

# **PROSPECTING RIGHT APPLICATION FOR HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN**

## **FINAL BASIC ASSESSMENT REPORT**

**KZN 30/5/1/1/2/10780PR**

**25 APRIL 2019**



Photo: Peter Terry-Lloyd, MarineTraffic.com

**Prepared by Alan Smith Consulting for Marine Sands (Pty) Ltd**

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**mineral resources**

Department:  
Mineral Resources  
**REPUBLIC OF SOUTH AFRICA**

**BASIC ASSESSMENT REPORT  
and  
ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT**

SUBMITTED FOR ENVIRONMENTAL AUTHORIZATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 AND THE NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT, 2008 IN RESPECT OF LISTED ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (MPRDA) (AS AMENDED)

**NAME OF APPLICANT:** Marine Sands (Pty) Ltd

**TEL NO:** 0112681644

**FAX NO:** 086 552 8093

**POSTAL ADDRESS:** P.O BOX 52673, SAXONWOLD, JOHANNESBURG, 2132

**PHYSICAL ADDRESS:** 86 GALWAY ROAD, PARKVIEW, JOHANNESBURG, 2193

**FILE REFERENCE NUMBER SAMRAD:** KZN 30/5/1/1/2/10780PR

## 1. IMPORTANT NOTICE

In terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002 as amended), the Minister must grant a prospecting or mining right if among others the mining “will not result in unacceptable pollution, ecological degradation or damage to the environment”.

Unless an Environmental Authorisation can be granted following the evaluation of an Environmental Impact Assessment and an Environmental Management Programme report in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA), it cannot be concluded that the said activities will not result in unacceptable pollution, ecological degradation or damage to the environment.

In terms of section 16(3)(b) of the EIA Regulations, 2014, any report submitted as part of an application must be prepared in a format that may be determined by the Competent Authority and in terms of section 17 (1) (c) the competent Authority must check whether the application has taken into account any minimum requirements applicable or instructions or guidance provided by the competent authority to the submission of applications.

**It is therefore an instruction that** the prescribed reports required in respect of applications for an environmental authorisation for listed activities triggered by an application for a right or a permit are submitted in the exact format of, and provide all the information required in terms of, this template. Furthermore please be advised that failure to submit the information required in the format provided in this template will be regarded as a failure to meet the requirements of the Regulation and will lead to the Environmental Authorisation being refused.

**It is furthermore an instruction that** the Environmental Assessment Practitioner must process and interpret his/her research and analysis and use the findings thereof to compile the information required herein. (Unprocessed supporting information may be attached as appendices). The EAP must ensure that the information required is placed correctly in the relevant sections of the Report, in the order, and under the provided headings as set out below, and ensure that the report is not cluttered with un-interpreted information and that it unambiguously represents the interpretation of the applicant.

## 2. OBJECTIVE OF THE BASIC ASSESSMENT PROCESS

The objective of the basic assessment process is to, through a consultative process—

- (a) determine the policy and legislative context within which the proposed activity is located and how the activity complies with and responds to the policy and legislative context;
- (b) identify the alternatives considered, including the activity, location, and technology alternatives;
- (c) describe the need and desirability of the proposed alternatives,
- (d) through the undertaking of an impact and risk assessment process inclusive of cumulative impacts which focused on determining the geographical, physical, biological, social, economic, heritage, and cultural sensitivity of the sites and locations within sites and the risk of impact of the proposed activity and technology alternatives on the these aspects to determine:

- (i) the nature, significance, consequence, extent, duration, and probability of the impacts occurring to; and
- (ii) the degree to which these impacts—
  - (aa) can be reversed;
  - (bb) may cause irreplaceable loss of resources; and
  - (cc) can be managed, avoided or mitigated;
- (e) through a ranking of the site sensitivities and possible impacts the activity and technology alternatives will impose on the sites and location identified through the life of the activity to—
  - (i) identify and motivate a preferred site, activity and technology alternative;
  - (ii) identify suitable measures to manage, avoid or mitigate identified impacts; and
  - (iii) identify residual risks that need to be managed and monitored.

**PART A**  
**SCOPE OF ASSESSMENT AND BASIC ASSESSMENT REPORT**

**3. Contact Person and correspondence address**

**a) Details of**

**i) Details of the EAP**

Name of The Practitioner: Alan Smith Consulting cc

Tel No.: 031 2086896

Fax No. : N/A

e-mail address: asconsulting@telkomsa.net

**ii) Expertise of the EAP**

**(1) The qualifications of the EAP**

(with evidence as **Appendix 1**)

Dr Alan Smith: PhD (Geology), Pr. Sci. Nat.

Ms Lisa Guastella: MSc (Oceanography), Pr. Sci. Nat.

**(2) Summary of the EAP's past experience.**

(In carrying out the Environmental Impact Assessment Procedure)

The consultants' qualifications and experience are outlined in Appendix 1, together with evidence of qualifications.

Dr Alan Smith has a PhD in geology; Ms Lisa Guastella has a MSc in Oceanography.

Both consultants have practised as environmental consultants and have 30 years of work experience each.

Past relevant EIA and EMPr experience includes:

- Upgrade of stormwater outfall, Beach Road, Amanzimtoti on behalf of eThekweni Municipality.
- Durban Beachfront Promenade Extension and Node Development – Basic Assessment, EMPr and Specialist Report input, for SDP on behalf of eThekweni Municipality.
- Isipingo nodal development: Lifesaving Club demolition and relocation of facilities to Reunion Park - Basic Assessment and EMPr together with SDP on behalf of eThekweni Municipality.
- EIA: Demolition and Reconstruction of Sunkist Stormwater Outfall, Durban, eThekweni Municipality.
- Objective analysis of EIA and public opinion pertaining to the proposed Plettenberg Bay Marina development on behalf of Environmental Evaluation Unit (EEU), UCT, to advise the Cape Provincial Administration for decision-making.
- EIA and EMPr for Umfolozi Casino Conference & Hotel Resort, Richards Bay
- Applications for small-craft launch site licences for Ethekeweni Municipality & EMPs
- Basic Assessment: Richards Bay cemetery expansion for uMhlathuze Municipality
- Basic Assessment & EMPr: Community bridge over Tugela River at Sahlumbe, for KZN Department of Transport.
- Basic Assessment: Construction of gauging weirs on the Londonspruit, Coedmore Quarry, for AFRISAM
- Environmental Management Plan: Café Fish, Durban Harbour
- Environmental Impact Assessment: Elysium Desalination Plant
- Proposed upgrade of Tinley Manor Beach facilities: Specialist Report: Physical Marine & Coastal Impacts, input to BAR.
- Richmond Waste Water Treatment Works Upgrade, Amendment Report: Geomorphological & Wetland Specialist Report, input to BAR.

**b) Location of the overall Activity**

<b>Farm Name:</b>	N/A
<b>Application area (Ha)</b>	9.8611 ha
<b>Magisterial district:</b>	Durban
<b>Distance and direction from nearest town</b>	Offshore immediately south to east of the Durban Harbour South Pier, City of Durban, within 3 kilometres thereof
<b>21 digit Surveyor General Code for each farm portion</b>	N/A - See map and co-ordinates – Appendix 2

**c) Locality map**

Attach a locality map at a scale not smaller than 1:250000 showing the nearest town and attach as **Appendix 2**

**d) Description of the scope of the proposed overall activity**

Attach a plan drawn to a scale acceptable to the competent authority but not less than 1: 10 000 that shows the location, and area (hectares) of all the aforesaid main and listed activities, and infrastructure to be placed on site.

The location is as per the locality map contained in **Appendix 2**.

This application is made in relation to a prospecting rights application wherein prospecting is to determine if certain heavy minerals are present in potentially economic concentrations in the dredged beach and sea floor sand which may contain inter alia; ilmenite, rutile, zircon, garnet and magnetite This sea floor sand has historically, and is currently, being dredged by Durban port authorities (Transnet) from the ocean floor at an area known as the "sand trap" immediately south to east of the Durban harbour's South Pier. The sand is thereafter deposited to the hopper at the "A" berth in the Durban port and subsequently pumped by the eThekweni Municipality northward along the Durban beaches. Alternative sand replenishment measures involve depositing sand on the "mound" offshore of Durban, or more recently, in emergency measures, pumping dredged sand directly from the dredger ship via a pipeline to the beaches (refer Appendix 3, Figure 4). These activities are conducted in order to augment the sand supply to the beaches and to clear the harbour entrance (refer Appendix 3, Figure 3).

The prospecting of these sea floor sands and the heavy minerals contained within the sands, shall occur within the translocation process of the dredged sand to the sand hopper site and/or from the dredger itself. The sampling of these sands at either of these sites (i.e. the sand hopper or dredger) will not materially impact the surrounding environment nor detrimentally affect the composition and volume of sand available for the augmentation of the beaches.

The purpose of the prospecting right applied for is to determine the volumes and grades of heavy minerals within the sea floor sands, as currently being dredged, and to further determine if such heavy minerals may be economic to be extracted from the sea floor sands that will continue to be dredged in the future.

(i) **Listed and specified activities**

<b>NAME OF ACTIVITY</b>	<b>AERIAL EXTENT OF THE ACTIVITY (HA OR M<sup>2</sup>)</b>	<b>LISTED ACTIVITY</b>	<b>APPLICABLE LISTING NOTICE</b>
<b>E.g. For prospecting</b> - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc.  <b>E.g. For mining</b> - excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc.)		Mark with an X where applicable or affected	GNR 983, GNR 984 or GNR 985
Prospecting right: Sampling of dredged sand after removal thereof from sea floor through current operations of third parties	Within a 9.8611 Ha area dredged by Transnet	X Activity 20 (Listing Notice 1)	GNR 983
		<input type="checkbox"/>	
		<input type="checkbox"/>	
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		<input type="checkbox"/>	
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		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	

(ii) **Description of the activities to be undertaken**

(Describe Methodology or technology to be employed, including the type of commodity to be prospected/mined and for a linear activity, a description of the route of the activity).

The type of commodity is heavy minerals that may be present in marine sea floor sands that will have already been dredged by Transnet in the proposed prospecting rights area of Area 1, including, inter alia, ilmenite, rutile, zircon, garnet and magnetite.

Area 1 relates to the area known as the "sand trap" up to 1 km offshore east to south of the Durban harbour's South Pier (refer Appendix 2) off Durban's Bluff.

Physical prospecting will comprise a sand sampling survey of the Transnet dredged sand by a competent person and, with the consent of the relevant authority, will consist of removal of hand collected small sand samples (approximately 1 kg) from, either:

- a. Within and/or around the hopper system located at the A berth in the Durban port (refer Fig. 1, Appendix 3); and/or
- b. On the dredger ship, which is responsible for the dredging of the sand within the prospecting areas applied for (refer Fig. 2, Appendix 3).

Sampling will take place when the dredger is operating within the area specified. The sampling will be non-invasive. It is submitted that no prospecting will occur (in situ) on the ocean floor prior to the dredging of the sand within the prospecting areas applied for. The proposal relates only to sampling of the sand that has already been dredged by Transnet to determine if economic concentrations of heavy minerals are present in the dredged sand.

No infrastructure will be developed or required, and no processing of materials will take place on site; all sample preparation and analyses will take place in registered and established off-site laboratories and facilities. The sand will be analysed in an offsite commercial laboratory to determine the concentrations of heavy minerals. No environmental disturbances are envisaged during the prospecting process; the sampling is a physical process with no chemical or other substances added in situ and thus will not detrimentally impact the surrounding environment, nor materially affect the composition and volume of sand available for the augmentation of the beaches. The initial focus of the programme will be initiated by a Proof of Concept study for a year which will review of existing data, undertake limited sampling of dredged sand material and a high-level review of various technical, contractual, commercial and logistical aspects of the proposed project. It is envisaged that the initial sampling process and analysis of the samples will take an estimated 3-5 months. Should the Proof of Concept study provide positive results, a Scoping Study and subsequently a Feasibility Study will be undertaken in which similar work would be undertaken to increasingly more detailed levels. Each of these subsequent programmes will take approximately 12 months and will involve the same sampling of already dredged material either on the dredger or at the hopper. In each of the three 12-month phases, sampling should ideally be undertaken over a prolonged enough period to ensure that the effect of variations in sea and weather conditions on the sand samples are monitored and determined

#### e) Policy and Legislative Context

<b>APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT</b>  A description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process	<b>REFERENCE WHERE APPLIED</b>	<b>HOW DOES THIS DEVELOPMENT COMPLY WITH AND RESPOND TO THE LEGISLATION AND POLICY CONTEXT.</b>  E.g. In terms of the National Water Act a Water Use License has/ has not been applied for
Mineral and Petroleum Resources Development Act (Act 28 of 2002), Section 16 as amended	Prospecting activities: KZN 30/5/1/1/2/10780PR	Conditions and requirements attached to the granting of a prospecting right will apply to the prospecting activities
National Environmental Management Act, No 107 of 1998 (as amended) Listing Notice 20 of Listing Notice 1	Prospecting activities: KZN 30/5/1/1/2/10780PR	The appropriate environmental authorisation must be obtained before proceeding with any prospecting activities. Duty of care, public participation, consideration of alternatives and environmental impacts.
National Heritage Resources Act, 25 of 1999 ("NHRA")	Commenting authority	Archaeological awareness
Constitution of the Republic of South	Rights of South	The prospecting activities



<p>Africa: everyone has a right:</p> <p>a. to an environment that is not harmful to their health or wellbeing; and</p> <p>b. to have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that:</p> <p>i. prevent pollution and ecological degradation;</p> <p>ii. promote conservation; and</p> <p>iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.</p>	<p>African citizens</p>	<p>shall be conducted in such a manner that there are no anticipated significant environmental impacts</p>

**f) Need and desirability of the proposed activities.**

(Motivate the need and desirability of the proposed development including the need and desirability of the activity in the context of the preferred location).

The aim of the prospecting activities is to evaluate the heavy mineral content of the marine sand already dredged by Transnet immediately east to south of the Durban Harbour entrance to determine the economic value of the heavy minerals and determine the viability of establishing an operation for extracting any mineral resource that may be identified in the prospecting. The proposal presents an opportunity to maximise the return from a process where the sand has to be dredged as a matter of course and this project would merely entail opportunistically removing the heavy mineral content. Furthermore, should extraction of heavy minerals prove economically viable and proceed, it would enhance the eThekweni regional economy and that of Kwazulu Natal and the national mineral industry, including exports and job creation

**g) Motivation for the overall preferred site, activities and technology alternative.**

The site is known as the “sand trap” area offshore of Durban Harbour (refer **Appendix 2**) that Transnet dredges for maintenance purposes and then eThekweni Municipality utilises (the sand material) for beach nourishment. There is no site alternative, as this is the area that requires maintenance dredging. Were Transnet not to dredge this area, there would be an un-natural sand build-up, as the natural northward movement of sand via the longshore drift is blocked the South Pier.

The sampling would be done at selected points within the sand collection and distribution system, either at the sand hopper or alternatively on the dredger (refer **Appendix 3**). Permission for sampling would be required to be obtained from the operators of the sand hopper system and/or the dredger. Samples will be collected by hand, with approximately 1 kg of material in each sample. The sampling protocol would ensure that the samples are representative of the sand being dredged. There is no alternative technology for this critical aspect to determine the grade of heavy minerals in the dredged sand.

The approximately 1 kg sample would be bagged and stored before drying and dispatch to the laboratory of Scientific Services Ltd who are ISO accredited. Initially the dried samples will be visibly examined for presence of dark minerals which will be a proxy estimate for the heavy mineral component. Thereafter the grain size variation and proportion of slimes material will be determined. This will be followed by dense media separation, or cyclones to estimate the total heavy mineral count. Selected samples will be analysed by XRF for significant HMS chemical components of titanium, zirconium and iron. Further QEMSEM analysis of selected samples will estimate the proportion of ilmenite, rutile, zircon and iron and other heavy mineral constituents. The distribution of the heavy minerals will then be plotted, which will allow for the determination of the global grade of heavy minerals in any one of the dredged areas

**h) Full description of the process followed to reach the proposed preferred alternatives within the site.**

NB! – This section is about the determination of the specific site layout and the location of infrastructure and activities on site, having taken into consideration the issues raised by interested and affected parties, and the consideration of alternatives to the initially proposed site layout.

**i) Details of the development footprint alternatives considered.**

With reference to the site plan as provided above and the location of the individual activities on site, provide details of the alternatives considered with respect to:

- (a) the property on which or location where it is proposed to undertake the activity;
  - (b) the type of activity to be undertaken;
  - (c) the design or layout of the activity;
  - (d) the technology to be used in the activity;
  - (e) the operational aspects of the activity; and
  - (f) the option of not implementing the activity.
- (a) The area (Area 1) is the sand trap area that Transnet routinely dredges and then uses the material to replenish Durban's beaches north of the Durban Harbour northern breakwater, thus no alternative area is considered. The other prospecting rights applications submitted in tandem with this application (Area 2: KZN 30/5/1/1/2/10778PR and Area 3: KZN 30/5/1/1/2/10779PR), have the same attributes in that they are, or are proposed to be, sites for Transnet dredging.
- (b) The type of activity involves sampling as outlined in section g) above. The prospecting activities are also provided in the Prospecting Works Programme, submitted to DMR.
- (c) The design of the activity is such that sand samples will be taken either from the sand hopper or directly from the dredger, as outlined in g) above. The sand samples will correspond to where the dredger operates in Area 1, as per the layout in Appendix 2.
- (d) The technology is as outlined in g) above. Sampling will be non-invasive and will take sea floor sand that has already been disturbed and removed from the sea floor by the dredger. In addition to the dredged sand samples that will be collected in all three phases for assay and grade purposes, during the Phase 2 Scoping Study and Phase 3 Feasibility Study, larger (1 m<sup>3</sup>) dredged sand samples may be collected for bench-scale metallurgical test work in a laboratory to determine the applicability of various extraction techniques on the sand samples. It is likely that this off-site test-work will involve studying the size distribution of the sand components, removal of slimes, gravity concentration of minerals of higher density and the electromagnetic separation of the various potentially economic sand particles.
- (e) The operational aspects are as outlined in g) above. *Proof of Concept*: Initially, between 20 and 50 samples will be collected over a 3-month period to provide an early indication of the concentrations of the heavy minerals and whether they are likely to be present in economically viable concentrations. The sampling would only commence after a 3-month literature survey. The sampling process and analysis of the samples will take an estimated 5 months, as time delays are essential between sampling surveys. It will be necessary, once prospecting rights are granted, to liaise with the relevant Third Parties, in particular those parties collecting the dredged sand (i.e. Transnet), and those parties that operate the sand hopper and the sand beach pumping system (i.e. eThekweni Municipality). It is likely that agreements will have to be negotiated and concluded with these Relevant Third Parties, thus it is anticipated that the entire first phase of sampling and assessment will take approximately 12 months.
- Should the results of the initial Proof of Concept study outlined above be positive, a *Scoping Study* will proceed in Year 2 of the operation. Should, in the opinion of Marine Sands Pty Ltd, the Proof of Concept study not have positive results, the project and work programme would be terminated, and no further work would be undertaken. The Scoping Study will mostly include periodic sampling of the hopper or onboard the dredger, conducted over a 12-month period to determine any time-dependent variations in grade of the heavy mineral content of the pumped sand. The Scoping Study would undertake similar categories of work to those set out in the Proof of Concept Study, but in all cases the work would be done in more detail. Preliminary environmental test-work will be undertaken during this phase. An infrastructure and logistics study would review, in more detail, the potential sites of the operation along with the availability of site access, and services of water electricity etc. A marketing and transport study would refine the identification of potential markets and determine prices that would render the project economically viable, information of which would feed into a financial and operational model. Should this indicate the project to be viable, then a feasibility study would be recommended, but if not, the project will be curtailed.
- The *Feasibility Study* would include all aspects normally undertaken in such a study, including environmental impact, logistics and infrastructure requirements, initial capital expenditure and operating and financial modelling. If the results of the Feasibility study are positive, mining rights

would be applied for and financing for project development and production would be arranged in this phase.

- (f) Prospecting activities are essential to investigate and confirm the presence and quality of heavy mineral deposits. Should the activity not be implemented, opportunity will be lost to determine the viability of heavy mineral extraction using an already available resource, i.e. dredged sand. The proposed study represents an opportunity to optimize the value of an existing resource that is anyway transported from the seafloor to the Durban beaches. Should the prospecting right be refused, a potential economically viable heavy mineral resource will effectively be sterilised.

## ii) Details of the Public Participation Process Followed

Describe the process undertaken to consult interested and affected parties including public meetings and one on one consultation. NB! The affected parties must be specifically consulted regardless of whether or not they attended public meetings. Information to be provided to affected parties must include sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land.

