from the base case scenario indicate a 34% probability that the santer stock is above the target biomass ($B/B_0 = 0.4$) and that the stock is being fished below F_{MSY} . It must be noted that the base case is the most pessimistic of the four scenarios produced, and the remaining three scenarios estimate this probability to be between 82% and 89%. The results imply the santer stock is rebuilding and should reach B_{MSY} by 2021 if current catch levels are maintained. It is unlikely that the stock could currently sustain an increase in fishing mortality without there being a significant risk of overexploitation. Increases in annual catch should be avoided until the biomass target B_{MSY} is reached.	The results are explicit in that all four scenarios indicate a 100% probability that the silver kob stock is severely depleted and continues to be over-exploited. The current biomass was estimated as 10.4% (5–17%) of the unfished biomass level. According to the LMPI the silver kob stock has collapsed. Overfishing, and subsequent stock depletion, of silver kob occurred prior to 1987 and despite there having been a trend towards reduced fishing mortality since 1991, this decrease has not been sufficient to initiate stock rebuilding.	Results from the base case scenario indicate a 83% probability that the slinger stock is above the target biomass ($B/B_0 = 0.4$) and that the stock is being fished below F_{MSY} . The remaining three scenarios suggest this probability ranges from 39% to 98%. There is little evidence to suggest the slinger is overexploited and the stock could potentially sustain a 5% increase in fishing mortality without there being a significant risk of overexploitation.	The results are explicit in that all four scenarios indicate that there is a 100% probability that snoek has been fished below F_{MSY} for the entire assessment period. There is no anecdotal evidence or data to suggest that snoek has been over-exploited over the last Century and snoek biomass has been increasing for the past 10 years. In contrast, linefish catch in 2014 was unusually low and the 2015 catch was the lowest ever recorded in the linefishery - despite relative consistency in annual offshore trawl catches over the same period. The linefishery targets the nearshore component of the snoek stock, which is renowned for inter-annual variability. This variability is seemingly driven by resource availability and, to a lesser extent, the market price - as opposed to overall biomass. Snoek is the single largest component of the linefishery and has the capacity to sustain increased fishing mortality. However, the current TAE framework of the linefishery is restrictive in that introducing more participants to the fishery is the only viable means of increasing harvest, assuming current fishers make full use of their Right. This would likely have negative impacts, such as increased sector competition and unsustainable exploitation of other species during periods when snoek is unavailable to the linefishery.	According to the base case scenario, there is a 70.8% probability that the yellowtail biomass is above the target reference point. However, annual catch has exceeded sustainable levels at regular intervals (e.g. 1989, 1993/4, 2004, 2014). This assessment is characterised by an unusually high degree of uncertainty in biomass and harvest (F) estimates as a result of inter-annual variability in CPUE and catch data, which must be acknowledged in the associated scientific recommendations. The remaining three model scenarios in the JABBA-Select assessment suggest that the probability of yellowtail being overexploited is low - between 5.9% and 32.8%. A conservative sustainable yield estimate for this stock would be approximately 700 tonnes per annum. Annual catches exceeding 850 tonnes are not sustainable.

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Saldanha fishermen slam new marine bill

"Where are we going to fish?" MPs asked during public hearing

1 September 2017 | By Alicestine October (/author/296/)

Parliament (/category/parliament/) | South Africa (/region/South%20Africa)



(/media/uploads/Images/photographers/Alicestine%20October/FishersSaldanha-AlicestineOctober-20170831.jpg)

Saldanha Bay fisherman Christo Koopman told MPs during public hearings on the Marine Spatial Planning Bill that the bill would have a serious impact on fishing communities. Photo: Alicestine October

It was anything but smooth sailing for the Marine Spatial Planning Bill on Wednesday when members of Parliament came to consult the fishing community of Saldanha.

Members of Parliament's portfolio committee on environmental affairs came to consult coastal communities along the West Coast on the bill. The bill is intended to give effect to government's Operation Phakisa and in particular the focus on the economic potential of the seas. The public participation process is scheduled to conclude in Parliament on Friday.

The bill, Department of Environmental Affairs director Gcobani Popose told community members, would enable an integrated system to guide the development, implementation and monitoring of Marine Spatial Management Plans in the country. This would be better than the "silo" approach and would reduce conflict over the use of resources, and help to ensure these resources are used sustainably and for development.

In his State of the Nation address in 2014 President Jacob Zuma said of Operation Phakisa that South Africa's oceans had the potential to contribute up to R177 billion to the economy by 2033 compared to R54 billion in 2010. But Saldanha community members, mostly small scale fishermen, wanted to know who would benefit from unlocking economic opportunities.

A fisherman from St Helena Bay, Gerald Cloete, appealed to lawmakers to take into account small scale fishers' contribution to the formal economy. He said Operation Phakisa was aimed at utilising the economic potential of the ocean. But, he said, "should we not start by first giving proper recognition to these fishermen and their contribution to the existing economy?"

"I am not saying Operation Phakisa will be a stillborn baby, I am not saying it will fail, but my problem is that we first need to recognise the existing economy and small scale fishers are part of that existing economy."

Popose stressed that the bill would not replace existing legislation in departments such as Agriculture, Forestry and Fisheries (DAFF), Mineral resources and Environmental Affairs (as steering department) but would allow for better coordination of planning. This means policies like the controversial fishing quotas and other regulations which are causing an outcry from fishing

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communities will mainly remain intact – something that Cloete sees as a concern.

"We are sitting with a department (DAFF) causing more trouble for our communities than providing solutions," said Cloete. He referred to the Marine Protected Areas that limit traditional small scale fishing.

"Some of these are more than 100 years old and this bill highlights the importance of protecting marine resources, but how can we talk about protecting marine resources and then let those like us dependent on them to make a living, languish in poverty?" he asked, to cheers from the audience.

"So I'm asking you, let us start at the beginning and first recognise small scale fishing."

"There is just no protection from DAFF and government should at least give us some kind of 20% or 30% usage of the Marine Protected Areas."

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Another local fisherman, Christo Koopman, was much more emotional in his plea to lawmakers. "Wamee is die regering nou wee deu'meka" (What is government up to now?). He pointed through the window to the bay, claiming the community was already feeling the impact of government's Industrial Development Zone which he said had undermined the whole fishing industry in Saldanha.

The Saldanha Bay IDZ, according to its website, is designed to be "a world-class, internationally recognised and respected South African marine engineering hub focused on the international oil and gas sector" which offers surrounding communities an opportunity to "transform their own landscapes of possibility". But Cloete said what he saw was "gas pipes, and the sea, the traditional fishermen's primary source of income, turned into an industrial site".

"We are robbed of our daily bread whilst the IDZ only seems to benefit some people," Cloete told MPs.

Christian Adams, secretary of Coastal Links, also raised concerns that the bill "seeks to further dispossess small scale fishers and small scale fishing communities of either the fishing grounds they've historically fished in or the land adjacent to those fishing grounds".

"You come here with a presentation telling us that one economy is more important than the other. So what you mean is that if our government decides that the gas and the oil economy is more important than the fishing economy — and we are already seeing this happening outside here — that the fishing economy will cease to exist. That is what this bill is telling me."

"Just look at the drilling here in the bay for gas and oil by the likes of BHP Billiton. Where is that company based? Does this bill seek to enhance the economic opportunities for SA citizens or is it to benefit multinational companies like BHP, or Arcelor Mittal, the Guptas and them?" Adams asked to approval from fellow fishermen.

He then took a swipe at the public participation process. "The constitution demands that you consult with the public and now that you have, will it actually be taken into consideration? I don't think so because we have made hundreds of submissions before Parliament," Adams said waving papers in the air. "We have written hundreds of thousands of words of public comments and nowhere do we see any movement happening for the betterment of the lives of small scale fishers."

Adams told MPs small scale fishing communities had been fighting for a small scale fisheries policy since 2007. He said Operation Phakisa would create 22 more Marine Protected Areas. "So where are we going to fish? You come, you consult, you tick your box, you leave and it doesn't matter because we don't see you again. Yet the decisions you make have a huge impact," said Adams.

Some of the community members present urged government not to take Phakisa (which in Sesotho means Hurry Up) so literally.

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DA Councillor Andre Kruger reminded MPs that good balanced decisions usually took time. "I support the use of the ocean economy to create jobs, but if we hurry we get the situation we have now. Let us make balanced decisions that are best for the economy, the environment and society," he urged.

Produced for GroundUp by Notes From the House.

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Letters

Small guys left out of fishing quotas

Dear Editor

Zuma when he wants something makes impossible promises. Four years ago he promised us five million new jobs. What happened is that the economy shed jobs. Now he is promising millions and billions and like the five million new jobs they will not appear.

Firstly the oceans are over-fished, so quotas will be imposed, and the small guy will be left out. Secondly the Chinese, one of our Brics partners will fish just outside the boundaries and perhaps inside the boundaries and we do not have the navy to protect our interests, those interest that have not already been sold to them.

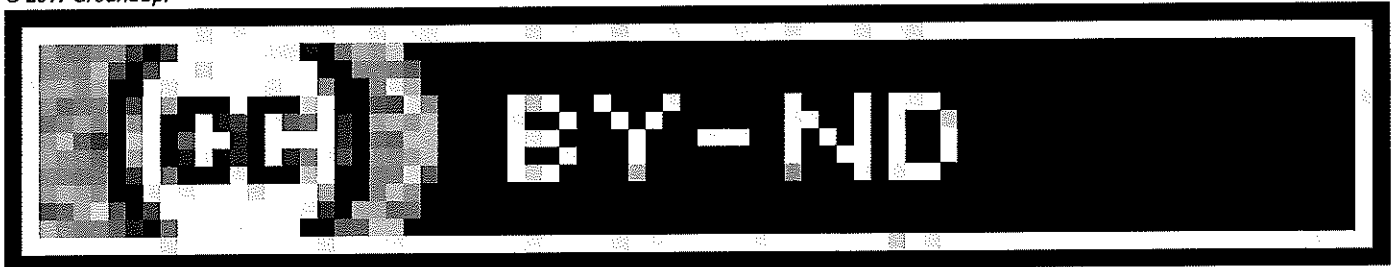
Sincerely

rossg

14 Sep 2017

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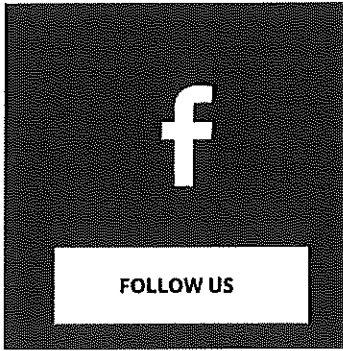
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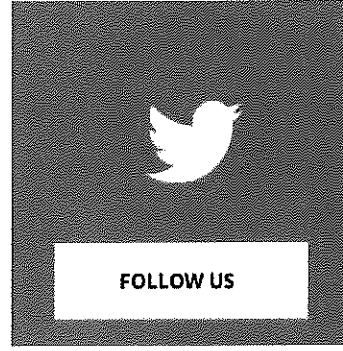
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PER E-MAIL / MAIL

Dear Mr Katmer

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED: FOR THE GAS TO POWER VIA POWERSHIP PROJECT AT THE PORT OF NGQURA WITHIN THE COEGA SEZ IN THE NELSON MANDELA BAY METROPOLITAN MUNICIPALITY IN THE EASTERN CAPE PROVINCE

With reference to the above application, please be advised that the Competent Authority has decided to refuse the application for Environmental Authorisation. The reasons for this refusal are contained in the Record of Refusal, of which a copy is attached hereto.

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

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

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

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Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Competent Authority, whichever is applicable.

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

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

By email: appealsdirector@environment.gov.za;

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

By post: Private Bag X447
Pretoria
0001

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

Yours faithfully



Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries and the Environment
Date: 23/06/2021

cc:	Ms Aletta Plomp	Tripl04 Sustainable Solutions	Email: hantie@triplo4.com
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**forestry, fisheries
& the environment**

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

Record of Refusal

In terms of Regulation 24(1)(b) of the Environmental Impact Assessment Regulations, 2014, as amended

Gas to Power via Powership Project at the Port of Ngqura within the Coega SEZ in the Nelson Mandela Bay Metropolitan Municipality in the Eastern Cape Province

Sarah Baartman District Municipality

Application Register Number:	14/12/16/3/3/2/2005
Applicant:	Karpowership SA (Pty) Ltd
Location of activity:	ERF 255 Coega ERF 312 Coega Remainder of ERF 252 Coega Remainder of Erf 281 Coega Remainder of Erf 275 Coega Nelson Mandela Bay Metropolitan Municipality Sarah Baartman District Municipality Eastern Cape Province

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Decision

The Competent Authority is satisfied, on the basis of information available to it that the applicant should not be authorised to undertake the activities specified below.

