MAMATWAN MINE TAILINGS FACILITY INFORMATION



Tailings Storage Facility (TSF) Information Summary (GISTM Requirement 15.1 B1 & B5)

Our South Africa Manganese operation consists of two manganese mines in the Kalahari Basin in the country's Northern Cape province, which is home to 80 per cent of the world's manganese, and the Metalloys manganese alloy smelter which was placed on care and maintenance in FY20.

Mamatwan mine is located approximately 25 km south of the town of Hotazel, in the Northern Cape Province. The mine straddles the southern perimeter of the Kalahari Manganese Basin and is located in the southwestern outer rim of the Kalahari Manganese Field in the Griqualand West region. The topography in the area is mostly flat with a mean elevation between 1,100 to 1,400 metres.

The mining method used is a conventional open-pit operation with drilling, blasting, mining with excavators or loaders and hauling with rigid-frame dump trucks. Ore is taken to the processing plant where it is processed through screening, crushing, and washing. Wet fines are pumped to the Adam's Pit TSF.



Adam's Pit

Adam's Pit is used for in-pit disposal of tailings, with a maximum depth/wall height of approximately 40 metres and crest perimeter length of approximately 1,310 metres. The pit is used to store manganese tailings and water pumped from the process plant, and forms part of the overall tailings management system. Water from the mining pits is also periodically pumped into the facility.

The walls of the pit comprise open-pit overburden and low-grade ore over which, tailings is deposited via an open-end high-density polyethylene slurry pipeline located on the south-west edge of the pit.

Backfill of Adam's Pit commenced in 2002 using an overhead conveyor structure, from the plant to a point above the edge of the pit, to deliver the coarse discard material. An open-ended discharge point delivers the tailings south-east corner of Adam's Pit.

There is sufficient volume within Adam's Pit to contain tailings until the end of Mamatwan's projected mine life.