

BASIC ASSESSMENT REPORT
APPLICATION FOR ENVIRONMENTAL AUTHORISATION TO THE
PROVINCIAL DEPARTMENT OF ENVIRONMENT AND NATURE CONSERVATION
REFERENCE NUMBER: NC/BA/21/NAM/NAM/POR1/2018

APPENDIX E7
Stakeholder Consultation
Background Information
Document (BID)

Anchor Environmental Consultants (Pty) Ltd
Reg. no. 2014/038279/07

- marine, estuarine & freshwater ecology • environmental management • resource economics •
- natural resources management • conservation planning •



OVERVIEW OF PROJECT OUTPUTS BASIC ASSESSMENT REPORT AND APPENDICES

Basic Assessment Report (BAR)	Pre-Application BAR, Draft BAR, Final BAR
Appendix A	Site Maps
Appendix B	Site Photos and Descriptions
Appendix C	Facility Illustrations
Appendix D	1. Heritage Impact Assessment – Archaeology
Appendix E	<p>E1-E6: Stakeholder Consultation Report</p> <ol style="list-style-type: none"> 1. Proof of the placement of the relevant advertisements and notices. 2. Proof that the key stakeholders (other than organs of state identified in terms of Regulation 41(2)(b) of GN 733 received written notification of the proposed activities. 3. Comments and response report. 4. Proof that the Authorities and Organs of State received written notification of the proposed activities. 5. A list of registered Interested and Affected Parties. 6. Copies of any correspondence and minutes of any meetings held. <p>E7: Background Information Document</p>
Appendix F	Impact Assessment
Appendix G	Environmental Management Programme (EMPr)
Appendix H	Details of EAP and Expertise
Appendix I	Specialist Declaration of Interest
Appendix J	<p>Additional Information</p> <ol style="list-style-type: none"> 1. De Beers Letter of support 2. De Beers Waste Disposal Consent 3. De Beers Sewage Disposal Consent 4. De Beers Access to Servitude and Electricity 5. Department of Public Works permission to conduct Environmental Impact Assessment 6. Operation Phakisa inclusion letter

BACKGROUND INFORMATION DOCUMENT
PORT NOLLOTH SEA FARMS RANCHING (PTY) LTD
ABALONE HOLDING AND PROCESSING FACILITY,
NORTHERN CAPE

October 2018

Introduction

Port Nolloth Sea Farms Ranching (Pty) Ltd (hereinafter referred to as PNSFR) ranches abalone in the Northern Cape Concession Area NC 3 and is in need of an abalone holding and processing facility to support the abalone ranching business. The northern boundary of the concession area is situated just south of Kleinzee (29°40'43.90"S 17° 3'3.50"E) and extends 44 km to the south (30° 2'52.04"S, 17°10'39.69"E) (Figure 1). PNSFR is currently in the process of registering as an Operation Phakisa: Oceans Economy (Aquaculture) project and have completed stage one of the application process¹.

The proposed holding and processing facility is situated approximately 6 km south of Kleinzee on State Land (Figure 1). PNSFR had leased this land from De Beers Namaqualand Mines up until four years ago when ownership was transferred to the state.

The proposed development triggers a number of Listed Activities in the Environmental Impact

Assessment (EIA) Regulations, 2014 (as amended by Government Notice No. 40772 of 7 April 2017), promulgated in terms of the National Environmental Management Act (Act No. 107 of 1998) (NEMA). PNSFR is therefore required to apply for Environmental Authorisation to the Northern Cape Department of Environment and Nature Conservation (DENC). PNSFR appointed Anchor Environmental Consultants (Pty) Ltd (Anchor) to undertake the Basic Assessment (BA) process.

PNSFR has obtained permission from the Department of Public Works to conduct the environmental impact assessment process.

This BID aims to provide you, as an interested and/or affected party (I&AP), with:

- An overview of the proposed development;
- An overview of the Environmental Impact Assessment process and studies being undertaken to assess the potential impacts, both positive and negative, associated with the proposed project; and
- Details of how to become involved in the process, receive information, or raise issues, which may be of concern and/or interest.