The following public participation has been conducted for the proposed project to date:

- Identification of stakeholders and compilation of comprehensive Interested and Affected Party database (I&AP Register). Stakeholders, as part of the Public Participation Process, include Transnet and eThekweni municipality as occupiers of the property, i.e. area dredged, sand hopper owners and dredger owners/operators; municipal officials and ward councillors; relevant State Departments; relevant sporting clubs and associations; relevant NGO's and commenting authorities. The database was reviewed and updated with the latest contact details of the relevant stakeholders (refer Appendix 4.3). All identified authorities and those I&AP's that had expressed interest in the process and/or registered under the previous process (similar applications for Area 2: KZN 30/5/1/1/2/10778PR and Area 3: KZN 30/5/1/1/2/10779PR) were informed by email and sent copies of the public notice and BID (refer Appendix 4.3). The draft BAR was circulated amongst the list of I&AP's for a 30-day commenting period.
- Fixing site notices at the following locations (refer Appendix 4.1)
  - (i) Entrance gate to the National Sea Rescue Institute (NSRI), sand hopper and Berth "A" at Durban Harbour
  - (ii) Notice board at the Point Watersports Club, Point, Durban
  - (iii) Landward end of uShaka Pier, opposite Moyo's restaurant
- Placing an advertisement in the English medium "The Mercury" newspaper, Friday 25 January 2019 (refer Appendix 4.2)
- Circulation to all identified I&APs and relevant authorities of a Background Information Document (BID) and the public notice (refer Appendix 4.3).
- Meetings between Marine Sands (Pty) Ltd and representatives from Transnet and the Stormwater & Catchment Management Unit (responsible for beach nourishment scheme) of eThekweni Municipality took place during the previous process for Areas 2 and 3 and do not need to be duplicated, as the principles of this application are the same.
- Compilation and circulation of a Draft Basic Assessment Report (dBAR) to all I&APs, Key Stakeholders and Organs of State (refer Appendix 4.3) to facilitate comments on the proposed prospecting right application, allowing the EAP to address the issues during the EIA process, for a 30-day period.
- The Draft Basic Assessment Report was circulated to all I&AP's via email and a hard copy was made available at the Durban Central library. In addition, two hard copies and a CD copy of the dBAR were delivered to eThekweni Municipality for dissemination and comment, as is their requirement. The dBAR was made available for comment and review for a period of 30 days.
- All comments received during the public participation process, as well as responses provided, have been captured and are recorded in item (iii) below. Completed I&AP registration forms and relevant email communications are provided in Appendix 4.4.
- Once DMR has made a decision, all registered I&APs and relevant authorities will be notified of the outcome of the application.

iii) **Summary of issues raised by I & Aps**  
 (Complete the table summarising comments and issues raised, and reaction to those responses)

<b>INTERESTED AND AFFECTED PARTIES</b>  List the names of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted	<b>DATE COMMENTS RECEIVED</b>	<b>ISSUES RAISED</b>	<b>EAPs response to issues as mandated by the applicant</b>	<b>Section and paragraph reference in this report where the issues and or response were incorporated.</b>
<b><u>AFFECTED PARTIES</u></b>				
<b>Landowner/s</b>	N/A			
<input type="checkbox"/>				
<input type="checkbox"/>				
<b>Lawful occupier/s of the land</b>	N/A			
<input type="checkbox"/>				
<input type="checkbox"/>				
<b>Landowners or lawful occupiers on adjacent properties</b>	N/A			
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<b>Municipal councillor (if more than one, attach list as an</b>				

Annexure)					
Conrad Dlamini Bongimusa Ward councillor (ward 26 Point)	X	-	No comment received		
JP Prinsloo Ward councillor (ward 66 Bluff)	X	-	No comment received		
<b>Municipality (if more than one, attach list as an Annexure)</b>					
eThekwini Municipality – co-ordinated response from all line departments via Development Planning Dept: LUM branch	X	Dated 11 April, signed 12 April, received 15 April 2019e	<p>Complete submission and EAP response is provided in Appendix 4.4.5. Issues raised:</p> <ol style="list-style-type: none"> <li>1. Electricity dept – No objection; standard concerns if any electrical cables affected.</li> <li>2. EPCPD – no biodiversity concerns</li> <li>3. LUM branch – sampling falls out of town planning scheme</li> <li>4. Strategic Spatial Planning Branch – No objection; requested clarity in BID phase re sampling protocol (equipment, process, operations) and queried whether any impact on tourism and Point development and whether national and provincial departments canvassed for comment.</li> <li>5. Coastal Policy – No objection</li> <li>6. Coastal Stormwater &amp; Catchment Management – No objection</li> <li>7. Parks, Leisure &amp; Cemeteries – No objection. Commented that un-natural sand build-up without dredging was incorrect.</li> <li>8. Pavement &amp; Geotech – No comment received further to initial comment on BID: consider whether there will be compounded impacts when spoil mounds further offshore are mined for harbour pier 203/5 extension.</li> <li>9. eThekwini Transport Authority - No objection subject to submission of a traffic management plan</li> <li>10. Environmental Health – No objection, provided standard PPE used</li> <li>11. Water &amp; Sanitation – No comment</li> <li>12. Cleansing &amp; Solid Waste - no</li> </ol>	<ol style="list-style-type: none"> <li>1. No electrical services will be affected</li> <li>4. No infrastructure required, sample preparation and analyses will take place in registered and established off-site laboratories, no chemicals used, no impact on tourism or the Point Waterfront development, national and provincial environmental departments have been consulted.</li> <li>7. we stand by our comment “Were Transnet not to dredge this area, there would be an un-natural sand build-up, as the natural northward movement of sand via the longshore drift is blocked the South Pier.” We agree that “The build-up of sand is due to northward migration under longshore drift, which is a natural process”, but the harbour South Pier obstructs the natural northward movement of sand via the longshore drift, which results in an un-natural build-up of sand that would otherwise be transported northward and form a bar across the harbour mouth.</li> <li>8. This was the subject of a separate EIA process, conducted by NEMAI consulting on behalf of TNPA for which environmental authorisation was approved. This area corresponds to the separate Area 3 application by Marine Sands (Pty) Ltd, for which comment has already been provided via a previous process.</li> <li>9. This is a standard condition of comment – no traffic plan required.</li> <li>10. Standard PPE will be required, as outlined</li> </ol>	<ol style="list-style-type: none"> <li>4: Part A (d) (ii) of dBAR</li> <li>4: Appendix 4.3 of dBAR lists all I&amp;AP’s consulted</li> <li>7: Part A (d) (ii) (g) of dBAR (Pg 9)</li> <li>14. Part B (EMPr)</li> </ol>

			requirements 13. Disaster Management – No comment 14. Fire safety – No objection provided compliance with legislative requirements and codes.	in the EMPr 14. No fuel will be involved in the sampling protocol	
<b>Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA e</b>					
Transnet - Environmental	X	-	No comment received		
Transnet – Engineering services	X	-	No comment received		
Transnet – Business Unit	X	-	No comment received		
Transnet – Group Capital	X	-	No comment received		
Transnet – New Business Development	X		No comment received		
DWS	X		No comment received		
<b>Communities</b>					
<b>Dept. Land Affairs</b>					
Dept of Land Affairs	X	-	No comment received		
Land Claims Commission	X	-	No comment received		
<b>Traditional Leaders</b>					
<b>Dept. Environmental Affairs</b>					
National	X	26 March 2019	(1) No objection. (2) Applicant should not carry out any activities without authorization from the competent authority. (3) Project will not cause adverse impacts on the marine environment. Applicant to familiarise with Duty of Care under NEMA to	Noted. DEA will be notified when fBAR is submitted to DMR.	

			prevent pollution or degradation of the environment. (4) Request proof that their comments are submitted to the competent authority Refer full submission in Appendix 4.4.5.		
Provincial	X	-	No comment received		
<b>Other Competent Authorities affected</b>					
SAHRA	X	26 March 2019	As the material to be sampled has been previously dredged and is therefore out of context SAHRA has no objections to the proposed work. While there are no known wrecks in the vicinity of the prospecting area and the work is being undertaken on previously disturbed sediment there is a small chance that previously unknown heritage material may be disturbed. Should any heritage material be uncovered during the proposed works it must be recorded and retained and SAHRA must be informed of its discovery and given the opportunity to advise on the way forward. Refer full submission in Appendix 4.4.5.	Noted	Part A (d) (ii) e), Part A (d) (ii) h) (iv) (1) (a), Part A (d) (ii) t) (i) (2)
EKZNW	X	18 April 2019	No response within commenting period, despite being notified and sent electronic copies of all documentation throughout process. Request for hard copies of Area 1 documentation after commenting period closed. Further to telephonic discussion with Mr Dominic Wieners on 29 April 2019, this request is to be reviewed further to an EKZNW internal meeting on 30 April 2019. Should EKZNW wish to submit comment, this will be provided directly to DMR for consideration, copy of which will be sent to the EAP for response. Copies of all communication with EKZNW throughout the process will be supplied.		
DAFF	X		No comment received		

<b><u>OTHER AFFECTED PARTIES</u></b>				
Silverwave	X		Email correspondence from Marine Sands (Pty) Ltd to Silverwave, as requested in the DMR acceptance letter. No response received	
Exxon	X		Email correspondence from Marine Sands (Pty) Ltd to Exxon. No response received.	
<b><u>INTERESTED PARTIES</u></b>				
Jeremy Williams, Conservation Officer, SAUFF (South African Underwater Fishing Federation)	31 Jan 2019		Registered for the Public Participation Process. No comment received.	
Malcolm Keeping	5 Feb 2019		Registered for the Public Participation Process. No comment received	

Copies of relevant correspondence is included in Appendix 4.4



iv) **The Environmental attributes associated with the alternatives. (The environmental attributed described must include socio-economic, social, heritage, cultural, geographical, physical and biological aspects)**

**(1) Baseline Environment**

**(a) Type of environment affected by the proposed activity.**

(its current geographical, physical, biological, socio- economic, and cultural character).

Sand is already dredged (removed) by Transnet from the offshore marine environment. The biophysical environment is thus what is contained within the dredger and sand hopper - *there will be no additional affect on the external environment*. Externally, the marine environment that is dredged from the area known as the “sand trap”, located east to south offshore of Durban harbour’s South Pier, is described below for context and to provide a description of the baseline environment from which the dredger operates.

**GEOGRAPHICAL CONTEXT:** The main reason for the existence of Durban is the Durban Harbour, reportedly Africa’s busiest port. The port is on the southern side of the City of Durban and to the south of this is an area known as The Bluff, characterised by ancient sand dunes (Berea Red Sands) rising to an elevation of 100 m. Between the immediate hinterland and the Bluff, lies an area termed the South Durban Basin, a flat area of low elevation, historically mostly swampland, which was infilled and where much of Durban’s industry is based. The Durban area has a climate classification of *Cfa*, according to the Köppen-Geiger Climate Classification (Conradie, 2012), meaning a warm temperate climate, fully humid with a hot summer. Rainfall is mostly in summer, averaging 1 006 mm per annum.

**OCEANOGRAPHIC SETTING:** The KZN coastline is bathed by the warm waters of the Indian Ocean, with the strong Agulhas Current flowing in a south-westward direction, transporting warm water polewards. Ocean temperatures off the KZN coast are warm (typically 20–26°C), which is a contributing factor to the warm climate and high humidity levels, particularly in summer. Durban is at the southern end of what is termed the KZN Bight, which refers to the concave curvature of the coastline between Cape St Lucia and Durban (Roberts, et al., 2016), where the coastline recedes from the shelf edge and the continental shelf widens to almost 50 km at its widest point off the Thukela River (Guastella & Roberts, 2016). The continental shelf narrows south of Durban (8 km wide with a gradient ranging from 2-8°) characterised by a wave- and current-dominated oceanographic regime (Cawthra et al., 2012). There is often the presence of a semi-permanent, mesoscale, cyclonic ocean circulation inshore of the main Agulhas Current between approximately Durban and Park Rynie, referred to as the Durban Eddy (Guastella & Roberts, 2016); this feature is responsible for frequent nearshore current reversals, i.e. north-eastward currents, opposite to the “expected” south-westward flowing Agulhas Current.

**WAVE ENVIRONMENT, LONGSHORE DRIFT & MARINE SEDIMENTS:** The KZN coastline is dynamic, and is subject to large swell events, associated with cut-off low (COL) pressure systems, cold fronts and dissipating tropical storms (Guastella & Smith, 2018). Based on a combined CSIR/Transnet waverider buoy dataset for Richards Bay and Durban for the 18-year period from 1992 to 2009, the average significant wave height ( $H_s$ ) for Durban is 1.65 m, with an average swell direction of 130° (Corbella & Stretch, 2012). Swells from the south-south-east (SSE) dominate the spectrum (Appendix 5, Fig. 1), particularly in autumn, winter and spring, associated mainly with cold fronts. Longshore drift is predominantly from south to north, although reversals are possible during NE to E swells, which are more prevalent during summer. The nett south to north longshore drift, together with the blocking effect of the Durban Harbour south pier, which prevents the natural northward migration of marine sand, is responsible for the accumulation of sand in an area colloquially known as the “sand trap”. This is the subject of Area 1 (KZN 30/5/1/1/2/10780PPR) applied for. The sand from this

area is dredged by Transnet to replenish Durban's beaches northward of the harbour. The proposed sampling of marine sand containing heavy minerals is from existing sandwinning sites located within what Flemming (1981) has termed the "wave dominated nearshore sediment wedge". The sand wedge is dynamic and constantly redistributed by currents and bottom surge associated with high swells and marine storm events (Cawthra, et al., 2012). The shelf sands represent the transgressive Holocene- to modern sediment wedge forming a seaward thinning unit stacked against the Pleistocene aeolianite/beachrock substrate (Cawthra, et al., 2012).

**MARINE FAUNA:** The marine fauna consists of fauna typically found on the KZN coast. *Marine Mammals:* Cetaceans encountered include mainly the resident Humpback whale (June to November), and Bottlenose dolphins, however the following species may also be present: Minke whale, Southern Right whale, Sperm whale, Sei whale, Bryde's whale, Blue whale.

*Turtle* species likely to be encountered include Loggerhead, Leatherback, Green, and to a lesser extent, Hawksbill and Olive Ridley turtles.

*Ichthyofauna:* Fish species off the Durban coast are dominated by the Indo-Pacific ichthyofauna, with many endemic reef species, as well as migratory gamefish species. Whalesharks are possible during summer and a number of shark species are found offshore, including Zambezi, Great White, Tiger and Dusky sharks, as well as rays. Cuttlefish and squid are also known to occur. The area offshore of Durban is popular amongst ski-boat, kayak and paddleski fishermen, whilst the beaches are also popular amongst shore anglers. The annual sardine run occasionally brings a bounty of the small fish to the Durban area, coinciding with marine mammal and fish migrations.

*Benthic fauna:* Benthic invertebrate diversity is greatest along the east coast of South Africa, compared to the south or west coast (Sink et al., 2011). A total of 198 invertebrate macrofauna species have been recorded in the nearshore sandy substrate. Distinctive molluscs inhabit the sandy areas offshore of Durban that are dredged, amongst these various bivalves (e.g. mussels, scallops) and gastropods (e.g. frog shells). Various Meiofauna (organisms <1 mm in size) also inhabit the sandy substrates. Meiofauna includes small species such as copepods, ostracods, gastrotriches, nematode worms and flat worms. Some of the meiofauna are adept at burrowing while others live in the interstitial spaces between the sand grains (Pilfrich, 2018).

**AVIFAUNA:** Durban Harbour is the subject of a consistent monitoring programme run by Dr David Allan, under the auspices of the Natural History Museum, where water birds within the harbour are monitored on a monthly basis. Species commonly sighted include various species of plover, terns, herons, egrets, cormorants, kingfishers, wagtails and ibis, as well as the occasional stork, flamingo, pelican, spoonbill (Allan, 2012). The offshore environment is relatively species poor, with mainly Grey Headed gulls, Kelp gulls and a variety of tern species and white-chin petrels. Gannets are occasional visitors along with the sardine run in winter. There is a resident pair of fish eagles in the vicinity of the Bluff Nature Reserve.

#### HERITAGE:

Previous studies (Maitland, 2016) have indicated a high number of shipwrecks in the area offshore of Durban. In a specialist study corresponding to Area 3, Maitland (2016) indicated a high number of Maritime Underwater Cultural Heritage (MUCH) sites from the shipwreck database, with the two most prominent wreck trap areas (due to topography, historical shipping limitations and prevailing weather conditions) being the Back Beach and the Bar – today these areas correspond to just offshore, north of the harbour; and the Harbour mouth. However, the nature of the environment, poor historical reporting and the length of time since the wrecks occurred means these MUCH sites are hard to locate with any accuracy (Maitland, 2016). According to the database there are at least 35 vessels that may be found in the area that corresponds to PR Site 3, most of these in the more southern section of this area, corresponding to Alternative 2 in the study.

*As the prospecting environment will be on the dredger and/or at the sand hopper site from sand already dredged by Transnet, there will be no additional affect on the external environment.* There is no waste or discard material involved in this process or necessary disturbance of the surface. The EMP for Transnet contains the correct protocol in dealing with any MUCH sites encountered during dredging operations and any sites uncovered during dredging work are dealt with on an ad hoc basis.

#### SOCIO-ECONOMIC ENVIRONMENT

Durban harbour is Africa's busiest port and the economic hub of the City of Durban. The dredger operates offshore and, when not in operation, moors alongside the Harbour "A" Berth near where the Sand Hopper is located on the quayside (refer map in Appendix 4.1). Owing to the project area being an offshore environment, there are no land occupants and no land-based communities are directly affected by any of the dredger operations. Surrounding communities to where the dredger operates include the Durban Point area (refer Appendices 2 and 4.1) and Bluff. The offshore area is utilised by ski-boat anglers, paddleskiers and kayak fishermen.

The project will not affect other person's socio-economic conditions. Prospecting is to occur from a dredger ship in the offshore sea zone or from the Sand Hopper in which the sand is deposited from the dredger, at "A" Berth, Port of Durban. The adjacent area to where the ship dredgers operate is the eThekweni Municipality; surrounding communities will be unaffected, as the activities take place offshore or at the sand hopper site within the Port of Durban.

#### **(b) Description of the current land uses.**

The offshore environment corresponding to the prospecting rights applications is utilised by shipping traffic in and out of Durban Harbour, ski-boat anglers, paddleskiers and kayak fishermen.

The "A" berth is used for mooring of ships, more specifically the three Transnet dredgers, these being the Ilembe, Isandlwana and Italen; the latter is used for maintenance dredging within the port of Durban and material dumped at an offshore dumpsite. The Ilembe and Isandlwana are used for dredging where sand is required to be moved off Durban, Richards Bay, East London, Ngqura and Port Elizabeth. The Sand Hopper, in which the marine sands are deposited from the dredgers for Durban's beach nourishment scheme, is located at "A" berth near where the dredgers are moored, with a pipe extending from the quayside to the hopper (refer **Appendix 3 and map in Appendix 4.1**) to facilitate the transfer of sand.

The prospecting environment will be inside the dredger and/or sand hopper; there will be no additional affect on the external environment.

#### **(c) Description of specific environmental features and infrastructure on the site.**

Sand samples would be collected offshore directly from on board the dredger at sea, as the sand is dredged or from within the sand hopper, once delivered from the dredger. The prospecting environment will be on the dredger and/or the sand hopper, thus the infrastructure will consist of the dredger itself and the sand hopper. There will be no further disturbance of the earth surface, sea or seafloor caused by the prospecting methods beyond that caused by existing dredging operations,

#### **(d) Environmental and current land use map.**

(Show all environmental, and current land use features).

A map showing the offshore areas applied for in relation to Durban is depicted in **Appendix 2, Figure 2.**

#### **v) Impacts and risks identified including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts**

(Provide a list of the potential impacts identified of the activities described in the initial site layout that will be undertaken, as informed by both the typical known impacts of such activities, and as informed by the consultations with affected parties together with the significance, probability, and duration of the impacts. Please indicate the extent to which they can be reversed, the extent to which they may cause irreplaceable loss of resources, and can be avoided, managed or mitigated).

The sampling will not involve any mechanical sampling equipment and will thus have no impact on mechanical operations or additional environmental impacts. The sampling would be done by hand and all sampling would be done without any noise pollution or disruption to third party activities. The sampling would be done at selected points within the sand collection and distribution system, at the sand hopper or alternatively on the dredger. Each prospecting phase is dependent on the results of the preceding phase.

Potential impacts of the prospecting application are minimal, as this is an application for a prospecting right where sand samples will be taken from an existing process; there will be no additional processes required to obtain samples for analysis.

The only risks envisaged would be injuries to staff if standard safety protocols are not adhered to on site, i.e. safety at sea (if sampling directly from the dredger) or safety at the hopper site. Standard safety could include the wearing of PPE and if operating from the dredger at sea, it may be a Transnet requirement that the sampling personnel have minimum safety at sea qualifications, e.g. STCW.

**vi) Methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks;**

(Describe how the significance, probability, and duration of the aforesaid identified impacts that were identified through the consultation process was determined in order to decide the extent to which the initial site layout needs revision).

Owing to the fact that sampling is being done on an existing dredging process, no additional environmental impacts are anticipated.

**vii) The positive and negative impacts that the proposed activity (in terms of the initial site layout) and alternatives will have on the environment and the community that may be affected.**

(Provide a discussion in terms of advantages and disadvantages of the initial site layout compared to alternative layout options to accommodate concerns raised by affected parties).

The prospecting activities are non-invasive and hence will have no physical environmental or social impact.

