SUPPLEMENTARY WATER USE INFORMATION

(ONLY APPLICABLE FOR NWA – SECTION 21g WATER USES)

DETAILS OF WASTE MANAGEMENT FACILITY

1. WASTE MANAGEMENT FACILITY DETAILS

1.1 Name of waste management facility: MINING AREA - DUST SUPPRESSION ON ROADS, STOCKPILE

1.2 Waste management facility file no:

1.3 Type of site: OPEN CAST VOIDS [Select] [Clear]

1.3.1 Description of site

The proposed mining footprint will be 4.9 ha and will be developed over a portion of the farm used for grazing. The proposed mining method will make use of blasting in order to loosen the hard rock; the material will then be loaded and hauled to the crushing plant where it will be screened to various sized stockpiles. The aggregate will be stockpiled until it is transported from site using

1.3.2 Size of site (hectares): 4.9

1.3.3 Estimated lifetime:

1.3.4 Disposal started on: August 2021

1.3.5 Disposal ceased on (if applicable): August 2026

1.4 Waste types

Waste Type		Other Waste Type	
OTHER WASTE	Select	Dust suppression	Delete
	Select		Delete

Add another

1.5 Fatal flaw indicators

Fatal Flaw Indicator		
IN AN AREA CHARACTERISED	Select	Delete
	Select	Delete

Add another

1.6 Method of disposal

Disposal Method		Other Description	
OTHER	Select	Dust suprresion by wate	Delete
	Select		Delete

Add another

1.7 Approximate maximum volume/tonnage per site per day: 22500

1.8 Approximate total tonnage per site per annum: 270000

1.9 Distance from nearest borehole used for drinking water or stock watering (meters): 0

1.10 Distance from the edge of nearest downstream surface water resource (meters): 837

1.11 Total area of 'property' on which waste is disposed (hectares): 4.9

1.12 Area of actual waste body (`footprint`area) (hectares): 4.9

1.13 Hazard rating: HAZARD WASTE LANDFILL THAT CAN RECEIVE WAST

Select Clear

1.14 Has the Waste Management Facility been classified?

- ○ Yes
- ◉ No

Classification

Select Clear

Classification date

1.15 Lining of the site

a) The site is/will be Lined

- ○ Yes
- ◉ No

b) If lined, the lining system is

Select Clear

1.16 Dimensions of waste site

a) At commencement

Height or depth (meters)

Length (meters)

Breadth (meters)

b) After rehabilitation

Height or depth (meters)

Length (meters)

Breadth (meters)

c) Available air space

Length (meters)

d) Total volume already used for waste disposal

Length (meters)

e) Accuracy of above volumes

Select Clear

1.17 Buffer Zone

a) Actual distance to the boundary of the nearest: • Formal residential area (meters)

a) Actual distance to the boundary of the nearest: • Informal residential area (meters)

a) Actual distance to the boundary of the nearest: • Industrial Area (meters)

b) Buffer zone determination done by

Select Clear

1.18 Location of Waste Management Facility

Geographical location for each of the external corner points of the waste management facility

Latitude	Longitude	Datum Type	
30.435320632456722 Clear	-29.52536526141077 Clear	WGS-84	Delete
Clear	Map	Select	
Clear	Clear		Delete
Clear	Map	Select	

Add another

1.19 Climatic water balance

The wettest six months of the year are: MAY TO OCTOBER [Select] [Clear]

The wettest years during the past thirty years were (populate at least one year's details with both rainfall and evaporation detail completed)

Wettest year

Year

Total rainfall for 6 months (mm)

Total evaporation (A-pan) for 6 months (mm)

2nd wettest

Year

Total rainfall for 6 months (mm)

Total evaporation (A-pan) for 6 months (mm)

3rd Wettest

Year

Total rainfall for 6 months (mm)

Total evaporation (A-pan) for 6 months (mm)

4th Wettest

Year

Total rainfall for 6 months (mm)

Total evaporation (A-pan) for 6 months (mm)

5th Wettest

Year

Total rainfall for 6 months (mm)

Total evaporation (A-pan) for 6 months (mm)

