

PROJECT UPDATE #1 (SEPTEMBER 2020) GALALAR SILICA SAND PROJECT

INTRODUCTION AND FREQUENTLY ASKED QUESTIONS

INTRODUCTION

On 14 January 2020, Diatreme Resources submitted a voluntary Environmental Impact Statement (EIS) application for the Galalar Silica Sand Project (GSSP or the Project), which was approved by the Queensland Department of Environment and Science (the department) on 5 March 2020.

The GSSP proposal involves the following –

- Construction and operation of a greenfield silica mine and associated infrastructure.
- Extraction of up to 950,000 tonnes per year of silica sand.
- Construction and operation of a barge loading facility, either at Nob Point (with construction of an associated haul road) or at Cooktown on the Endeavour River.
- Screening and wet processing of silica sand on site.
- Product stockpiling on site and at the barge loading facility.
- Trucking of product from the mine to the barge loading facility.
- Transhipment of product from barges to an anchored ship for export.

Diatreme submitted the draft Terms of Reference (TOR) for an EIS for the Project to the department on 3 July 2020. The draft TOR outline the requirements and scope of studies that must be undertaken by Diatreme Resources as part of the future EIS.

The draft TOR, a public notice and a description of the project (the Initial Advice Statement) are available online on the department's website:

<https://www.qld.gov.au/environment/pollution/management/eis-process/projects/current-projects/galalar-silica-sand-project>

Further information is also contained at Diatreme's website:

<https://www.diatreme.com.au/eis-process/>



FREQUENTLY ASKED QUESTIONS - #1

What are the draft Terms of Reference (TOR)?

The draft TOR outline the requirements and scope of technical studies that must be undertaken by Diatreme Resources as part of the EIS for the GSSP. These include environmental studies as well as assessing implications on social and economic values.

The GSSP has not been approved. Approval of the project (including the granting of a mining lease by the Queensland Government) will be dependent on the outcomes of the EIS process.

What is the current public submission period related to the EIS?

The EIS has not yet been prepared, though a number of technical studies have commenced. The draft TOR for the EIS are currently available for public review and comment from 27 July 2020 to 14 September 2020.

If there are additional or specific issues that the community wants addressed in the draft TOR, the current public comment period is aimed at seeking this feedback. The formal submission process is being managed by the Queensland Department of Environment and Science (DES) with details here:

<https://www.qld.gov.au/environment/pollution/management/eis-process/projects/current-projects/galalar-ilica-sand-project#eis-process>

Submissions on the draft TOR should be made to the Department directly as the entity managing the EIS process.

Why are public submissions being sought?

The purpose of this step in the EIS process is to make affected and interested persons aware of the GSSP proposal and to invite the public to review and provide submissions on the draft TOR, which outline what topics and issues the EIS must cover and contain.

However, this is only the first stage of a broader stakeholder engagement programme on the draft EIS that will be occurring in parallel with the preparation of the document.

The public will have the opportunity to make a submission on the actual draft EIS document once it is prepared (this is expected in mid-2021).

Why did only some people receive notices in the mail about the submission period on the TOR?

The public notice about the GSSP TOR appeared in *The Australian* newspaper on 25 July, 2020 as a newspaper circulating nationally.

At this early stage of the EIS process, the focus of local consultation is required for 'affected' and 'interested' persons as defined by the *Environmental Protection Act 1994* under which the EIS is being developed.



Given the location of the proposed GSSP at Cape Bedford, in addition to notifying the two local government entities as 'affected' persons (Hope Vale Aboriginal Shire Council and Cooktown Shire Council), the Project team identified all properties along the road route from the proposed mine at Cape Bedford to the boat ramp at Marton in Cooktown.

Letters containing a copy of the notice were mailed out to these residents as potentially 'interested persons'. Copies of the notice were also sent to regional stakeholder groups and bodies identified by the Queensland Government representing conservation, fishing, tourism, and indigenous interests in the region.

Notwithstanding this process, anyone can download the initial documentation about the GSSP and make a submission if they so choose and interested parties are encouraged to contact Diatreme directly on either manager@diatreme.com.au or via the Project 1800 512 189 number for more information.

What is the involvement of Traditional Owners in the Galalar project?

Under a partnership with Diatreme Resources, Hope Vale Congress (RNTBC) on behalf of affected native title holders will hold a 12.5% stake in the project, ensuring that the economic benefits flow directly to the region's Traditional Owners for their long term benefit if the project is approved.

It is acknowledged that the land where the proposed mine is situated has significance to First Nation peoples and a key focus of the EIS will be on identifying and understanding Aboriginal cultural heritage values and associations with the land and adjoining waters.