From a socio-economic perspective, a positive impact will be short-term, limited employment opportunities for prospecting in terms of sampling, analysis and reporting. This will be up to 36 months or the course of the prospecting programme, depending on its success,

**viii) The possible mitigation measures that could be applied and the level of risk.**

(With regard to the issues and concerns raised by affected parties provide a list of the issues raised and an assessment/ discussion of the mitigations or site layout alternatives available to accommodate or address their concerns, together with an assessment of the impacts or risks associated with the mitigation or alternatives considered).

The only mitigation measures envisaged are the following of safety protocols for sampling, i.e. standard safety could include the wearing of PPE and if operating from the dredger at sea, it may be a Transnet requirement that the sampling personnel have minimum safety at sea qualifications, e.g. STCW. The risks of not complying with these conditions are that staff could potentially get injured. If operating from the dredger, motion sickness preventative action may need to be employed, i.e. ingestion of motion sickness tablets.

**ix) Motivation where no alternative sites were considered.**

The limitations of the area are determined by the sites Transnet dredge and any alternatives are limited to Areas 2 and 3 (refer Appendix 2, Figure 2), where prospecting rights have also

been applied for. No other alternative sites were considered, as the project is governed by the existing dredging programme.

**x) Statement motivating the alternative development location within the overall site. (Provide a statement motivating the final site layout that is proposed)**

Sampling is to be taken from two alternative locations, viz from the dredger or the sand hopper. There are no other suitable sampling sites. The advantage of sampling directly from the dredger is that you can know the exact location of the sand sampled at that time, whereas the sampling from the sand hopper would only be from the general area that the dredger was operating in during that dredge, as it would be the accumulated dredge sand that is deposited into the hopper. Likewise, sampling the sand delivered onto the beaches via the sand pumping scheme would not provide a precise sampling area and samples could be mixed with existing beach sand that may have already been reworked. Sampling directly from the slurry pumped onto the beaches is risky, owing to the high volume and velocity of sand pumped during this time and the slurry becomes like a quicksand, hence there would be safety concerns (e.g. a City Police mounted unit horse almost succumbed after getting caught in the quicksand following a sand pumping episode at Addington Beach).

**i) Full description of the process undertaken to identify, assess and rank the impacts and risks the activity will impose on the preferred site (In respect of the final site layout plan) through the life of the activity. (Including (i) a description of all environmental issues and risks that were identified during the environmental impact assessment process and (ii) an assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures.)**

There are only two sampling sites that could be considered, namely the dredger and the hopper sites. These are the only two sites where one can sample the dredged sands. The selection of the site that would be used for sampling will be determined in discussions with eThekweni Municipality and Transnet. Sampling at both of these sites would not involve any environmental disturbance, so there is no environmental impact at either site and therefore no opportunity to assess the process of selecting either site.

**j) Assessment of each identified potentially significant impact and risk**

(This section of the report must consider all the known typical impacts of each of the activities (including those that could or should have been identified by knowledgeable persons) and not only those that were raised by registered interested and affected parties).

<b>NAME OF ACTIVITY</b>	<b>POTENTIAL IMPACT</b>	<b>ASPECTS AFFECTED</b>	<b>PHASE</b>	<b>SIGNIFICANCE</b>	<b>MITIGATION TYPE</b>	<b>SIGNIFICANCE</b>
<p><b>E.g. For prospecting</b> - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc.</p> <p><b>E.g. For mining</b>, - excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc.)</p>	<p>Including the potential impacts for cumulative impacts</p> <p>(E.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc.)</p>		<p>In which impact is anticipated</p> <p>(E.g. Construction, commissioning, operational Decommissioning, closure, post-closure)</p>	If not mitigated	<p>Modify, remedy, control, or stop through e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc.</p> <p>(E.g. modify through alternative method. Control through noise control. Control through management and monitoring through rehabilitation).</p>	If mitigated
Collection of sand samples from dredger or sand hopper	PHYSICAL ENVIRONMENT	No identified additional environmental impact to normal dredging operations	Prospecting	Insignificant	No mitigation required	Insignificant
	SOCIO-ECONOMIC	Limited job creation	Prospecting	Moderate	No mitigation required	Low
	PERSONAL SAFETY	Safety on site when extracting sand samples	Prospecting	Moderate	PPE to be worn and site-specific health & safety requirements to be adhered	Low

					to; STCW qualification required if prerequisite for work onboard Transnet dredger, compliance with instruction of Transnet dredger staff or Sand hopper staff (as required)	
Analysis of sand samples	SOCIO-ECONOMIC  PERSONAL SAFETY	Limited job creation  Safety in laboratory when analysing sand samples	Analysis	Moderate	No mitigation required  PPE to be worn and laboratory health & safety requirements to be adhered to. Accredited laboratory, so standards expected to be met.	Low

The supporting impact assessment conducted by the EAP must be attached as an appendix, marked **Appendix**

Owing to the fact that no adverse environmental impacts are envisaged, the information contained in the table under (j) above should suffice; thus to avoid repetition, no separate Appendix is deemed necessary

**k) Summary of specialist reports.**

(This summary must be completed if any specialist reports informed the impact assessment and final site layout process and must be in the following tabular form):

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT (Mark with an X where applicable)	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED.
No specialist reports required or been undertaken at this stage	N/A	<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	
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Attach copies of Specialist Reports as **Appendices**



**l) Environmental impact statement**

**(i) Summary of the key findings of the environmental impact assessment;**

The prospecting activities are non-invasive and involve extracting samples from sand that has already been removed from the sea floor by third parties, hence no additional environmental or social impacts have been determined.

**(ii) Final Site Map**

Provide a map at an appropriate scale which superimposes the proposed overall activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. Attach as **Appendix**

Refer Appendix 2, Figures 1 & 2.

**(iii) Summary of the positive and negative impacts and risks of the proposed activity and identified alternatives;**

Positive impact with respect to limited job creation associated with sampling and analysis of samples.

Possible negative impact with respect to adherence of sampling personnel to health & safety requirements; mitigated fully by conforming to requirements.

Risk of sampling staff injury on site; mitigated fully by staff conforming to health & safety requirements and adhering to instruction by dredger and/or hopper relevant personnel.

**m) Proposed impact management objectives and the impact management outcomes for inclusion in the EMP; Based on the assessment and where applicable the recommendations from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMP as well as for inclusion as conditions of authorisation.**

Nil

**n) Aspects for inclusion as conditions of Authorisation.**

(Any aspects which must be made conditions of the Environmental Authorisation)

Adherence by sampling staff on board the dredger or at the hopper to standard safety protocols.

**o) Description of any assumptions, uncertainties and gaps in knowledge.**

(Which relate to the assessment and mitigation measures proposed)

Nil

**p) Reasoned opinion as to whether the proposed activity should or should not be authorised**

**i) Reasons why the activity should be authorized or not.**

The activity should be authorised as there are no anticipated environmental impacts of the proposed activity. There are limited safety issues that can be fully mitigated against. If the project is successful, there could be significant economic benefit.

**ii) Conditions that must be included in the authorisation**

Suggestion: Adherence by sampling staff on board the dredger or at the hopper to standard safety protocols

**q) Period for which the Environmental Authorisation is required.**

Three years

**r) Undertaking:**

**Confirm that the undertaking required to meet the requirements of this section is provided at the end of the EMPr and is applicable to both the Basic Assessment Report and the Environmental Management Programme Report.**

Confirmed

**s) Financial Provision:**

**State the amount that is required to both manage and rehabilitate the environment in respect of rehabilitation.**

No rehabilitation is required, as there is no negative impact on the environment during the prospecting stage, therefore no provision needs to be made for funding any rehabilitation for the prospecting stage.

**i) Explain how the aforesaid amount was derived.**

See above

**ii) Confirm that this amount can be provided for from operating expenditure.** (Confirm that the amount, is anticipated to be an operating cost and is provided for as such in the Mining work programme, Financial and Technical Competence Report or Prospecting Work Programme as the case may be).

See above.

**t) Specific Information required by the competent Authority**

**i) Compliance with the provisions of sections 24(4) (a) and (b) read with section 24 (3) (a) and (7) of the National Environmental Management Act (Act 107 of 1998). the EIA report must include the:-**

**(1) Impact on the socio-economic conditions of any directly affected person.** (Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any directly affected person including the landowner, lawful occupier, or, where applicable, potential beneficiaries of any land restitution claim, attach the investigation report as an **Appendix**.)

As this prospecting right application is based on sampling sand that already has been removed legitimately by dredging by third parties, this does not apply at this stage. Refer Appendix 6.

**(2) Impact on any national estate referred to in section 3(2) of the National Heritage Resources Act.** (Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) with the exception of the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act, attach the investigation report as **Appendix 2.19.2** and confirm that the applicable mitigation is reflected in 2.5.3; 2.11.6.and 2.12.herein).

As this prospecting right application is based on sampling sand that already has been removed legitimately by dredging by third parties, this does not apply at this stage. Refer Appendix 6.

**u) Other matters required in terms of sections 24(4) (a) and (b) of the Act.**

(the EAP managing the application must provide the competent authority with detailed, written proof of an investigation as required by section 24(4)(b)(i) of the Act and motivation if no reasonable or feasible alternatives, as contemplated in sub-regulation 22(2)(h), exist. The EAP must attach such motivation as an **Appendix**).

As this prospecting right application is based on sampling sand that already has been removed legitimately by dredging by third parties, this does not apply at this stage. Refer Appendix 6.

**PART B**  
**ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT**

**1) Draft environmental management programme.**

- a) Details of the EAP,** (Confirm that the requirement for the provision of the details and expertise of the EAP are already included in PART A, section 1(a) herein as required).

The EAP is Alan Smith Consulting; information is already provided in Part A and Appendix 1.

- b) Description of the Aspects of the Activity** (Confirm that the requirement to describe the aspects of the activity that are covered by the draft environmental management programme is already included in PART A, section (1)(h) herein as required).

This has been addressed in Part A

**c) Composite Map**

Provide a map (**Attached as an Appendix**) at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that any areas that should be avoided, including buffers.

Attached as **Appendix 2.**

**d) Description of Impact management objectives including management statements**

- i) **Determination of closure objectives.** (ensure that the closure objectives are informed by the type of environment described)  
No environmental damage is anticipated and therefore no closure plan is required
- ii) **Volumes and rate of water use required for the operation.**  
There will be no water consumption beyond that of human consumption of a small prospecting sampling team (3 people)
- iii) **Has a water use licence has been applied for?**  
Not required or requested

iv) Impacts to be mitigated in their respective phases

Measures to rehabilitate the environment affected by the undertaking of any listed activity

ACTIVITIES	PHASE	SIZE AND SCALE (of disturbance)	MITIGATION MEASURES	COMPLIANCE WITH STANDARDS	TIME PERIOD FOR IMPLEMENTATION
<p><b>E.g. For prospecting, -</b> drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc.</p> <p><b>E.g. For mining,-</b> excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc.</p>	<p>(Of operation in which activity will take place.</p> <p>State; Planning and design, Pre-Construction' Construction, Operational, Rehabilitation, Closure, Post closure).</p>	<p>(volumes, tonnages and hectares or m<sup>2</sup>)</p>	<p>Describe how each of the recommendations in herein will remedy the cause of pollution or degradation and migration of pollutants)</p>	<p>A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities</p>	<p>Describe the time period when the measures in the environmental management programme must be implemented Measures must be implemented when required.</p> <p>With regard to Rehabilitation specifically this must take place at the earliest opportunity. With regard to Rehabilitation, therefore state either:</p> <p>Upon cessation of the individual activity or Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be.</p>
<p>Sampling of sand already dredged by Transnet</p>	<p>Phase 1, 2 and 3</p>	<p>Nil, on ship or at hopper</p>	<p>Not required</p>	<p>No damage so compliant</p>	<p>N/A</p>

**e) Impact Management Outcomes**

(A description of impact management outcomes, identifying the standard of impact management required for the aspects contemplated in paragraph):

<b>ACTIVITY</b> (whether listed or not listed)	<b>POTENTIAL IMPACT</b>	<b>ASPECTS AFFECTED</b>	<b>PHASE</b> In which impact is anticipated	<b>MITIGATION TYPE</b>	<b>STANDARD TO BE ACHIEVED</b>
E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc.	(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc.)		(e.g. Construction, commissioning, operational Decommissioning, closure, post-closure)	(modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc.)  E.g. <ul style="list-style-type: none"> <li>• Modify through alternative method.</li> <li>• Control through noise control</li> <li>• Control through management and monitoring</li> <li>• Remedy through rehabilitation.</li> </ul>	(Impact avoided, noise levels, dust levels, rehabilitation standards, end use objectives etc.)
Sampling already dredged sand material	Nil	Nil	Nil	N/A	N/A

**f) Impact Management Actions**

(A description of impact management actions, identifying the manner in which the impact management objectives and outcomes contemplated in paragraphs (c) and (d) will be achieved).

<b>ACTIVITY</b> Whether listed or not listed.	<b>POTENTIAL IMPACT</b>	<b>MITIGATION TYPE</b>	<b>TIME PERIOD FOR IMPLEMENTATION</b>	<b>COMPLIANCE WITH STANDARDS</b>
(E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors etc.)	(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc.)	(modify, remedy, control, or stop through e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc.)  E.g. <ul style="list-style-type: none"> <li>• Modify through alternative method,</li> <li>• Control through noise control,</li> <li>• Control through management and monitoring,</li> <li>• Remedy through rehabilitation.</li> </ul>	Describe the time period when the measures in the environmental management programme must be implemented Measures must be implemented when required.  With regard to Rehabilitation specifically this must take place at the earliest opportunity. With regard to Rehabilitation, therefore state either: Upon cessation of the individual activity or Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be.	(A description of how each of the recommendations in 2.11.6 read with 2.12 and 2.15.2 herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)
Sampling dredged sand on dredge ship or at hopper	No impact	No impact, thus no mitigation required	No impact, thus no mitigation required	No impact, thus no mitigation required

**g) Financial Provision**

**(1) Determination of the amount of Financial Provision.**

- (a) Describe the closure objectives and the extent to which they have been aligned to the baseline environment described under the Regulation.**

No environmental impact of sampling the already dredged material, so no closure possible or required

- (b) Confirm specifically that the environmental objectives in relation to closure have been consulted with landowner and interested and affected parties.**

No environmental impact of sampling the already dredged material, so no closure possible or required

- (c) Provide a rehabilitation plan that describes and shows the scale and aerial extent of the main mining activities, including the anticipated mining area at the time of closure.**

No environmental impact of sampling the already dredged material, so no closure plan possible or required. No mining anticipated under prospecting rights.

- (d) Explain why it can be confirmed that the rehabilitation plan is compatible with the closure objectives.**

No rehabilitation possible, thus no plan required.

- (e) Calculate and state the quantum of the financial provision required to manage and rehabilitate the environment in accordance with the applicable guideline.**

No environmental impact, so no rehabilitation or financial provision required.

- (f) Confirm that the financial provision will be provided as determined.**

No environmental impact, so no rehabilitation or financial provision required.





**m) Indicate the frequency of the submission of the performance assessment/ environmental audit report.**

As no environmental damage will be caused in the course of sampling the already dredged sand, we would be guided by the requirements of the department as to how frequently they will require a submission of performance assessment/ audit report.

**n) Environmental Awareness Plan**

**(1) Manner in which the applicant intends to inform his or her employees of any environmental risk which may result from their work.**

Employees would be informed in their letters of appointment, and in a code of standard basic operating conditions, which would address possible risk areas, and in addition at regular meetings and on company billboards or social media communication, as would be applicable

**(2) Manner in which risks will be dealt with in order to avoid pollution or the degradation of the environment.**

Employees and contractors would be informed of all requirements to ensure no degradation of the environment or pollution, although there is limited probability as there is limited opportunity for these occurrences in the sampling of the already dredged sand.

**o) Specific information required by the Competent Authority (Among others, confirm that the financial provision will be reviewed annually).**

Should a financial provision be required this will be reviewed regularly, but there is no foreseeable requirement at present, as there is no environmental damage possible in extracting samples of sand already dredged on a dredger or at the hopper.

**2) UNDERTAKING**

The EAP herewith confirms

- a) the correctness of the information provided in the reports; **X**
- b) the inclusion of comments and inputs from stakeholders and I&As; **X**
- c) the inclusion of inputs and recommendations from the specialist reports where relevant; **X** and
- d) that the information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties are correctly reflected herein **X**.

*L Guastella*

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Signature of the environmental assessment practitioner:

Alan Smith Consulting

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Name of company:

29 April 2019

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Date:

## APPENDIX 1: DETAILS OF THE CONSULTANTS & PROOF OF QUALIFICATIONS

ALAN SMITH CONSULTING, 29 Browns Grove, Sherwood, Durban, 4091.

**Consultant name:** Dr Alan Smith (Pr.Sci. Nat.)

**Qualifications:** BSc Geology, BSc (Hons) Geology, MSc Geology, PhD Geology (all University of Natal Durban, now University of KwaZulu-Natal)

**Contact details:** *Landline:* 0312086896

*Mobile:* 0824336697

*Email:* [asconsulting@telkomsa.net](mailto:asconsulting@telkomsa.net)

Dr Alan Smith is an independent environmental consultant, with specialist skills including fluvial floodplain analysis, palaeoflood hydrology, palaeontology, coastal morphodynamics, estuarine morphodynamics and marine processes. Alan attained a PhD in Earth Science from the University of KwaZulu-Natal (1989) and has practised as an environmental consultant since he left the Council for Geosciences in 1993. He has provided Specialist Reports for both marine- and land- based projects. Alan's offshore work has included seabed mapping, heavy mineral prospecting and seabed ground truthing.

Alan has been researching fluvial systems since 1988. He has also conducted various river flood and coastal erosion investigations for various municipalities, organizations and individuals, both in KZN, Mozambique and Kenya. More recently Alan has compiled Palaeontological reports for renewable energy solar photo-voltaic parks in the Free State and N Cape. Examples of major projects which he has been involved with include the assessment of coastal erosion along the Dolphin, Umdoni and Ugu Coasts following the catastrophic storm surf erosion of March 2007. Alan was also involved in the offshore survey for sighting of the marine telecom fibre optic cable which landed at Mtunzini, the offshore component of the Richards Bay coal wharf development and Richards Bay Minerals offshore prospecting.

Alan is a Research Associate of the University of KwaZulu-Natal and is actively involved in scientific research on the topics on which he consults. This allows him to understand these processes better, keep scientifically current and be able to supply a contemporary science service. Alan has authored or co-authored 45 refereed papers (published both nationally and internationally) and regularly attended international conferences as a speaker delegate. Alan has lectured part-time in the School of Agriculture, Earth & Environmental Sciences (SAEES) at UKZN and was a co-supervisor on a PhD (2010-15) concerning river floods and Climatic Change.

**Consultant name:** Lisa Guastella (Pr.Sci. Nat.)

**Qualifications:** BSc Geography, BSc (Hons) Atmospheric Science, MSc Oceanography (all University of Cape Town)

**Contact details:** *Landline:* 0312086896

*Mobile:* 0828604043

*Email:* [lisagus@telkomsa.net](mailto:lisagus@telkomsa.net); [lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)

Lisa is an environmental consultant and meteorologist/air quality specialist and oceanographer, qualified with a BSc (Geography), BSc (Hons) Atmospheric Science (1985) and MSc Oceanography (1988). Lisa has practised as an environmental consultant and specialist meteorologist and air quality consultant for approximately 20 years, during which time she has maintained air quality and meteorological instrumentation, performed data quality control and reported on meteorological conditions and air quality for South Durban, Richards Bay and Coega. She has been involved in the siting and installation of meteorological and air monitoring equipment and has a good understanding of local weather and climate conditions.

Lisa has been studying part-time towards a PhD in Physical Oceanography on oceanography of the KZN Bight and is a Research Associate of the Bayworld Centre for Research and Education (BCRE) and is actively involved in scientific research on oceanography, coastal processes and meteorology, subject matter in which she consults. Lisa has authored or co-authored 14 peer-reviewed scientific papers (published both nationally and internationally) and has regularly attended national and international conferences as a speaker delegate; she has presented 36 conference papers on subjects including air quality, meteorology, oceanography, coastal erosion, fisheries and climate change. She has co-authored a small-craft launch site policy for KZN and book chapters on coastal erosion and oceanography.