Details regarding the basis on which the Competent Authority reached this decision are set out in Annexure 1 to this Record of Refusal.

Activities refused

By virtue of the powers conferred on it by the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment Regulations, 2014, as amended, the Competent Authority hereby refuses the application for Environmental Authorisation to –

KARPOWERSHIP SA (PTY) LTD

with the following contact details –

Mr Mehmet Katmer

Karpowership SA (Pty) Ltd

PO Box 619

PRETORIA

0001

Telephone Number: +90 212 295 47 37 - 121

Email Address: Mehmet.Katmer@karpowership.com

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not to undertake the following activities (hereafter referred to as "the activity"):

Activity number	Activity description
<u>Listing Notice 1, Activity 11:</u> <i>"The development of facilities or infrastructure for the transmission and distribution of electricity-</i> <i>(i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts</i> <i>(ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more;</i> <i>excluding the development of bypass infrastructure for the transmission and distribution of electricity where such bypass infrastructure is —</i> <i>(a) temporarily required to allow for maintenance of existing infrastructure;</i> <i>(b) 2 kilometres or shorter in length;</i> <i>(c) within an existing transmission line servitude; and will be removed within 18 months of the commencement of development."</i>	The power generated on the ship will be converted by the on-board High Voltage substation (110kV-170kV) and transmitted along the 132kV twin conductor overhead transmission line. A switching station will be required to facilitate the supply of electricity into the national grid. The transmission line and switching will be located within the boundaries of the Port of Ngqura (Transnet) and within the Coega Industrial Development and its capacity falls below the threshold of 275kV.
<u>Listing Notice 1, Activity 12:</u> <i>"The development of</i> <i>(i) infrastructure or structures with a physical footprint of 100 square meters or more; where such development occurs</i> <i>(a) within a watercourse or</i> <i>(c) within 32 meters of a watercourse, measured from the edge of a watercourse</i> <i>Excluding:</i> <i>(dd) where such development occurs within an urban area."</i>	The preferred route of the transmission line on the western side of the services servitude, the locations of the proposed switching station and the temporary laydown area for the gas pipeline installation, is within 32m of a watercourse. The FEPA wetland that is indicated on maps, no longer exists.
<u>Listing Notice 1, Activity 15:</u>	Structures in the coastal public property exceeding 50 square meters include: the gas

<i>"The development of structures in the coastal public property where the development footprint is bigger than 50 square metres, excluding—</i> <i>(i) the development of structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</i> <i>(iv) activities listed in activity 14 in Listing Notice 2 of 2014, in which case that activity applies."</i>	pipeline, transmission line and the laydown areas and mooring structures for the gas pipeline and transmission line installations. The development of these structures and infrastructure will occur within the Port of Ngqura. A part of the gas pipeline will be established overland to connect to the Powership.
<u>Listing Notice 1, Activity 17:</u> <i>"Development—</i> <i>(i) in the sea;</i> <i>(ii) in an estuary;</i> <i>(iii) within the littoral active zone</i> <i>in respect of-</i> <i>(e) infrastructure or structures with a development footprint of 50 square metres or more —</i> <i>but excluding-</i> <i>(aa) the development of infrastructure and structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</i> <i>(dd) where such development occurs within an urban area."</i>	The Powerships and FSRU are not being developed. However, the mooring system, the gas pipeline, the proposed towers for the transmission line, the switching station and the temporary laydown area for the gas pipeline installation will cumulatively exceed a footprint of 50 square meters within the sea, and littoral active zone.
<u>Listing Notice 1, Activity 18:</u> <i>"The planting of vegetation or placing of any material on dunes or exposed sand surfaces of more than 10 square metres, within the littoral active zone, for the purpose of preventing the free movement of sand, erosion or accretion."</i>	Sections of the gas pipeline and transmission line, where it comes on shore, need to be stabilised to prevent erosion on the substrate where the pipeline and transmission line is established. Furthermore, rehabilitation for the land-based portion will be required. Although the area has already been transformed due to port activity, it will require the planting of vegetation on exposed sand surfaces of more than 10 square meters to ensure environmental management.

<u>Listing Notice 1, Activity 19:</u> <i>"The infilling or depositing of any material of more than 10m³ into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock from a watercourse."</i>	Based on the proposed route of the transmission line, and the location of the temporary laydown area for the gas pipeline installation, the development will take place within a watercourse and will require the infilling or depositing of material of more than 10 cubic meters into, and the excavation, removal or moving of soil or sand of more than 10 cubic meters from a watercourse.
<u>Listing Notice 1, Activity 19A:</u> <i>"The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from—</i> <i>(i) the seashore;</i> <i>(ii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater; or</i> <i>(iii) the sea</i> <i>but excluding where such infilling, depositing, dredging, excavation, removal or moving—</i> <i>(h) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour."</i>	The Powership mooring system, the gas pipeline, the erection of the towers for the transmission line, and the temporary laydown area for the gas pipeline installation will require the removal of more than 5 cubic metres of soil or sand from the littoral active zone, a distance of 100 meters inland of the high water mark and the sea. Installation of the subsea as well as land based portions of the pipeline will require excavation, levelling infilling and compaction.
<u>Listing Notice 1, Activity 27:</u> <i>"The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—</i> <i>(i) the undertaking of a linear activity; or maintenance purposes undertaken in accordance with a maintenance management plan.</i>	The transmission line, its servitude and the switching station (approx. 1,1ha footprint) will cumulatively require clearance of more than 1 hectare of indigenous vegetation. The switching station with a footprint of approximately 1,1ha, will require the clearance of approximately 1ha of indigenous vegetation.

<u>Listing Notice 2, Activity 2:</u> <i>"The development and related operation of facilities or infrastructure for the generation of electricity from a non-renewable resource where the electricity output is 20 megawatts or more."</i>	The two Powerships and FSRU are assembled off-site and will be delivered fully equipped and ready to operate to the Port of Ngqura where they will be moored. The proposed design capacity for the two Powerships is approximately 540MW, which comprises of 27 gas reciprocating engines having heat input of over 10MW each. The 3 steam turbines have a heat input of 15.45MW each. The gas pipeline from the FSRU to the Powerships and the transmission line from the Powerships to the substation trigger separately listed activities as does the need for an AEL which if issued, will regulate the atmospheric emissions during commissioning and operation of the project
<u>Listing Notice 2, Activity 4:</u> <i>"The development and related operation of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres."</i>	Storage of LNG on the FSRU will exceed 500 cubic meters (maximum estimated storage is 175 000 cubic meters at any given time).
<u>Listing Notice 2, Activity 6:</u> <i>"The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding—</i> <i>(i) activities which are identified and included in Listing Notice 1 of 2014;</i> <i>(ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of</i>	The engines used for electricity generation are a Listed Activity under GN 893 of 22 November 2013 (as amended) in terms of Section 21 of the NEM: AQA SubCategory 1.5: Reciprocating Engines. In the case of the proposed project, the Powership will have a combined sum of 27 engines that all have a heat input capacity of more than 10MW each. The two steam turbines have a heat input capacity of less than 50MW, but more than 10MW. These

2008) in which case the National Environmental Management: Waste Act, 2008 applies."	units are therefore declared Controlled Emitters and they will be regulated in terms of GN 831 of 1 November 2013 for Small Boilers.
<u>Listing Notice 2, Activity 7:</u> "The development and related operation of facilities or infrastructure for the bulk transportation of dangerous goods— (i) in gas form, outside an industrial complex, using pipelines, exceeding 1 000 metres in length, with a throughput capacity of more than 700 tons per day; (ii) in liquid form, outside an industrial complex, using pipelines, exceeding 1 000 metres in length, with a throughput capacity of more than 50 cubic metres per day; or (iii) in solid form, outside an industrial complex, using funiculars or conveyors with a throughput capacity of more than 50 tons per day."	A subsea gas pipeline for transportation of gas in gas form is proposed, exceeding 1000 meters.
<u>Listing Notice 2, Activity 14:</u> "The development and related operation of— (ii) an anchored platform; or (iii) any other structure or infrastructure — on, below or along the sea bed; excluding — (a) development of facilities, infrastructure or structures for aquaculture purposes; or (b) the development of temporary structures or infrastructure where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared."	The ships will be anchored and moored in existing port operational areas utilising the vessel's anchoring system. The transmission of the NG gas will flow via a gas pipeline from the moored ship along the seabed to the main ship for processing. The subsea gas pipeline is proposed to be installed, operate and maintained along the toe of the existing dredged slopes between the floating storage regasification unit (FSRU) and Powership to ensure gas supply for power generation.

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<u>Listing Notice 3, Activity 10:</u> <i>"The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres</i> a. Eastern Cape (cc) <i>Within 500metres of an estuarine function zone excluding areas falling behind the development setback line."</i>	The storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres. The FSRU with a storage capacity not exceeding 175 000 cubic metres of LNG at any time, will be situated approximately 500 metres from the shoreline, adjacent to the breakwater structure, within the Port of Ngqura will be situated further than 500m from the estuarine functional zone. The Jahleel Island is approximately 1km away whereas the St Croix and Brenton Islands are situated approximately 6,5km away. From the FSRU. These islands are situated within the Greater Addo National Elephant Park Marine Protected Area, which is situated immediately adjacent to the breakwater structure within the Port.
<u>Listing Notice 3, Activity 12:</u> <i>"The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan</i> a. Eastern Cape i. <i>Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</i>	This activity will be triggered because of the clearance of vegetation exceeding 300 square metres for the establishment of the transmission line towers and switching station within the littoral active zone and 100 metres inland from the highwater mark of the sea and estuarine functional zone.

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ii. <i>Within critical biodiversity areas identified in bioregional plans;</i> iii. <i>Within the littoral active zone or 100 metres inland from the high water mark of the sea, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;</i> iv. <i>Outside urban areas, within 100 metres inland from an estuarine functional zone; or</i> v. <i>On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning."</i>	
<u>Listing Notice 3, Activity 14:</u> <i>"The development of—</i> <i>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or</i> <i>(ii) infrastructure or structures with a physical footprint of 10 square metres or more;</i> <i>where such development occurs—</i> <i>(a) within a watercourse;</i> <i>(b) in front of a development setback; or</i> <i>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</i> <i>excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour</i> <i>Eastern Cape</i> i. <i>Outside urban areas:</i>	Infrastructure or structures with a footprint of more than 10 square meters will be developed within the Port of Ngqura and the CDC. The CDC's potentially preferred alignment of the transmission line will occur within 32m of a watercourse.

(aa) A protected area identified in terms of NEMPAA, excluding conservancies; (bb) National Protected Area Expansion Strategy Focus areas; (cc) World Heritage Sites; (dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; (ee) Sites or areas identified in terms of an international convention; (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (gg) Core areas in biosphere reserves; (hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; (ii) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined."	
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as described in the Environmental Impact Assessment (EIAR) dated April 2021:

21 Digit SG Codes

C	0	7	6	0	0	2	3	0	0	0	0	0	2	5	5	0	0	0	0
C	0	7	6	0	0	2	3	0	0	0	0	0	3	1	2	0	0	0	0
C	0	7	6	0	0	2	3	0	0	0	0	0	2	5	2	0	0	0	0
C	0	7	6	0	0	2	3	0	0	0	0	0	2	8	1	0	0	0	0
C	0	7	6	0	0	2	3	0	0	0	0	0	2	7	5	0	0	0	0

- for the 540MW Gas to Power Powership Project at Port of Ngqura within Coega SEZ at Nelson Mandela Bay Metropolitan Municipality in the Eastern Cape Province, hereafter referred to as "the property".

The proposed Gas to Powership Project will entail the following:

- Two floating mobile Powerships and Floating Storage Regasification Unit (FSRU);
- Berthing and mooring of the Powerships and FSRU;
- Transmission lines;
- Gas pipelines;
- Water requirements;
- Handling and storage of hazardous goods; and,
- Waste management

Technical details of the proposed facility:

Component	Description/ Dimensions
Location of the site	Port of Ngqura and Coega Special Economic Zone, situated near Port Elizabeth
Export capacity	~540MW
Preferred Site access	The proposed location of the Project is situated within the existing and operational Port of Ngqura and Coega IDZ, and therefore the existing access road network from the N2 will be used to access the Powerships site.