6th Wettest

Year

Total rainfall for 6 months (mm)

Total evaporation (A-pan) for 6 months (mm)

7th Wettest

Year

Total rainfall for 6 months (mm)

Total evaporation (A-pan) for 6 months (mm)

8th Wettest

Year

Total rainfall for 6 months (mm)

Total evaporation (A-pan) for 6 months (mm)

9th Wettest

Year

Total rainfall for 6 months (mm)

Total evaporation (A-pan) for 6 months (mm)

10th Wettest

Year

Total rainfall for 6 months (mm)

Total evaporation (A-pan) for 6 months (mm)

Site-specific water balance factors

☐ If leachate is visible (for existing facilities only)

Other site specific water balance factors (specify)

1.20 Details of the person in control of the site

Surname	SAAL
Initials &/or First Name	MURCHELLIN
Title	MRS Select Clear
ID No.	8305040185089
Phone Number (Example 6505555)	8512673
Ext	
Fax Number	8512673
Cellphone Number	+27799798766
E-mail	MURCHELLIN.S@GREENMINED.CO.ZA
Highest Educational Qualification	HIGHER DIPLOMA Select Clear

1.21 Alternative Contact Person

Surname	Initials and/or First Name	Title	ID No	Phone Number	Contact Ext.	I
Weideman	C	MR Select	7107206336080	+27 11 966 4314		+27 86
		Select				

Add another

2. OPERATION OF THE WASTE MANAGEMENT FACILITY

2.1 Type of operation

Type of Operation		Other (Specify)	
OTHER	Select	OPEN CAST MINING O	Delete
	Select		Delete

Add another

2.2 Length of time of the operation

Operation Start date: August 2021

Operation End date (if applicable): August 2026

2.3 Is sufficient cover material on site?

- ○ Yes
- ◉ No

2.4 Covering and burning of waste

Covering and Burning of Waste		
	Select	Delete

Add another

2.5 Is leachate management system present?

- ○ Yes
- ◉ No

2.6 Storm water management

Storm Water Type		
UPSTREAM CUT-OFF TRENCH	Select	Delete
	Select	Delete

Add another

2.5 External reference

System Name		External Reference number	
~~1*DAM SAFETY OFFICE~~			Undelete
	Select		Delete

Add another

3. MANAGEMENT PRACTICES OF THE WASTE MANAGEMENT FACILITY

Artificial Wetlands

Artificial Wetlands : Facility is generally lined (clay liners typically) and are designed to receive 120/l/m2/d at a depth of 30 cm.

- ○ Yes
- ◉ No

Artificial Wetlands : Stormwater and seepage drains

- ○ Yes
- ◉ No

Any other practice

Ash Dams/Dumps

Ash Dams/Dumps : Facility is lined (synthetic or clay)

- ○ Yes
- ◉ No

Ash Dams/Dumps : Side slopes stabilized to minimize erosion

- ○ Yes
- ◉ No

Ash Dams/Dumps : Rainfall runoff collected into a dirty water storage facility

- ○ Yes
- ◉ No

Ash Dams/Dumps : Collection of percolated storm water via under drains into collection sumps, which should pump the water to a dirty water storage facility

- ○ Yes
- ◉ No

Ash Dams/Dumps : For pits, ingress of water is prevented

- ○ Yes
- ◉ No

Any other practice

Coal Dams

Coal Dams : Lined facility (synthetic or clay liners)

- ○ Yes
- ◉ No

Coal Dams : Seepage drains in place

- ○ Yes
- ◉ No

Coal Dams : Storm water drains in place & connected to the polluted storm water system

- ○ Yes
- ◉ No

Coal Dams : Effluent in the dam is not of acidic pH

- ○ Yes
- ◉ No

Coal Dams : Dam is covered to prevent contact with oxygen

- ○ Yes
- ◉ No

Facility does not maintain anaerobic conditions

- ○ Yes
- ◉ No

Any other practice

Effluent Dams

Effluent Dams : Lined facility (synthetic or clay)

- ○ Yes
- ◉ No

Effluent Dams : Facility has seepage drains

- ○ Yes
- ◉ No

Effluent Dams : Splitting of facility into 2 separate compartments for the purposes of cleaning and management

- ○ Yes
- ◉ No

Any other practice

Evaporation Dams/Ponds

Evaporation Dams/Ponds : Lined facility (synthetic or clay.)

