



Date: 9th July 2018

South African Heritage Resources Agency
Maritime and Underwater Cultural Heritage Unit
PO Box 4637
Cape Town 8001
Via e-mail

Attention: Briege Williams and Lesa Le Grange

EXTENSION OF TORMIN MINE, WEST COAST SOUTH AFRICA (MAY 2018): CASE 12519

Dear Briege and Lesa,

I refer to the Tormin Mine expansion EIA that I have been involved with for some time and which recently had a second "Interim comment" issued the contents of which I was hoping you could re-assess for the reasons laid out below.

A NID was submitted to HWC and the project was registered on SAHRIS due to the beach mining component. HWC requested an integrated HIA with specialist Archaeological and Palaeontological studies. At the time, the initial project manager omitted to submit the project to SAHRA and so our first submission was of the scoping HIA under case number 11244 for which we received an interim comment from SAHRA on 11 July 2017.

The interim comment essentially indicated the possibility for shipwrecks or associated material that could be uncovered during beach mining and went on to say: *"The nearest recorded wreck is that of the Catherine Isabella which lies approximately 18kms south of Beach 1 off Robeiland. While there are no known shipwrecks within the development area, there is always the potential for unknown wrecks or shipwreck material to have been washed up and buried along the shoreline. The likelihood of any shipwreck material being present within the development area should be explored as part of the HIA conducted by a heritage specialist as part of the EIA. Should anything of archaeological or paleontological significance be exposed during the sand excavation, work should cease immediately and SAHRA informed of its discovery."*

In the circumstances, this seemed to be an appropriate manner of dealing with the situation, and is in line with what is usually requested to deal with buried terrestrial heritage resources, be they archaeological or palaeontological.

Subsequent to receiving this comment we have written the HIA in which we devoted a section to potential shipwreck and maritime heritage, following broadly the recommendation that, if anything of a heritage nature was found, it would be reported to the Archaeologist and SAHRA for evaluation.

Environmental Authorisation for the expansion of the mine was refused by DMR at Scoping stage citing the undertaking of a section 24G process for the rectification of unlawful activities. SAHRA was notified of this turn of events and on 8 December 2017 issued a letter in which inter alia the following was noted: *"SAHRA would like to thank you for the notification of Refusal of Environmental Authorisation for the Proposed Extension of Tormin Mine, West Coast, South Africa. SAHRA requests that we are notified should any appeals be lodged regarding the decision. Should the decision be overturned, the comment issued by SAHRA on 11/7/2017 still applies."*

The EIA process was then restarted and the Scoping report resubmitted. The project remains essentially the same as before. SRK, who made the new submission of the Scoping report to SAHRA, were informed that it was a new process and that a new case must be opened. A new case number 12519 was created and SAHRA again issued an interim comment on 28 May 2018. Although the project has remained much the same to what was described in 2017, the new interim comment included new requirements that seem to contradict the conclusions of the letter of 8 December 2017 i.e. *“....Should the decision be overturned, the comment issued by SAHRA on 11/7/2017 still applies.”*

The new interim comment of 28 May 2018 noted: *“A new application for EA for the proposed extension of Tormin Mine has now been submitted. This Scoping Report, which forms part of the new EIA process, is largely the same as the Scoping Report dated April 2017 (my emphasis) and previously released for stakeholder comment. The scoping report for the 2017 Environmental Authorisation was submitted to SAHRA for comment in July 2017 under the case Number 11244. As the 2018 Scoping Report is part of a new application SAHRA required that a new case be created and submitted on SAHRIS for comment.”*

The new comment however went further than the previous (as recorded in paragraph 3 of this letter) and continued: *“While there are no known shipwrecks within the development area, there is always the potential for unknown wrecks or shipwreck material to have been washed up and buried along the shoreline. The act of excavating the beach and building sand berms is highly destructive and while the area may have been previously disturbed, heritage material can exist metres under the current surface due to the dynamism of the coastal zone. The likelihood of any shipwreck material being present within the development area must be explored. Therefore it is required that an Underwater Heritage Impact Assessment (UHIA) is carried out by a suitably qualified maritime and underwater cultural heritage specialist as part of the Environmental Impact Assessment. The UHIA must include an in-depth survey of the affected area, paying particular attention to the coastal areas between the high and low water marks (i.e. the intertidal zone), indicating the significance of each heritage resource in the affected area, and making recommendations that seek to minimise negative impacts.”*

While we do not dispute the conclusion that maritime material may have washed up and been buried on the shoreline, given what we know of this piece of the coastline this is a low possibility. There are no obvious visible traces of ship related material on the beaches that we have seen in the course of looking at the beach access roads.