Legislative Requirements

Refusal of the application

1. The application for Environmental Authorisation is refused for the 540MW Gas to Power Powership Project at the Port of Ngqura within the Coega SEZ in the Nelson Mandela Bay Metropolitan Municipality in the Eastern Cape Province as described above.

Notification of refusal and right to appeal

2. The applicant must notify every registered interested and affected party, of the Competent Authority's decision, in writing and within 14 (fourteen) calendar days of the date of this record of refusal.
3. The notification referred to must –
 - 3.1. specify the date on which the record of refusal was issued;
 - 3.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 3.3. advise the interested and affected party that a copy of the record of refusal will be furnished on request; and,
 - 3.4. give the reasons of the Competent Authority for the decision.

Date of refusal of the application for Environmental Authorisation: 23/06/2021


Mr Sabelo Malaza

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

Annexure 1: Reasons for Decision

1. Information considered in making the decision

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

- The listed activities as applied for in the application form received on 05 October 2020.
- The information contained in the Scoping Report (SR) received on 18 November 2020 and the EIAr dated April 2021.
- The comments and inputs received from interested and affected parties (I&APs) including various Organs of State, *inter alia*: the Nelson Mandela Bay Metropolitan Municipality, Eskom, Birdlife SA, SANParks, the Department of Water and Sanitation, the Department of Forestry, Fisheries and the Environment: Biodiversity and Conservation, Oceans and Coast, and Air Quality, the Eastern Cape Department of Economic Development and Environmental Affairs and Tourism, SAHRA, the South African Civil Aviation Authority, Transnet as included in the EIAr dated April 2021.
- The information contained in the specialist studies contained within the appendices of the EIAr dated April 2021 and as appears below:

Title	Prepared by	Date
Wetland Delineation and Functionality	Triplo4	April 2021
Terrestrial Ecological Assessment	Ms Leigh Anne De Wet	April 2021
Archaeological Impact Assessment	ACRM	October 2020
Estuarine and Coastal Assessment	GroundTruth & Coastwise Consulting	April 2021
Climate Change Impact Assessment	Themis Environmental Peer Reviewed by: Luke Richard Moore	April 2021
Geohydrological, Hydrology & Hydropedology Assessments	GCS Water & Environmental Consultants	April 2021
Aquatic Impact Assessment	GCS Water & Environmental Consultants	April 2021
Major Hazardous Installations (Risk Assessment)	Major Hazard Risk Consultants	February 2021
Marine Ecology Assessment	Lwandle Marine Environmental Services	April 2021
Air Quality Impact Assessment	uMoya-Nilu Consulting	April 2021
Socio Economic Impact Assessment	Urban-Econ Development Economists	April 2021
Noise Impact Assessment	Safetech	October 2020
Avifauna Impact Assessment	Dr AP (Paul) Martin	April 2021
Landscape & Visual Impact Assessment	Environmental Planning and Design	April 2021

- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

2. Key factors considered in making the decision

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

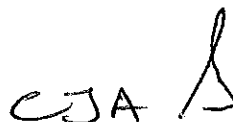
- a) The information contained in the application form, the SR received on 18 November 2020 and the EIAr dated April 2021.
- b) The information contained in the specialist studies as contained as Appendix I of the EIAr.
- c) The comments received by various I&APs and the responses thereto as contained in Appendix D of the EIAr.
- d) The comments provided by the Chief Directorate: Integrated Environmental Authorisations on the draft SR, the acceptance of the SR and the draft EIAr dated 02 November 2020, 06 January 2021 and 11 March 2021, respectively.

3. Findings

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

- a) The Environmental Impact Assessment Process was compromised as the applicant failed to comply with the requirements prescribed in terms of Section 24(1A)(c) of the NEMA in relation to any procedure relating to public consultation and information gathering. The draft EIAr was subjected to public review for a period less than the legislated 30 days as indicated by I&AP's. The documents were removed from the website, and were only returned after queries were raised by various I&AP's.
- b) The EAP failed to enlist the provision of Regulation 23(1)(b) of the EIA Regulations, 2014 as amended, as the EIAr dated April 2021 contains significant changes and/or significant new information which was not contained in the reports consulted on during the public participation process before it was submitted to the Competent Authority for decision making. This then compromises the decision making powers of the Competent Authority as information was not presented to I&AP's for their consideration, prior to decision making.

- c) The Public Participation Process was not conducted in terms of Regulation 39, 40, 41, 42, 43 & 44 of the EIA Regulations, 2014, as amended as well as per the principles of NEMA as outlined in Chapter 2 of the Act.
- d) The Competent Authority advised the EAP on a number of occasions, i.e. comments on the draft Scoping Report, acceptance of the Scoping Report and comments issued on the draft Environmental Impact Assessment Report that the EAP must ensure that all relevant listed and specified activities are applied for, are specific and can be linked to the development activity or infrastructure as described in the project description, and that a final list of all applicable listed activities must be clearly identified and provided. However, the final EIAR and amended application form both contain listed activities where the EAP indicated uncertainty in terms of their applicability and requirement for environmental authorisation. As such, the objectives of the Environmental Impact Assessment Process as outlined in Appendix 3 of the EIA Regulations, 2014 as amended were not fulfilled and the Competent Authority was unable to make an informed decision on the on the potential impacts of the listed or specified activities on the receiving environment.
- e) The "Marine Ecology Specialist Study G2P Development, Port of Ngqura" dated April 2021 recommends that a noise modelling study should be undertaken to gain a more quantitative understanding of the noise produced from power ship operations in the Port of Ngqura and the cumulative impacts on the surrounding marine ecology. The same recommendation is made by the estuarine specialist. The recommended study should have been conducted as part of the EIA process to fully comprehend the impacts of the proposed development.
- f) The conclusion of the SACNASP Peer Review of the Estuarine Impact Report dated 23 April 2021 as included as Appendix I of the EIAR dated April 2021 for the Gas to Power Powership Project at the Port of Richards Bay within the uMhlathuze Local Municipality in the KwaZulu-Natal Province project DFFE Reference: 14/12/16/3/3/2/2007 states "MER was requested by GroundTruth to review three draft specialist reports (dated February 2021) which focused on assessments of the environmental impacts of the Gas to Power developments proposed for the harbours of Richards Bay (Version 1 Draft Report), Coega (Version 1 Draft Report) and Saldanha Bay (Version 1 Draft Report) and states that impacts identified is not a true reflection of the scale of the project in terms of influence. There are impacts that trigger regional and global scale impacts and the specialists recommends that these be reassessed. In addition the peer review states that there is also no clear recommendation from the estuarine specialist. It must be noted that this peer review report has been omitted from the abovementioned application. This should have been reassessed and finalised by the EAP prior to submission of the report for decision making.



- g) Birdlife SA together with SANParks raised serious concerns regarding underwater noise that may have adverse effect on the African Penguin *Sphensiscus demersus* breeding on the nearby Jaheel and St Croix islands by increasing their foraging effort and consequently, negatively impacting their reproductive success. The Noise Impact Assessment recognises that it is "of critical importance that the current underwater soundscape of Algoa Bay be determined, and the potential noise impacts of the proposed project be thoroughly assessed" and it recommends that a separate Underwater Noise Impact Assessment be undertaken. The failure to undertake the Underwater Noise Impact Assessment makes the Specialist hesitant to commit on whether or not the proposed mitigation measures reflected in the Marine Ecology, Avifauna and Noise studies will be sufficient to address potential impacts.
- h) Most of the specialists indicated limitations to their respective studies; amongst, others that they either had very limited time to apply their minds, or it does not apply to the standards of undertaking the assessments and that these studies were undertaken in the wrong season. These limitations were highlighted in the comments raised by various I&AP's as well as in the comments issued by the Chief Directorate: Integrated Environmental Authorisations. The gaps and limitations identified in the respective assessments; raises concerns with regard to the adequacy of the assessment and the validity of the findings. The studies should have been updated and amended prior to submission for decision making.
- i) As a result of the significant gaps and limitations with the assessments conducted, the Competent Authority cannot fully understand the potential impacts of the proposed development and thus not able to make an informed decision. As such, the objectives of the Environmental Impact Assessment Process as outlined in Appendix 3 of the EIA Regulations, 2014 as amended cannot be met.
- j) The EIAr in its current form is not adequate to make an informed decision on the abovementioned application.

In view of the above, the Competent Authority is of the following opinion:

- i. The minimum requirements, specifically with regard to public participation, were not met. The purpose of public participation is not only to promote informed decision making, but also to promote the legitimacy and acceptance of an outcome or decision and to promote participatory democracy.
- ii. The actual and potential impacts on the environment as well as socio-economic conditions could not be properly evaluated (particularly insofar as small-scale fisheries are concerned), especially because of the lack of a proper underwater noise impact study and because of the contradictory information that was made available.
- iii. The effects of activities on the environment could not receive adequate consideration because one of the major impacts, underwater noise generation, was not fully investigated nor were discrepancies and contradictions between specialist studies clarified by the Environmental Assessment Practitioner.

- iv. Under these circumstances it is not possible to make a determination with regard to the significance of potential impacts or consequences for the environment, the effectiveness of potential mitigation measures or whether the project under consideration will constitute a sustainable development.

Consequently there is no sufficient, adequate and reliable basis upon which the statutory discretion of the Competent Authority can be exercised in favour of the applicant and therefore the application for Environmental Authorisation is refused.

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IN THE HIGH COURT OF SOUTH AFRICA
EASTERN CAPE DIVISION, GRAHAMSTOWN

CASE NO. 3491/2021

In the matter between:

SUSTAINING THE WILD COAST NPC

First Applicant

MASHONA WENT DLAMINI

Second Applicant

DWESA-CWEBE COMMUNAL PROPERTY ASSOCIATION

Third Applicant

NTSINDISO NONGCAVU

Fourth Applicant

SAZISE MAXWELL PEKAYO

Fifth Applicant

CAMERON THORPE

Sixth Applicant

ALL RISE ATTORNEYS FOR CLIMATE AND THE ENVIRONMENT NPC Seventh Applicant

and

MINISTER OF MINERAL RESOURCES AND ENERGY

First Respondent

MINISTER OF ENVIRONMENT, FORESTRY AND FISHERIES

Second Respondent

SHELL EXPLORATION AND PRODUCTION SOUTH AFRICA BV

Third Respondent

IMPACT AFRICA LIMITED

Fourth Respondent

BG INTERNATIONAL LIMITED

Fifth Respondent

JUDGMENT

Bloem J.

- [1] This is an application for an interim interdict. The application has two parts. In Part A the applicants seek an order interdicting the third, fourth and fifth respondents from proceeding with a seismic survey pending the finalisation of the relief sought under Part B. In Part B they seek an interdict prohibiting the same respondents from proceeding with the seismic survey unless and until an environmental authorisation has been granted

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under the National Environmental Management Act¹ (NEMA).

The parties

- [2] The applicants are non-profit companies, natural persons and a communal property association. The first applicant, Sustaining the Wild Coast NPC, works to promote sustainable livelihoods that construct, rehabilitate and protect the natural environment on the Wild Coast. The second applicant is Mashona Dlamini, a traditional healer and a member of the iNkosana's (headwoman's) council, a body established in terms of customary law. He acts on his own behalf and on behalf of traditional healers along the Wild Coast and on behalf of the Umgungundlovu community. The third applicant is the Dwesa-Cwebe Communal Property Association. The fourth applicant is Ntsindiso Nongcavu, a fisher from Port St Johns who acts on his own behalf as well as on behalf of fellow Wild Coast fishers. The fifth and sixth applicants are Sazise Pekayo and Cameron Thorpe respectively, who are both fishers from Kei Mouth and members of a local cooperative, the Kei Mouth Fisheries. They act on their own behalf and on behalf of their community as well as on behalf of fellow Wild Coast fishers. The seventh applicant is All Rise Attorneys for Climate and Environmental Justice NPC, a law clinic representing communities fighting against and affected by climate change. It is not in dispute that all the applicants act in the public interest and in the interest of protecting the environment.
- [3] The first respondent is the Minister of Mineral Resources and Energy. The second respondent is the Minister of Environment, Forestry and Fisheries. The third respondent is Shell Exploration and Production South Africa BV, the

¹ National Environmental Management Act, 1998 (Act 107 of 1998).

