Project description

In order for South Africa to further increase its iron ore export, the Port of Saldanha Iron Ore Terminal needs to be expanded. This is to accommodate the increased frequency at which the trains will deliver iron ore to the Port, the increased frequency of ships docking at the Port as well as the need to ensure the efficient transfer of iron ore onto ships.

The current capacity at the Iron Ore Terminal is limited by the tippler capacity, available stock yard area; and the number of stacker-reclaimers, ship-loaders and berths. Transnet’s proposal therefore addresses these limitations.

Port expansion components

The proposed Port Iron Ore Terminal expansion covers the following main components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Existing Capacity (60 Mtpa)</th>
<th>Proposed Expansion Capacity (88 Mtpa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tippler Units</td>
<td>1st, 2nd (3rd proposed; separate EIA process)</td>
<td>4th</td>
</tr>
<tr>
<td>Stock Yard</td>
<td>About 4.8 million tons</td>
<td>About 7 million tons</td>
</tr>
<tr>
<td>Stacker-reclaimers</td>
<td>4</td>
<td>2 additional</td>
</tr>
<tr>
<td>Berths</td>
<td>2</td>
<td>1 additional</td>
</tr>
<tr>
<td>Ship Loaders</td>
<td>2</td>
<td>2 additional (on the new berth)</td>
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</tbody>
</table>

Other components and activities that form part of the iron ore terminal expansion include:

- New rail lines to and from the 4th tippler
- Conveyor system extensions
- Extension of stockyard by reclamation (of man-made pond and dune area)
- Stockyard service road extension
- Stockyard wind barrier/wall (potential)
- Electricity infrastructure upgrade
- Seawater desalination plant expansion (to be confirmed)
- Berth and inner navigation channel dredging
- Use of dredge material for infill

Note: At this stage all Transnet’s proposals are based on pre-feasibility investigations and are therefore preliminary and may be adjusted during detail design.

4th Tippler

Each tippler consists of three main components:
1. Rail Tracks (short sections)
2. Tippler
3. Dust Extractor and Filter Unit

The tipplers have the function to off-load the iron ore from the trains at the port. A section of the loaded train known as a train rake moves through the tippler unit. The tippler takes two wagons at the same time, turns them upside down and thereby tips the ore out into a bunker underneath. From the bunker the ore is moved towards the terminal stockyard and/or loading area via a conveyor belt.

Dust is generated when the trucks are tipped out and therefore each tippler unit is provided with a dust extractor and associated filter unit to reduce dust pollution. The dust waste from the filter is disposed to landfill, but opportunities to sell the product as pigment or filler arise periodically.

Currently there are two tippler units. A 3rd tippler unit is proposed to provide operational security for the current iron ore export capacity as it would allow one of the existing tipplers to be taken off-line for maintenance or overhauling. (The application for Environmental Authorisation for the 3rd tippler does not form part of the overall capacity expansion and is being undertaken separately.) The 4th tippler forms part of Port Expansion.

The proposed site for Tippler 4 (and Tippler 3) is to the east of the rail tracks leading to Tippler 1 and Tippler 2.