# Univerſitas Natalienſis



hoc ſcripto nos, Univerſitatis Natalienſis  
Vice-Cancellarius, Registrarius, teſtamur

ALAN MITCHELL SMITH

## Gradum Philoſophiae Doctoris in Facultate Scientiae

attigisse

*P. van Booyen*

Vice-Cancellarius

*[Signature]*

Registrarius

a.d. XI Kal. Mai. MCMLXXXIX

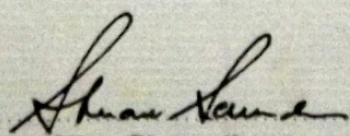


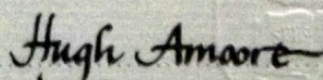


**UNIVERSITY OF CAPE TOWN**  
*with which is incorporated the South African College*

**Degree of Master of Science**

*We hereby certify that* LISA ANNE-MARIE GUASTELLA  
*was admitted to the Degree of Master of Science in*  
PHYSICAL OCEANOGRAPHY ON 24 JUNE 1988

  
Vice-Chancellor

  
Registrar



**APPENDIX 2: LOCALITY MAPS**

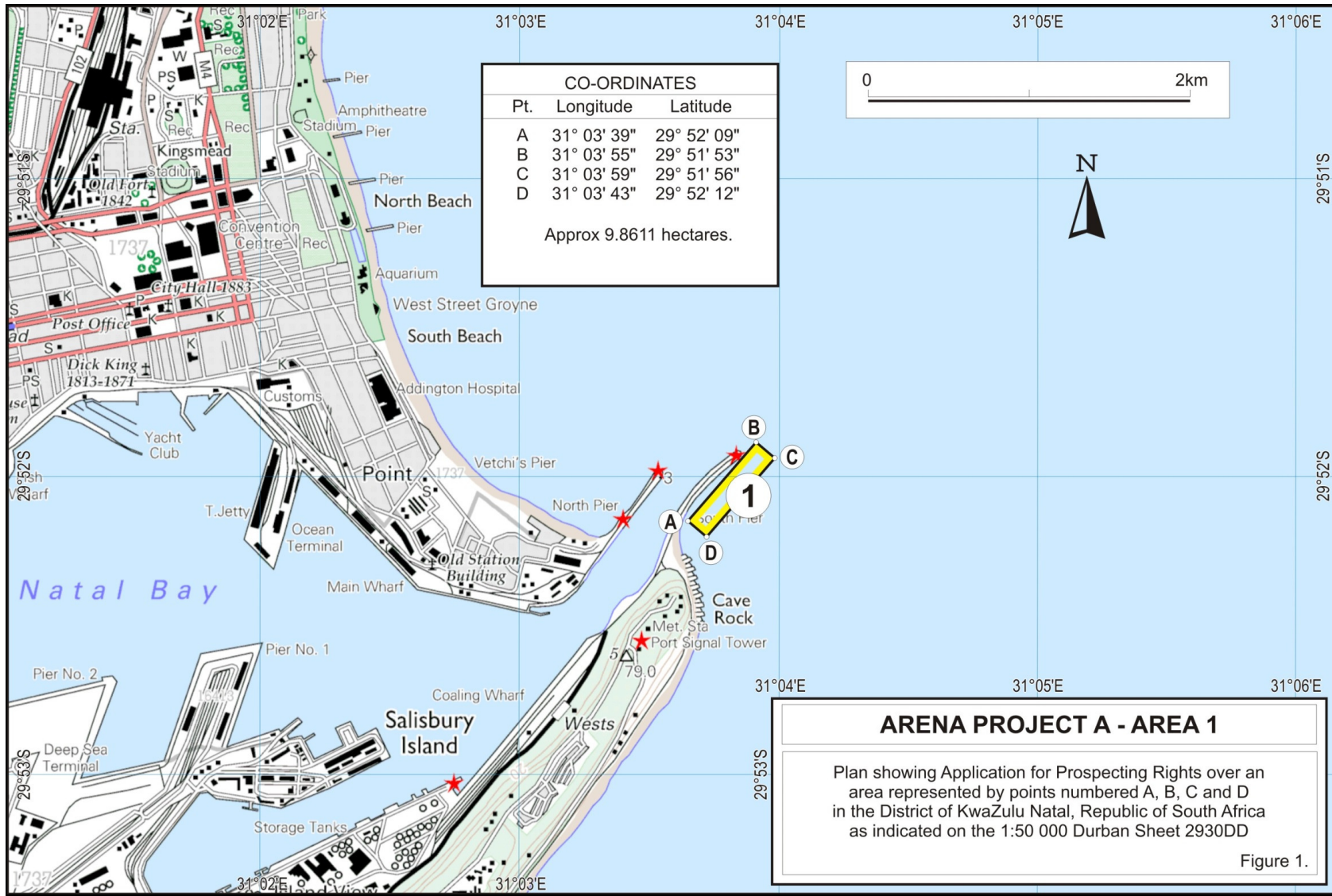


Figure 1: Prospecting area applied for

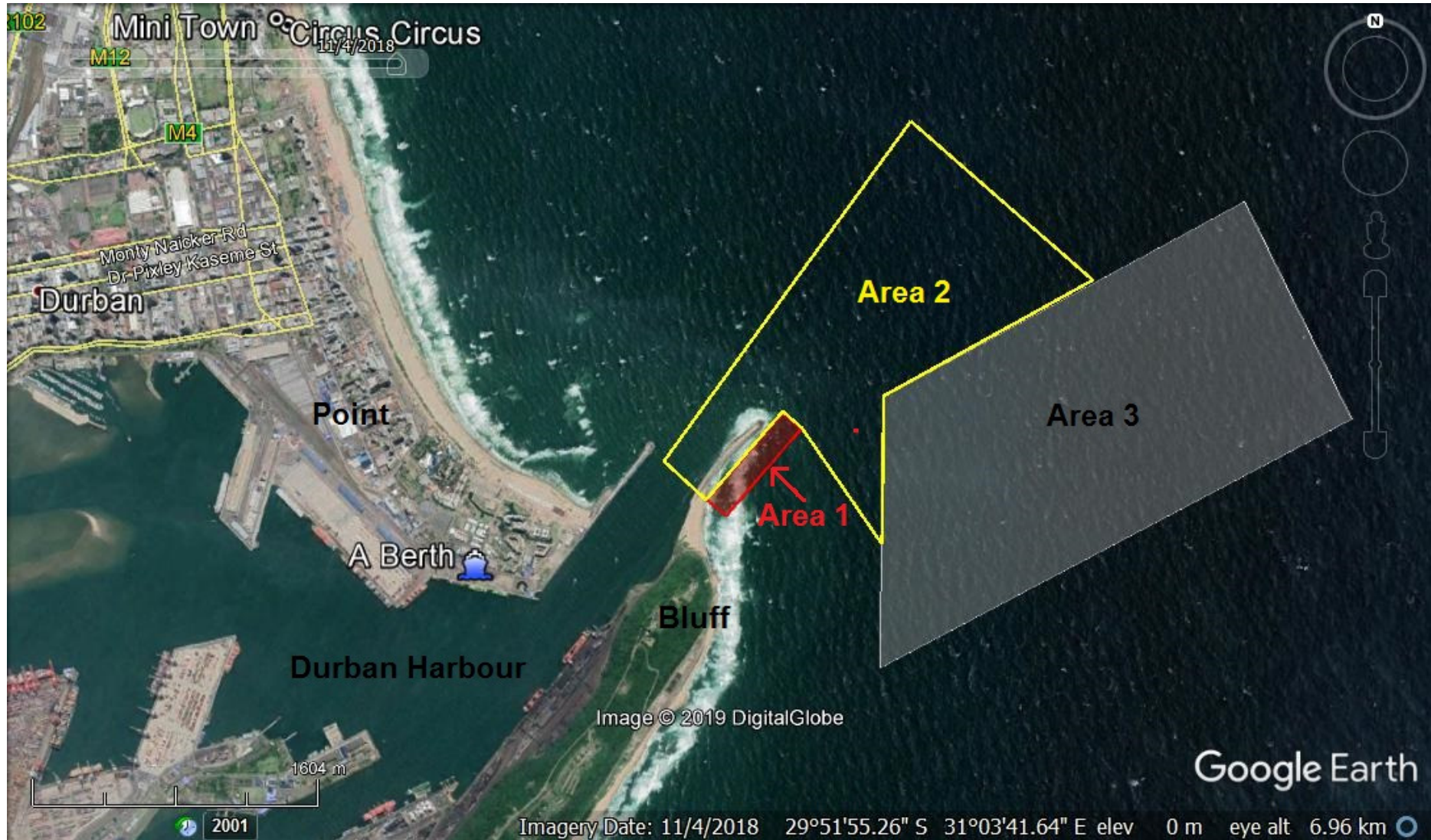


Figure 2: Aerial image indicating prospecting areas applied for (this application is for Area 1) in relation to Durban. Areas 2 and 3 have followed a similar, but separate, application process to Area 1. Surrounding land use at the Point and Durban CBD is residential and commercial; the Durban harbour perimeter quaysides serve port operations, whilst the northern end of the Bluff is a South African naval base.



**APPENDIX 3: SITE PHOTOGRAPHS**



Figure 1: Sand hopper located at Durban Harbour “A” berth, dredgers moored in the background.

(a) Isandlwana



(b) Ilembe



Figure 2: Transnet dredgers (pics: MarineTraffic.com)





Figure 3: Transnet dredger operating off Durban harbour mouth; harbour South Pier in background



Figure 4: Emergency sand pumping directly to Durban's central beaches, May 2018 (image: swell.co.za).



# APPENDIX 4: PUBLIC PARTICIPATION

## 4.1 SITE NOTICES

The map below indicates the location of site notices, which were placed at:

- (i) Entrance gate to the National Sea Rescue Institute, sand hopper and Berth "A" at Durban Harbour,
- (ii) The landward end of uShaka Pier, (b)
- (iii) Notice board at the Point Watersports Club, Point, Durban

For reference, the location of the Sand hopper and Vetch's Beach is also indicated.




Photographs of site notices, 25 January 2019

(i) entrance gate to NSRI and Berth A	(ii) landward end of uShaka Pier	(iii) Notice board at the Point Watersports Club
<p>NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORIZATION IN TERMS OF GOVERNMENT NOTICE REGULATION 883 (LISTING NOTICE 1) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT NO. 107 OF 1998)</p> <p>DMR REF NO.: KZN 30/5/11/2/10780PR</p> <p>PROSPECTING ACTIVITIES FOR HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN, ETHERIMWI MUNICIPALITY, KWAZULU-NATAL</p> <p>Notice is hereby given in terms of Regulations published in Government Notice R 983 of 04 December 2014, under sections 24(3) and 44 of the National Environmental Management Act, 1989 (Act No. 107 of 1989), as amended, that Marine Sands (Pty) Ltd has applied for Prospecting Rights to conduct prospecting activities to determine if viable deposits of heavy minerals occur within the sand currently being dredged by Transnet officials of Durban, which is then placed, inter alia, by the eThekweni Municipality for beach nourishment purposes. The sampling will occur within the sand hopper situated at the A berth of the Durban harbour and/or on the dredging ships.</p> <p>In order to obtain Environmental Authorization from the Department of Mineral Resources (DMR), a Basic Assessment (BA) process needs to be followed. Alan Smith Consulting has been appointed as independent environmental practitioners to carry out the BA process.</p> <p>The proposed activities will take place offshore of Durban and are relevant to one site, i.e.:</p> <p>KZN 30/5/11/2/10780PR - Area 1: 9,8611 ha, corresponding to an area known as the "sand trap" immediately south to east of the Durban Harbour South Pier.</p> <p><b>NOTICE OF PUBLIC PARTICIPATION PROCESS</b></p> <p>As part of the BA process, the Applicant is required to notify stakeholders of the application and make draft reports available in the public domain. Interested and affected parties (I&amp;APs) who wish to participate by providing comments, or who would like to obtain more information should please contact Ms Lisa Gumbel or Dr Alan Smith at Tel: 031 276 8996. E-mail: <a href="mailto:lisa.gumbel@asmc.co.za">lisa.gumbel@asmc.co.za</a>; <a href="mailto:alan.smith@asmc.co.za">alan.smith@asmc.co.za</a>; Postal Address: 29 Browns Grove, Sherwood, 4001.</p> <p>Date of this notice: 25 January 2019</p>	<p>NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORIZATION IN TERMS OF GOVERNMENT NOTICE REGULATION 883 (LISTING NOTICE 1) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT NO. 107 OF 1998)</p> <p>DMR REF NO.: KZN 30/5/11/2/10780PR</p> <p>PROSPECTING ACTIVITIES FOR HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN, ETHERIMWI MUNICIPALITY, KWAZULU-NATAL</p> <p>Notice is hereby given in terms of Regulations published in Government Notice R 983 of 04 December 2014, under sections 24(3) and 44 of the National Environmental Management Act, 1989 (Act No. 107 of 1989), as amended, that Marine Sands (Pty) Ltd has applied for Prospecting Rights to conduct prospecting activities to determine if viable deposits of heavy minerals occur within the sand currently being dredged by Transnet officials of Durban, which is then placed, inter alia, by the eThekweni Municipality for beach nourishment purposes. The sampling will occur within the sand hopper situated at the A berth of the Durban harbour and/or on the dredging ships.</p> <p>In order to obtain Environmental Authorization from the Department of Mineral Resources (DMR), a Basic Assessment (BA) process needs to be followed. Alan Smith Consulting has been appointed as independent environmental practitioners to carry out the BA process.</p> <p>The proposed activities will take place offshore of Durban and are relevant to one site, i.e.:</p> <p>KZN 30/5/11/2/10780PR - Area 1: 9,8611 ha, corresponding to an area known as the "sand trap" immediately south to east of the Durban Harbour South Pier.</p> <p><b>NOTICE OF PUBLIC PARTICIPATION PROCESS</b></p> <p>As part of the BA process, the Applicant is required to notify stakeholders of the application and make draft reports available in the public domain. Interested and affected parties (I&amp;APs) who wish to participate by providing comments, or who would like to obtain more information should please contact Ms Lisa Gumbel or Dr Alan Smith at Tel: 031 276 8996. E-mail: <a href="mailto:lisa.gumbel@asmc.co.za">lisa.gumbel@asmc.co.za</a>; <a href="mailto:alan.smith@asmc.co.za">alan.smith@asmc.co.za</a>; Postal Address: 29 Browns Grove, Sherwood, 4001.</p> <p>Date of this notice: 25 January 2019</p>	<p>NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORIZATION IN TERMS OF GOVERNMENT NOTICE REGULATION 883 (LISTING NOTICE 1) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT NO. 107 OF 1998)</p> <p>DMR REF NO.: KZN 30/5/11/2/10780PR</p> <p>PROSPECTING ACTIVITIES FOR HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN, ETHERIMWI MUNICIPALITY, KWAZULU-NATAL</p> <p>Notice is hereby given in terms of Regulations published in Government Notice R 983 of 04 December 2014, under sections 24(3) and 44 of the National Environmental Management Act, 1989 (Act No. 107 of 1989), as amended, that Marine Sands (Pty) Ltd has applied for Prospecting Rights to conduct prospecting activities to determine if viable deposits of heavy minerals occur within the sand currently being dredged by Transnet officials of Durban, which is then placed, inter alia, by the eThekweni Municipality for beach nourishment purposes. The sampling will occur within the sand hopper situated at the A berth of the Durban harbour and/or on the dredging ships.</p> <p>In order to obtain Environmental Authorization from the Department of Mineral Resources (DMR), a Basic Assessment (BA) process needs to be followed. Alan Smith Consulting has been appointed as independent environmental practitioners to carry out the BA process.</p> <p>The proposed activities will take place offshore of Durban and are relevant to one site, i.e.:</p> <p>KZN 30/5/11/2/10780PR - Area 1: 9,8611 ha, corresponding to an area known as the "sand trap" immediately south to east of the Durban Harbour South Pier.</p> <p><b>NOTICE OF PUBLIC PARTICIPATION PROCESS</b></p> <p>As part of the BA process, the Applicant is required to notify stakeholders of the application and make draft reports available in the public domain. Interested and affected parties (I&amp;APs) who wish to participate by providing comments, or who would like to obtain more information should please contact Ms Lisa Gumbel or Dr Alan Smith at Tel: 031 276 8996. E-mail: <a href="mailto:lisa.gumbel@asmc.co.za">lisa.gumbel@asmc.co.za</a>; <a href="mailto:alan.smith@asmc.co.za">alan.smith@asmc.co.za</a>; Postal Address: 29 Browns Grove, Sherwood, 4001.</p> <p>Date of this notice: 25 January 2019</p>

# Legals & Tenders

715 Tenders 715 Tenders 715 Tenders



**UMzimkhulu Municipality**  
PROVINCE OF KWAZULU-NATAL  
KZN435/18/19/021/PNLG

**RE-ADVERTISEMENT  
INVITATION TO TENDER**

UMzimkhulu Municipality hereby invites reputable and experienced service providers to respond on the projects below:

**SUPPLY AND DELIVERY OF BAKING CONTAINER FOR WARD 13**  
PROPOSAL NO. ULM-PNLG 001/19

**SUPPLY AND DELIVERY OF BAKING CONTAINER FOR WARD 17**  
PROPOSAL NO. ULM-PNLG 007/19

Tender documents will be available from the cashier at 169 Main Street, UMzimkhulu, 3297 upon the non-refundable payment of R100.00 per document or a bank guaranteed cheque made out to UMzimkhulu Municipality during working hours between 09h30 and 16h00 from 30 January 2019. **Cut-off time for buying documents is 05 February 2019, 15 minutes before the briefing time.**

**Compulsory** briefing meeting is scheduled to take place at 169 Main Street, UMzimkhulu, 3297, Municipal Boardroom on 05 February 2019 at 11h00.

**Invalid or non-submission of the following documents will render the tenderer disqualified. BBBEE points will not be allocated if the Certificate is not submitted:** • Registered on Central Suppliers Database (CSD) attach proof of Registration • Valid BBBEE Certificate/certified or original • MBD 4, 8 & 9 • Municipal rates Certificate/statement for the Directors and the company • Confirm that Municipal rates are not in arrears for more than 90 days • Attach valid lease agreement if the company is leasing the office space • Attach a valid lease agreement if the director is leasing accommodation • Attach affidavit if the account is under your parents, siblings, grandparents and you are not paying any Municipal rates • Copy of a marriage certificate if Municipal account is under your spouse • Certificate of Authority to sign all documents in connection with this Tender and any contract or agreement which may arise therefrom, duly signed and dated, shall be provided by the Board of Directors of the firm and shall be attached and must be on a Company letter head.

**80/20** Preference Point System will be used on the following project, functionality will be considered and UMzimkhulu Local Municipal SCM policy.

Service providers must meet the minimum threshold percentage for local production and content for the Steel products and content for Steel production

711 Public Notices 711 Public Notices

**NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORIZATION IN TERMS OF GOVERNMENT NOTICE REGULATION 983 (LISTING NOTICE 1) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT NO. 107 OF 1998)**

DMR REF NO. KZN 30/5/11/2/10780PR

**PROSPECTING ACTIVITIES FOR HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN, ETHEKWINI MUNICIPALITY, KWAZULU-NATAL**



Notice is hereby given in terms of Regulations published in Government Notice R. 982 of 04 December 2014, under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, that Marine Sands (Pty) Ltd has applied for a Prospecting Right to conduct prospecting activities to determine if viable deposits of heavy minerals occur within the sand currently being dredged by Transnet offshore of Durban, which is then utilized, inter alia, by the eThekweni Municipality for beach nourishment purposes. The sampling will occur within or about the sand hopper situated at the A berth of the Durban harbour and / or on the dredging ships.

In order to obtain Environmental Authorisation from the Department of Mineral Resources (DMR), a Basic Assessment (BA) process needs to be followed. Alan Smith Consulting has been appointed as independent environmental practitioners to carry out the BA process.

The proposed activities will take place offshore of Durban and are relevant to one site, viz.: KZN 30/5/11/2/10780PR - Area 1: 9,881.1 ha, corresponding to an area known as the "sand trap" immediately south to east of the Durban harbour South Pier.

**NOTICE OF PUBLIC PARTICIPATION PROCESS**  
As part of the BA process, the Applicant is required to notify stakeholders of the application and make draft reports available in the public domain. Interested / affected parties who wish to participate by providing comments, or who would like to obtain more information should please contact Ms Lisa Gustolle or Dr Alan Smith at Tel: 031 208 6896, E-mail: lisa.gustolle@alumniuct.ac.za / asconsulting@ethiokmsa.net. Address: 29 Browns Grove, Sherwood, 4081.