¹ Aquaculture is one of the sectors which form part of Operation Phakisa under the Ocean's Economy in South Africa. Operation Phakisa is an initiative of the South African government which aims to implement priority economic and social programmes better, faster and more effectively. Operation Phakisa was launched by the President of the Republic in October 2014. The sector offers significant potential for rural development, especially for marginalised coastal communities. Kleinzee is a derelict mining town and unemployment is high in this area. The proposed development will provide employment opportunities for the local and regional communities.

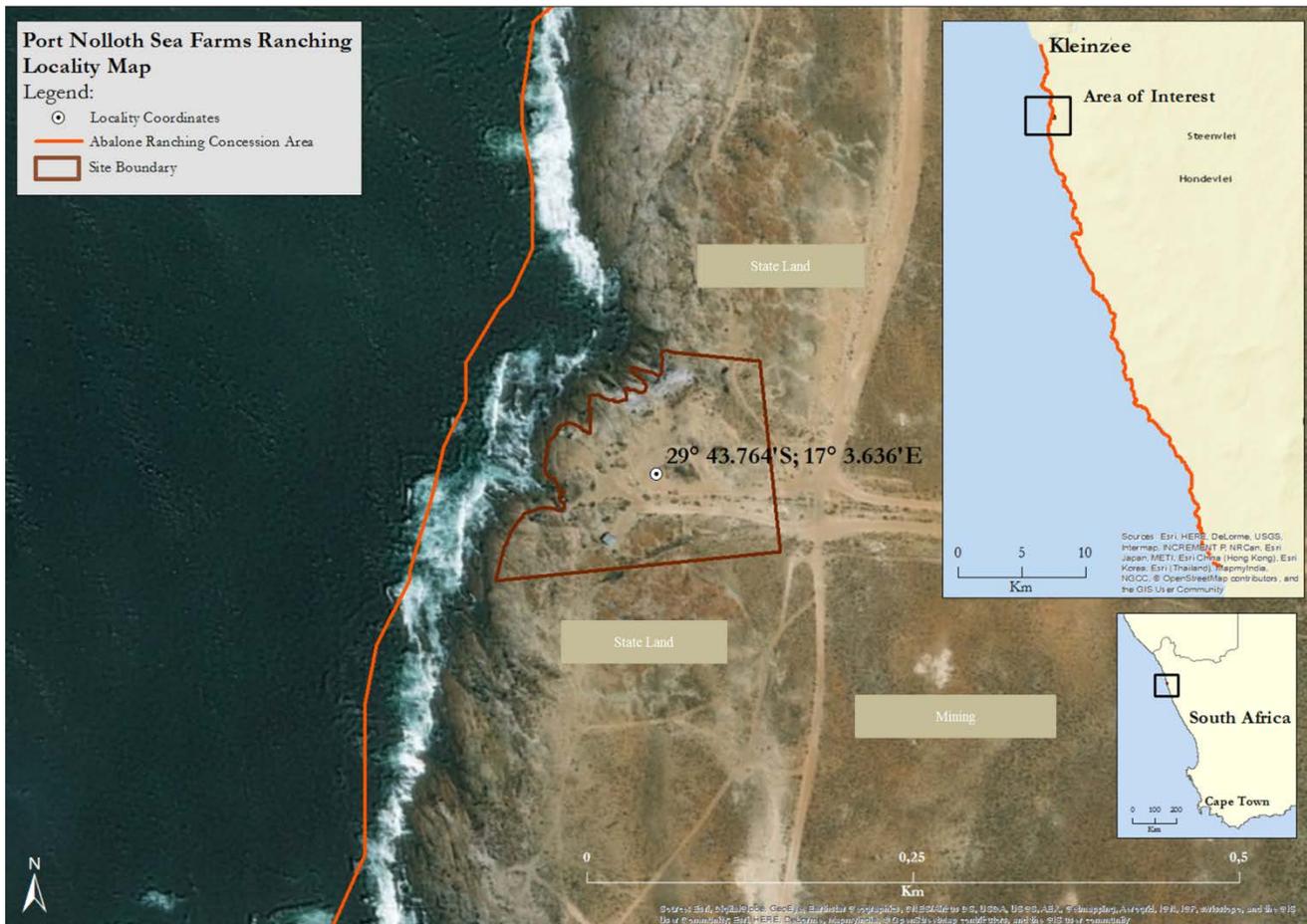


Figure 1: Port Nolloth Sea Farms Ranching (Pty) Ltd abalone ranching concession area NC 3 and the proposed site for the abalone holding and processing facility, Northern Cape.