Mining companies have been operating in the area since the 1960's and the Trans Hex Group (THG) has active rights to mine the diamondiferous gravel on the beaches down to the bedrock, as indicated on the attached figure showing the extent of THG's approved Mining Right areas (Concession Area 11 and the “Weskus” Admiralty Concession, amongst others) as determined from THG's Environmental Management Programme (2005).

According to the Trans Hex EMPR (2005), Concessions 11(a), 12(a) and 13(a) occupy a coastal strip from 31.49 m seaward of the LWM to approximately 1000 m seawards of the HWM north of the Olifants River mouth. The associated surf-zone and admiralty strip concessions Weskus, Bethel, Strykloof, De Punt, Papendorp and Hollebakstrandfontein occupy a narrow coastal strip ~70m to ~300m wide from 31.49 m seaward of the LWM to the edge of the adjacent farm boundaries, from ~1.5 km north of Jakkalshok to Doring Bay. At present, all mining operations conducted by Transhex on the above-mentioned concessions take place below the HWM only, although suggestions are that they have been, and are mined.

Trans Hex undertake three methods of exploitation of the diamondiferous gravels:

- Beach mining – removal of beach sand to reach the bed rock;
- Shore-based mining – use of diver-assisted suction pumps to extract gravels from subtidal gullies and potholes to ~10m;
- Vessel-based mining – diver-assisted suction pumps for deeper areas ~25m.

The Namakwa Diamond Company mined the adjacent inland areas between 2004 and 2006.

Coming at this late stage however, the requirement for a specialised UHIA has come as something of a surprise and is likely to result in significant delays if a detailed physical beach survey is required. As far as we can determine then, the only way of really knowing what is potentially buried is to undertake a magnetometer survey, which apart from requiring a fair bit of time to do, will probably result in substantial additional cost.

We feel that the original comment, i.e. that should anything of archaeological (including maritime) or paleontological significance be exposed during the sand excavation, work should cease immediately and SAHRA be informed of its discovery (for further assessment), is the more practical way of dealing with this matter where the likelihood of finding maritime remains is assessed to be improbable.

We have included paragraphs below from the Tormin Draft AIA which are integrated into the HIA along with SAHRA's initial comments. I thought these may be useful for you in re-assessing the interim comment. If there were additional measures with respect to monitoring that SAHRA feels should be included, we still have time to do that in the AIA/HIA.

That being said, I would please request that the requirements of the interim comment dated 28 May 2018 be reviewed.

Yours sincerely

David Halkett

For: ACO Associates

Excerpts from the Draft AIA

Beach mining sites

No pre-colonial archaeological resources are anticipated here as the sands are constantly overturned and replenished during storms, although there is a low possibility of finding maritime resources (shipwreck material).

No known coastal wrecks are marked on the relevant 1:50 000 maps of the coastline at any of the beaches in the study site (3117BD Baieveli, 3118 CA Papendorp, 3118 AC Landplaas).

The literature search indicated that a heritage impact assessment of the Ibhubesi Gas pipeline (Hart and Kendrick 2016) involving the construction of a gas pipeline from an offshore gas field off northern Namaqualand to supply natural gas to potential receivers at Saldanha Bay and Cape Town had inputs on the maritime component by the African Centre for Heritage Activities. While the pipeline itself does not come close to the coast, the assessment of shipwrecks was quite broad and therefore has application here.