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fourth respondent is Impact Africa Limited (Impact Africa) and the fifth respondent is BG International Limited. Hloniphizwe Mtolo, the deponent of the main answering affidavit that was filed on behalf of the third, fourth and fifth respondents, stated that the fifth respondent is the Shell entity which owns the project in question and that the third respondent has nothing to do with the project.

- [4] The second respondent does not oppose the application insofar as the relief sought under Part A is concerned. Soon after the founding application papers were served on the respondents, a notice was delivered on behalf of the first respondent, the Minister of Mineral Resources and Energy (the Minister), indicating that he did not intend opposing Part A of the application. However, on 15 December 2021 a notice to oppose was delivered on behalf of the Minister. Later on that day an affidavit was delivered on his behalf wherein his stance to these proceedings was set out. The change of heart was not explained. The third, fourth and fifth respondents (to which I shall collectively refer as Shell) oppose the application.

Introduction

- [5] In 2013 Impact Africa submitted an application to the Petroleum Agency of South Africa (PASA) for an exploration right in terms of section 79 of the Mineral and Petroleum Resources Development Act² to explore for oil and gas in the Transkei and Algoa exploration areas. PASA accepted the application on 1 March 2013. A draft environmental management programme was made available for interested and affected parties to raise issues and concerns that they may have had with the proposed

² Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002).

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exploration activities. The issues and concerns were required to have been raised between 22 March and 12 April 2013. Advertisements were placed in The Times, Die Burger (Eastern Cape), The Herald and The Daily Dispatch newspapers, notifying the public of the proposed project and providing details of the consultation process and information on how members of the public could provide input into the environmental management programme process and inviting comment. A final environmental management programme was produced during June 2013. PASA approved it on 9 September 2013, with a few conditions. The Deputy Director-General of the Department of Mineral Resources and Energy approved the environmental management programme and on 29 April 2014 the exploration right was granted.

- [6] Shell is currently conducting a seismic survey off the eastern coast of South Africa. The total survey area size is 6 011 square kms. It covers almost the entire Eastern Cape coastline. According to Shell the survey will take between 110 and 140 days, from December 2021 until April 2022, depending on the weather, currents and the sea conditions. The purpose of the seismic survey is to provide imaging of the subsurface to determine whether there might be energy reserves below the sea floor.³ Shell will use the seismic vessel, the Amazon Warrior, from which it will conduct the seismic survey. It is not in dispute that during the survey the Amazon Warrior will discharge pressurised air from its airgun arrays to generate sound waves.

³ In *Border Deep Sea Angling Association and others v Minister of Mineral Resources and Energy and others* (3865/2021) [2021] ZAECHC 111 (3 December 2021) Govindjee AJ described a seismic survey as "a study in which seismic waves generated through compressed air are used to image layers of rock below the seafloor in search of geological structures to determine the potential presence of naturally occurring hydrocarbons (that is, oil and gas)."

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- [7] I have to decide whether or not the applicants are entitled to an interim interdict. To secure such an interdict, they were required to satisfy the court they have established: (i) at least a *prima facie* right even if it is open to some doubt; (ii) a reasonable apprehension of irreparable and imminent harm of the right if the interim interdict is not granted; (iii) that the balance of convenience favours the granting of the interim interdict; and (iv) that they have no other satisfactory remedy.⁴ Shell contended that the application should be dismissed because, so it contended, the applicants failed to establish any one of the above requirements.

Prima facie right?

- [8] It was submitted on behalf of the applicants that they have established the following *prima facie* rights which require the protection of an interdict. Firstly, the applicant communities have a right to be meaningfully consulted about the seismic survey, because it impacts upon their customary rights, including customary fishing rights. Secondly, they claim that their (as well as the public's) statutory right under NEMA, which requires that prospectors must obtain an environmental authorisation under NEMA for exploration for oil and gas, has been breached, because, so it was contended, Shell does not have a NEMA environmental authorisation. It was submitted on behalf of the applicants that the NEMA obligations give effect to the rights of affected communities and the public in relation to the environment.

- [9] The constitutional rights which the applicants claim are implicated are contained in

⁴ *Setlogelo v Setlogelo* 1914 AD 221 at 227; *Eriksen Motors (Welkom) Ltd v Protea Motors, Warrenton* 1973 (3) SA 685 (A) at 691C-E.

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sections 24, 30 and 31 of the Constitution. It was submitted on their behalf that the application was brought to protect the above rights.

9.1. Section 24 deals with the environment. It reads as follows:

"Everyone has the right-

- (a) to an environment that is not harmful to their health or well-being; and
- (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-
 - (i) prevent pollution and ecological degradation;
 - (ii) promote conservation; and
 - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."

9.2. Section 30 deals with language and culture. It reads as follows:

"Everyone has the right to use the language and to participate in the cultural life of their choice, but no one exercising these rights may do so in a manner inconsistent with any provision of the Bill of Rights."

9.3. Section 31 deals with cultural, religious and linguistic communities. It reads as follows:

- "(1) Persons belonging to a cultural, religious or linguistic community may not be denied the right, with other members of that community-
 - (a) to enjoy their culture, practise their religion and use their language; and
 - (b) to form, join and maintain cultural, religious and linguistic associations and other organs of civil society.
- (2) The rights in subsection (1) may not be exercised in a manner inconsistent with any provision of the Bill of Rights."

[10] In *Bengwenyama Minerals (Pty) Ltd and others v Genorah Resources (Pty) Ltd and others*⁵ Froneman J discussed the importance of consultation under the Mineral and Petroleum Resources Development Act.⁶ For fear of doing an injustice to what has been said by the learned Judge, I quote hereunder in full what was said in paragraphs 62 to 68

⁵ *Bengwenyama Minerals (Pty) Ltd and others v Genorah Resources (Pty) Ltd and others* 2011 (4) SA 113 (CC).

⁶ Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002).

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thereof.

"Consultation

[62] The Act requires consultation in regard to prospecting rights at different levels. Within 14 days of accepting a prospecting right application the regional manager must make known that an application has been received and must call upon interested and affected persons to submit their comments within 30 days from the date of the notice.⁷⁵ If a person objects to the granting of the right the objection must be referred to the Regional Mining Development and Environmental Committee to consider the objection and advise the minister on them. Also within 14 days of acceptance of the application, the regional manager must notify the applicant in writing that the landowner or lawful occupier must be notified and consulted. The result of the consultation must be submitted within 30 days from the date of the notice. Before the holder of a prospecting right actually starts prospecting the landowner or lawful occupier must again be notified and consulted.

[63] These different notice and consultation requirements are indicative of a serious concern for the rights and interests of landowners and lawful occupiers in the process of granting prospecting rights. It is not difficult to see why: the granting and execution of a prospecting right represents a grave and considerable invasion of the use and enjoyment of the land on which the prospecting is to happen. This is so irrespective of whether one regards a landowner's right as ownership of its surface and what is beneath it 'in all the fullness that the common-law allows', or as use only of its surface, if what lies below does not belong to the landowner, but somehow resides in the custody of the State.

[64] The purpose of the notification and subsequent consultation must thus be related to the impact that the granting of a prospecting right will have on the landowner or lawful occupier. The community is the landowner of the farms at stake in this application and therefore I will restrict further discussion to the position of landowners.

[65] One of the purposes of consultation with the landowner must surely be to see whether some accommodation is possible between the applicant for a prospecting right and the landowner insofar as the interference with the landowner's rights to use the property is concerned. Under the common law a prospecting right could only be acquired by concluding a prospecting contract with the landowner, something which presupposed negotiation and reaching agreement on the terms of the prospecting contract. The Act's equivalent is consultation, the purpose of which should be to ascertain whether an accommodation of sorts can be reached in respect of the impact on the landowner's right to use his land. Of course the Act does not impose agreement on these issues as a requirement for granting the prospecting right, but that does not mean that consultation under the Act's provisions does not require engaging in good faith to attempt to reach accommodation in that regard. Failure to reach agreement at this early consultation stage might result in the holder of the prospecting right having to pay compensation to the landowner at a later stage. The common law did not provide for this kind of compensation, presumably because the opportunity to provide recompense for use impairment of the land existed in negotiation of the terms of the prospecting contract.

[66] Another, more general, purpose of the consultation is to provide landowners or occupiers with the necessary information on everything that is to be done, so that they can make an informed decision in relation to the representations to be made, whether to use the internal procedures if the application goes against them and whether to take the administrative action concerned on review. The consultation process and its result are an integral part of the fairness process because the decision cannot be fair if the administrator did not have full regard to precisely what happened during the consultation process in order to determine whether the consultation was sufficient to render the grant of the application procedurally fair.

[67] The consultation process required by s 16(4)(b) of the Act thus requires that the applicant must: (a) inform the landowner in writing that his application for prospecting rights on the owner's land has been accepted for consideration by the regional manager concerned;

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(b) inform the landowner in sufficient detail of what the prospecting operation will entail on the land, in order for the landowner to assess what impact the prospecting will have on the landowner's use of the land; (c) consult with the landowner with a view to reach an agreement to the satisfaction of both parties in regard to the impact of the proposed prospecting operation; and (d) submit the result of the consultation process to the regional manager within 30 days of receiving notification to consult.

[68] Genorah did not comply with these requirements for consultation in terms of the Act. Essentially its purported compliance with the consultation requirements of the Act consisted of notifying the Kgoshi of the community of its application before lodging it with the regional manager, and leaving a prescribed form for him to indicate, by ticking a box on the form, whether he on behalf of the community supported its application or not. The form was never signed by the Kgoshi. Genorah did nothing further, despite being notified of the requirements under s 16(4) of the Act by the department, and despite receiving a letter from the Kgoshi on 13 March 2006 inviting Genorah to get to know each other better. There was never any consultation in relation to Eerstegeluk. The review must thus succeed on this ground."

[11] It is against the above that I will consider whether the applicants have reason to complain about the consultation process that was followed before the seismic survey commenced. The consultation process is set out in the environmental management programme, which is the basis upon which the exploration right was granted. Fortunately, the history set out in the environmental management programme cannot be changed. I will deal with the individual complaints raised by the individual applicant communities.

[12] The deponent of the applicants' founding affidavit, Sinegugu Zukulu, is a resident of the Baleni village which forms part of the Amadiba traditional community. He said that his family has been living in the area for more than a century, and perhaps two. That traditional community stretches from the Umtamvuna River, which is the border between the Eastern Cape and Kwa-Zulu Natal, to the Mtentu River. It runs 20 kms inland. The inland area is called Dangeni while the coastal area is called Umgundlovu. Members of the Amadiba community take pride in the land on which they live because their ancestors fought to protect it. They adopt the attitude that, not only does the land belong to them, they also belong to the land. That is so because the land is central to their identity. It sustains them.

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- [13] Mr Zukulu remembers how, in his earlier days, members of the Jama village (where he born and which is about 15 kms from the coastline) would walk to the sea to collect its healing waters and sacred sand, harvest mussels, catch fish and would sometimes camping on the coast. His mother's grandfather would go to the ocean every month to cleanse himself for healing purposes. Not only the land, but also the sea, plays an important role in the way of life of members of the Amadiba traditional community. They collect mussels, limpets, oysters and crayfish. They also fish for a range of species, including king fish, garrick, kob and shad. Seafood forms a vital part of their diet. It contributes to their community having some of the lowest rates of hunger in the country. They also sell their catches to generate an income. Their dependence on and the significance of the sea made training in conservation and sustainable harvesting on land and sea imperative. Mr Zukulu said that they *"are the conservationists of the sea in our area, using practices handed down to us over generations"*.
- [14] Members of the Amadiba traditional community also know the sea and the land to have healing properties. In some instances, traditional healers rely on the sea, for example to cleanse themselves and their patients. Some of the ancestors reside in the sea because they loved the sea in life and some of them died in the sea. It is considered very important by members of the Amadiba traditional community not to disturb these ancestors through pollution or other disturbances. That belief should not be difficult to comprehend by those who do not share the customs of the Amadiba traditional community if regard is had to the fact that graves on land are not easily disturbed or moved. Members of the Amadiba traditional community are concerned that the seismic survey will upset their ancestors and impact on their cultural and spiritual relationship with the sea. They are concerned that Shell did not consult them in that regard.