- ○ Yes
- ◉ No

Evaporation Dams/Ponds : Facility is of sufficiently large size to ensure that full evaporation of effluent is achieved

- ○ Yes
- ◉ No

Evaporation Dams/Ponds : Seepage drains in place.

- ○ Yes
- ◉ No

Storm water collection drains in place

Any other practice

Forced Evaporation

Forced Evaporation : Evaporation only with wind speeds less than 2m/sec

- ○ Yes
- ◉ No

Forced Evaporation : No evaporate pre-dawn as humidity is high

- ○ Yes
- ◉ No

Any other practice

Maturation Ponds

Maturation Ponds : Facility lined (synthetic or clay)

- ○ Yes
- ◉ No

Maturation Ponds : Facility designed to ensure at least 5 days retention time

- ○ Yes
- ◉ No

Maturation Ponds : Storm water and seepage collection drains in place

- ○ Yes
- ◉ No

Any other practice

Waste Water Ponds

Waste Water Ponds : Lined facility. (synthetic or clay)

- ○ Yes
- ◉ No

Waste Water Ponds : Storm water collection drains in place

- ○ Yes
- ◉ No

Waste Water Ponds : Seepage Drains in place

- ○ Yes
- ◉ No

Any other practice

Open Cast Voids

Open Cast Voids : Diversion of upslope storm water around the void

- ◉ Yes
- ○ No

Open Cast Voids : Upstream diversion berms or managementmeasures to prevent inflow of water into the void

- ◉ Yes

- ○ No

Open Cast Voids : Prevention of water flowing into the void by using highball drains where necessary

- ◉ Yes
- ○ No

Open Cast Voids : Ensure any water within the void is contained

- ◉ Yes
- ○ No

Any other practice

Oxidation Ponds

Oxidation Ponds : Lined facility (Synthetic or Clay)

- ○ Yes
- ◉ No

Oxidation Ponds : Adequate structures in place to ensure capture of a 1:50 year storm event

- ○ Yes
- ◉ No

Oxidation Ponds : Seepage drains in place

- ○ Yes
- ◉ No

Oxidation Ponds : Storm water collection drains in place

- ○ Yes
- ◉ No

Any other practice

Polluted Stormwater System

Polluted Stormwater System : Storm water discharged directly to the resource

- ○ Yes
- ◉ No

Polluted Stormwater System : Collection system incorporating the plant, raw material stockpiles and waste disposal facilities

- ◉ Yes
- ○ No

Polluted Stormwater System : Clean stormwater separated from stormwaterdraining “dirty” sites or facilities

- (●) Yes
- ( ) No

Polluted Stormwater System : Polluted stormwater collected & stored in dams

- ( ) Yes
- (●) No

Any other practice

Return Water Dams

Return Water Dams : Sizing to accept seepage from the under drainage systems and decant systems for up to the 1:50 year rainfall event, over and above normal operating conditions

- ( ) Yes
- (●) No

Any other practice

Sewage Treatment Works

Sewage Treatment Works : Pump stations operational

- ○ Yes
- ◉ No

Sewage Treatment Works : Emergency storage dam(s) available

- ○ Yes
- ◉ No

Sewage Treatment Works : Adequate capacity in emergency storage dams

- ○ Yes
- ◉ No

Sewage Treatment Works : Compliance with minimum discharge standards

- ○ Yes
- ◉ No

Sewage Treatment Works : Stormwater collection system in place

- ○ Yes
- ◉ No

Sewage Treatment Works : Adequate capacity to contain total volume

- ○ Yes
- ◉ No

Any other practice

Silt Dams

Silt Dams : Lined silt facility (synthetic or clay)

