



3 June 2014

Western Cape Heritage Resource Council

Private Bag X9067

CAPE TOWN,

8000

Reference No: WC 30/5/1/1/2/10199PR

Attention: Ms T v Niekerk

Dear Sir/Madam

NOTICE OF ENVIRONMENTAL MANAGEMENT PLAN CONSULTATION PROCESS FOR A PROSPECTING RIGHT APPLICATION

Mineral Sands Resources Pty Ltd (MSR) submitted a prospecting right (PR) application to the Department of Mineral Resources (DMR) in May 2014 to prospect for garnet, heavy minerals, leucoxene, monazite, rutile and zircon on an off-shore area situated approximately 1 km seaward from the low-water mark of the sea adjacent to the farm Geelwal Karoo 262 to a line approximately 10 km out to sea, in the Magisterial District of Van Rhyndorp in the Western Cape Province (locality map attached to the letter).

The DMR issued an acceptance letter to MSR and allocated a DMR reference number to the application: WC 30/5/1/1/2/10199 PR. The acceptance letter directs the Company to consult with Interested and Affected Parties (I&APs) and Government Departments by 18 June 2014 and to compile an Environmental Management Plan for submission on 18 July 2014.

The proposed exploration programme is designed to evaluate the distribution of heavy mineral sands in the PR area and to ascertain the extent and grade of the deposits both vertically and laterally.

Marine mineral sands exploration relies heavily on non-invasive geophysical prospecting activities. Initially this will involve a review of existing information and past survey results for these potential heavy mineral deposits. The prospecting will then follow several phases from



grab sampling to geophysical surveys. If this work indicates potential, a vibracoring programme will define grade and tonnages of specific areas.

Numerous prospecting and feasibility studies have been conducted on the Geelwal-Karoo heavy mineral sand deposits over the years. Results of the initial geological evaluation of the deposits have been published in MacDonald & Rozendaal (1995). Past information sources will be reviewed to provide a context for interpretation of results conducted under this application. The significance and grade of the Geelwal beach deposits has indicated the offshore potential for heavy mineral sands in the sea floor sediments.

This specialist prospecting method involves work being undertaken from aircrafts and survey vessels using remote sensing techniques. No surface disturbance will take place during this phase and therefore no rehabilitation will be required.

The size of the grab samples are considered very small and would not impact on the continuously recycled movements of the sea floor sediments.

The prospecting activities will consist of the following phases:

- **Phase 1: Literature Study (Estimated Duration 1 year)**

This will involve the identification, collation and review of all literature related to the previous, exploration, mining and research of the sea floor sediments in the prescribed area. The area has been mined for diamonds over many years and a considerable amount of information exists on the marine conditions and sediment dynamics.

This information will be used to determine the extent and viability of heavy mineral concentrations in the sea floor sediments.

- **Phase 2: Geophysical Survey (Estimated Duration -1 year)**

Pending the results of Phase 1, all available geophysical information will be reviewed and evaluated. Heavy minerals are magnetic and slightly radioactive and can be mapped accordingly using remote sensing techniques. This does not involve direct contact with the sea floor and the sea floor sediments.



The geophysical survey will be in the form of a low level airborne magnetic survey. The results from this will identify potential enriched areas within the PR area that can be targeted for specific sampling.

- **Phase 3: Grab sampling and analysis. (Estimated duration 1 year)**

Following the outcome of the Phase 2 programme, grab samples of the sea floor sediments will be taken. The areas of high magnetic potential will be sampled using a small grab lowered from a boat. The samples will be no more than 20 kg each. Sample sites will be surveyed and the actual samples will be analysed in detail to define the mineral types and ratios.

- **Phase 4: Detailed Geophysical Surveys. (Estimated duration 2 years)**

With the combined earlier exploration results a detailed geophysical survey will be undertaken. A combination of single beam bathymetry, side scan sonar and boomer sub bottom profiling will be recorded from a survey vessel/boat.

The results will indicate sea floor sediment types, thickness, distribution and concentrations of heavy minerals.

Your comments on the project are imperative for the successful compilation of the EMP and identification of the impacts and mitigation measures. In order for us to meet the stringent timelines from the DMR your comments should reach our office by no later than 14 June 2014.

Should you wish to receive additional details on the project, please contact Lizette Venter or Abongile Dweba via:

Tel: 021 417 1700

Fax: 021 425 2341.

E-mail: Lizette@erakis.co.za or Abongile@erakis.co.za.

Yours sincerely,

A Lashbrooke
Director