What is the difference between the exploration permit area and the mine site?

Diatreme Resources holds an Exploration Permit for Minerals (EPM) issued by the Queensland Government covering a large area of approximately 542 square kilometre (54,200 ha) near and adjacent to Cape Bedford.

The area that is proposed for mining that is the subject of the EIS will be a much smaller and defined area of 535 hectares within the EPM area near Nob Point. This represents only about 1% of the EPM area.

What effect will the mine have on adjacent land, sea and waterways?

The EIS process will involve comprehensive environmental studies to determine the extent to which the proposed mining and associated export operation effect the environmental values of the land, sea and waterways.

It is planned that the mine site will have extensive buffer areas proposed to protect waterways, wetlands, and important vegetation communities.

The mining operation is not proposed to extend into or below the natural groundwater table and any indirect impacts on surface water and groundwater both within and adjacent to the mine site will be comprehensively assessed as part of the EIS.



The mining lease area is near the coast at Nob Point, but there is no mining activity on or around any beach or any tidal areas. The actual proposed mining activity takes place approximately half a kilometre from the beach area. All vegetation in this transition zone will be strictly protected.

The Project will be closely regulated by Government approval processes at the Commonwealth, State and local government level, which will require best practice environmental management approaches are undertaken.

What are the export options being considered?

The EIS intends to examine two options for export of the mined silica sand by sea.

One is through the establishment of a barge ramp close to the proposed mining operations at Nob Point, while the other is through expansion of the Marton boat ramp site on the Endeavour River in Cooktown. Diatreme's preferred export option is via Nob Point (refer below).

Both options will involve barging the covered or containerised silica sand to a larger ocean-going vessel for transshipment through the designated shipping lanes of the Great Barrier Reef region.

The EIS will examine several locations where the larger vessel could be anchored, including immediately offshore from the mine site as well as within or adjacent to existing port limits (at either the Port of Cape Flattery or the Port of Cooktown, which are both designated ports).

What is the preferred export option?

Diatreme's preferred export option is through the establishment of a barge ramp at Nob Point. This will cause only a very small development footprint and will reduce levels of community disturbance compared to the Endeavour River trucking and barging option.

It is intended that the Nob Point barge ramp would also be designed for joint community use and could be utilised for reef monitoring and active reef maintenance programs.

Transshipping can occur within the Cape Flattery designated port area to the north or immediately offshore from the mine site.

Are there human health risks from silicosis associated with the Project?

It is acknowledged that there may be community concern with the human health implications involving the stockpiling and transportation of silica sand. This is a matter that will be addressed and confirmed in the EIS.

The silica sand, in its natural form as mined and during proposed transport over land and water as part of the GSSP, is inert sand with a typical particle size that does not represent a human health risk as dust or as air emissions.

This is in contrast to silica dust (crystalline silica) which is more generally associated with further processes after mining, such cutting or grinding of manufactured quartz products and is harmful when inhaled into the



lungs. This respirable quartz is approximately 100 times smaller than a typical grain of beach sand which Diatreme Resources is looking to mine and process at Galalar.

Will the project affect the use of Elim Beach and existing beach shacks?

No. At its closest point the proposed mine is over 3.5 km from Elim Beach, although the mine infrastructure area itself is about 7 km away. By road the distance is nearly 18 km (the turnoff from Beach Road to the proposed mine is about 10 km from Elim Beach). The operation will have no effect on any beach shacks at Elim Beach or the campground.

Will public access to the beach adjacent to Nob Point be affected?

The public road that goes from Hope Vale to the beach near the mine (to a point known locally as 'The Church') would remain open, even though it passes through the proposed ML. There would need to be appropriate safety measures and management to make sure that road users and mine traffic are not in conflict, but otherwise all existing rights to access the beach at this location are proposed to remain.

What are the benefits of the Project for the local community?

An independent economic study by Cummings Economics (excerpts on Diatreme web site – ASX releases) estimates the Project has the potential to generate more than 110 equivalent full-time equivalent jobs including flow-on effects, becoming Hope Vale's largest employer outside local government.

The Project is expected to inject around \$24 million in the construction phase and up to \$42 million in its operation, with the majority of expenditure to occur in the region.

Diatreme's priority is on employing local community-based workers including traineeships and apprenticeships in a drive-in, drive-out operation, with the Company also putting priority on local suppliers.

How will the silica product be used?

The Project will produce a refined and processed premium-quality silica sand, suitable for the fast-growing solar panel manufacturing industry and other high-tech applications. Demand for solar energy continues to increase, with the World Economic Forum estimating that the world will add 70,000 solar panels every hour in the period through to 2022.