For all your Legal Advertisements  
Contact us on  
**Tel: 031 3082004**

**TENDER AWARD NOTICE**

Ezemvelo KZN Wildlife hereby advises the intention to award the following bids:

BID NO.	BID DESCRIPTION	SERVICE PROVIDER	TENDER AMOUNT	B-BBEE LEVEL
EKZNW 08/2018	Construction Of New 4 Bed Staff Accommodation Unit At Kamberg Nature Reserve	Hygiene Lab	R2 573 280.71	1
EKZNW 11/2018	Construction Of New 4 Bed Staff Accommodation Unit At Vergelegen Nature Reserve	Ndalokuhle Construction and Security	R2 291 588.90	1

**NB: Objections to this award must be made within five (5) working days to the office of Ezemvelo Chief Executive at e-mail: Cecilia.Sampson@kznwildlife.com from the 25 to 31 January 2019.**

DEPARTMENT OF PUBLIC WORKS - ETHEKWINI REGIONAL AND DISTRICT OFFICE



### 4.3 I&AP LIST

(a) The following is a list of interested & affected parties notified from the EAP's database

<b>1.2 I&amp;APs to whom notification sent to date</b>		
<b>Name</b>	<b>Affiliation</b>	<b>email</b>
Fiona MacKay	ORI	<a href="mailto:fmackay@ori.org.za">fmackay@ori.org.za</a>
Shanice	SDCEA	<a href="mailto:shanice@sdceango.co.za">shanice@sdceango.co.za</a>
Des D'Sa	SDCEA	<a href="mailto:desmond@sdceango.co.za">desmond@sdceango.co.za</a>
Bobby Peek	Groundwork	<a href="mailto:bobby@groundwork.org.za">bobby@groundwork.org.za</a>
Di Jones	Coastwatch	<a href="mailto:Coastwatch@telkomsa.net">Coastwatch@telkomsa.net</a>
Andre Fletcher	NSRI	<a href="mailto:station5@searescue.org.za">station5@searescue.org.za</a>
Paul Smit	General Manager: Point Water sports Club	<a href="mailto:gm@pwsc.co.za">gm@pwsc.co.za</a>
	Durban Ski-boat club	<a href="mailto:accounts@durbanskiboatclub.co.za">accounts@durbanskiboatclub.co.za</a>
Paddy Norman	WESSA	<a href="mailto:paddyn@telkomsa.net">paddyn@telkomsa.net</a>
Richard Holmes	Durban Boatowners Association	<a href="mailto:dboa@sphere.co.za">dboa@sphere.co.za</a>
Graham Rose	RNYC	<a href="mailto:commodore@myc.org.za">commodore@myc.org.za</a>
Malcolm Keeping	SA Sugar Association, DUC	<a href="mailto:malcolm.keeping@sugar.org.za">malcolm.keeping@sugar.org.za</a>
Johnny Vassilaros	Durban Paddleski Club	<a href="mailto:atlantistrade@telkomsa.net">atlantistrade@telkomsa.net</a>
Donavan Henning	Nemai consulting	<a href="mailto:donavanh@nemai.co.za">donavanh@nemai.co.za</a>
Jeremy Williams	SAUFF	<a href="mailto:jeremy@divefactory.co.za">jeremy@divefactory.co.za</a>
Rory O'Connor	Concerned citizen	<a href="mailto:roc@tiscali.co.za">roc@tiscali.co.za</a>
Eddie Litchfield	Paddleski Club	<a href="mailto:jayed@mweb.co.za">jayed@mweb.co.za</a>
Jeremy Saville	Concerned citizen (swell.co.za website)	<a href="mailto:jemsav@swell.co.za">jemsav@swell.co.za</a>
Riaz Khan	KZN Subsistence Fishermen Forum	<a href="mailto:lamatikzn@gmail.com">lamatikzn@gmail.com</a>
Essop Mohammed	KZN Subsistence Fishermen Forum	<a href="mailto:Katie@telkomsa.net">Katie@telkomsa.net</a>

(b) The following is a list of authorities notified

<b>Name</b>	<b>Affiliation</b>	<b>email</b>
Conrad Dlamini Bongimusa	Ward councillor (ward 26 Point)	<a href="mailto:Conrad.dlamini@durban.gov.za">Conrad.dlamini@durban.gov.za</a>
JP Prinsloo	Ward councillor (ward 66 Bluff)	<a href="mailto:ward66@ethekwini.org">ward66@ethekwini.org</a>
Dianne van Rensburg	Development Planning: Land Use Management	<a href="mailto:diane.vanrensburg@durban.gov.za">diane.vanrensburg@durban.gov.za</a>
Siraj Paruk	Transnet	<a href="mailto:Siraj.Paruk@transnet.net">Siraj.Paruk@transnet.net</a>
Nelson Mbatha	Transnet	<a href="mailto:Nelson.Mbatha@transnet.net">Nelson.Mbatha@transnet.net</a>
Clive Greyling	Transnet	<a href="mailto:Clive.Greyling@transnet.net">Clive.Greyling@transnet.net</a>
Dorian Bilse	Transnet	<a href="mailto:Dorian.Bilse@transnet.net">Dorian.Bilse@transnet.net</a>
Shamina Krishnaswamy	Transnet	<a href="mailto:Shamina.Krishnaswamy@transnet.net">Shamina.Krishnaswamy@transnet.net</a>
Dineo Mazibuko	Transnet	<a href="mailto:Dineo.Mazibuko@transnet.net">Dineo.Mazibuko@transnet.net</a>
Makhosazane Zondi	Transnet pipelines	<a href="mailto:khosi.zondi@transnet.net">khosi.zondi@transnet.net</a>
Thami Khubisa	Transnet new business development	<a href="mailto:thami.khubisa@transnet.net">thami.khubisa@transnet.net</a>
Norman Ward	DWS	<a href="mailto:WardN@dws.gov.za">WardN@dws.gov.za</a>
Jennifer Olbers	EKZNW	<a href="mailto:Jennifer.Olbers@kznwildlife.com">Jennifer.Olbers@kznwildlife.com</a>
Santosh Bachoo	EKZNW	<a href="mailto:Santosh.Bachoo@kznwildlife.com">Santosh.Bachoo@kznwildlife.com</a>
Dominic Wieners	EKZNW	<a href="mailto:Dominic.Wieners@kznwildlife.com">Dominic.Wieners@kznwildlife.com</a>
Irene Hatton	EKZNW	<a href="mailto:irene.hatton@kznwildlife.com">irene.hatton@kznwildlife.com</a>
J Zikhali	DAFF KZN	<a href="mailto:jeffreyzikhali@hotmail.com">jeffreyzikhali@hotmail.com</a>
Dennis Fredericks	DAFF Marine Resource management	<a href="mailto:DennisF@daff.gov.za">DennisF@daff.gov.za</a>
Desmond Stevens	DAFF Acting DDG Fisheries	<a href="mailto:DDGFisheries@daff.gov.za">DDGFisheries@daff.gov.za</a>
Omar Parak	DEDTEA	<a href="mailto:omar.parak@kznedtea.gov.za">omar.parak@kznedtea.gov.za</a>
Bonisiwe Sithole	DEDTEA	<a href="mailto:bonisiwe.sithole@kznedtea.gov.za">bonisiwe.sithole@kznedtea.gov.za</a>
Madibe Ntombi	DWS	<a href="mailto:mngoma-madibej@dws.gov.za">mngoma-madibej@dws.gov.za</a>
Neo Leburun	DWS	<a href="mailto:leburun@dws.gov.za">leburun@dws.gov.za</a>
Lesa la Grange	SAHRA	<a href="mailto:llagrange@sahra.org.za">llagrange@sahra.org.za</a>
Feroza Albertus	DEA Oceans & Coasts	<a href="mailto:falbertus@environment.gov.za">falbertus@environment.gov.za</a>
Nontsasa Tonjeni	DEA Oceans & Coasts	<a href="mailto:ntonjeni@environment.gov.za">ntonjeni@environment.gov.za</a>
Jo McMahan	Transnet: Environment & Sustainability	<a href="mailto:Joseph.mcmahan@transnet.net">Joseph.mcmahan@transnet.net</a>
Sifiso Ndlovu	Land Claims Commission	<a href="mailto:Sifiso.ndlovu@drdlr.gov.za">Sifiso.ndlovu@drdlr.gov.za</a>
Sithembile Nxumalo	Dept. of Land Affairs	<a href="mailto:Sithembile.nxumalo@drdlr.go.za">Sithembile.nxumalo@drdlr.go.za</a>
Thandeka Mbambo	DEA Oceans & Coasts	<a href="mailto:TMbambo@environment.gov.za">TMbambo@environment.gov.za</a>
Funanani Ditinti	DEA Oceans & Coasts	<a href="mailto:fditinti@environment.gov.za">fditinti@environment.gov.za</a>

## 4.4 RELEVANT COMMUNICATIONS

The below communications outlined in 4.4.1, 4.4.2 and 4.4.3 are generic to Areas 1, 2 and 3, which all fall under the same process and involve the same discussion with relevant stakeholders, save that the prospecting areas applied for are different. Section 4.4.5 details comment received on the dBAR during the official 30-day comment period specific to Area 1.

### 4.4.1: Transnet

Subject: Transnet Meeting Summary - 27 Sep 2018

#### Summary of meeting minutes with Transnet:

Date: 27 September 2018

Present:

Keith Comline (Marine Sands) - KC  
Nelson Mbatha (Transnet)  
Siraj Paruk (Transnet)  
Vishern Beakam (Transnet)

- \* Introductions were made and KC briefly introduced the Marine Sands project – Project Arena
- \* Vishern explained the current dredging operations as follows:
  - They conduct 2 types of dredging:
    - Maintenance dredging within the harbour for shipping lines
      - o Circa 150,000 cubic m per year using grab and suction dredgers
    - Sand trap / beach augmentation dredging

#### Beach Augmentation Dredging

- \* This dredging is done as they are bound by an agreement with the municipality and because the harbour impedes the natural flow of sand
- \* They generally dredge between 250,000 and 500,000 cubic m of sand a year but 500,000 would be the maximum
- \* Dredging is conducted through 3 procedures:
  - \* Dredging and dumping onto the mound (out at sea)
  - \* Discharging into direct floating line
  - \* A berth to south of Addington
    - Struggle to get sand to Addington
- \* Hopper (A Berth)

#### Dredging is temperamental due to:

- \* Currents
- \* Demand from the municipality (how much sand is on the beach)
- \* Storms
- \* Rip tides, weather, seasonal currents
- \* The municipality determines the quantum of sand required for the beach augmentation. Can cause dredging schedule to be changed/ceased

#### Further Discussions:

The Dredger is currently deployed domestically (only in Durban beach augmentation for 3 months annually). Will soon be deployed internationally.

Marine Sands will need a Transnet licence to operate commercially within the Durban Harbour area

Transnet covers the costs of dredging whilst the municipality covers other pumping/sand distribution costs (floating lines etc.)

There may be space constraints for our operation by the hopper, however KC explained that it would require the size of approximately 2 shipping containers (during mining operations) which seemed to appease their concern.

The Transnet mining right for sand winning was approved within the last 2/3 weeks

Operationally, there was concern that our operations would impede their operations and future growth plans - KC explained that we would fit into their plans as much as possible

They expressed concern of the PPP we would have to undertake and potential environmental impact. KC explained that there would be little to no environmental impact.

They are looking for a solution for the dredged sand from within the harbour, as opposed to dumping it into the ocean.

They enquired as to our intention to operate outside of Transnet with our own dredging - it was explained that we are compiling 2 business cases, one with collaboration with Transnet and one without. This is dependent on further discussions and the grade of resource available.

Nelson Mbatha advised that the commercial engagements be discussed with the Transnet business development department.

Nelson Mbatha will provide names of persons in the business development department (Shamina??) to arrange a time to present our project to them (more formal presentation) and the commercials to be discussed further. We must keep Dorian included on our emails.

#### **4.4.2 eThekweni Municipality**

##### **Summary of Meeting Minutes with eThekweni Municipality: Coastal Engineering**

Present:

Keith Comline (Marine Sands) - KC

Godfrey Vella (Senior Manager: Coastal Engineering) - GV

Date: 11 October 2018

Time: 10h00 - 11h00

##### **Introduction:**

- \* KC introduced the sand processing/cleansing project, where it is focused and the current prospecting rights applications.
- \* Proposed Benefits of the project: Sand cleansing, Project Phakisa, Economic harbour development
- \* Only 5% of sand volumes lost due to extraction of heavy minerals

##### **Richard Bay investigations:**

- \* GV confirmed that Richard Bay Minerals had conducted previous investigations on the extraction of heavy minerals from the beach sand which proved to be unviable

##### **CURRENT OPERATING PROCESSES:**

- \* GV confirmed that they currently use different systems to augment the beaches:

Receiving sand from the Transnet Hopper (Bx) and (should be) pumping up the beaches through the booster plants (B0 - B4)

- \* 400 diameter HDP pipe
- \* Pumps circa 1,800 cubic metres of slurry per hour
- \* Slurry consists of between 15 - 20% sand
- \* Currently can pump to first booster station (B0)
- \* This system is still in testing and proving up - fixing pumps, valves and actuators.
- \* This is highly technical (compared to previous hopper - 2 pumps) as this has 28 pumps and is automated process which have to be correct for it to operate

Bypass pipeline:

- \* Sand slurry received straight from Dredger at the same berth as the Hopper
- \* This line provides 2 - 3 km pumping up the beaches (North)
- \* 900 diameter HDP Pipe and can pump 1200 per hour (this number subject to confirmation as it was indicated that the amount was more than the Hopper pipe - see diameter)
- \* Generally can pump about 40% slurry

Floating pipeline system

- \* This is a temporary system
- \* Used for northern beaches (about 6km) (North End, Sub Coast, Denning (sp))
- \* Requires quite a bit of manpower when operating (front-end loaders on beach, divers, etc.)

**Dredging and Hopper information:**

- \* There are 2 dredgers, one can pump 2 km and the other 3 km.
- \* Current dredgers can operate at +/- 26m depth
- \* The Isandlwana dredger has been in for repairs/maintenance since November 2017
- \* Dredging schedule is not fixed and the dredger moves between ports as and when required by the relevant port masters
- \* Ability to go out to sea also dependent on a SAMSA licence
- \* The new hopper has 28 pumps operated under the SCADA (?) system
- \* There is a draft MoA for the council to operate the hopper on behalf of Transnet
- \* Transnet will be liable for maintenance and defaults

**Time delays of dredger:**

- \* The Dredge can dump into the Hopper on its first trip (which has to receive the full load before it can discharge)
- \* Thereafter the Dredger can go out again on its 2nd trip and will return before the hopper has finished discharging. The second load will fill the hopper (+/- 5,000 cubic metres) and then any additional loads will be pumped through the by-pass line up the beaches.
- \* Often the dredgers have to wait for other boats and tankers to enter and exit the harbour
- \* The by-pass line is a permanent feature within the municipalities pumping plans
- \* The old hopper pumping system could pump up to Snake Park Beach
- \* The current system runs up to about 4km but needs to work correctly

**Transnet operations:**

- \* The dredging services is an in-house service operated by Transnet, which invoices the port (another division of Transnet) for its dredging services
- \* Often the dredger goes to the port with the budget available for its services

**Ownership/Management of infrastructure:**

- \* Transnet owns and manages the:



- \* Dredging services
- \* The hopper (Bx) (owned by the port department)
- \* The pipe from the hopper to the first booster pump station (B0)
  
- \* Municipality owns and manages the:
  - \* Pump stations B0 to B4 (about 4 km piping north of harbour)
  - \* By-Pass line
  - \* Floating pipelines

**Needs of municipality:**

- \* Require reliable dredging services
- \* Municipality is looking at 3 offshore borrow traps to take sand for sand augmentation - Amanzimtoti Area / Durban / mHlanga and mDhloti area
- \* Have conducted sand samples and confirmed there are no reefs. Currently in the environmental application stages
- \* Depths for these areas are +/- 18 - 24m
- \* mHlanga area is an important need of the municipality and could commit to at least 500,000 cubic metres per year
- \* Currently being engaged with by Jan De Nul dredging services

**Public Participation Process:**

- \* Should put up notice at the Dredging services, Point Watersport Club
- \* Should notify ORI/SAAMBR, Transnet and the Municipal Environmental department (who will consolidate all municipal responses)

**Other information:**

- \* Clive Greyling (Transnet) manages the Hopper (Bx) and could give a tour
- \* Hopper is operated by Grant de Klerk
- \* Hopper could be included as a tourist place of public interest
- \* Godfrey conducts tours of the sand pumping and goes through the tunnel under the harbour
- \* Tunnel is due to be taking sewerage from the pump stations at NSRI to the Central Works sewage plant (Bluff), which pumps treated sewerage out into offshore sewerage dumps (+/- 3km out)
- \* There is also a temporary desalination plant being developed/commissioned

**4.4.3 Further Discussions with Transnet**

The applicant has held further collective meetings with the following departments of Transnet on 15 November 2019:

- New Business Development;
- Transnet Group Capital
- Transnet Dredging

The project was again introduced to the members who had not yet been introduced to it previously and the outcomes of these meetings was, in principle, favourable in Transnet's support of the project, pending the further approvals from the Transnet port authorities and the approval of the relevant prospecting rights applications.

**4.4.4 COMMENTS & RESPONSES**

Copies of email correspondence from Marine Sands (Pty) Ltd to Silverwave, as requested in the acceptance letter, and Exxon copied below. No responses received to date.

(a) Silverwave: 18 January

## Operations offshore of Durban, South Africa

Keith - Comline Inc. <[keith@comlinelaw.co.za](mailto:keith@comlinelaw.co.za)>

To: [minnminnoug@googlemail.com](mailto:minnminnoug@googlemail.com) <[minnminnoug@googlemail.com](mailto:minnminnoug@googlemail.com)>;  
[minnminnoug@silverwaveenergy.com.com.sg](mailto:minnminnoug@silverwaveenergy.com.com.sg) <[minnminnoug@silverwaveenergy.com.com.sg](mailto:minnminnoug@silverwaveenergy.com.com.sg)>;

Cc: [info@silverwaveinternational.com](mailto:info@silverwaveinternational.com) <[info@silverwaveinternational.com](mailto:info@silverwaveinternational.com)>;

Good day

I confirm that Marine Sands (Pty) Ltd, whom I represent, is a resource company which has applied to the Department of Mineral Resources (DMR) in South Africa for prospecting rights for heavy minerals in the area immediately south of the south harbour entrance pier at Durban harbour situated in the KwaZulu Natal Province in South Africa.

In accepting our application for processing, the DMR has instructed us to contact Silver Wave Energy, for comment regarding ER154 which the DMR has identified as being held by Silver Wave Energy. This ER includes cadastral blocks 2931 D, 2932A, 2932C and part of 2931 C.

Should you have any comments or queries please submit them to us at [keith@comlinelaw.co.za](mailto:keith@comlinelaw.co.za).

Yours faithfully

---

Keith Comline  
Director



Tel: +27 (0) 10 035 3797  
Mobile: +27 (0) 82 497 6859  
Fax: +27 (0) 86 552 8093  
Website: [www.comlinelaw.co.za](http://www.comlinelaw.co.za)  
Grosvenor Corner, 195 Jan Smuts, Rosebank  
Johannesburg, Gauteng, South Africa, 2196

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Silverwave: 16 January 2019

RE: Silver Wave Energy - No 154 ER

Keith - Comline Inc. <keith@comlinelaw.co.za>

To:plu@petroleumagencysa.com <plu@petroleumagencysa.com>;

Good day

With reference to the email below, we would be grateful to receive your response to the queries below.

Regards

---

Keith Comline  
Director



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*Mobile:* +27 (0) 82 497 6859

*Fax:* +27 (0) 86 552 8093

*Website:* [www.comlinelaw.co.za](http://www.comlinelaw.co.za)

Grosvenor Corner, 195 Jan Smuts, Rosebank  
Johannesburg, Gauteng, South Africa, 2196

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**From:** Keith - Comline Inc. <keith@comlinelaw.co.za>

**Sent:** Friday, 21 December 2018 2:46 PM

**To:** 'plu@petroleumagencysa.com' <plu@petroleumagencysa.com>

**Subject:** Silver Wave Energy - No 154 ER

Good day

I confirm that Marine Sands (Pty) Ltd, whom I represent, is a resource company which has recently applied for 3 prospecting rights in relation to heavy minerals over areas which are immediately East, South-East and in the 'Sand Trap' of the Durban harbor.

In terms of the acceptance letter received from the DMR pertaining to these applications, we have been instructed to contact your office in order to consult with Silver Wave Energy (Pty) Ltd regarding our proposed prospecting operations; with particular reference to the operations under Ref. No. 154 ER.

Accordingly, we would be grateful to:

- receive the contact details of the relevant person and/or department at Silver Wave Energy (Pty) Ltd which we should engage with in order to progress these consultations; and
- current ownership and a plan with coordinates of the boundaries of ER 154.

Regards

---

Keith Comline  
Director



*Tel:* +27 (0) 10 035 3797

*Mobile:* +27 (0) 82 497 6859

*Fax:* +27 (0) 86 552 8093

*Website:* [www.comlinelaw.co.za](http://www.comlinelaw.co.za)

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(b) Exxon: 18 January 2019

RE: EP 154 Kwa Zulu Natal coast

Keith - Comline Inc. <keith@comlinelaw.co.za>

To: miranda.anthony@exxonmobil.com <miranda.anthony@exxonmobil.com>;

Cc: 'Stuart Comline' <comline@icon.co.za>;

Good day

We refer to the correspondence below regarding our intended prospecting programme about the area surrounding the Durban harbour (to the east and south thereof) and confirm that in addition to the two areas contemplated in the Basic information Document, which was sent previously, we have received acceptance of our application for prospecting for heavy minerals in the area immediately south of the south harbour entrance pier at Durban harbour situated in the KwaZulu Natal Province in South Africa.

Kindly acknowledge receipt of this communication and in the event that you wish to discuss this matter further or require further details, please contact me or Stuart Comline at [comline@icon.co.za](mailto:comline@icon.co.za).

Yours faithfully

---

Keith Comline  
Director



*Tel:* +27 (0) 10 035 3797

*Mobile:* +27 (0) 82 497 6859

*Fax:* +27 (0) 86 552 8093

*Website:* [www.comlinelaw.co.za](http://www.comlinelaw.co.za)

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**From:** Anthony, Miranda /C <[miranda.anthony@exxonmobil.com](mailto:miranda.anthony@exxonmobil.com)>

**Sent:** 09 November 2018 13:01

**To:** Stuart Comline <[comline@icon.co.za](mailto:comline@icon.co.za)>

**Subject:** RE: EP 154 Kwa Zulu Natal coast

Dear Stuart,

Notification received, thank you.