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- [15] Members of the Amadiba traditional community are also concerned about the impact that the seismic survey will have on the climate. The ultimate aim of the project is the extraction of fossil fuels. They are concerned that exploration for the possibility of fossil fuels takes place without a climate impact assessment. They stated that they already observe signs of climate change in Amadiba, for example, they experience much more unpredictable weather patterns with more extreme weather events, such as more droughts and heavier downpours of rain and livestock become sick more often. They are very concerned about the prospect of rising sea levels. As indigenous peoples, they feel responsible for conserving the planet for themselves and humanity.
- [16] The Dwesa-Cwebe Communal Property Association is the owner of the Dwesa-Cwebe Reserve. The Dwesa-Cwebe community is made up of seven villages which border the Dwesa-Cwebe Reserve. The reserve is situated along the coast in which the seismic survey will be performed. The villages which make up the Dwesa-Cwebe are historically fishing villages. Members of those villages have relied, and still rely, on the sea for sustenance mainly through fishing and harvesting mussels, which, for many inhabitants are the only source of protein. Like Amadiba, some members of the Dwesa-Cwebe community also sell their sea harvests as a means of making a living. They claim that, because the sea is integral to the community's cultural identity and customary system, in other words, the sea is integral to who they are, they have over time developed sustainable fishing practices which pose no great risk to marine life in the area. Members of the villages comprising the Dwesa-Cwebe community are very concerned that the seismic survey threatens great disruptions to the prevailing ecological, marine life and the socio-economic conditions in and around their community.

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[17] Mr Nongcavu is a fisherman from Port St Johns. He has been fishing since the age of 12. He now makes a living from fishing. As with his forebears who are buried in Sicambeni village where Mr Nongcavu now resides, he follows his community's customary sustainable fishing practices. In accordance with their customary practices and indigenous knowledge, they do not take too much from the sea. They only take fish of a certain size. They practise the customary practices which they have been taught, namely when they fish, they think of tomorrow. Some fishers sell their harvest for an income. Like the Amadiba, members of the Sicambeni village, regard the sea as important to them as a site where ancestors reside. Traditional healers use the sea for rituals, healings and ceremonies to perform their practices. For example, some traditional healers take sick people within their community to the sea to speak to their ancestors for healing. Mr Nongcavu regards the sea as a mystical place where their ancestors reside. It is a place where some churches congregate for worship and prayer. He stated that the Sicambeni community was not consulted about the exploration for oil and gas by Shell. He is also not aware that any member of his community, co-operatives, village headman or chief was consulted at any point about the seismic survey. Members of the community are concerned that the seismic survey may kill marine species or force them to migrate, with adverse consequences for the community. The fear is also that the seismic survey will negatively impact on the community's customary practices and spiritual relationship with the sea.

[18] Mr Pekayo and Mr Thorpe, who represent fishers at Kei Mouth, are members of the Kei Mouth Fisheries Co-Operative. They fish to sustain their families. Like other communities along the east coast, members of this community also rely on the sea for cultural and spiritual practices. Their complaint is also that they were not consulted in the

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environmental management programme process and were surprised to learn of the exploration right eight years after it had been granted.

[19] Thembelihle Mbokazi says that she has been a conservationist along the south coast from since she can remember. In her community's culture, the ocean is a precious and sacred place where everyone goes to perform rituals. She can remember how, in her early childhood, sangomas, *"trained under the ocean"*, often became the most powerful sangomas in the community. In her affidavit Ms Mbokazi also dealt with the importance of meaningful public participation and mitigation measures.

[20] I now look at the applicants' criticism of the consultation conducted during the process leading up to the approval of the exploration right and the subsequent seismic survey. Shell's position is that it has not only followed, but exceeded, the requirements for the public participation of all relevant stakeholders.

[21] The environmental management programme identified the potential interested and affected parties *"through analysis of potential stakeholders and based on stakeholders engaged in previous similar studies in the area"*. The list of the interested and affected parties consulted was attached to the final environmental management programme. It includes *"government authorities (local and regional), non-governmental organisations (NGO), community-based organisations (CBO) and industry groups (including the fishing industry)"*. The list was further expanded through feedback and suggestions received following consultation and disclosure activities". The applicants' complaint is that members of the villages, communities and traditional communities from where they come are not on that list. That, they allege, is proof that their communities were not consulted. Shell's response to the above complaint was that no one was precluded from registering

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as an interested and affected person pursuant to the newspaper advertisements. The simple answer to that is that a person who does not know of the process cannot be expected to register and participate in the process as an interested and affected person.

[22] Shell relies on the fact that the advertisements were placed in four newspapers to notify the public about the proposed project and providing details of the consultation process. The notifications were published in newspapers in English and Afrikaans. They were not published in isiZulu or isiXhosa, the languages spoken in the communities in question. The applicants criticised Shell for not having used radio and community newspapers which would have facilitated communication with them in the language used in their respective communities. The newspapers in which the advertisements were published were only accessible to literate persons with access to those newspapers. In my view, those who cannot read English or Afrikaans, were excluded from the consultation process. Given the nature of the communities in question, the notification provided by Shell was inadequate.

[23] After the proposed project was advertised in the newspapers, members of the public could provide comments. The comments were compiled after receipt. A draft environmental management programme was placed on the project website and interested and affected persons were given 30 days to comment. Notification was sent directly to all interested and affected persons. Thereafter a series of in-person group meetings and focused group meetings were held as part of the engagement process. All interested and affected persons on the stakeholder database were invited to these meetings.

[24] A further criticism was that group meetings were not held in the communities in question.

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Rather, they were held in Port Elizabeth, East London and Port St Johns on 3, 4 and 5 June 2013 respectively. The location of those meetings excluded the communities in question from attending.

- [25] The consultation process described above was severely criticised by the applicants. The approach that was followed to consult was inconsistent with the communities' custom of seeking consensus. The approach was also invalid. Shell considered it adequate to speak only to the "Kings" of communities and to assume that those Kings spoke for their subjects. The applicants contended that Shell's way of engagement in this regard derives from the colonial and apartheid eras. Communities, such as the Amadiba community, have strict rules about consultation that emphasise the importance of seeking consensus. This is part of their customary law and avoids the imposition of top-down decision-making.
- [26] Meaningful consultation entails providing communities with the necessary information on the proposed activities and affording them an opportunity to make informed representations.⁷ The "King" cannot make representations on behalf of all of the community members. The monarchs in question do not have jurisdiction over large communities who are affected by the seismic survey. Those monarchs do not have jurisdiction over amaMpondo aseQaukeni (Eastern Pondoland). None of them was

⁷ See *Maqoma v Sebe NO and Another* 1987 (1) SA 483 (CK) where the following was said at 491F-H: "However convinced the empowered authority may be at the outset, of the wisdom or advisability of the intended course of action, he is obliged to constrain his enthusiasm and to extend a genuine invitation to those to be consulted and to inform them adequately of his intention and to keep an open and receptive mind to the extent that he is able to appreciate and understand views expressed by them; to assess the views so expressed and the validity of objections to the proposals and to generally conduct meaningful and free discussion and debate regarding the merits or demerits of the relevant issues. So receptive must his mind be that, if sound arguments are raised or other relevant matters should emerge during consultation, he would be receptive to suggestions to amend or vary the intended course to the extent that at least a possibility exists for those with whom he consults to persuade him to alter his intentions if not to abandon them."

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accordingly empowered to speak on behalf of customary fishers anywhere along the Wild Coast.

[27] Shell did not follow through with the defective consultations proposed in its environmental management programme wherein its consultants state that *"two traditional monarchs and their senior advisors were met in Mthatha, as well as Richard Stephenson who is mandated to represent 4 of the Transkei Kingdoms regarding this project."* In the environmental management programme Shell's consultants made reference to a request for five additional meetings to be held with the Kings. There is no suggestion that those meetings were held.

[28] Shell's consultants developed a *"stakeholder database"* through *"stakeholder analysis"* using previous studies in the area. Shell gave no detail about what the *"stakeholder analysis"* entailed. The list of interested and affected persons on the database was supplemented with reference to feedback received following consultation and the disclosure process. The bid information document, containing details regarding the proposed exploration activities, was then distributed to the interested and affected persons. Later, in 2020, Shell sent a notification of the 2020 audit to all interested and affected persons who registered in the 2013 process, inviting them to comment on the audit results. Shell maintains that persons who are part of the monarchies but were not consulted through the engagement with the Kings, were free to register as interested and affected persons pursuant to the newspaper notices.

[29] According to Shell such persons could have attended group meetings and engaged through that process. A person who does not know of the process or meeting cannot be expected to participate in such a process or attend those meeting. In order to become

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interested and affected persons, community members had to have knowledge about the seismic survey and the contact details of Shell's consultants. I have already dealt with the fact that the advertisements were published in only English and Afrikaans and the difficulties with that mode of communication. The draft environmental management programme was subsequently published on the project website and notification was sent to registered interested and affected persons. It means that unless a person was already registered as an interested and affected persons, he or she would not know where to find the draft environmental management programme and how to comment. Thus, there was little prospect of community members registering as interested and affected persons or otherwise discovering the relevant documents.

[30] Shell did not provide an explanation of how its "*stakeholder analysis*" was conducted or why it considered the "*previous studies*" that it relied upon to be sufficient. This analysis and these studies were insufficient because they did not identify the numerous small scale and subsistence fishing communities along the coastline where the seismic survey will be performed. Regard being had to the above, the consultation process was, in my view, inadequate.

[31] The applicant communities are holders of customary fishing rights.⁸ They allege that the

⁸ Customary fishing rights were recognised in *Gongqose and others v Minister of Agriculture, Forestry and Fisheries and others* 2018 (5) SA 104 (SCA) where the court had the following to say:

"[37] In this case there is extensive evidence concerning the nature of a customary system governing all aspects of life in the Dwesa-Cwebe communities, having regard to the study of the history of those communities and their usages. These aspects range from relations between parents and children, husbands and wives, household heads and neighbours, headmen and subheadmen. They include ceremonial events (weddings, payment of bridal wealth and circumcision); access to and use of natural resources, more particularly land, forest and marine resources; and the resolution of disputes. There is historical evidence of fishing and collection of shellfish since at least the 18th century.

[38] Knowledge of the customary system was transmitted from generation to generation, typically from father to son as regards fishing and from mother to daughter with regard to the harvesting of intertidal resources.

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seismic survey will impact negatively upon those rights and as holders of such rights which are threatened by the seismic survey, the customary fishers of the Wild Coast had a right to consultation in respect of the seismic survey. The consultation process carried out by Shell in that regard was inadequate.

[32] I accept that the customary practices and spiritual relationship that the applicant communities have with the sea may be foreign to some and therefore difficult to comprehend. How can ancestors reside in the sea and how can they be disturbed, may be asked. It is not the duty of this court to seek answers to those questions. We must accept that those practices and beliefs exist. What this case is about is to show that had Shell consulted with the applicant communities, it would have been informed about those practices and beliefs and would then have considered, with the applicant communities, the measures to be taken to mitigate against the possible infringement of those practices and beliefs. In terms of the constitutional those practices and beliefs must be respected and where conduct offends those practices and beliefs and impacts negatively on the environment, the court has a duty to step in and protect those who are offended and the

Knowledge was also conveyed through a range of rituals and practices within the larger customary system within which fishing was located. All of this evidence was not disputed by the state. Indeed, the prosecutor put it to Ms Sunde that the state did not deny that the Dwesa-Cwebe communities had a right in terms of customary law (of access to marine resources), and that customary law had to be given equal recognition as legislation.

[39] *The appellants accordingly proved that, since time immemorial, the Dwesa-Cwebe communities, of which they are part, have a tradition of utilising marine and terrestrial natural resources. It is thus not surprising that the magistrate found that the evidence established the existence of a customary right to fish within the relevant coastal waters by the Dwesa-Cwebe communities. The High Court described that right and its regulation as follows:*

'[23] . . . (T)hey understood that nature had a way of protecting itself and this is what regulated their harvesting; the tides and the weather did not allow them to go fishing every day; they also had their own way of making sure that there would be enough fish for the generations to come, having been taught by their fathers and elders not to take juveniles and to put the small fish back. These rights were never unregulated, and were always subject to some form of regulation either under customary and traditional practices.'

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environment.

[33] Shell was under a duty to meaningfully consult with the communities and individuals who would be impacted by the seismic survey. Based on all the evidence, I am of the view that Shell failed to do so. The evidence shows that the consultation process in question was inadequate and substantially flawed.