Project description

Port Nolloth Sea Farms Ranching (Pty) Ltd ranches abalone in the Northern Cape Concession Area 3 (Figure 1) and is in need of an abalone holding and processing facility to support the abalone ranching business. The proposed development site is situated approximately 6 km south of Kleinzee on state land measuring 2.22 ha in size (Figure 1). The proposed facility will have the capacity to hold six tonnes of abalone.

Juvenile abalone sized 10-12 mm will be sourced from Abagold Ltd. in Hermanus and will be acclimatized and reared in flow-through holding tanks for a few months at the proposed holding facility until they are ready to be seeded (size 20 mm). Concurrently, harvested abalone will also be kept in the holding tanks until enough abalone

have been harvested for one shipment to the market. The proposed abalone holding tank facility layout is shown in Figure 2. As part of this development, the seawater intake infrastructure will be repaired (a pump house and intake lines already exist due to previous mining activities in the area). Effluent originating from flow-through abalone tanks is known to be very clean with low concentrations of nutrients and waste products. It is therefore proposed that the effluent outfall channel will be open for effective maintenance and that the effluent is discharged at the high water mark as is the practice with many other abalone aquaculture facilities.

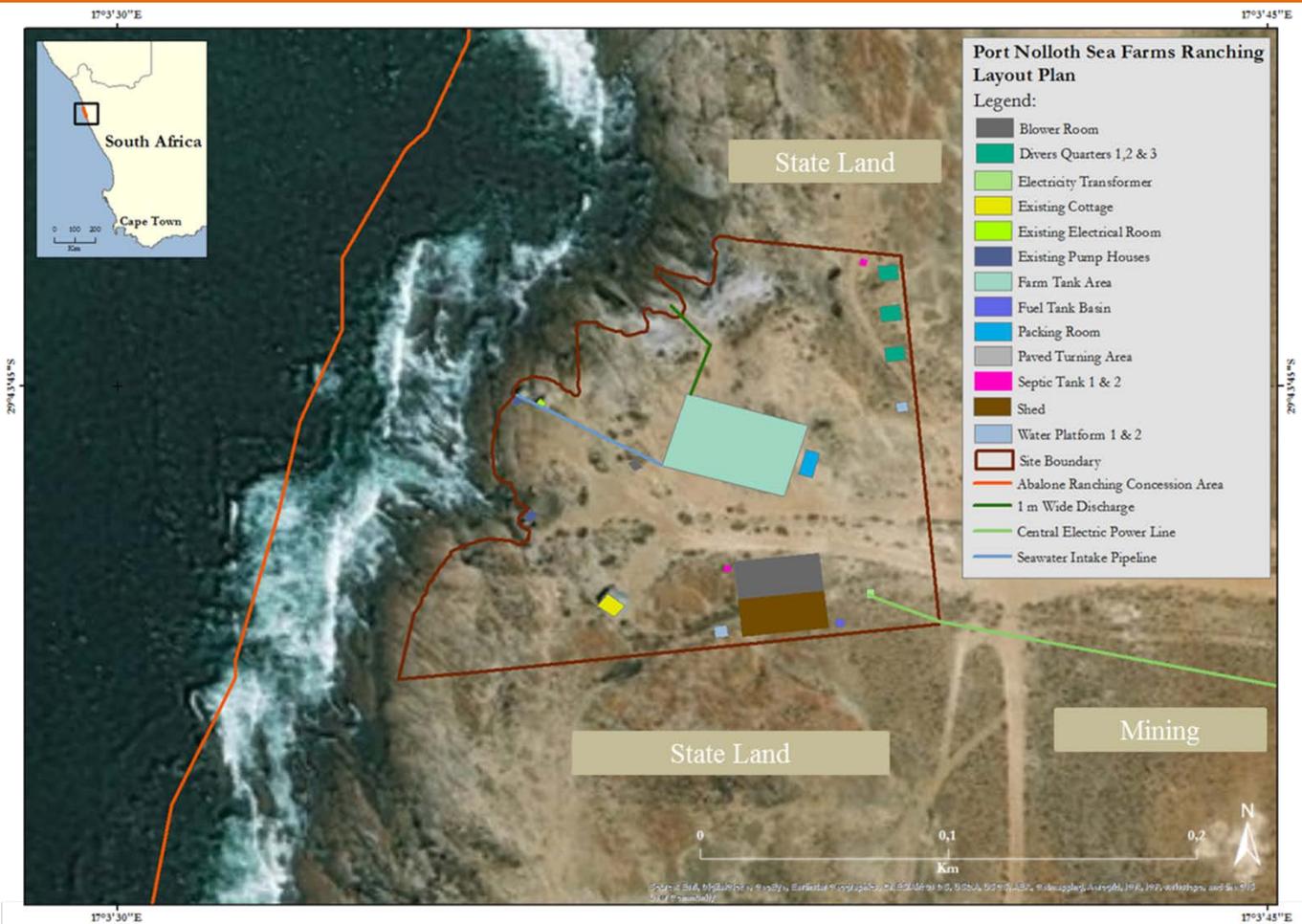


Figure 2: Port Nolloth Sea Farms Ranching (Pty) Ltd proposed abalone holding and processing facility layout, Northern Cape.

A processing facility is also proposed, where abalone can be de-shelled, gutted, dried or frozen and packed for export. The abalone waste will amount to approximately 3 200 kg per year and will be discarded at a registered landfill site.

Amenities (three small accommodation units and ablutions) for employees and security staff will be constructed. In addition to a demarcation fence around the leased area, a security fence will be erected around the abalone holding tanks.

Electricity will be provided by De Beers via the existing servitude. PNSFR proposes to install an electricity transformer in the south-eastern corner of the proposed site (Figure 2). The abalone holding facility relies on fresh seawater supply to operate successfully and has minimal potable water requirements, which will be supplied by PNSFR as required. The

establishment of the abalone facility is an important job-creation and economic contributor to the local economy of Kleinzee.

Alternatives

It is a requirement of NEMA that feasible and reasonable alternatives (i.e. site, activity, layout, technology, operational aspects) are considered, including the 'No Go' option.