Regards,

**Miranda Anthony**

Public and Government Affairs Manager

(b) Exxon Mobil (contd)

ExxonMobil Exploration and Production South Africa Limited (EMEPSAL)  
3rd Floor, Icon Building  
cnr Lower Long Street and Hans Strijdom Avenue  
Cape Town 8001, South Africa  
Office: [+27 21 412 1531](tel:+27214121531)  
Email: [miranda.anthony@exxonmobil.com](mailto:miranda.anthony@exxonmobil.com)

---

**From:** Stuart Comline [<mailto:comline@icon.co.za>]  
**Sent:** Tuesday, November 6, 2018 10:07 AM  
**To:** Anthony, Miranda /C <[miranda.anthony@exxonmobil.com](mailto:miranda.anthony@exxonmobil.com)>  
**Subject:** EP 154 Kwa Zulu Natal coast

Good day Miranda

Further to our telephone call this morning, I attach a Basic Information Document (BID) relating to the proposed activities of Marine Sands (Pty) Limited (Marine Sands) offshore of the Durban coast. Marine Sands has applied for prospecting rights for Heavy Mineral Sands in the areas that are dredged offshore of Durban. In acceptance of the application, the Department of Mineral Resources has advised us that we need to notify the owners of EP154, which we understand is managed by Exxonmobil.

Kindly acknowledge receipt of this communication and in the event that you wish to discuss this matter further, please contact me.

With best regards  
One behalf of Marine Sands  
Stuart Comline  
0836545449

(c) I&AP registration in response to BID: Malcolm Keeping

APPENDIX A

PROSPECTING RIGHT APPLICATION FOR PROSPECTING ACTIVITIES FOR HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN, ETHEKWINI MUNICIPALITY, KWAZULU-NATAL

Title: <i>VA</i>	First name: <i>MALCOLM</i>	Surname: <i>KEEPING</i>	Initials: <i>MK</i>
Organisation: <i>PRIVATE</i>	Designation:		
Postal Address: <i>P. 946 x 02, Mt. EDENCOMBE</i>			
Postal Code: <i>4300</i>			
Tel No: <i>041 504 7443</i>		Cell No: <i>0429636427</i>	
Fax No:		E-mail: <i>malcolm.keeping@sugat.org.za</i>	

I, the registered owner / representative of the organisation / property known as:

Hereby verify that an information notice of the above development has been circulated to me and would like to be registered as an Interested and Affected Party for the abovementioned development. Please address the concerns expressed by me in the below text in the Basic Assessment process (feel free to add additional text on a separate page):

Please provide more information regarding the project (Specify):

Please add the following persons to your list of interested and affected parties:

Name:	Organisation:
Telephone:	
Postal Address:	
Name:	Organisation:
Telephone:	
Postal Address:	

Signed at *Mt. EDENCOMBE* this *5* day of *FEB* 2018

Signature 

PLEASE SEND THIS REGISTRATION FORM AND ANY ADDITIONAL COMMENTS TO:

Environmental Assessment Practitioners:

Contact person:

Postal address:

Postal code:

Telephone:

Cell phone:

E-mail:

Alan Smith Consulting
Ms Lisa Guastella or Dr Alan Smith
29 Browns Grove, Sherwood, Durban
40917
+27 (0)31 2086896
+27 (0)82 8604043
<a href="mailto:lisa.guastella@alumni.uct.ac.za">lisa.guastella@alumni.uct.ac.za</a> ,
<a href="mailto:asconsulting@telkomsa.net">asconsulting@telkomsa.net</a>

Thank you for your participation



(d) I&AP response to BID: Jeremy Williams

APPENDIX A

PROSPECTING RIGHT APPLICATION FOR PROSPECTING ACTIVITIES FOR HEAVY MINERALS FROM  
DREDGED SAND OFFSHORE OF DURBAN, ETHEKWINI MUNICIPALITY, KWAZULU-NATAL

Title: MR	First name: JEREMY	Surname: WILLIAMS	Initials: JR
Organisation: SOUTH AFRICAN UNDERWATER	Designation: FISHING FEDERATION DES. CONSERVATION OFF.		
Postal Address: 174 MAGWAZA MAPHALALA ST. DURBAN			
Postal Code: 4001			
Tel No: 031-3012241	Cell No: 082 959 1991		
Fax No: 031-3012242	E-mail: jeremy@diverfactory.co.za		

I, the registered owner / representative of the organisation / property known as:

SAUFF

Hereby verify that an information notice of the above development has been circulated to me and would like to be registered as an Interested and Affected Party for the abovementioned development. Please address the concerns expressed by me in the below text in the Basic Assessment process (feel free to add additional text on a separate page):

Please provide more information regarding the project (Specify):

Please add the following persons to your list of interested and affected parties:

Name:	Organisation:
Telephone:	
Postal Address:	
Name:	Organisation:
Telephone:	
Postal Address:	

Signed at DURBAN this 31 day of JAN 2018

Signature

PLEASE SEND THIS REGISTRATION FORM AND ANY ADDITIONAL COMMENTS TO:

Environmental Assessment Practitioners:

Contact person:

Postal address:

Postal code:

Telephone:

Cell phone:

E-mail:

Alan Smith Consulting
Ms Lisa Guastella or Dr Alan Smith
29 Browns Grove, Sherwood, Durban
40917
+27 (0)31 2086896
+27 (0)82 8604043
lisa.guastella@alumni.uct.ac.za,
asconsulting@telkomsa.net

Thank you for your participation



#### **4.4.5 COMMENTS TO DRAFT BASIC ASSESSMENT REPORT & RESPONSES**

- 1. South African Heritage Resources Agency (SAHRA)**
- 2. Department of Environmental Affairs (DEA) OCEANS & COASTS**
- 3. ETHEKWINI MUNICIPALITY**
- 4. Ezemvelo KZN Wildlife (EKZNW)**

Our Ref:



an agency of the  
Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za  
South African Heritage Resources Agency | 111 Harrington Street | Cape Town  
P.O. Box 4637 | Cape Town | 8001  
www.sahra.org.za

Enquiries: Briege Williams  
Tel: 021 462 4502  
Email: bwilliams@sahra.org.za  
CaseID: 13546

Date: Tuesday March 26, 2019  
Page No: 1

## Interim Comment

### In terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999)

Attention: Mr Keith Comline

50 KEYES AVENUE  
ROSEBANK  
JOHANNESBURG  
2196

**Prospecting rights application to determine if economically viable heavy minerals exist in sand already dredged by Transnet from the area referred to as Area 1, and known as the "sandtrap" offshore of Durban, eThekweni, KZN, South Africa. See also attached BID and dBAR documentation**

The South African Heritage Resources Agency (SAHRA) would like to thank you for submitting the Draft Basic Assessment Report (DBAR) for the Prospecting Right Application for Heavy Minerals from Dredged Sand offshore of Durban. The purpose of the prospecting right is to determine the volumes and grades of heavy minerals within previously dredged sea floor sands. The area for proposed prospecting is known as Area 1 which relates to an area to the southeast of Durban harbour's South Pier and is referred to as a sand trap. As the material to be sampled has been previously dredged and is therefore out of context SAHRA has no objections to the proposed work.

Durban has historically been a very busy shipping port and has a rich maritime history with many wrecks and shipping accidents being recorded in the area. While there are no known wrecks in the vicinity of the prospecting area and the work is being undertaken on previously disturbed sediment there is a small chance that previously unknown heritage material may be disturbed. Should any heritage material be uncovered during the proposed works it must be recorded and retained and SAHRA must be informed of its discovery and given the opportunity to advise on the way forward.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Our Ref:



an agency of the  
Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: [info@sahra.org.za](mailto:info@sahra.org.za)  
South African Heritage Resources Agency | 111 Harrington Street | Cape Town  
P.O. Box 4637 | Cape Town | 8001  
[www.sahra.org.za](http://www.sahra.org.za)

Enquiries: Briege Williams  
Tel: 021 462 4502  
Email: [bwilliams@sahra.org.za](mailto:bwilliams@sahra.org.za)  
CaseID: 13546

Date: Tuesday March 26, 2019  
Page No: 2

---

Briege Williams  
Heritage Officer  
South African Heritage Resources Agency

---

Lesla la Grange  
Acting Manager: Maritime and Underwater Cultural Heritage  
South African Heritage Resources Agency

**ADMIN:**

Direct URL to case: <http://www.sahra.org.za/node/521435>  
(DMR - KZN, Ref: KZN 30/5/1/1/2/10780PR )

**Terms & Conditions:**

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
3. SAHRA reserves the right to request additional information as required.

## 2. DEA Oceans & Coasts



### **environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

**Enquiries: F Ditinti Ref: EDMS 180744**

**Tel:** (+27 21) 819 2499 **Fax:** (+27 21) 819 2445 **E-mail:** [fditinti@environment.gov.za](mailto:fditinti@environment.gov.za)

**Alan Smith Consulting cc**

**Ms. Lisa Guastella**

29 Browns Grove,

Sherwood,

4091

**Tel:** 031 208 6896 / **E-mail:** [asconsulting@telkomsa.net](mailto:asconsulting@telkomsa.net)

**Dear Ms. Lisa Guastella**

**SUBJECT: COMMENTS ON THE DRAFT BASIC ASSESSMENT REPORT FOR THE PROPOSED PROSPECTING RIGHT APPLICATION FOR HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN.**

The Department of Environmental Affairs DEA in its Branch Oceans & Coasts reviewed the Draft Basic Assessment Report in terms of the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICM Act") and does not have an objection to the proposed project, and reasons are provided below:

- (1) While this Branch Oceans and Coasts considers prospecting for viable heavy mineral reserves in the dredged beach and sea floor of South African waters desirable, the applicant must take note that the Branch Oceans and Coasts in DEA has a mandate to ensure that the use of natural resources in the coastal zone and development associated with the coastal zone is socially and economically justifiable and ecologically sustainable. To ensure the achievement of the objectives of the ICM Act, 2008, and guarantee that the coastal environment will be protected and conserved throughout all phases of the proposed project.

- (2) To avoid causing adverse impacts on the marine environment, it is a recommendation of this Branch that the applicant should not carry out activities that have not been assessed that require authorization (either in support or not of the proposed project) within the coastal zone without an authorization from the competent authority. Failure to adhere to this requirement may result in the implementation of Section 59 and 60 of the ICM Act where a coastal protection notice and coastal access notice may be issued to the applicant.
- (3) From the assessment of activities associated with the proposed project it is the conclusion of this Branch that this project will not cause adverse impacts on the marine environment and to ensure the coastal zone is protected, managed and conserved the applicant is advised to familiarize themselves with Section 28 Duty of Care under the National Environmental Management Act, 1998 (Act No 107 of 1998), ("NEMA") by taking reasonable measures to prevent pollution or degradation to the marine environment throughout all proposed project phases.

These comments must be sent to the competent authority for consideration and implementation, and proof should be sent to this office.

Kindly note that the department reserves the right to revise our initial comments and we may request further information based on any additional information that might be received. All future correspondence and documentation (hard copy and an electronic copy) must be submitted to our office for the attention to the Directorate: Coastal Conservation Strategies using the following contact details: **Funanani Ditinti Physical Address: Department of Environment Affairs (DEA), Branch: Oceans and Coast, 2 East Pier Building, East Pier Road, Victoria and Alfred Waterfront, Cape Town, 8001.**

Yours Sincerely



**ACTING CHIEF DIRECTOR: INTEGRATED COASTAL MANAGEMENT:**

DATE: 2019/3/26



**DEVELOPMENT PLANNING, ENVIRONMENT & MANAGEMENT UNIT**  
**Development Planning Department**  
**Land Use Management Branch**

166 K.E. Masinga Road  
Durban 4001  
P.O. Box 680 Durban  
4000  
Telephone 031-311 111

**Our Ref.:** (21/11) DPM/EIA 838  
**DEDTEA:** KZN/30/5/1/1/2/10780PR  
**Enquiries:** Mrs D. van Rensburg  
**Telephone:** 031 – 3117136

11 March 2019

Alan Smith Consulting  
29 Browns Grove  
Sherwood  
Durban  
4091

Att: Lisa Guastella

Dear Sir/Madam,

**BACKGROUND INFORMATION DOCUMENT, MARINE SANDS PROJECT 1 FOR THE PROSPECTING RIGHT APPLICATION FOR HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN HARBOUR.**

With reference to the abovementioned Background Information Document, please be advised that various Municipal Departments have had sight of the proposal and the following comments are submitted for your attention:-

**1. eThekweni Electricity Department.**

The H.V. Operations has no objection to the above mentioned application, however please note:

- 1.1. The applicant must consult eThekweni Electricity's mains records (held in the drawing office at eThekweni Electricity Headquarters, 1 Jelf Taylor Crescent, for the presence of underground electrical services. In addition should any overhead line and/or servitude be affected, the specific permission of the Head: Electricity must be sought regarding the proposed development.
- 1.2. The relocation of MV/LV electrical services, if required in order to accommodate the proposed development, will be carried out at the expense of the applicant.

**2. Environmental Planning and Climate Protection Department.**

The Environmental Planning and Climate Protection Department has no biodiversity concerns associated with the proposed prospecting right application.

Prospecting will comprise a sand sampling survey of the Transnet dredged sand and will consist of removal of hand collected small sand samples (approximately 1 kg) from, either: within and/or around the hopper and/or on the dredger ship. No environmental disturbances are envisaged during the prospecting process; the sampling is a physical process with no chemical or other substances added *in situ* and will thus not detrimentally impact on the surrounding environment.

**3. Land Use Management Branch.**

The extraction of the sand occurs outside the harbour mouth and does not fall within the Durban Scheme area and there are no town planning controls in force. The sand hopper is on shore and is situated with the "Harbour" zoned area which is freely permitted as an industrial land use.

**4. Strategic Spatial Planning Branch.**

The Strategic Spatial Planning Branch notes that the Background Information Document is for authorization to prospect for heavy minerals. In this regard, the Strategic Spatial Planning Branch requests clarity regarding;

- The infrastructure that will be required.
- Where will the processing of the material be conducted (landside or seaside).
- What activities will be associated with the extraction (daily operations, chemicals, by-products and waste materials produced).
- What equipment will be used.
- The process involved.
- What will the operations be.
- Impact on tourism and the multi billion rand Point Development.

Furthermore, it is important that comment is obtained from the National and Provincial Departments that have jurisdiction on activities that occur within the marine environment.

The Strategic Spatial Planning Branch looks forward to information on the abovementioned points raised before making further comment.

**5. Project Executive: Coastal Policy.**

No objection.



**6. Coastal, Stormwater and Catchment Management.**

No objection.

**7. Parks, Leisure and Cemeteries.**

The Park, Leisure and Cemeteries Department has no objections to the proposed application for a prospecting licence for heavy metals from the sand dredged offshore of Durban Harbour.

**8. Pavement and Geotechnical Engineering.**

No geotechnical objection in principle. Prospecting will make no material difference but, clearly, mining is the ultimate goal. It would be prudent to consider if there will be compounded impacts when the spoil mounds a little further off shore are mined for backfill at the proposed widening of Berths 203-205 inside the harbour.

**9. eThekweni Transport Authority.**

The Traffic Engineering Branch has No Objection to the proposed Background Information Document subject to a Traffic Management Plan being submitted to this Departments Traffic Operations Branch.

**10. Environmental Health Department.**

- 10.1. This Department has no objection to this application as a small amount of sand samples will be collected on the current Transnet dredged sand. There will be no other processes that will be conducted on site.
- 10.2. All employees conducting the collection of sand samples should be provided with personal protective clothing during such operation.
- 10.3. Should the study provide positive results, the Environmental Health Department should be notified on future plans of the activities.

**11. eThekweni Water and Sanitation Department.**

Sanitation Planning:

The Branch has noted the Background Information Document for the proposed project. Further comments will be submitted when more details on the proposal are available.

**12. Cleansing and Solid Waste.**

No requirements from this Department.



**13. Disaster Management.**

No comment from this Department.

**14. Fire Safety.**

This Department raises no objection to the proposed project subject to:

- 14.1. Compliance with the Interim Code Relating to Fire Prevention and Flammable liquids and Substances since the fuel will be used to run the machines.
- 14.2. Full compliance with other applicable Legislative requirements.

Should you seek clarification on any of the above issues, please contact the writer on telephone: 031 - 3117136 or via e-mail: [diane.vanrensburg@durban.gov.za](mailto:diane.vanrensburg@durban.gov.za) in addition, the Department requests that a copy of the Environmental Authorisation be emailed to the same address.

Yours faithfully



**MANAGER: LAND USE MANAGEMENT**  
**CB NORTON**  
(Claire Norton: Professional Planner A/746/1993)

13/03/2019

**DATE:**



**ACTING HEAD: DEVELOPMENT PLANNING, ENVIRONMENT AND**  
**MANAGEMENT**  
**J. S. NDEBELE**

13/02/2019

**DATE:**

**Copy To:**  
Department of Economic Development, Tourism and Environmental Affairs  
Private Bag X 54321  
Durban  
4000



**DEVELOPMENT PLANNING, ENVIRONMENT & MANAGEMENT UNIT**  
**Development Planning Department**  
**Land Use Management Branch**

166 K.E. Masinga Road  
Durban 4001  
P.O. Box 680 Durban  
4000  
Telephone 031-311 111

**Our Ref.:** (21/11) DPM/EIA 838A  
**DEDTEA:** KZN/30/5/1/1/2/10780PR  
**Enquiries:** Mrs D. van Rensburg  
**Telephone:** 031 – 3117136

11 April 2019

Alan Smith Consulting  
29 Browns Grove  
Sherwood  
Durban  
4091

Att: Lisa Guastella

Dear Sir/Madam,

**DRAFT BASIC ASSESSMENT REPORT, MARINE SANDS PROJECT 1 FOR THE PROSPECTING RIGHT APPLICATION FOR HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN HARBOUR.**

With reference to the abovementioned Draft Basic Assessment Report, please be advised that various Municipal Departments have had sight of the proposal and the following comments are submitted for your attention:-

**1. eThekweni Electricity Department.**

The H.V. Operations has no objection to the above mentioned application, however please note:

- 1.1. The applicant must consult eThekweni Electricity's mains records (held in the drawing office at eThekweni Electricity Headquarters, 1 Jelf Taylor Crescent, for the presence of underground electrical services. In addition should any overhead line and/or servitude be affected, the specific permission of the Head: Electricity must be sought regarding the proposed development.
- 1.2. The relocation of MV/LV electrical services, if required in order to accommodate the proposed development, will be carried out at the expense of the applicant.

**2. Environmental Planning and Climate Protection Department.**

The Environmental Planning and Climate Protection Department has no biodiversity concerns associated with the proposed prospecting right application.

Prospecting will comprise a sand sampling survey of the Transnet dredged sand and will consist of removal of hand collected small sand samples (approximately 1 kg) from, either: within and/or around the hopper and/or on the dredger ship. No environmental disturbances are envisaged during the prospecting process; the sampling is a physical process with no chemical or other substances added *in situ* and will thus not detrimentally impact on the surrounding environment.

**3. Land Use Management Branch.**

The extraction of the sand occurs outside the harbour mouth and does not fall within the Durban Scheme area and there are no town planning controls in force. The sand hopper is on shore and is situated with the "Harbour" zoned area which is freely permitted as an industrial land use.

**4. Strategic Spatial Planning Branch.**

In terms of the Spatial Development Framework (SDF) 2018/2019) the area around the harbour is identified for industrial use. The SDF does not cover activities that take place offshore. The Strategic Spatial Planning Branch does not object to the application in its current format.

The application is however subject to the following conditions.

- 4.1. This Branch's support is subject to the applicant meeting all sector requirements.
- 4.2. This support should not be deemed to be an approval of the eThekweni Municipality.
- 4.3. This Branch reserves the right to comment further should the need arise.

**5. Project Executive: Coastal Policy.**

No objection.

**6. Coastal, Stormwater and Catchment Management.**

No objection.

**7. Parks, Leisure and Cemeteries.**

The comments to the effect that without dredging there will be an unnatural build-up of sand (Page 9, g.) is not correct. The build-up of sand is due to the northward migration of sand caused by the long shore current and is a natural process. More correctly, the "sand trap" area is a more convenient locality to dredge the sand and prevent a sand bar from forming across the harbour mouth. Nevertheless, the activity will not negatively impact on the immediate environment.

The Parks, Leisure and Cemeteries Department has no objections to the proposed application for a prospecting licence for heavy metals from the sand dredged offshore of Durban Harbour.

**8. Pavement and Geotechnical Engineering.**

No further comment received.

**9. eThekweni Transport Authority.**

9.1. Please note that this Departments Traffic Engineering Branch has **No Objection** to the Proposed Draft Basic Assessment Report, report titled "PROSPECTING RIGHT APPLICATION FOR HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN, DRAFT BASIC ASSESSMENT REPORT, KZN 30/5/1/1/2/10780PR, report dated 14 FEBRUARY 2019, which was then corrected to read 7 March 2019.

9.2. This is subject to the submission of a Traffic Management Plan prior to commencement of the project. In this regard, please note that approval of said management plan must be sort from this Departments Traffic Operations Branch, Manager Traffic Operations Branch; Mr Vishay Hariram, 031-3117335.