[34] In all the circumstances, it seems to me that the exploration right, which was awarded on the basis of a substantially flawed consultation process, is thus unlawful and invalid. The applicants' right to meaningful consultation constitutes a *prima facie* right which deserves to be protected by way of an interim interdict. I am satisfied that the applicants have established that they have a *prima facie* right. In *National Treasury and others v Opposition to Urban Tolling Alliance and others*⁹ Moseneke DCJ stated that if the right asserted in a claim for an interim interdict is sourced from the Constitution, it would be redundant to enquire whether that right exists. The applicants have established constitutional rights worthy of protection by an interim interdict.

[35] At the hearing, the applicants indicated that they might in due course amend the relief sought under Part B of the notice of motion to include a prayer reviewing and setting aside the exploration right. Both counsel for the Minister and Shell submitted that the applicants cannot be allowed to secure an interim interdict on the basis the Shell does not have an environmental authorisation granted under NEMA and at the subsequent hearing seek an order reviewing and setting aside the exploration right. In my view the objection is more about form than substance. What is presently important is that Shell is conducting

⁹ *National Treasury and Others v Opposition to Urban Tolling Alliance and Others* 2012 (6) SA 223 (CC) at par 46.

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a seismic survey which, as said above, is the result of a substantially flawed consultation process. The underlying grounds for the relief sought under the proposed amended notice of motion will include the grounds upon which the interim relief was granted. Since the applicants have established a *prima facie right*, they are entitled to have that right protected against such unlawfulness, provided that the other requirements of an interim interdict have been met. Failure to protect the applicants against unlawfulness will offend the rule of law.

[36] Whether or not Shell requires an environmental authorisation obtained under NEMA involves a difficult legal issue. The Minister caused an affidavit to be delivered wherein he adopted the stance that "*the environmental management programme used to support the application made by [Impact Africa] for the renewal of its exploration right ... constitutes an environmental authorisation, as envisaged by the National Environmental Management Act 107 of 1998 (NEMA)*". Whether that is so, however, is a decision to be made by the court. Although I am of the view that the applicants have prospects of success in that regard, it is a matter that should rather be considered by the court which will determine the relief sought under Part B of the notice of motion.

Irreparable harm?

[37] The applicants were required to establish that they have a reasonable apprehension of irreparable harm if the interim interdict is not granted. What a reasonable apprehension of harm means has been dealt with in *Minister of Law and Order and Others v Nordien and Another*¹⁰ wherein Hefer JA had the following to say:

¹⁰ *Minister of Law and Order and Others v Nordien and Another* 1987 (2) 894 (AD) at 896F-I.

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'What a 'reasonable apprehension' in this context means and how it is to be established, appears from a passage in the judgment of Berker JP in *Nestor and Others v Minister of Police and Others* 1984 (4) SA 230 (SWA) at 244, with which I respectfully agree. It reads as follows:

'A reasonable apprehension of injury has been held to be one which a reasonable man might entertain on being faced with certain facts (*Free State Gold Areas Ltd v Merriespruit (Orange Free State) Gold Mining Co Ltd* 1961 (2) SA 505 (W) at 515). The applicant for an interdict is not required to establish that, on a balance of probabilities flowing from the undisputed facts, injury will follow: he has only to show that it is reasonable to apprehend that injury will result (*Free State Gold Areas* case *supra* at 518). However, the test for apprehension is an objective one (*Ex parte Lipshitz* 1913 CPD 737; *Seligman Bros v Gordon* 1931 OPD 164; *Pickles v Pickles* 1947 (3) SA 175 (W)). This means that, on the basis of the facts presented to him, the Judge must decide whether there is any basis for the entertainment of a reasonable apprehension by the applicant."

[38] The applicants rely on cultural and spiritual harm; the threatened harm to marine life; and the negative impact on the livelihood of small-scale fishers, arising from the harm to marine life. I have already dealt with the impact that the seismic survey will have on the applicant communities' cultural and spiritual beliefs. To conclude the discussion on this topic, reference is made to the evidence of Jacqueline Sunde, a senior researcher at the Department of Environmental and Geographical Science at the University of Cape Town. Dr Sunde is also a member of the One Hub research team and the Ocean Justice network. She stated the following in paragraphs 18, 21 and 24 of her affidavit which formed part of the applicants' founding papers:

"18. The material basis of Dwesa-Cwebe's ocean-coastal culture comprises three elements - sense of place linked to their coastline, a relational ontology connecting them to their ancestors and the way meaning is substantiated through socio-ecological interactions (performing rituals in the sea, the sea providing sustenance through fishing and harvesting activities), thus including both tangible and intangible culture. This is very evident in the Dwesa-Cwebe communities' coastal land-ocean culture today.

19. ...

20. ...

21. Residents of the Hobeni community recognise specific rocks as belonging to specific clans. For example, amaDingatha have got their own rocks at the sea where they come for spiritual healing. They would come to that rock to talk to their ancestors.

22. ...

23. ...

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24. *Many Nguni clans believe that the ancestors reside in the sea and in certain rivers and streams [...] This isiXhosa belief is confirmed in research conducted elsewhere along the Eastern Cape coast. The ancestors of these clans reside in the ocean. In addition, most Dwesa-Cwebe residents believe that there are ancestral spirits in the ocean and hence the ocean is sacred, with its significance increasing with depth. Disturbing these ancestors will cause them great distress."*

[39] In its answering affidavit Shell elected not to deal with the aspect relating to the threat of harm to the applicant communities' cultural and spiritual beliefs. The applicants' allegations in that regard are accordingly undisputed. There is no reason not to accept the applicants' evidence in that regard.

[40] Before I deal with the applicants' contention that there is a threat to marine life and resultant economic harm, I must deal with Shell's contention that the applicants failed to establish harm or that the harm that might have been established is irreparable. It furthermore relies on the mitigation measures that are implemented to minimise harm to marine life.

[41] Implicit in Shell's contention is an acknowledgment of harm to marine life, hence the mitigation measures. Shell, through Mr Mtolo, says that those mitigation measures include:

- 41.1. seasonal restrictions, in that the humpback whale has a peak migration period between May and November;
- 41.2. the lowest volume airguns used in the survey, meaning that the sound at source level is low;
- 41.3. a survey area which has been carefully drawn to ensure that it is as small as possible and that no unnecessary or speculative exploration is carried out;

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- 41.4. survey lines which are orientated in such a way that minimises the duration of the survey;
- 41.5. a 5km buffer zone around marine protected areas, despite the fact that the recommended buffer zone for a marine protected area is 2 km;
- 41.6. no survey activities will be undertaken in any declared marine protected area; and
- 41.7. the extension of the typical mitigation and exclusion zone from 500m to 800m to provide further protection to marine mammals, particularly low frequency cetaceans.

[42] Shell furthermore relies on the following operational measures:

- 42.1. Prior to any start, there will be a 60-minute pre-watch period. This means that the procedure may only commence if, for a period of at least 60 minutes, no marine animals are observed in the mitigation zone of 800m around the sound source.
- 42.2. Passive Acoustic Monitoring will run for 24 hours a day for the full duration of the survey.
- 42.3. Independent Marine Mammal Observers will be on board the seismic vessel to observe and record responses of marina fauna to the survey. The observers are able to request that the start be delayed or the survey be suspended if required for the safety of marine life.
- 42.4. Each time the airgun is initiated, it will be carried out as a "soft-start", meaning that the sound source is ramped up slowly to full sound over a period of a

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minimum of 20 minutes. This allows marine life to detect it and move away from the source.

[43] Shell is of the view that all these measures, taken together, make for comprehensive mitigation of any of the adverse effects of the seismic survey.

[44] To prove irreparable harm, the applicants relied on the evidence of ten experts. Simon Elwen is a marine scientist, a Research Associate in the Department of Botany and Zoology at the University of Stellenbosch and a Director at Sea Search Africa (Pty) Ltd and Sea Search Research and Conservation NPO. Tess Gridley is also a marine scientist and a Director at Sea Search Africa (Pty) Ltd and Sea Search Research and Conservation NPO. Dr Gridley also founded the African Bioacoustics Community, an international forum for the promotion of bioacoustics research and best practice in Africa. Drs Elwen and Gridley have been requested by the applicants to compile a report on new developments and information since the completion of the environmental management programme in 2013. In their report, which is dated 29 November 2021, they caution against Shell's reliance on the environmental management programme which is now eight years old for its denial of any significant harm. They argue that a more refined understanding of the ecological context requires that an up-to-date assessment be conducted to establish the true nature and extent of the potential harm that may arise from the seismic survey. Based on their expertise, they anticipate that the seismic survey would have an impact on individual animals, whole populations of animals and on the ecosystem as a whole. They point out that seismic airguns produce pulsed, high intensity, low frequency sounds typically every 10 seconds and with most energy below 200 Hz. In addition to the immediate potential harm from the high density sounds, low frequency

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sounds may extend over large distances (hundreds of thousands of kms, they say), especially in deeper waters. The pulsed sounds can change substantially in frequency and duration as they travel, essentially becoming a single continuous sound. They also point out that while no studies have directly linked seismic surveys to stranding or death of cetaceans, multiple studies have shown that cetaceans have a behavioural response to seismic surveys, including movement away, changes in movement/dive parameters and changes in vocalisation/singing behaviour and the reduction in the ability over which other animals can be heard, an important factor for breeding. They also point out that recent improvement of knowledge shows that humpback dolphins are impacted by multiple human activities and that fewer than 500 individuals remain in South Africa. They are now recognised as endangered. Although highly coastal in nature, humpback dolphins are common in Algoa Bay and East London. Drs Elwen and Gridley point out that the extreme vulnerability of the humpback dolphin has not been recognised in the environmental development programme. They expressed the view that the seismic survey and any future extraction of hydrocarbons will impact a high number of endangered and/or endemic marine mammal, turtle, bird and fish species, as well as completely unstudied marine ecosystems. They fairly state that the immediate and cumulative impacts of seismic surveys, noise and hydrocarbon extraction in this environment remain unknown. For that reason, they suggest that a precautionary approach be followed. Drs Elwen and Gridley are of the view that the mitigation measures relied on by Shell are directed at the localised and short-term impacts, and do not adequately address the threat of harm.

- [45] Douglas Nowacek is the Repass-Rodgers Chair of Marine Conservation Technology in the Nicolas School of the Environment and the Edmund T Pratt School of Engineering at

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Duke University in Durham, North Carolina, United States of America. He has studied the behavioural and acoustic ecology of marine animals throughout his professional career, with particular expertise in the subject of anthropogenic noise. He has authored or co-authored about 25 papers and reports specifically focused on ocean noise, from analyses of acoustic sources to impacts on marine animals to the mitigation of those impacts. Dr Nowacek emphasised the importance of sound in the biological activities of marine species, as well as the behavioural and physiological responses to unwanted sound. The exposure to the noise contemplated by Shell, and to the reverberating energy that would follow each blast, can aggregate into species-level consequences, which is of particular concern in the case of endangered populations. Dr Nowacek's opinion, that the seismic survey will likely cause significant harm to marine animals, is based on his finding that the 2013 environmental management programme did not use acoustic modelling, but rather relied upon outdated information regarding the presence and abundance of animals and outdated science regarding the acoustic impact on marine species. In particular, he stated that noise from the seismic survey will adversely affect cetaceans in three ways: (i) by inducing a physiological stress response; (ii) by disrupting biologically essential behaviour, such as vocalising, mating, or foraging; and (iii) by masking acoustic communication, including between mothers and calves.

- [46] Shell alleges that the south right whale is not present during the survey window in the survey area and that the humpback whale has a peak migration period between May and November (outside of the survey window). Migrating humpback cow-calf pairs migrate close to the coast, while non-calf groups may extend to at least 20 km from the coast, the argument being that if cow-calf pairs are passing by the area in the southern migration, they will likely be outside the potential behavioural disturbance threshold ranges of more

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than 10 kms from seismic source. Whales all migrate a maximum of 16 km from the shore, outside of the survey area which at the closest will only come within 20 km of the shoreline.

[47] Shell furthermore alleges that there is no well-established or acceptable threshold for behavioural disturbance in marine mammals. Moreover, the lower the frequency, the further the sound can travel. The ocean is also full of noises, both high and low frequency, natural and man-made. Not all of these sounds or frequencies are audible to all animals and not all of these sounds are necessarily disturbing to marine life.

