



## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

Private Bag X447, Pretoria, 0001, Environment House, 473 Steve Biko Road, Pretoria, 0002

### APPEAL RESPONSE REPORT

**PROJECT NAME/TITLE:** Appeal against Environmental Authorisation granted to Mineral Sands Resources (Pty) Ltd (MSR) to extend mining operations at Tormin Mine

**PROJECT LOCATION:** Tormin Mine, West Coast, South Africa (Ten Beaches along the stretch of coastline north of the Mine and to an inland “strand line” mining area on the Farm Geelwal Karoo 262

**PROJECT REFERENCE NUMBER:** WC 30/5/1/2/3/2/1 (162 and 163 EM)

**DATE PROJECT/ACTIVITY AUTHORISED:** 7 June 2019

**DATE OF NOTIFICATION OF THE DEPARTMENTS DECISION:**

| DETAILS OF THE APPELLANT  | DETAILS OF THE APPLICANT   |
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| <b>Name of appellant:</b> Merle Sowman  | <b>Name of applicant:</b> Mineral Sands Resources (Pty) Ltd (MSR)  |
| <b>Appellant's representative (if applicable):</b>  | <b>Applicant's representative (if applicable):</b>   |
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## INTRODUCTION

1. This is an appeal against the approval of an integrated environmental authorisation (IEA) granted by the Department of Mineral Resources (DMR) in terms of section 24 of the National Environmental Management Act, 1998 (NEMA) and the National Environmental Management: Waste Act, 2008, read in conjunction with Regulation 21 of the Environmental Impact Assessment (EIA) Regulations for mining of heavy minerals (Ilmenite, Leucoxene, Rutile, Zircon, Monazite, Garnet and Staurolite) on remaining extent of the Farm Geelwal Karoo 262 and 10 Beaches adjacent to the remaining extent of the Farm Klipvley Karoo 153, Portion 4, 5, 6, and 7 of the Farm Klipvley Karoo 153, Farm Perseel Weskus 191, 192, 193, 194, 196, 197, 198, 199, 200 201, 202, 203, 204, 205, 206 and Portion 3 of the Farm Graauwduinen 152 in the Varhynsdorp Magisterial District, Western Cape Region.
2. The appellant is Associate Professor Merle Sowman, Head of Department at the Environmental and Geographical Science Department, University of Cape Town.
3. I am writing to lodge an appeal regarding the above Environmental Authorisation (hereafter Extension of Tormin Mine, West Coast, South Africa) on the following grounds:
  - 1) No consideration of cumulative impacts of this application and associated applications;
  - 2) Mitigation measures to reduce significant impacts are vague and unrealistic and rehabilitation cannot be guaranteed.

| GROUNDS OF APPEAL   | RESPONDING STATEMENT BY THE APPLICANT   | COMMENTS BY THE DEPARTMENT |
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| <p>1. The first issue concerns the failure to consider cumulative impacts especially given that there are several other applications to undertake prospecting and mining for heavy mineral resources along this stretch of coast from the northern bank of the Olifants estuary to the northern most beach associated with this application. Aside from the existing (and operational) Tormin mine there have been 6 applications that have been submitted over the past 4-5 years along this stretch of coast for prospecting and mining rights (see attached map). While some applications have been refused, others have been granted environmental authorization pending certain additional studies. Of grave concern is that each of these applications is being assessed on a project/application basis without undertaking a strategic environmental assessment of the coastal area in question and without considering the cumulative effects of these various applications as required by the EIA regulations.</p> | <p>The cumulative impacts, including cumulative marine and coastal ecology impacts, were discussed in Section 3 of the Impact Assessment Report (Appendix 10). As discussed in this section, the project area overlaps with marine diamond concessions and the associated Weskus surf-zone concession and admiralty strip area over which the Trans Hex Group (THG) holds long-term mining rights. THG has been actively prospecting and mining these beaches for some time and previously, the broader area has been subject to mining activities since the 1950s. The specialist notes that sandy beaches are highly dynamic environments and macrofaunal communities are resilient to change as demonstrated during long-term monitoring of beach mining in southern Namibia. The cumulative impact of beach mining was assessed to be of <i>low</i> significance.</p> <p>MSR would welcome a Strategic Environmental Assessment (SEA) and would support any initiative by the relevant authorities to commission such a study, since it is not the responsibility of MSR, as the proponent, to initiate a SEA for the stretch of coast north of the Olifant's River Estuary. MSR was granted Environmental Authorisation in terms of the National Environmental Management Act 107 of</p> |                            |