**10. Environmental Health Department.**

10.1. This Department has no objection to this application as a small amount of sand samples will be collected on the current Transnet dredged sand. There will be no other processes that will be conducted on site.

10.2. All employees conducting the collection of sand samples should be provided with personal protective clothing during such operation.

10.3. Should the study provide positive results, the Environmental Health Department should be notified on future plans of the activities.

**11. eThekweni Water and Sanitation Department.**

No further comment received.

**12. Cleansing and Solid Waste.**

No requirements from this Department.

**13. Disaster Management.**

No comment from this Department.

**14. Fire Safety.**

This Department raises no objection to the proposed project subject to:

14.1. Compliance with the Interim Code Relating to Fire Prevention and Flammable liquids and Substances since the fuel will be used to run the machines.

14.2. Full compliance with other applicable Legislative requirements.

Should you seek clarification on any of the above issues, please contact the writer on telephone: 031 - 3117136 or via e-mail: [diane.vanrensburg@durban.gov.za](mailto:diane.vanrensburg@durban.gov.za) in addition, the Department requests that a copy of the Environmental Authorisation be emailed to the same address.

Yours faithfully



**MANAGER: LAND USE MANAGEMENT  
CB NORTON**  
(Claire Norton: Professional Planner A/746/1993)

12/04/2019

**DATE:**



**ACTING HEAD: DEVELOPMENT PLANNING, ENVIRONMENT AND  
MANAGEMENT  
J. S. NDEBELE**

12/04/2019

**DATE:**

**Copy To:**  
Department of Economic Development, Tourism and Environmental Affairs  
Private Bag X 54321  
Durban  
4000

### 3. Response to eThekwini Municipality

## ALAN SMITH CONSULTING (ASC)

### Specialist Physical Environmental Reports & Environmental Impact Assessments

29 BROWN'S GROVE, SHERWOOD, 4091

Tel: (031) 2086896, Fax: 0866024642

E-mail: [asconsulting@telkomsa.net](mailto:asconsulting@telkomsa.net); [lisagus@telkomsa.net](mailto:lisagus@telkomsa.net)

---

17 April 2019

Ms D van Rensburg  
Land Use Management Branch  
Development Planning Branch  
Development Planning, Environment & Management Unit  
eThekwini Municipality  
166 KE Masinga Road  
Durban  
4001

Your ref: (21/11) DPM/EIA 838

Our ref: DMR: KZN 30/5/1/1/2/10780PR

Dear Ms van Rensburg

#### Response to eThekwini comment on KZN 30/5/1/1/2/10780PR (Area 1) BID and dBAR

Thank-you for submitting the consolidated comments on the BID and dBAR with respect to the above-mentioned prospecting rights applications.

For your records, responses to the comments are detailed below:

1. **Electricity Dept.:** No electrical services will be affected
4. **Strategic Spatial Planning Branch: Response to queries on BID**
  - No infrastructure required.
  - All sample preparation and analyses will take place in registered and established off-site laboratories and facilities. The sand will be analysed in an offsite commercial laboratory to determine the concentrations of heavy minerals (refer Part A (d) (ii) of dBAR).
  - No chemicals will be associated with on-site sampling.
  - Sampling methodology will comprise removal of hand collected small sand samples (approximately 1 kg) from, either (a) within and/or around the hopper system located at the A berth in the Durban port and/or (b) on the dredger ship which is responsible for the dredging of the sand within the prospecting areas applied for (refer Part A (d) (ii) of dBAR).
  - There will be no impact on tourism or the Point Waterfront development.
  - The national and provincial environmental departments have been consulted (refer Appendix 4.3 of dBAR).
5. **Parks, Leisure & Cemeteries:** No objections. However, we stand by our comment “Were Transnet not to dredge this area, there would be an un-natural sand build-up, as the natural northward movement of sand via the longshore drift is blocked the South Pier.” We agree that “The build-up of sand is due to northward migration under longshore drift, which is a natural process”, but the harbour South Pier obstructs the natural northward movement of sand via the longshore drift, which results in an un-natural build-up of sand that would otherwise be transported northward and form a bar across the harbour mouth (i.e. if no harbour pier). Should the department have any further queries or require clarification on this matter, they are welcome to contact us.
8. **Pavement and Geotechnical Engineering: Response to comment on BID:** Dredging of sands from “the spoil mounds a little further offshore” were the subject of a separate EIA process, conducted by NEMAI consulting on behalf of TNPA, to supply sand for the planned Pier 203/5 development, and environmental

authorisation was approved. This area corresponds to the separate Area 3 application by Marine Sands (Pty) Ltd, for which comment has already been provided via a previous process.

**9. ETA:** No Traffic Management Plan is required as sampling will either be offshore or from the sand hopper.

**10. Environmental Health dept.:** Standard PPE will be required, as outlined in the EMPr.

**14. Fire Safety:** No fuel will be involved in the sampling protocol.

Please do not hesitate to contact me should you have any further queries or require clarification on any aspects of the prospecting rights applications.

Regards

*L Guastella*

*Lisa Guastella, M.Sc. (Pr.Sci.Nat.)  
Environmental Consultant, Oceanographic and Air Quality specialist  
Alan Smith Consulting  
Tel: +27312086896  
Cell: +27828604043  
[lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)*

## 4. Email communications with EKZN Wildlife

Re: Final BAR's: Marine Sands prospecting rights applications  
Areas 2 & 3

Lisa Guastella

Thu 2019/04/25 10:13

Sent Items

To: Irene Hatton &lt;irene.hatton@kznwildlife.com&gt;; Ashantia Nerissa Pillay &lt;Nerissa.Pillay@kznwildlife.com&gt;;

Cc: Andy Blackmore &lt;Andy.Blackmore@kznwildlife.com&gt;;

Good day all

Thank you for your interest in this project.

You will be aware that the commenting period in terms of the NEMA EIA regulations has expired prior to receiving your communications and we are in the final stages of preparing the final Basic Assessment Report (fBAR) for Area 1 for submission before due date 30 April. The fBARs for Areas 2 and 3 were submitted on 13 March 2019.

We propose that should you wish for your delayed comments to be received, these can be included by us in a supplementary submission of the fBAR to DMR. We propose, in the interests of time, that your comments are made based on the electronic copies of the dBARs previously provided to your offices. These comments can be submitted to me.

However, should your protocol still require hard copies of the reports for commenting purposes, we will have to provide these. Please advise. Should you still require these hard copies, can they be dropped off at your Durban office, as I am presuming that the marine and coastal specialists based there will need to provide comment in any case?

Notwithstanding the above, we cannot confirm that your comments will be accepted by the relevant authorities to whom we will be submitting the fBAR supplementary submissions, due to their late submission.

Regards

Lisa

*Lisa Guastella, M.Sc. (Pr.Sci.Nat.)**Environmental Consultant, Oceanographic and Air Quality specialist**Tel: +27312086896**Cell: +27828604043*[lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)[lisagus@telkomsa.net](mailto:lisagus@telkomsa.net)

---

**From:** Lisa Guastella**Sent:** Thursday, 18 April 2019 3:50:52 PM**To:** Irene Hatton; Ashantia Nerissa Pillay**Cc:** Andy Blackmore**Subject:** Re: Final BAR's: Marine Sands prospecting rights applications Areas 2 & 3



OK, Irene; I thought we had all bases covered by sending to Dom (who used to co-ordinate these), yourself and the marine folk, and didn't know that Nerissa had taken over the co-ordination function; sadly none of my emails were forwarded internally to her. But yes, moving forward, we will advise DMR that you may still submit comment. In the interim, we will forward the requested hard copies to Andy for all areas; they are pretty much the same, just some subtle area differences and descriptions - so will send fBAR's for Areas 2 & 3; and the (later) Area 1 application will also be in fBAR phase, no point in sending the dBAR at this stage.

Thanks, you have a good Easter weekend, too!

Regards  
Lisa

*Lisa Guastella, M.Sc. (Pr.Sci.Nat.)*  
*Environmental Consultant, Oceanographic and Air Quality specialist*  
*Tel: +27312086896*  
*Cell: +27828604043*  
[lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)  
[lisagus@telkomsa.net](mailto:lisagus@telkomsa.net)

---

**From:** Irene Hatton <irene.hatton@kznwildlife.com>  
**Sent:** Thursday, 18 April 2019 2:34:01 PM  
**To:** Lisa Guastella; Ashantia Nerissa Pillay  
**Cc:** Andy Blackmore  
**Subject:** RE: Final BAR's: Marine Sands prospecting rights applications Areas 2 & 3

Thank you Lisa

The person on our side that co-ordinates the incoming applications is the one person that didn't appear to have received the e-mail (Nerissa Pillay). However given Jenny's response to you I do now understand why you believed the project to be in hand.

You are correct that it is unlikely that we will get comment to you before you submit, and I would appreciate if you do let DMR know that we may still be commenting to them.

Thanks and have a great Easter weekend

Regards  
Irene

---

**From:** Lisa Guastella <lisa.guastella@alumni.uct.ac.za>  
**Sent:** 18 April 2019 02:15 PM  
**To:** Irene Hatton <irene.hatton@kznwildlife.com>; Ashantia Nerissa Pillay <Nerissa.Pillay@kznwildlife.com>  
**Cc:** Andy Blackmore <Andy.Blackmore@kznwildlife.com>  
**Subject:** Re: Final BAR's: Marine Sands prospecting rights applications Areas 2 & 3

Good day, Irene

The information was sent to you in good faith.

Unfortunately I have no way of knowing how EIA's are internally assigned within Ezemvelo for comment. I assumed that at least one of the 4 recipients of my 4 emails (prior to my 5th message that was responded to) should have at least contacted me to advise on your protocol? Not one of the 4 email recipients responded to advise: "As per established practice, only on receipt of the hard copy, will Ezemvelo screen and allocate your project for comment." I knew Ezemvelo needed to be consulted, hence your inclusion in my public participation process, but was not informed that hard copies of the documentation were required. The only response I received was from Jennifer further to my first email on 16 Oct 2018, which read: "Thanks Lisa, I think Dom or Irene will be working on this but I'll keep tabs on it.

Regards,  
Jennifer "

As an example, I sent the same content to key personnel at eThekweni, after which Di van Rensburg, who co-ordinates the eThekweni comment from their line departments, kindly responded that they required 3 hard copies of the dBAR, which I provided. Their comment to both phases of our applications was received timeously. Similarly, SAHRA responded and requested that electronic copies be lodged on their system and a case number generated so that comment could be assigned. Yet I received no response from Ezemvelo at all.

For your records, emails were sent to Jennifer, Santosh, Dominic and yourself on the following dates:

- 1) 16 Oct 2018 - Areas 2 & 3 BID & copy of Newspaper ad (Mercury) sent
- 2) 11 Dec 2018 - Areas 2 & 3 dBAR sent with invitation to comment
- 3) 30 Jan 2019 - Area 1 BID & copy of Newspaper ad (Mercury) sent
- 4) 7 Mar 2019 - Area 1 dBAR sent with invitation to comment
- 5) 3 Apr 2019 - Notification of submission of fBAR to DMR sent

We can submit hard copies to Andy, but note that the comment period is officially closed, therefore any comment will need to be submitted directly to DMR (Karoon Moodley), cc'd to me. We will notify DMR that you may still wish to provide comment on documents that have already been submitted, and will provide DMR with proof of all our correspondence with Ezemvelo to date. Our due date for submission of the Area 1 final BAR is 29 April, so with the Easter break, it is doubtful you will be able to submit comment prior to that date; the 30-day comment period closed on 11 April.

Regards  
Lisa

*Lisa Guastella, M.Sc. (Pr.Sci.Nat.)*  
*Environmental Consultant, Oceanographic and Air Quality specialist*  
*Tel: +27312086896*  
*Cell: +27828604043*  
[lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)  
[lisagus@telkomsa.net](mailto:lisagus@telkomsa.net)

**From:** Irene Hatton <[irene.hatton@kznwildlife.com](mailto:irene.hatton@kznwildlife.com)>  
**Sent:** Thursday, 18 April 2019 11:55 AM  
**To:** Lisa Guastella; Ashantia Nerissa Pillay  
**Cc:** Andy Blackmore  
**Subject:** RE: Final BAR's: Marine Sands prospecting rights applications Areas 2 & 3

Hello Lisa

Please note that sending me a copy of a project which has not been assigned to me and I can see has been mailed to various people does not constitute consultation with Ezemvelo (we are e-mail swamped with many consultancies shot mailing all known addresses for all projects and planners can only engage on the ones that have been specifically assigned to them). Therefore I will engage on all projects assigned to me but if a consultancy is making first contact on a project (i.e. before it is assigned) the proper process to have a project assigned is as follows:

Please ensure that you send a hard copy of the application to the Ezemvelo Planning section as for all development projects. As per established practice, only on receipt of the hard copy, will Ezemvelo screen and allocate your project for comment.

Can you kindly submit the hardcopies for the project to Ezemvelo as follows:

Addressee: Mr Andy Blackmore – Head IEM and Protected Area Planning

Postal:	P O Box 13053 Cascades 3202	Courier:	Queen Elizabeth Park Cascades 1 Peter Brown Drive Montrose 3201
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Enquiries to Ms Nerissa Pillay on [Nerissa.Pillay@kznwildlife.com](mailto:Nerissa.Pillay@kznwildlife.com) or 033 845 1917

Regards  
Irene

[Irene Hatton](#)  
[Environmental Management Systems Planner](#)  
[Conservation Planning](#)  
[Ezemvelo KZN Wildlife](#)  
[PO Box 13053, Cascades, 3202](#)  
[Queen Elizabeth Park, 1 Peter Brown Drive, Montrose, 3202](#)  
[Office Tel 033 845 1452](#)  
[Fax to E-mail 086 669 6446](#)



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**From:** Lisa Guastella <[lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)>  
**Sent:** 18 April 2019 10:14 AM  
**To:** Ashantia Nerissa Pillay <[Nerissa.Pillay@kznwildlife.com](mailto:Nerissa.Pillay@kznwildlife.com)>  
**Cc:** Andy Blackmore <[Andy.Blackmore@kznwildlife.com](mailto:Andy.Blackmore@kznwildlife.com)>; Irene Hatton <[irene.hatton@kznwildlife.com](mailto:irene.hatton@kznwildlife.com)>  
**Subject:** Re: Final BAR's: Marine Sands prospecting rights applications Areas 2 & 3

Good day, Nerissa

Unfortunately the comment period for all the DMR applications is now closed. EKZNW have been informed throughout the process; BID's & dBAR's for Areas 1, 2 and 3 have been sent to Dominic Wieners, Irene Hatton, Santosh Bachoo and Jennifer Olbers, yet no comment has been received to date from EKZNW.

The final BAR for Area 1 is to be submitted to DMR at the end of next week.

Regards

Lisa

*Lisa Guastella, M.Sc. (Pr.Sci.Nat.)  
Environmental Consultant, Oceanographic and Air Quality specialist  
Tel: +27312086896  
Cell: +27828604043  
[lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)  
[lisagus@telkomsa.net](mailto:lisagus@telkomsa.net)*

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**From:** Ashantia Nerissa Pillay <[Nerissa.Pillay@kznwildlife.com](mailto:Nerissa.Pillay@kznwildlife.com)>  
**Sent:** Thursday, 18 April 2019 9:54 AM  
**To:** Lisa Guastella  
**Subject:** RE: Final BAR's: Marine Sands prospecting rights applications Areas 2 & 3

Dear Lisa,

Thank you for following up.

Unfortunately, we do not have the storage capacity for electronic copies of applications. Hardcopies of the relevant documentation related to the projects are therefore required for review and assessment.

Regards  
Nerissa

---

**From:** Lisa Guastella [<mailto:lisa.guastella@alumni.uct.ac.za>]  
**Sent:** Wednesday, April 17, 2019 2:25 PM

**To:** Ashantia Nerissa Pillay

**Cc:** Andy Blackmore

**Subject:** Re: Final BAR's: Marine Sands prospecting rights applications Areas 2 & 3

Good day, Nerissa

I await your response to my email of 5 April please.

FYI, we are currently in the process of finalising the final BAR for the Area 1 prospecting rights application. Thus my query relating to whether an electronic copy will suffice relates to this application as well.

Please advise.

Regards

Lisa

*Lisa Guastella, M.Sc. (Pr.Sci.Nat.)*

*Environmental Consultant, Oceanographic and Air Quality specialist*

*Tel: +27312086896*

*Cell: +27828604043*

[lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)

[lisagus@telkomsa.net](mailto:lisagus@telkomsa.net)

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**From:** Lisa Guastella

**Sent:** Friday, 05 April 2019 11:33 AM

**To:** Ashantia Nerissa Pillay

**Subject:** Re: Final BAR's: Marine Sands prospecting rights applications Areas 2 & 3

Good day, Ashantia

Thanks for your email. The request relates to 2 prospecting rights applications, same process, just different areas offshore of Durban.

The other area (Area 1) is also undergoing the same process, although currently in draft BAR stage; the applications are slightly staggered owing to different dates of acceptance from DMR!

Will an electronic copy of each of Areas 2 and 3 final BAR's not suffice?

Kind regards

Lisa

*Lisa Guastella, M.Sc. (Pr.Sci.Nat.)*

*Environmental Consultant, Oceanographic and Air Quality specialist*

*Tel: +27312086896*

*Cell: +27828604043*

[lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)

[lisagus@telkomsa.net](mailto:lisagus@telkomsa.net)

**From:** Ashantia Nerissa Pillay <[Nerissa.Pillay@kznwildlife.com](mailto:Nerissa.Pillay@kznwildlife.com)>  
**Sent:** Friday, 05 April 2019 10:51:52 AM  
**To:** Lisa Guastella  
**Subject:** RE: Final BAR's: Marine Sands prospecting rights applications Areas 2 & 3

Good morning Lisa,

Thank you for the email notification below. Please may I request that a hardcopy report for the prospecting application be forwarded to our IEM Planning Division, for further consideration. The details are as follows:

Addressee: Mr Andy Blackmore – Head IEM and Protected Area Planning (alternatively, Nerissa Pillay- Scientific Technician, Conservation Planning: IEM)

<b>Postal:</b>	P O Box 13053	<b>Courier:</b>	Queen Elizabeth Park
	Cascades		Cascades
	3202		1 Peter Brown Drive
			Montrose
			3201

Please feel free to contact this office should you have any queries.

Best Regards

*A. Nerissa Pillay*

*Scientific Technician*

*Conservation Planning: IEM*

*Ezemvelo KZN Wildlife*

*1 Peter Brown Drive*

*P.O. BOX 13053*

*Cascades*

*3200*

**Telephone: (033) 845 1917**

**Fax: (033) 845 1499**

**email: [nerissa.pillay@kznwildlife.com](mailto:nerissa.pillay@kznwildlife.com)**



---

**From:** Irene Hatton  
**Sent:** Wednesday, April 3, 2019 1:58 PM  
**To:** Ashantia Nerissa Pillay  
**Subject:** FW: Final BAR's: Marine Sands prospecting rights applications Areas 2 & 3

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**From:** Lisa Guastella <[lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)>  
**Sent:** 03 April 2019 01:57 PM  
**To:** Jennifer Olbers <[Jennifer.Olbers@kznwildlife.com](mailto:Jennifer.Olbers@kznwildlife.com)>; Santosh Bachoo <[Santosh.Bachoo@kznwildlife.com](mailto:Santosh.Bachoo@kznwildlife.com)>; Irene Hatton <[irene.hatton@kznwildlife.com](mailto:irene.hatton@kznwildlife.com)>  
**Cc:** Dominic Wieners <[Dominic.Wieners@kznwildlife.com](mailto:Dominic.Wieners@kznwildlife.com)>  
**Subject:** Final BAR's: Marine Sands prospecting rights applications Areas 2 & 3

**NOTIFICATION OF SUBMISSION OF FINAL BAR'S: MARINE SANDS (PTY) LTD PROSPECTING RIGHTS APPLICATIONS KZN 30/5/1/1/2/10778PR (Area2) & KZN 30/5/1/1/2/10779PR (Area 3)**

Good day

This serves as notification that the Final Basic Assessment Reports (fBAR's) for the proposed prospecting rights by Marine Sands (Pty) Ltd for Area 2 (KZN 30/5/1/1/2/10778PR) and Area 3 (KZN 30/5/1/1/2/10779PR), north and east of the Port of Durban, have been submitted to the Department of Mineral Resources (DMR).

Copies of the final reports can be downloaded using the following links:

Area 2: [https://www.dropbox.com/s/a6o9y5m0ftkp8ko/NEMA%20BAR%20EMP%20Template%20Area2%20Marine%20Sands%20fBAR%20\\_final\\_4DMR-signed.pdf?dl=0](https://www.dropbox.com/s/a6o9y5m0ftkp8ko/NEMA%20BAR%20EMP%20Template%20Area2%20Marine%20Sands%20fBAR%20_final_4DMR-signed.pdf?dl=0)

Area 3: [https://www.dropbox.com/s/796jc9jk7rfjt3n/NEMA%20BAR%20EMP%20Template%20Area3%20Marine%20Sands%20fBAR%20\\_final\\_4DMR-signed.pdf?dl=0](https://www.dropbox.com/s/796jc9jk7rfjt3n/NEMA%20BAR%20EMP%20Template%20Area3%20Marine%20Sands%20fBAR%20_final_4DMR-signed.pdf?dl=0)

If you have any difficulty downloading the copies, please contact me and I will gladly forward them to you.