A large stretch of this coastline has been declared State Land and PNSFR has obtained permission from the Department of Public Works to conduct an EIA for this site. This site is situated conveniently and is accessible with respect to PNSFR's concession area. Finally existing pump houses installed by De Beers can be used for the proposed development. Thus, no alternative sites have been considered.

Three alternative technologies were considered during the planning phase. The preferred alternative constitutes a flow-through (or open) system, which requires continuous replacement of water in the production system. The flow-through system prevents the temperature in the holding tanks from rising, which is essential for juvenile abalone acclimation to the temperature range in the receiving environment prior to seeding.

The technology used in a partial recirculation system re-uses 50-70% of water in the production system. These systems are considered more environmentally friendly when freshwater aquaculture is practiced and they may reduce energy consumption requiring less pumping (but increased filtration and water treatment is required and the effluent is more concentrated). For an abalone holding facility, which produces large volumes of clean effluent, this does not constitute a viable financial alternative, primarily due to the fact that the seawater would have to be chilled to prevent warming. It also does not provide any environmental benefits over a flow through system.

PNSFR would be faced with the same problem if a fully-recirculated system (i.e. very little or no water is replaced) was installed. Additionally, installation and running costs are very high as oxygen must be added using expensive technology and production wastes have to be fully removed. Finally, biosecurity risks are high, which could jeopardise the operation.

The partially and fully recirculated systems do not constitute feasible alternatives for the proposed development and will not be considered in the impact assessment.

The Environmental Impact Assessment (EIA) Process

Sections 24 and 44 of NEMA make provision for the promulgation of regulations that identify activities which may not commence without an Environmental Authorisation issued by the competent authority, in this case, the Northern Cape Department of Environment and Nature Conservation (DENC). The 2014 EIA Regulations promulgated in terms of NEMA (as amended by Government Notice R326), govern the process, methodologies, and requirements for the undertaking of EIAs in support of EA applications. The EIA Regulations are accompanied by Listing Notices (LN) 1-3 (R327, R325 and R324) that list activities requiring an EA.