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| <p>In view of the fact that this area falls within a critical biodiversity area, is an important ecological corridor, incorporates a highly sensitive coastal and marine environment and is in the vicinity of the third most important estuary in South Africa, the Olifants estuary, it is incumbent on the responsible Environmental Minister to require a Strategic Environmental Assessment to be undertaken to ascertain the scope and scale of all mining (current and planned) and determine what level of mining would be environmentally sustainable.</p> <p>If one considers the cumulative impacts of this application as well as the other mining operations and applications on this west coast environment, in particular the impacts on biodiversity and marine ecology, and the increased pressure on municipal water resources, traffic impacts and loss of access to the coast, the benefits of proceeding with these various mining projects may not outweigh the losses and costs.</p> | <p>1998 and the Environmental Impact Assessment Regulations, 2014.</p>   |  |
| <p><b>2.</b> The Specialist Studies in the EIA indicate a number of impacts of high significance in particular in relation to marine ecology and terrestrial ecology. The EAP indicates that with mitigation the significance rating of all of the</p>  | <p>Marine and coastal ecology impact assessments were assessed by Anchor Environmental. Anchor Environmental is a recognised independent consulting company with vast experience in marine and coastal projects including numerous projects on</p> |  |

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| <p>impacts rated of high significance would shift to low or medium significance. However, it is well documented that adherence to conditions in Environmental Management Plans and monitoring of project activities once approval has been granted is weak in South Africa. Another issue of concern is that several of the mitigation measures listed are vague and unrealistic. For example, the specialist study identifies 24 key mitigation measures to reduce impacts of mining on the marine environment. These include various so-called mitigation measures which in reality are suggestions for environmentally conscious mining rather than mitigation measures. Measures such as 'minimise the disturbance of the intertidal and subtidal areas', weekly photographs of beach mining areas (dunes and cliffs) and cease work if deviations are recorded (until mitigation measures are implemented), 'avoid discharging tailings from a centralised point' are suggestions rather than mitigation measures and rely on ethical practices of the mine company and its staff and strict adherence to conditions in the EMP. In the section on assumptions, uncertainties and gaps in the EIA, the EAP states that they assume that "MSR will in good faith implement the agreed</p> | <p>the West Coast and for similar beach mining projects in Namibia, for example.</p> <p>Anchor Environmental identified marine and coastal ecology impacts of 'high' significance from beach mining (e.g. shoreline erosion and altered beach profiles, changes in macrofaunal community structure). However, with the implementation of mitigation measures as identified by the specialist, these impacts will be reduced to 'medium'.</p> <p>The mitigation / management measures identified by the specialist and those included in the Environmental Management Programme are not considered to be "suggestions", but are essential measures which must be implemented and are non-negotiable. These essential measures, and ongoing monitoring thereof, are conditions of authorisation.</p> <p>Anchor Environmental concludes that during beach mining, the beach habitat and its associated communities will be severely impacted. However, Anchor emphasise that:</p> <ol style="list-style-type: none"> <li>1. available evidence points to relatively rapid recovery of beach communities post disturbance (if rehabilitation and other mitigation measures are implemented);</li> </ol> |  |
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| <p>mitigation measures identified in this report” (SRK, 2018, pg 188). Given the collapse of the sea cliff at the present Tormin mine and the secrecy surrounding the reasons for the collapse and what measures were implemented to address the problem as well as the initiation of mining activities without proper approval (refer 24 G rectification process), it is difficult for the public to have confidence that the many mitigation measures listed in the EIA and the conditions contained in the EMPr will be meticulously adhered to. Furthermore, it is unlikely that the beach and coastal environment will be fully rehabilitated even where mitigation measures are implemented.</p> <p>The west coast north of the Olifants estuary remains one of the last unspoilt stretches of coast along the west coast of South Africa. The northern Cape coast has been devastated by mining activities and the costs of rehabilitation have been found to be exorbitant and not feasible. In view of the above, and South Africa’s commitments to the Aichi targets and Sustainable Development Goals, it would be unwise to allow this application to be approved without undertaking a Strategic Environmental Assessment and ascertaining whether mining</p> | <ol style="list-style-type: none"> <li>2. the communities in question are not considered unique to the region; and</li> <li>3. the environment is not in pristine condition due to historical and ongoing diamond mining.</li> </ol> <p>As discussed in the EIA Report, areas along the coast adjacent to and north of Tormin Mine have been disturbed from historic and current mining and/or prospecting activities. Mining companies have been operating in the area since the 1950s. THG has the right to mine the beaches north and south of Tormin Mine for diamondiferous gravel below the Valuable Heavy Minerals deposit, down to the bedrock. The Namakwa Diamond Company mined the adjacent inland areas between 2004 and 2006.</p> |  |
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| at the scale and scope proposed by MSR is in the best interests of the environment and society. | We additionally note that the description of the coastline as “unspoilt” is erroneous given the fact that mining activities has taken place for at least the last 50 or so years. |  |
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#### ARR comments by Case Officer

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Date:

Signature:

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#### Approved by Supervisor

Name & Surname:

Date:

Signature:

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