Information on wreck locations is generally poor and consultation with Jaco Boshoff (Iziko) as well as input from maritime archaeologists at African Centre for Heritage Activities (ACHA) has revealed that while wrecks are known to exist along the west coast, particularly in the area of the Vredenberg Peninsula to St Helena Bay, the historic records are very inaccurate in terms of precise positional information.

The database used for the Ibhubesi study reflects the estimated positions of wrecks where the provenance is known or can be roughly estimated. Information is drawn mainly from ACHA's own records and the National Shipwreck database. In very few instances do old accounts/records provide co-ordinates, and so often shipwrecks are located based on descriptions such as estimated bearing and/or distance from a known shore based landmark or island.

Despite the inaccuracies of the data, we note that only one wreck is located offshore adjacent to the relevant section of coast proposed for beach mining expansion. In December 1840, the brigantine named Australia, caught fire, exploded and sank ~24 km north of the Olifants River and ~10km offshore (S31.562561° E17.947147°). Some debris from the Australia might have been driven onshore but the distance from shore she went down means lighter debris would in all likelihood be very widespread.

In their comment on the scoping report (Appendix D), the case officer (Ms B Williams) noted that the nearest recorded wreck is that of the Catherine Isabella which lies approximately 18 kms south of Beach 1 off Robeiland but further indicated that there are no known shipwrecks within the development area.

As it is impossible to predict the possibility of finding shipwrecks at any of the beach mining locations, if any such remains should any be found, they should be reported to SAHRA as a matter of course.

The significance of any remains, if found, would be dependent on the type and age of the wreck. Older wrecks (15th – early 19th century) are of high significance and later 19th – 20th century wrecks are generally of lower significance.

Potential Impact: Loss of buried maritime archaeological resources during mining of the beaches

Although there is no information suggesting that maritime remains will definitely be located on any of the beaches, it is impossible to predict likelihood due to inaccuracies of the data pertaining to shipwrecks. We cannot however ignore the possibility of something occurring.

As it is impossible to predict the possibility of finding shipwrecks at any of the beach mining locations, should any be found, they should be reported to SAHRA as a matter of course.

The significance of any remains, if found, would be dependent on the type and age of the wreck. Older wrecks (15th – early 19th century) are of high significance and later 19th – 20th century wrecks are generally of lower significance.

The impact without mitigation is assessed to be of **low** significance and with the implementation of mitigation remains **low** but with a positive outcome (**Error! Reference source not found.4**).

Table Error! No text of specified style in document.-1: Significance of loss of maritime archaeological resources during mining of the beaches

