
2. PROJECT DESCRIPTION

As state in the previous section of this report, is awarded a tender contract to compliment activities of the CUMET project by procuring, installing and operating a Floating-Transshipment-Unit (FTU) and to transfer the ore from a barge onto large vessel offshore.

The proponent proposes to strictly undertake their activity from the port area at Lüderitz, and these entails the proposed installation and operation of the transshipment facility (consisting of a floating crane and two barge facilities each with a capacity of between 8000 – 10 000 mt) from quayside of Lüderitz Port. In total the facility is designed and envisaged to be handle a volume of about 2.2 Mill ton in order to accommodate potential for growth.

2.1. SITE SELECTION

On a site specific, Alliance LLC proposes to install the transshipment platform within the Lüderitz Harbour and operate the Barge vessel between the port quay (corner GPS coordinates presented in **Table 3**) and the transshipment facility (**Figure 5**). The site selection process took into consideration key site selection factors such as land availability, proximity to sensitive receptors, site accessibility, topography, risks, current land use.

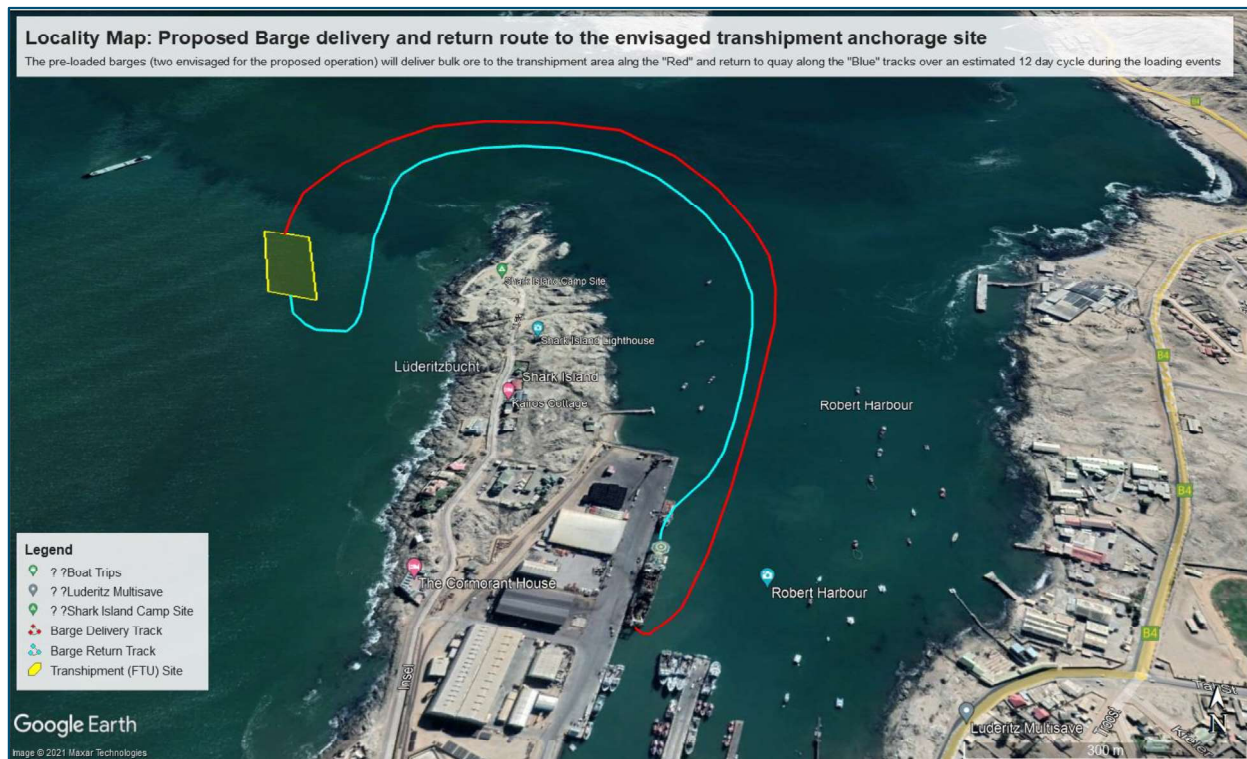


Figure 5: Illustration of the proposed barge delivery and return route from quay to the transshipment facility

Table 3: Corner coordinates of the proposed development site

Corner point	Latitude	Longitude
A – Lüderitz Port Point 1	-26.640786°	15.152960°
B – Lüderitz Port Point 2	-26.641257°	15.152842°
C – Lüderitz Port Point 3	-26.641326°	15.153498°
D – Lüderitz Port Point 4	-26.640888°	15.153682°

The Namibian Ports Authority (NamPort) has confirmed readiness to host the proposed operations and offered to avail two of its shore cranes as support infrastructure to the proposed activity. Additionally, Alliance LLC is sourcing a suitable transshipment facility to be installed at the Port of Lüderitz quayside to increase bulk vessel loading capacity.

2.2. KEY COMPONENTS OF ALLIANCE LLC OPERATIONS

The core activity will be the hatch-to-hatch transfer of bagged / bulk mineral ore between the draught deck cargo and an Ultra/Supramax vessel. This will be carried out by using a floating transfer unit, either floating cranes or Transfer vessels (preferably a transshipment barge crane). The proposed operation is therefore strictly for the operations within the Port area and in compliance with other existing authorization, and entails a combination of the current loading process and the floating transshipment barge crane.

Alliance LLC proposes to strictly undertake its activity from within the harbour at Lüderitz, and these entails the proposed installation and operation of the transshipment facility (consisting of a floating crane and two draught deck cargo each with a capacity of between 8000 – 10 000 mt) from quayside of Lüderitz Port. It is envisaged that in total 180 000 tons (90 000 ton per Ultra/Supramax vessel) of bulk ore will be handled per month, consisting of two loading cycles of nine (9) days per cycle. The loading at requires approximately ~ 1.5 day per draught deck cargo and barges will be utilized equating to three (3) days of quay loading and a cumulative of twelve / thirteen (12 / 13) days of docking of the FTU at anchorage site a month.

The proposed CUMET project activity’s EIA, which is conducted by separately Geo Pollution Technologies includes aspects of the development that will take place within port bounds i.e.

- arrival of a truck or train at the port,
- offloading of manganese ore within a purpose built warehouse for stockpiling,
- loading of a barge (or draught deck cargo) berthed at the quay wall, and
- all administrative and ancillary tasks required for efficient and reliable operations.

While the complementary transshipment operations, covered in this environmental assessment are strictly confined to the off-shore activities within the harbour i.e. firstly, Alliance LLC shall source a suitable transshipment facility to be installed at the Port of Lüderitz deep sea to increase bulk vessel loading capacity.

Secondly, the main loading component shall include the following steps:

- After completion of loading the draught deck cargo, the pre-loaded draught deck cargo will be propelled to the anchorage area (FTU) for transfer / loading onto the Ultra/Supramax vessel