Mining and mine waste

Ore

Stockpiles

Crushed ore for mining quality control, homogenization and mill-head grade

Mill

Concentrate
1 750 tonnes per day

Slurry tailings
200 000
tonnes per day

Overburden materials like soil and rocks are removed to access the ore body. These are generally considered benign and are often used for revegetation or landscaping. In coal mining the overburden is referred to as spoils.

Waste rock is classed as ores that are below the economic cut-off grade.

Mine

Sub-economic rock

Tailings pond

Slurry discharge

Overflow spillway

Phreatic line

Water cover

Lift 2

Lift 1

Starter dyke

Coarse fraction - Sands

Fine fraction - Slimes

Toe seepage

Seepage

Liner

Groundwater flow

Waste rock
180 000
tonnes per day

Waste rock storage facility

Seepage

Toe seepage

Groundwater flow

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Source: *Ground the trekking, 2014, Mine Tailings, www.groundtruthtrekking.org*

GRID ARENDAL