The EIA Regulations provide for two alternative authorisation processes depending on the type of activity that is proposed. A Basic Assessment (BA) process is required for projects associated with limited environmental impacts as defined in LN 1 and 3. In contrast, a Scoping and Environmental Impact Reporting process (S&EIR, also referred to as an EIA) is required to obtain EA for project with large scale, greater environmental impacts (defined in LN 2).

Anchor Environmental has determined that the proposed project triggers a number of activities listed in LN1 and LN3 of the 2014 EIA Regulations (as amended) and that an application for EA should follow the Basic Assessment process. The key listed activities are presented in Box 1 below. Please refer to Listing Notice 1 and 3 for the full description of all activities triggered, including activities 8,17, 19A, 34, 52, and 54; LN3: 14 and 23.

Box 1

The proposed development triggers the following listed activities, as listed in **Listing Notice 1 (GN R.327 of 2017)** for which a **Basic Assessment** process is stipulated:

8. The development and related operation of hatcheries or agri-industrial facilities outside industrial complexes where the development footprint covers an area of 2 000 square metres or more.

17. Development–

- (i) *In the sea;*
- (ii) *In an estuary;*
- (iii) *Within the littoral active zone;*
- (iv) *In front of a development setback; or*
- (v) *If no development setback exists, within a distance of 100 metres inland of the high water mark of the sea or an estuary, whichever is the greater.*

In respect of:

- (c) *embankments;*
- (d) *Rock revetments or stabilising structures including stabilising walls;*
- (e) *Infrastructure or structures with a development footprint of 50 m² or more.*

19A. 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) *The seashore;*
- (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;*
- (iii) *The sea;*

Note that other listed activities are also triggered by the proposed development. Please refer to Listing Notice 1 and 3 for the full description of all activities triggered, including activities 8, 17, 19A, 34, 52, and 54; LN3: 14 and 23.

Before commencing with the project, the proponent (PNSFR) is required to appoint an independent Environmental Assessment Practitioner (EAP) to undertake a Basic Assessment process and to obtain EA in terms of NEMA from the DENC. Regulations 19 and 20 of the EIA Regulations contain the detailed approach to the BA process. The BA process aims to identify and assess all potential environmental impacts (negative and positive). The Basic Assessment Report (BAR) should recommend how potential negative impacts should be effectively mitigated and how benefits can be enhanced.

Stakeholder consultation, as part of the BA process, is intended to provide all stakeholders with the opportunity to raise issues and concerns that should be addressed in the BA process. Minimum requirements for the stakeholder consultation process are specified in Chapter 6 of the 2014 EIA Regulations.

As part of these environmental studies, I&APs will be actively involved through the public involvement process also being undertaken by Anchor Environmental (see Opportunity to participate below).

Potential environmental impacts associated with the project

Anchor Environmental have identified the following potential impacts associated with this project:

- Impacts on the marine and coastal environment;
- Impacts on the terrestrial environment;
- Impacts on the social environment (e.g. employment and job creation, and revenue generation); and
- Impacts on heritage resources.

The impact assessment conducted as part of the Basic Assessment process showed that the proposed development has a very low impact on the environment, which can be attributed to (1) the existing infrastructure, (2) the disturbed nature of the site (3) the clean effluent produced from abalone holding facilities and (4) the limited spatial scale of the development. A Heritage Impact Assessment was requested by the South African Heritage Resources Agency and was completed during the pre-application phase. With mitigation impacts were found to be insignificant. Other specialist studies are not foreseen to be required as part of this impact assessment.

Opportunity to participate

Interested and affected parties (I&APs) are invited to register and provide written comments on this project during the public participation process. I&APs must provide their comments together with their name, contact details (preferred method of notification, e.g. e-mail address or fax number) and an indication of any direct business, financial, personal or other interest which they have in the application to the contact person indicated below.

A 30 day pre-application public participation process was completed on the 20 September 2018. Any comments received were incorporated in the BAR. An application-phase Basic Assessment Report (Draft BAR) will be made available to stakeholders over a 30 day commenting period during the month of October 2018. Thereafter Anchor Environmental will consider any comments submitted and complete the Final BAR for decision-making by the DENC.

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