[48] It also contends that seismic surveys have been shown not to cause injury or any biologically significant level of disturbance when appropriate mitigation measures (such as those employed by Shell in this survey) are utilised.

[49] Shell contends that the above considerations, in addition to the extensive mitigation measures undertaken by it, indicate that there can be no reasonable apprehension of harm to cetaceans.

[50] Shell's response to the evidence of Dr Nowacek and the evidence of the applicants' other expert witnesses is through the answering affidavit, which was deposed to by Mr Mtolo, the country chair of Shell Downstream (Pty) Ltd. Mr Mtolo did not allege or show that he has the requisite expertise to refute the expert evidence relied upon by the applicants. I will place no value on Shell's attempted rebuttal of the expert evidence relied on by the applicants through the opinion evidence of Mr Mtolo.

[51] To revert to Dr Nowacek, he also expressed the opinion that the mitigation measures relied upon by Shell and which are eight years old will be ineffective.

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[52] Jean Harris is a marine scientist, currently the Executive Director of WILDOCEANS, the marine programme of the Wildlands Trust, an NGO focused on biodiversity protection and building socio-ecological resilience in Southern Africa and the western Indian Ocean. Jennifer Olbers is employed as a senior marine scientist at WILDOCEANS. Kendyl Wright is employed as a marine protected area scientist at WILDOCEANS. The three of them compiled a report dated 6 December 2021 on the key findings in peer-reviewed literature on the physiological and ecological impacts of seismic survey activities on marine wildlife, with specific attention on the relevance of the information to the context of the survey in this case, as well as with regards to vulnerable and endangered species known to occur in the survey area during the present time. Drs Harris, Olbers and Wright have analysed the available information and established that there is plausible evidence to suggest that seismic survey activity is likely to affect the conservation status and recovery of populations of vulnerable and threatened species, including *inter alia* the humpback whale, because sound and the ability to hear and interpret sound is critical for many species to reproduce. They stated that it must therefore be assumed that interference in sound perception or utilisation for communication (temporary or permanent) had the potential to impact on an entire species.

[53] The three experts stated that the impacts of seismic activities are most well studied for marine mammals. Evidence suggests that there are distinct avoidance responses such as leaving the area of seismic activity or ceasing to undertake everyday activities, such as feeding in preferred areas. This, they say, is likely to negatively impact the fitness of an affected animal. The results of study in South Africa on the impacts of seismic activities in South African waters show clear evidence that the endangered and endemic African penguin avoided preferred feeding sites when a seismic survey was active

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nearby. This is of particular concern for a species that is already stressed by prey depletion and the greater demand for them to forage further afield, and for which the prospect of extinction is significant.

[54] Drs Harris, Olbers and Wright expressed particular concern for the stress and avoidance that the humpback whales and their calves would encounter in the survey area. They are at risk of airgun noise affecting their behaviour or interfering with the communication between mother and calf. Any impact on their energy reserves could impact on their weight and physiological condition and affect survival of the animals during a vulnerable time, especially lactating mothers and their calves, on their long migration to feeding grounds in Antarctica.

[55] Turtle hatchlings which are carried in the Agulhas current through the survey area from the nesting beaches of iSimangaliso MPA, do not have the ability to avoid the airgun arrays. The three experts expressed the opinion that, when the turtle hatchlings pass through the survey area, they would not be detected by marine mammal observers and suffer extreme disturbance, especially during February and March when, according to them, the seismic survey should not continue.

[56] Zooplankton forms the base of many important food webs in the marine environment. Research in 2017 has shown significant mortality in zooplankton up to 1.2 km from the seismic survey array. Depletion of zooplankton could thus have an impact on food for their predators, such as fish, as well as impact fish eggs and larvae, with potential local impacts on species important in fisheries. Drs Harris, Olbers and Wright express the view that the mitigation measures relied upon by Shell do not adequately address the concerns regarding turtle hatchlings and zooplankton.

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[57] Their report concluded that *"seismic surveys do cause harm to both species and the ecology, and that significant direct harm to individual animals and harm to populations of endangered species is the most likely scenario in the case of the seismic survey underway off the east coast of South Africa."*

[58] Lynton Burger is an impact investment specialist with 30 years' professional experience in environmental and sustainability management. He no longer works in the environmental management field. He presently works in the ocean impact and sustainable investment field. Mr Burger coordinated a group of 24 South African marine experts in drafting an open letter to the President of South Africa and the first and second respondents regarding the seismic survey in question. In that letter the experts point out, amongst others, that the country's marine ecosystems and the coastal communities' sustainable blue economies are being threatened by seismic surveys, that such surveys have immediate and long-term negative impacts on marine creatures and highlighting that the approval of the seismic surveys contradicts South Africa's agreement at the COP26 during October 2021, to move away from hydrocarbon-based energy towards renewables. They implored the South African government to *inter alia* halt all planned seismic surveys, including the one in question, until South Africa has a clear policy position on oil and gas exploration that is aligned with its climate change commitments.

[59] Mr Burger compiled a report dated 5 December 2021 wherein he commented on the exploration right that was granted to Shell as well as on the 2013 environmental management programme and the 2020 environmental compliance audit. He does not agree with the opinion contained in the 2020 environmental compliance audit to the effect that *"the measures contained in the [environmental management programme] sufficiently*

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provide for the avoidance, management and mitigation of key potential environmental impacts identified and no recommendation for update of the [environmental management programme] is considered necessary". In his view the 2013 environmental management programme is out of date and the 2020 environmental compliance audit does not address pertinent mitigation and management topics. He pointed out that neither report adequately considered "the mounting peer-reviewed scientific studies and government reviews that are exposing the full impacts – many studies and expert reviews quote irreparable damage – to marine organisms and ecosystems from seismic testing. The Audit also makes no mention of the fact that a growing number of governments around the world have, as a result of this scientific concern, outlawed this practice. The fact that many of these studies and reviews have been published post the 2013 EMPr further invalidates ERM's Audit conclusion".

- [60] Mr Burger is of the opinion that the authors of the environmental management programme are inadequately qualified. His investigation revealed that none of them has any listed professional marine science or marine environmental training. It appears to him that both reports have been compiled by consultants with land-based mining and generalised environmental impact experience. Mr Burger is also of the opinion that the mitigation measures, upon which Shell relies, are weak and inadequate as a management tool when one considers the full extent of ecological impacts that are now being understood. He says that those mitigation measures focus on an incomplete list of actual or potential negative impacts and are heavily reliant on marine mammal observers. The observers'

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ability to detect¹¹ cetaceans is severely limited to fleeting surface shows, like blows and fins. He is also concerned that there is effectively no mitigation during night-time surveying, which constitutes 50% of the surveying time. Most importantly, the full impacts to ecosystems components, like plankton, which occur as vast undetected biomass and which are the very building blocks of ocean ecosystems, as well as to the extensive unseen benthic reefs that the survey vessel passes over, cannot be monitored or mitigated by the monitors and are not adequately addressed by either of the reports. According to Mr Burger, the most material shortcoming of the 2020 Audit, as a compliance tool, is that it does not address the potential legal compliance conflicts and legislative framework questions that have arisen since the 2013 environmental management programme. Regard being had to the above, Mr Burger is of the opinion that neither the 2013 environmental management programme nor the 2020 environmental compliance audit represents a current and valid assessment of the full environmental impacts of seismic surveying off the Wild Coast.

- [61] Michael Bruton is an aquatic marine scientist, a retired Professor of Ichthyology and currently a Director of Mike Bruton Engineering. He compiled a report on the presence of the coelacanth within the area impacted by the seismic survey in question. Prof Bruton highlighted the scarcity of the coelacanth and the difficulty in conducting research in relation to coelacanths. Coelacanth prefer a depth ranging from less than 100 metres to 800 metres, although they may occur at depths greater than 800 metres if suitable habitats and prey species are present. Prof Bruton points out that a colony of coelacanth

¹¹ Detection in this regard means scanning a vast and ever-changing 360-degree seascape with human eyes and binoculars.

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was discovered at a depth of 104 metres by amateur divers off the iSimangaliso Wetland Park in northern Zululand. This population has been well studied and numbers over 26 individuals. Based on his own experience and available evidence, Prof Bruton expresses the opinion that coelacanth is likely to be off the Wild Coast as live specimens have been caught or seen on either side of the Wild Coast off Pumula and East London. In his knowledge and experience, the loss of even one coelacanth would have a significantly detrimental impact on the population as a whole, and particularly to the population occurring in the east coast of South Africa.

- [62] Alexander Winkler is a marine scientist with expertise in fish behaviour and life-history assessment. He is attached to the Centre of Marine Science at the University of Algarve Faro, Portugal. He is also an honorary Research Associate at the Department of Ichthyology and Fisheries Science at Rhodes University. In a report dated 6 December 2021 he expresses an opinion on the likely effects of the seismic survey and the proposed mitigation measures contained in the 2013 environmental management programme. The first point that he makes is that the 2013 environmental management programme is out of date. Since then at least two in-depth scientific reviews on the effects of seismic surveys on fish have been published. The one study highlights the direct behavioural effects of seismic surveys on the rhythmic behavioural patterns of cod, albeit in the North Atlantic. Closer home, shallow-water hake and spiny dogfish, which are found in the survey area, have been found to show rhythmic diurnal foraging behaviour, such as that exhibited by cod in the North Sea. It is therefore likely that the effects of the seismic survey would be similar. He is of the view that the effects of the survey would affect the reproductive processes of fish that perform rhythmic foraging behavioural patterns. He criticises the 2013 environmental management programme for not

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identifying the fish species of conservation concern. The most recent and in-depth South African national biodiversity assessment that was published in 2018 shows that 13% of the South African linefish fish species are threatened with extinction and most are found along the east coast. Of these fish more than 30% of the endemic seabream species are threatened and a further 27% are near threatened. Dr Winkler is of the view that the application of the precautionary approach on these species is imperative in the absence of evidence that the seismic survey in question will not directly or indirectly affect these species. He concludes by stating, as a fact, that the 2013 environmental management programme contains severe shortfalls that are the consequence of updated literature, technological advances and a growing global concern around the subtle indirect effects of noise pollution on marine ecosystems. In the light of the new body of information, he suggests that *"the effects of the survey will at least have lasting indirect energy budget effects on the Transkei and Algoa Bay's marine fish fauna, which will probably affect processes such as reproduction and migration of certain species"*.

[63] David Russell is an independent fisheries consultant based in Namibia. He has 30 years' experience in the fishing industry, with expertise in *inter alia* environmental aspects of fisheries management. Mr Russell provides an account of the impact on tuna catches of the seismic survey activities conducted by Shell between 2012 and 2017, and the devastating impact that this had on the albacore tuna industry. He states that many seasonal fishermen lost their jobs as a result of this.

[64] As pointed out above, Shell has, despite the massive body of expert evidence on the threat of harm to marine life, not adduced any expert evidence to neutralise the applicants' evidence in that regard. The opinions expressed by the above experts are based on

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objective facts contained in their reports or affidavits. There is no reason not to accept their evidence. That evidence establishes that, without intervention by the court, there is a real threat that the marine life would be irreparably harmed by the seismic survey. Against the acceptance of the body of expert evidence, Shell's denial that its activities will have an adverse impact on marine life cannot be sustained.

[65] Shell also relies on the fact that on 3 December 2021 this court found in *Border Deep Sea Angling Association and others v Minister of Mineral Resources and Energy and others*¹² that there is "no basis on the papers to suggest that the detailed mitigation strategy (emanating from a 600 page EMPr) is inadequate or to gainsay that Shell will implement the promised range of mitigation measures and do so properly. Indeed, Shell is obliged to do so in terms of the EMPr to ensure that its activities remain in the low risk-band." The finding made by Govindjee AJ must be read and understood in its proper context. One of the reasons that the learned judge dismissed that application is because the evidence relating to the contention that the seismic survey would have a detrimental impact on the environment, and marine life in particular, was "*speculative at best*". Govindjee AJ found that there was limited material in support of the applicants' contention on this point. Unsurprisingly, the learned judge found that the applicants did not establish a reasonable apprehension of irreparable harm. That case is completely distinguishable from the present matter because, in the present application, the applicants adduced a sizable body of expert evidence which establishes a reasonable apprehension of irreparable harm to marine life; and secondly, that the mitigation measures upon which Shell relies are inadequate. In all the circumstances, I am satisfied that the applicants

¹² n 3 at par 35.