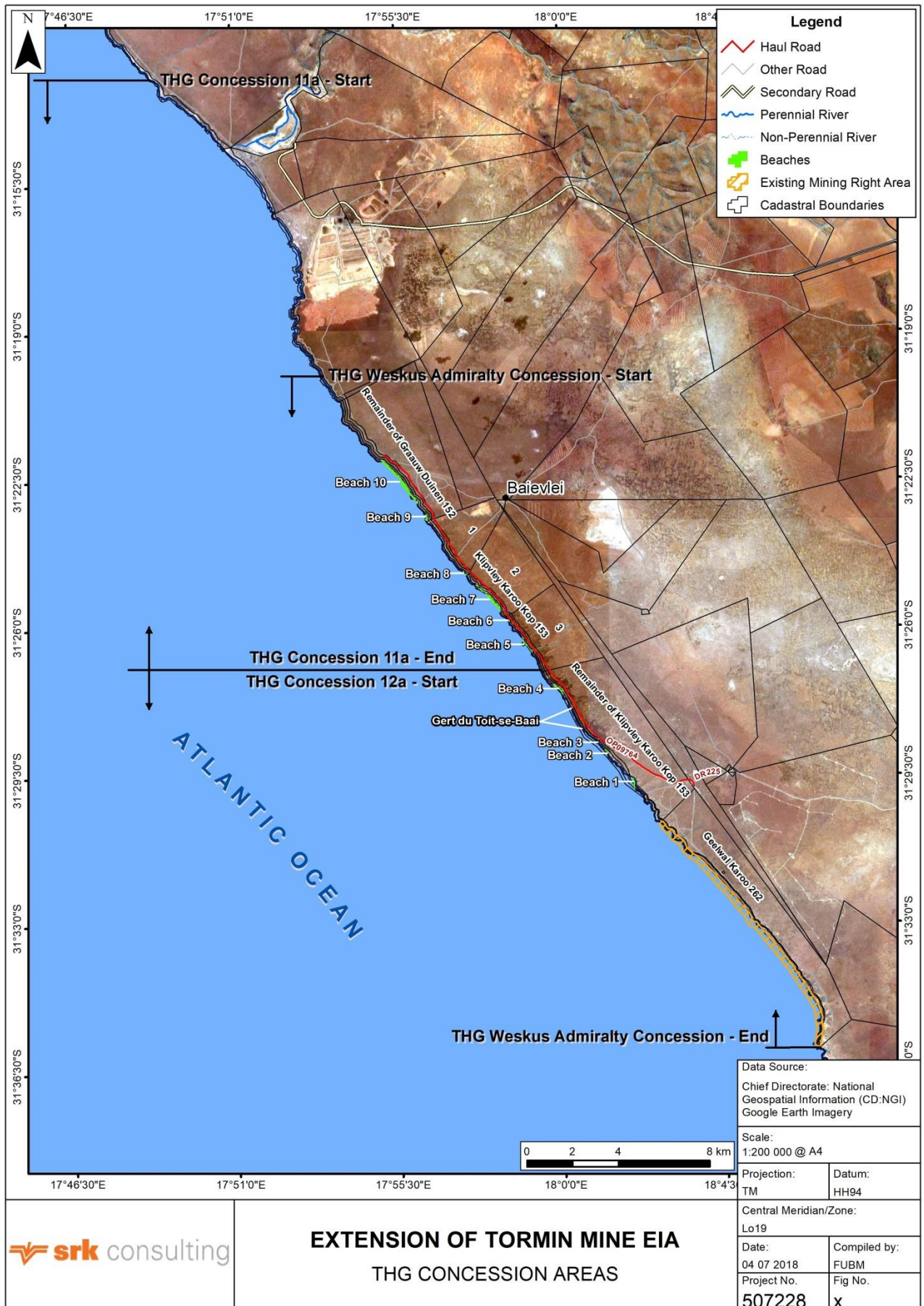
	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without mitigation	Local 1	Medium 2	Long-term 3	Medium 6	Improbable	LOW	- ve	Low
Essential mitigation measures:								
<ul style="list-style-type: none"> • Machine operators to be alerted to possibility of finding wreck material; • Establish protocol for what to do if any material found; includes reporting the find/s to SAHRA; • Maritime archaeologist must assess the material and propose the way forward; and • If required, collect/excavate any maritime archaeological resources that are exposed using appropriate methods to record provenance. 								
With mitigation	Local 1	Low 1	Long-term 3	Low 5	Improbable	VERY LOW	+ ve	Low

FINDINGS AND RECOMMENDATIONS

Beach mining

There is unlikely to be any impact to Pre-colonial remains due to the intertidal location. However, we are unable to ignore the possibility that unknown shipwreck material may occur. The incomplete nature and inaccuracies of the National shipwreck database prevent more certainty with respect to maritime heritage. We have suggested that machine operators be made aware of what to look out for in the course of the beach mining, and if any material is seen, it must be reported to supervisors who in turn should report the matter to SAHRA. A maritime archaeologist should assess the material (initially via photographic material) to assess if site visit is required.

If shipwreck material is located, its value will depend on its age, and state of preservation and/or the association with related material (cargos etc). Material may be collected if deemed necessary.



EXTENSION OF TORMIN MINE EIA
THG CONCESSION AREAS

Data Source: Chief Directorate: National Geospatial Information (CD:NGI) Google Earth Imagery	
Scale: 1:200 000 @ A4	
Projection: TM	Datum: HH94
Central Meridian/Zone: Lo19	
Date: 04 07 2018	Compiled by: FUBM
Project No. 507228	Fig No. X

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Revision: A Date: 06 07 2018