Should you have any additional comments on the reports, please submit these to the following person at DMR:

- The Regional Manager: Mineral Regulation (Karoon Moodley);
- Email address: [Karoon.Moodley@dmr.gov.za](mailto:Karoon.Moodley@dmr.gov.za);
- Telephone number: 031 335 9600.

Please also forward these comments to:

Alan Smith Consulting at [asconsulting@telkomsa.net](mailto:asconsulting@telkomsa.net) or [lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)  
Telephone number: 031 2086896.

I would also like to take this opportunity to remind you that comments on the draft BAR for the prospecting rights application for Area 1 (KZN 30/5/1/1/2/10780PR), known as the "sandtrap", east of and adjacent to the Port of Durban south pier, are due on 11 April. Please do not hesitate to contact me should you have any queries.

Regards

Lisa Guastella

*Lisa Guastella, M.Sc. (Pr.Sci.Nat.)*

*Environmental Consultant, Oceanographic and Air Quality specialist*

*Alan Smith Consulting cc*

*29 Browns Grove, Sherwood, Durban, 4091, South Africa*

*Tel: +27312086896*

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[lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)

[lisagus@telkomsa.net](mailto:lisagus@telkomsa.net)

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**APPENDIX 5: ADDITIONAL DIAGRAMS**

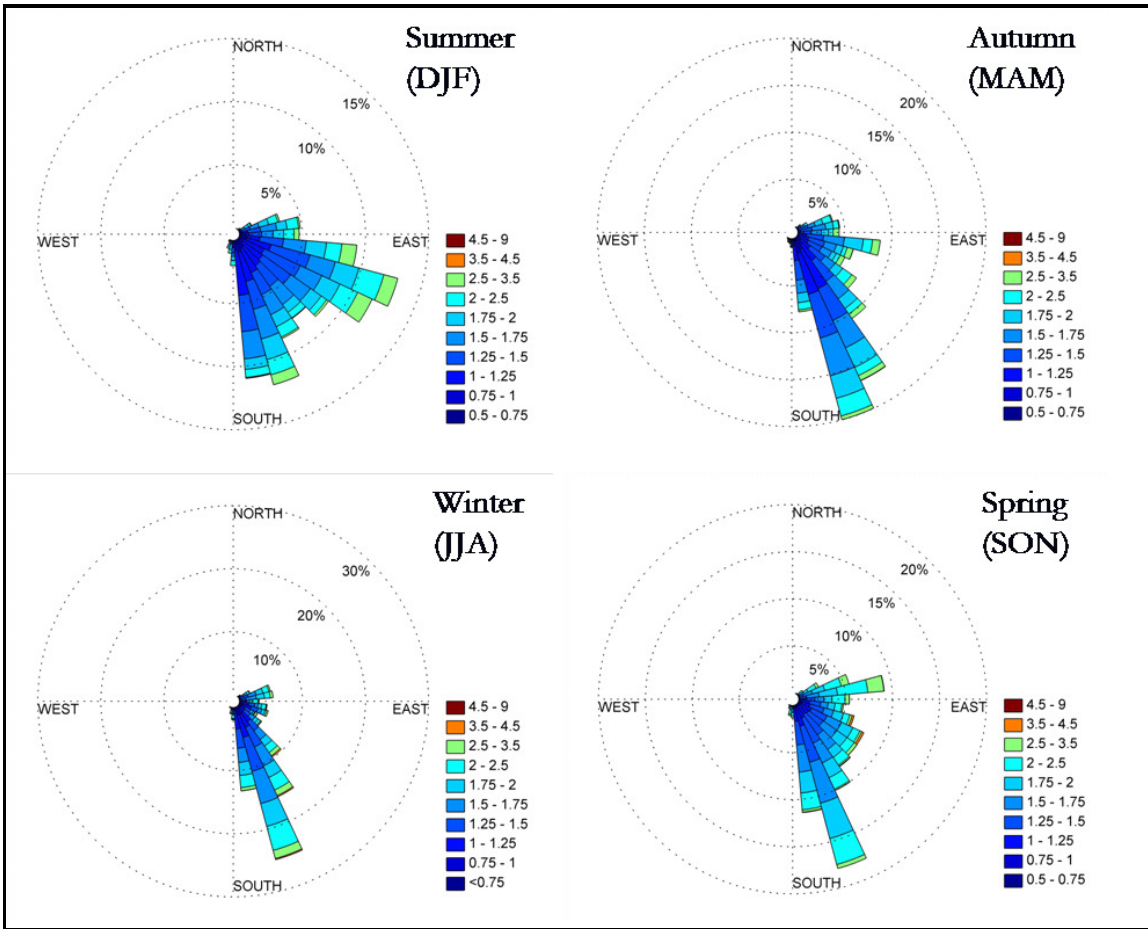


Figure 1: Seasonal swell distribution off Durban, based on 2007-2009 CSIR/ Transnet waverider data (S. Corbella, CCS construction).

## **APPENDIX 6: Specific Information required by the competent Authority**

The prospecting right application is based on sampling sand that already has been removed legitimately by dredging by third parties, i.e. Transnet.

### **(1) Impact on the socio-economic conditions of any directly affected person.**

The prospecting procedure involves physically sampling sand that is already dredged by Transnet, thus there will be no bulk sampling or chemical transformations that might directly affect the socio-economic conditions of any person. As the dredging takes place offshore, at sea, there is no directly affected landowner.

### **(2) Impact on any national estate referred to in section 3(2) of the National Heritage Resources Act.**

The prospecting procedure involves physically sampling sand that is already legitimately dredged by Transnet, and for which permission is already granted, thus there are no additional impacts on any national estate, thus no mitigation is applicable or required.

### **(3) Motivation for not investigating alternatives**

The site is governed by the area currently operated by Transnet for maintenance dredging. Apart from the other dredging areas, which are the subject of separate applications for Areas 1 and 3 (refer Appendix 2, Figure 2), no other sites are contemplated or considered. The site is therefore regarded as the preferred site.

## APPENDIX 7: BACKGROUND INFORMATION DOCUMENT

*ALAN SMITH CONSULTING*

*29 Browns Grove, Sherwood, 4091*

*Tel: 031-2086896, 0828604043*

*Email: [asconsulting@telkomsa.net](mailto:asconsulting@telkomsa.net) ; [lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za)*

# BACKGROUND INFORMATION DOCUMENT (BID)

## PROSPECTING RIGHT APPLICATION FOR PROSPECTING ACTIVITIES FOR HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN, ETHEKWINI MUNICIPALITY, KWAZULU-NATAL - KZN 30/5/1/1/2/10780PR – AREA 1 (SAND TRAP)

### 1. PURPOSE OF THIS DOCUMENT

Marine Sands (Pty) Ltd (hereinafter referred to as “the applicant”) submitted a prospecting right application to the Department of Mineral Resources (hereinafter referred to as “the DMR”) for various offshore regions currently dredged by Transnet, offshore of Durban (KZN), in terms of section 16 of the Mineral and Petroleum Resources Development Act (Act 28 of 2002) as amended by section 12 of the Minerals and Petroleum Resources Development Amendment Act (Act 49 of 2008) and section 24 of the National Environmental Management Act (Act 107 of 1998), read with Regulations 20 and 22 of the Environmental Impact Assessment (EIA) Regulations (2014). This Background Information Document (BID) is provided to:

- Communicate relevant information about the proposed project with identified stakeholders;
- Afford Interested and Affected Parties (I&APs) a platform to provide, in writing, their comments/concerns/issues with the application; and
- Provide details about the Public Participation Process that must be followed in terms of legislation.

#### 1.1 Appointed Environmental Assessment Practitioner (EAP)

Alan Smith Consulting was appointed by the applicant as the independent Environmental Assessment Practitioner (EAP) to compile a Basic Assessment Report (BAR), Environmental Management Plan (EMP) and to undertake the Public Participation Process (PPP) for the Prospecting Right Application.

### 2. PROJECT DESCRIPTION

Prospecting Right applications were submitted to the Department of Mineral Resources (DMR) in order to obtain rights to determine whether economic concentrations of heavy minerals are present in the sands currently being dredged from the seafloor, offshore from Durban. The collection of sand is currently and necessarily being conducted by Transnet Durban port authorities by way of maintenance dredging of the seafloor around and to the east of the Durban Harbour. Some of the dredged sand is thereafter deposited in the sand hopper at the “A” berth in the Durban port (located next to the National Sea Rescue Institute (NSRI) base, off Mahatma Gandhi Road, Point, Durban) (refer Figure 1) for subsequent pumping by the eThekweni Municipality northward along the Durban beaches as part of the beach re-nourishment scheme. Thus, the proposal relates to the prospecting for heavy minerals from sand that will have already been dredged by Transnet.

Dredging activities take place offshore of Durban and the current prospecting proposal is relevant to one site, viz.:

- KZN 30/5/1/1/2/10780PR - Area 1: 9.8611 ha, corresponding to an area known as the "sand trap" immediately south to east of the Durban harbour South Pier (Refer to Map 1).

Prospecting will comprise a physical sand sampling survey of the dredged sand, either from on board the Transnet dredger (refer Figure 2) or from within or about the sand hopper. Sampling will be done by a competent person and will consist of removal of hand collected small sand samples (<0.5m<sup>3</sup>) from within a Transnet dredger or from within a translocation process at the sand hopper. This sand will then be analysed at an offsite commercial laboratory to determine the concentrations of heavy minerals. No environmental disturbances are envisaged during the prospecting process: the sampling is a physical process with no substances added *in situ* and thus will not detrimentally impact the surrounding environment, nor materially affect the composition and volume of sand available for the augmentation of the beaches.

### 3. PROSPECTING RIGHT APPLICATION PROCESS AND PUBLIC PARTICIPATION

#### 3.1 Legislation

The proposed activity triggers Activity 20 of GNR 983 (Listing Notice 1) of the Environmental Impact Assessment Regulations, 2014, viz. "Any activity including the operation of that activity which requires a prospecting right in terms of section 16 of the Mineral and Petroleum Resources Development Act (Act 28 of 2002), including associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource..." Thus, in order to obtain Environmental Authorisation from the Department of Mineral Resources (DMR), a Basic Assessment (BA) process needs to be followed. In terms of prevailing mining and environmental legislation, the applicant is required to consult with Interested and Affected Parties (I&APs). Comments and/or issues raised by I&APs will be recorded and included in the Basic Assessment Report (BAR) and submitted to the DMR (KZN).

The BAR and Environmental Management Programme (EMPr) will be compiled and implemented to ensure that any potential impacts of the proposed prospecting activities are mitigated and managed. The EMPr will include, *inter alia*, the following:

- Description of the environment that is likely to be affected by the proposed prospecting activities;
- Identification of potential environmental and social impacts;
- Assessment of the significance of these potential impacts on the environment and socio-economic conditions; and
- Evaluation and implementation of the proposed mitigation measures to minimise negative environmental impacts.

#### 3.2. Public Participation

Notice of the prospecting rights application relevant to Area 1 (the "sandtrap") was advertised in the Mercury newspaper on 25 January 2019. Stakeholders affected by, or who are interested in, the proposed project are invited to register as an I&AP to become involved in the Public Participation Process (PPP). Please complete and submit the registration form contained in Appendix A to the EAP consultants by email or post. The following anticipated dates are important to note for the PPP going forward:

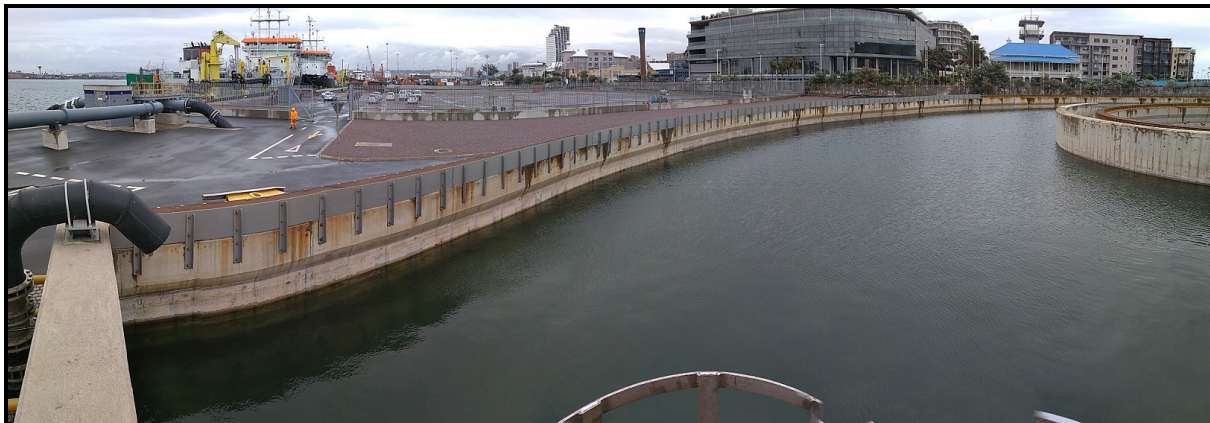
- Advertisement of applicant's Prospecting Right Application: 25 January 2019
- Stakeholder engagement and consultation, distribution of BID: January - February 2019
- Distribution of draft BAR & EMPr for comment (allow 30 days): 11 February 2019
- Closure of draft BAR & EMPr comment period: 13 March 2019
- Submission of final BAR and EMPr: last week of March 2019

**Contact Details of the EAP:**

Ms Lisa Guastella or Dr Alan Smith at Tel: 031 208 6896, E-mail: [lisa.guastella@alumni.uct.ac.za](mailto:lisa.guastella@alumni.uct.ac.za), [asconsulting@telkomsa.net](mailto:asconsulting@telkomsa.net), Postal Address: 29 Browns Grove, Sherwood, 4091.

**Date of this notice:** 28 January 2019

**Please note:** It is essential that you complete the registration form in Appendix A below. We urge you to register as an I&AP by 11 February 2019, in order to allow for the 30 day commenting period on the draft BAR.



**Figure 1: Sand hopper and dredgers at Durban Harbour "A" berth**



**Figure 2: Transnet's Ilembe dredger**

**APPENDIX A**

**PROSPECTING RIGHT APPLICATION FOR PROSPECTING ACTIVITIES FOR  
HEAVY MINERALS FROM DREDGED SAND OFFSHORE OF DURBAN,  
ETHEKWINI MUNICIPALITY, KWAZULU-NATAL**

Title:	First name:	Surname:	Initials:
Organisation:	Designation:		
Postal Address:			
Postal Code:			
Tel No:	Cell No:		
Fax No:	E-mail:		

I, the registered owner / representative of the organisation / property known as:

\_\_\_\_\_

Hereby verify that an information notice of the above development has been circulated to me and would like to be registered as an Interested and Affected Party for the abovementioned development. Please address the concerns expressed by me in the below text in the Basic Assessment process (feel free to add additional text on a separate page):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please provide more information regarding the project (Specify):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please add the following persons to your list of interested and affected parties:

Name:	Organisation:
Telephone:	
Postal Address:	
Name:	Organisation:
Telephone:	
Postal Address:	

Signed at \_\_\_\_\_ this \_\_\_\_ day of \_\_\_\_\_ 2018

Signature \_\_\_\_\_

**PLEASE SEND THIS REGISTRATION FORM AND ANY ADDITIONAL COMMENTS TO:**

**Environmental Assessment Practitioners:**

**Contact person:**

**Postal address:**

**Postal code:**

**Telephone:**

**Cell phone:**

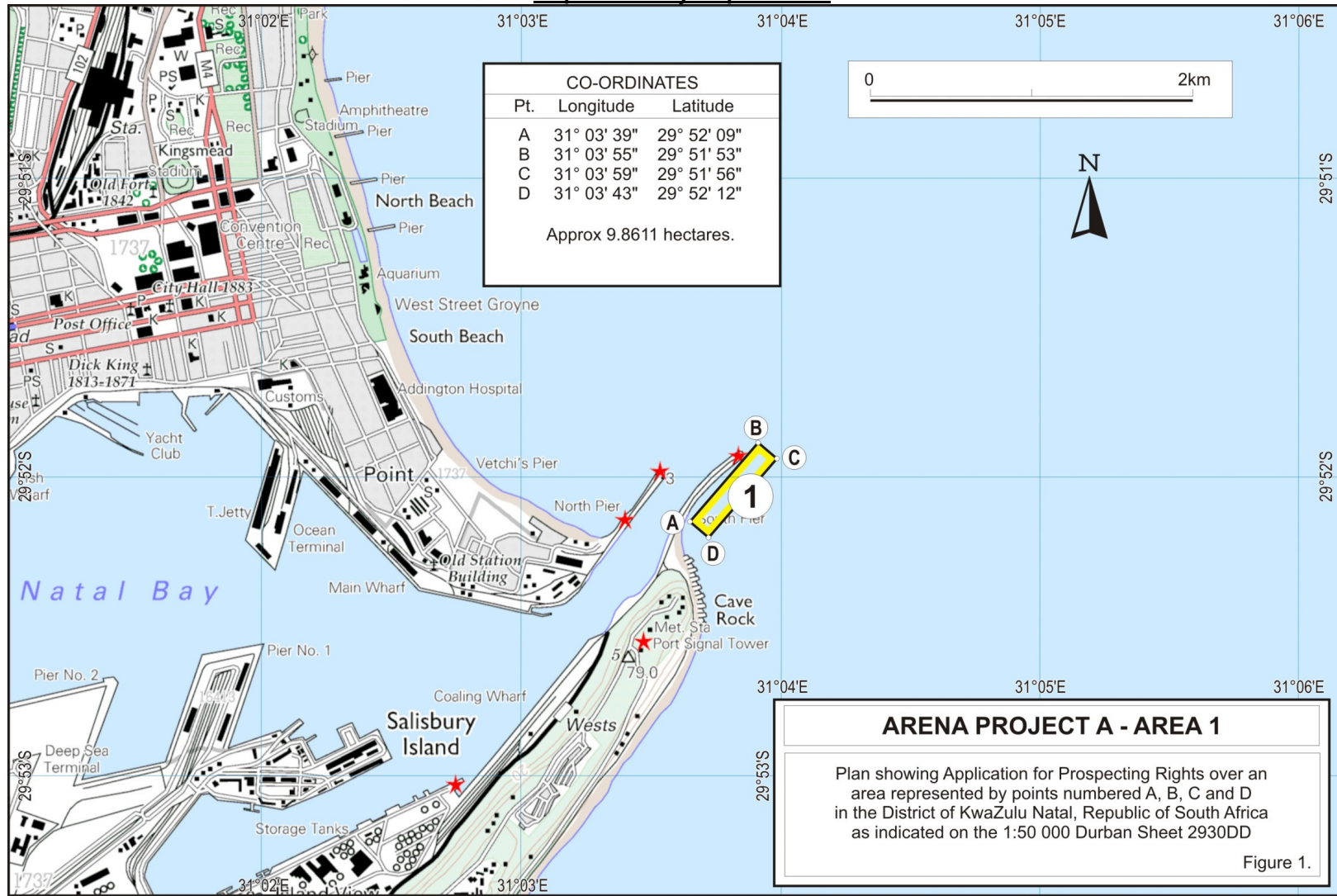
**E-mail:**

Alan Smith Consulting
Ms Lisa Guastella or Dr Alan Smith
29 Browns Grove, Sherwood, Durban
40917
+27 (0)31 2086896
+27 (0)82 8604043
<a href="mailto:lisa.guastella@alumni.uct.ac.za">lisa.guastella@alumni.uct.ac.za</a> ,
<a href="mailto:asconsulting@telkomsa.net">asconsulting@telkomsa.net</a>

*Thank you for your participation*



### Map 1: Locality Map – Area 1



## APPENDIX 8: REFERENCES

- Allan, D.G., 2012: The Waterbirds of Durban Bay – Current and Historical Population Trends, Durban Natural Science Museum *Novitates* 35, 74pp.
- Cawthra, HC, Neumann, FH, Uken, R, Smith, AM, Guastella, L & Yates, A. 2012: Sedimentation on the narrow (8 km wide), Oceanic current-influenced continental shelf off Durban, KwaZulu-Natal, South Africa, *Marine Geology*. Vols 323-325, 107-122, doi:10.1016/j.margeo.2012.08.001.
- Flemming, B.W., 1981. Factors controlling shelf sediment dispersal along the southeast African continental margin. *Marine Geology* 42, 259–277.
- Guastella, L.A. & Smith, A.M., 2018: Unlocking the “parking lot” – the impacts of dissipating tropical cyclones south-east of South Africa, *South African Society for Atmospheric Sciences (SASAS) Symposium*, Ballito, September 2018.
- Maitland, V., 2016: Underwater Heritage Impact Assessment for the Proposed Offshore Sandwinning for Developments within the Port of Durban, KwaZulu-Natal, Report 016/DBN/005, 40pp.
- Pilfrich, A. 2018. Marine and Coastal Ecology Assessment: ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR A PROPOSED EXPLORATION DRILLING CAMPAIGN WITHIN BLOCK ER236 OFF THE EAST COAST OF SOUTH AFRICA, Pisces Environmental Services (Pty) Ltd, 210pp.