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have established a reasonable apprehension of irreparable to marine life. In addition to the harm to marine life, the applicants have also established how the seismic survey will firstly, negatively impact on the livelihood of the fishers; and secondly, cause cultural and spiritual harm.

[66] I will now consider the balance of convenience. To make a finding in that regard the court must balance the harm that the applicants will suffer if the interim interdict is not granted, as against the harm that Shell will suffer if the interim interdict is granted. The balance of convenience is not evaluated in isolation. The stronger the prospects of success in the main proceedings, the less need for the balance to favour the applicants, and *vice versa*.¹³

[67] It was submitted on behalf of Shell that the prejudice to it would be real and devastating if the interim interdict against it would be granted, whereas the prejudice that the applicants would suffer if the interim interdict would not be granted is speculative.

[68] Shell's case is that, if the interim interdict is granted, it will be final in effect because it will make it impossible for the survey to be completed by the end of May 2022; that Shell and Impact Africa will be unable to exploit the exploration right and that the termination of the survey will result in an immediate cost of approximately R350 million to Shell and Impact Africa, with an estimated total loss as a result of having to terminate the survey and subsequent loss of the exploration right exceeding R1 billion. Shell's case is furthermore that if the applicants' case under Part B is ultimately dismissed, it and Impact Africa would have suffered severe prejudice in that the interim interdict would have caused them catastrophic harm even though its rights would have been vindicated. As I

¹³ *Cipla Medpro (Pty) Ltd v Aventis Pharma SA and Related Appeal* 2013 (4) SA 579 (SCA) at par 61.

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understand the applicants' case, they seek Shell to consult with all the stakeholders, including traditional communities, in accordance with the consultation procedure set out in the Mineral and Petroleum Resources Development Act. If that procedure was followed, Shell would have been made aware of the communities' cultural and spiritual beliefs and take appropriate measures to mitigate any harm that would have been highlighted during the consultation procedure. Shell failed to do so with the applicant communities. Shell should not now be allowed to use the consequences of its own failure to adequately consult with all interested and affected persons as a ground for why an interim interdict should not be granted against it. Constitutional rights are at stake. The financial loss that Shell and Impact Africa are likely to suffer cannot be weighed against the infringement of the constitutional rights in question. Put differently, the anticipated financial loss to Shell and Impact Africa cannot justify the infringement of the applicants' constitutional rights. The breach of those constitutional rights threaten the livelihoods and well-being of the applicant communities as well as their cultural practices and spiritual beliefs. Where constitutional rights are in issue, the balance of convenience favours the protection of those rights.¹⁴ In my view, the applicants have established that the balance of convenience favours them.

[69] It is pointed out that, despite the above expert evidence adduced by the applicants, Shell adopted the stance that the nature of harm of which the applicants complain is of a speculative nature, and because of the speculative nature of the harm, the balance of convenience favours the dismissal of the interim interdict. I do not agree. In my view the expert evidence establishes that there is a reasonable apprehension of real harm to

¹⁴ *Propshaft Master (Pty) Ltd and others v Ekurhuleni Metropolitan Municipality and others* 2018 (2) SA 555 (GJ) at par 10.7.

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marine life. But if there are any uncertainties about the harm that may be suffered, this is a case where the application of the precautionary principle is justified. In terms of that principle, where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.¹⁵ In terms of the Principle 15 of the Rio Declaration the onus is to be discharged by the party arguing against the application of the precautionary principle.¹⁶

[70] Section 2(4)(a)(vii) of NEMA provides that sustainable development requires the consideration of all relevant factors, including *"that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions"*. The Constitutional Court¹⁷ has had occasion to examine the duties arising from the proper interpretation of the precautionary principle. It emphasised that the approach adopted in NEMA is one of risk-aversion and caution, which entails *"taking into account the limitation on present knowledge about the consequences of an environmental decision"* and that the precautionary principle is applicable *"where, due to unavailable scientific knowledge, there is uncertainty as to the future impact of the proposed development."*¹⁸

[71] In *WWF South Africa v Minister of Agriculture, Forestry and Fisheries and others*¹⁹ the

¹⁵ Principle 15 of the Rio Declaration on Environmental and Development.

¹⁶ *Space Securitisation (Pty) Ltd v Trans Caledon Tunnel Authority and others* [2013] 4 All SA 624 (GSJ) at par 45.

¹⁷ *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and others* 2007 (6) SA 4 (CC).

¹⁸ *Id* at paras 81 and 98.

¹⁹ *WWF South Africa v Minister of Agriculture, Forestry and Fisheries and others* 2019 (2) SA 403 (WCC) at par 104.

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Court analysed the approaches in international and comparative law to the precautionary principle, particularly the development of and reliance on the principle in Australia.²⁰ In doing so the Court had the following to say at paragraph 104:

"Furthermore, prudence suggests that 'some margin of error should be retained' until all consequences of the activity are known. Potential errors are 'weighted in favour of environmental protection', the object being 'to safeguard ecological space or environmental room for manoeuvre.'"

[72] In that case the court set aside the decision under review on the basis that the decision-maker had not established that the risks were absent or negligible.

[73] In all the circumstances, the balance of convenience favours the granting of an interim interdict.

Alternative remedy?

[74] Shell pointed out that the applicants could have approached the Minister, in terms of section 90 as read with 47 of the MPRDA, to cancel or suspend its right to explore. Section 90 gives the Minister the power to cancel or suspend a permit or right in accordance with the procedure contemplated in section 47. Section 47 of the MPRDA reads as follows:

- "(1) Subject to subsections (2), (3) and (4), the Minister may cancel or suspend any reconnaissance permission, prospecting right, mining right, mining permit, retention permit or holders of old order rights or previous owner of works, if the holder or owner thereof-
- (a) is conducting any reconnaissance, prospecting or mining operation in contravention of this Act;
 - (b) breaches any material term or condition of such right, permit or permission;
 - (c) is contravening any condition in the environmental authorisation; or
 - (d) has submitted inaccurate, false, fraudulent, incorrect or misleading information for the purposes of the application or in connection with any matter required to be submitted under this Act.

²⁰ *Telstra Corporation Ltd v Hornsby Shire Council* [2006] NSWLEC 133.

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- (2) Before acting under subsection (1), the Minister must-
 - (a) give written notice to the holder indicating the intention to suspend or cancel the right;
 - (b) set out the reasons why he or she is considering suspending or cancelling the right;
 - (c) afford the holder a reasonable opportunity to show why the right, permit or permission should not be suspended or cancelled; and
 - (d) notify the mortgagee, if any, of the prospecting right, mining right or mining permit concerned of his or her intention to suspend or cancel the right or permit.
- (3) The Minister must direct the holder to take specified measures to remedy any contravention, breach or failure.
- (4) If the holder does not comply with the direction given under subsection (3), the Minister may act under subsection (1) against the holder after having-
 - (a) given the holder a reasonable opportunity to make representations; and
 - (b) considered any such representations.
- (5) The Minister may by written notice to the holder lift a suspension if the holder-
 - (a) complies with a directive contemplated in subsection (3); or
 - (b) furnishes compelling reasons for the lifting of the suspension."

[75] It is obvious that the section envisages a time-consuming procedure, which, if followed, would allow the continuous threat of infringement of the applicants' rights. Although the above section does provide a remedy, it is in the circumstances of this case not a satisfactory remedy.

[76] I have my doubts whether the process in terms of section 47 would have been fair. In terms of that section the applicants were required to approach the Minister to suspend or cancel Shell's rights. It is the same Minister who is said to have tweeted that the South African government considers the objections to the seismic survey "*as apartheid and colonialism of a special type, masqueraded as a great interest for environmental protection.*" Given the emotive language used by the Minister, it is not unreasonable to believe that he would not have suspended or cancelled any of Shell's rights, particularly the exploration right, especially since the Minister has delivered an answering affidavit wherein he "*nailed his colours to Shell's mast*", as was submitted on behalf of the applicants. It appears that the Minister had made up his mind and the procedure to which

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Shell refers would, quite frankly, have been a waste of time.

[77] I have not been persuaded that the applicants have a satisfactory alternative remedy available to them, other than the grant of an interim interdict.

Urgency

[78] In its main answering affidavit Shell adopted the attitude that the applicants failed to show why they will not obtain redress at a hearing in due course. It also alleged that the applicants could quite easily have intervened as parties in *Border Deep Sea Angling Association and others v Minister of Mineral Resources and Energy and others* but deliberately chose to stay out of that application, forcing Shell to defend itself twice in one month in applications arising from the seismic survey. The applicants alleged that the application is urgent because they will not obtain redress in the ordinary course. They contended that, without urgent interim relief, the seismic survey will cause ongoing harm to marine life, with the associated harm to their economic, cultural and social rights. They contended that if this matter was heard in the ordinary course in terms of the rules of court, it is likely that it would have been heard only towards the end of or after the completion of the seismic survey. The applicants alleged that they became aware of the commencement of the intended seismic survey through the media during the early part of November 2021 and briefed attorneys on 22 November 2021 after protest action and other forms of activism had failed to convince the government to intervene. The application was launched on 2 December 2021 and argued on 17 December 2021.

[79] On 8 December 2021 Shell requested a case flow meeting for a more reasonable timetable than the one contained in the notice of motion. On that same day I presided

CJA /

over that meeting. The parties agreed on the date of the hearing as well as the dates for the delivery of their respective affidavits and heads of argument. It is correct that the application must have caused severe inconvenience to Shell and its legal representatives, particularly this time of the year. However, when regard is had to the steps taken by the applicants after they had become aware of the commencement of the seismic survey, the issues raised in this application,²¹ that Shell had, under the circumstances, sufficient time to put its case before the court, as well as the public interest in the outcome of this application, I have decided to exercise my discretion in favour of the applicants and dispense with the rules insofar as they regulate the periods when documents should be delivered.

Costs

[80] The applicants have been successful. They are entitled to their costs. Although the Minister has opposed the application on a limited basis and although the real litigation at this stage was between the applicants and Shell, the fact of the matter is that the Minister has decided, belatedly so, to oppose the application. The Minister and Shell should accordingly be ordered to pay the applicants' costs.

[81] A further aspect relevant to costs that was raised, was whether Shell should pay the costs of two or three counsel employed by the applicants. It was submitted on behalf of Shell that the matter was not such that it required the services of three counsel. It appears to

²¹ The applicants allege unlawfulness of the seismic survey and the threat of infringement of constitutional rights. The courts should investigate the allegations of unlawfulness and infringement of constitutional rights as soon as reasonably possible because, to allow the continuation of the unlawfulness and the infringement of constitutional rights (if established), would offend the rule of law.

CJA B

me that all along the applicants employed the services of two counsel. However, when the timetable for the delivery of affidavits was adjusted, it resulted in the applicants having to deliver their replying affidavits and heads of argument in one day after the delivery of Shell's answering affidavits. They employed a third counsel because they had to deal with the contents of a lengthy answering affidavit and draft heads of argument in one day. In my view, given the factual allegations and legal issues that had to be dealt with, the applicants took the necessary precautionary measure to employ a third counsel. In the circumstances, the Minister and Shell should be ordered to pay the applicants' costs of the application, such costs to include the costs attendant upon the employment of three counsel, where so employed.

Order

[82] In the result, it is ordered that:

- 82.1. The third, fourth and fifth respondents be and are hereby interdicted from undertaking seismic survey operations under Exploration Right 12/3/252 pending the finalisation of Part B of the notice of motion.
- 82.2. The first and fifth respondents shall pay the costs of the application for an interim interdict, jointly and severally the one paying the other to be absolved, such costs to include the costs attendant upon the employment of three counsel, where so employed.
- 82.3. The application is postponed *sine die* for the determination of the relief sought under Part B of the notice of motion.

CJA S



G H BLOEM
Judge of the High Court

For the applicants:

Mr T Ngcukaitobi SC with Ms E Webber and
Ms N Stein, instructed by
Legal Resources Centre and Richard Spoor
Inc Attorneys, Cape Town and Huxtable
Attorneys, Grahamstown.

For the first respondent:

Mr O H Ronassen SC, instructed by the
State Attorney, Port Elizabeth and
Whitesides Attorneys, Grahamstown.

For the third, fourth and fifth respondents:

Mr A Friedman and Ms L Crow, instructed by
Shepstone & Wiley, Umhlanga Rocks and
Netteltons Attorneys, Grahamstown.

Date of hearing:

17 December 2021.

Date of delivery of judgement:

28 December 2021.

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