- ○ Yes
- ◉ No

Silt Dams : Stormwater collection system in place

- ○ Yes
- ◉ No

Silt Dams : Seepage drains in place for silt dam

- ○ Yes
- ◉ No

Any other practice

Slag Dumps

Slag Dumps : Stormwater collection system in place

- ○ Yes
- ◉ No

Slag Dumps : Seepage drains in place

- ○ Yes
- ◉ No

Slag Dumps : Separation of clean & dirty water

- ○ Yes
- ◉ No

Slag Dumps : Capacity to handle the 1:50 year storm event

- ○ Yes
- ◉ No

Slag Dumps : Collection of rainfall run-off into the dirty water storage facility

- ○ Yes
- ◉ No

Slag Dumps : After decommissioning, the top surface is shaped to suit drainage requirements and re-vegetated

- ○ Yes
- ◉ No

Slag Dumps : Implementation of under drainage systems to collect seepage for re-use as process water

- ○ Yes
- ◉ No

Any other practice

Slimes/Tailings Dams

Slimes/Tailings Dams : Stormwater collection system in place

- ○ Yes
- ◉ No

Slimes/Tailings Dams : Seepage drains in place

- ○ Yes
- ◉ No

Slimes/Tailings Dams : Separation of clean & dirty water

- ○ Yes
- ◉ No

Slimes/Tailings Dams : Capacity to handle the 1:50 year storm event

- ○ Yes
- ◉ No

Slimes/Tailings Dams : Collection of rainfall run-off into the dirty water storage facility

- ○ Yes
- ◉ No

Slimes/Tailings Dams : After decommissioning, the top surface is shaped to suit drainage requirements and re-vegetated

- ○ Yes
- ◉ No

Slimes/Tailings Dams : Implementation of under drainage systems to collect seepage for re-use as process water

- ○ Yes
- ◉ No

Slimes/Tailings Dams : Covering of side slopes with soil during the operational phase to assist in reducing any contact of rainfall runoff with the tailings

- ○ Yes
- ◉ No

Slimes/Tailings Dams : Vegetation of side slopes to minimise erosion

- ○ Yes
- ◉ No

Any other practice

Sludge Drying Beds

Sludge Drying Beds : Facility is lined (synthetic or clay)

- ○ Yes
- ◉ No

Sludge Drying Beds : Seepage drains in place

- ○ Yes
- ◉ No

Sludge Drying Beds : Storm water drains in place

- ○ Yes
- ◉ No

Sludge Drying Beds : Moisture reduction of sludge

- ○ Yes
- ◉ No

Sludge Drying Beds : Incorporation of sludge into soil

- ○ Yes
- ◉ No

Sludge Drying Beds : Leachate management system in place

- ○ Yes
- ◉ No

Sludge Drying Beds : Mixing of high moisture content or liquid waste with dry waste

- ○ Yes
- ◉ No

Any other practice

Sludge Ponds/Lagoons

Sludge Ponds/Lagoons : Facility is lined (synthetic or clay)

- ○ Yes
- ◉ No

Sludge Ponds/Lagoons : Seepage drains in place

- ○ Yes
- ◉ No

Sludge Ponds/Lagoons : Storm water drains in place

- ○ Yes
- ◉ No

Sludge Ponds/Lagoons : Capacity to handle the 1:50 year storm event

- ○ Yes
- ◉ No

Any other practice

Waste Rock Dump

Waste Rock Dump : Stabilisation of side slopes to minimise erosion

- ○ Yes
- ◉ No

Waste Rock Dump : Rainfall runoff collected into a dirty water

- ○ Yes
- ◉ No

Waste Rock Dump : Covering of terraces or step-ins with a soil layer, followed by paddocking & vegetation to minimise ingress of water into the dump

- ○ Yes
- ◉ No

Waste Rock Dump : Collection of percolated stormwater via under drains into collection sumps which should pump the water to a dirty water storage facility

- ○ Yes
- ◉ No

Any other practice

Waste Storage

Waste Storage : Lined facility (synthetic or clay)

- ○ Yes
- ◉ No

Waste Storage : Leachate management system in place

- ○ Yes

- (●) No

Waste Storage : Leachate detection layer in place

- ( ) Yes
- (●) No

Waste Storage : Leachate collection layer in place

- ( ) Yes
- (●) No

Waste Storage : Seepage drains in place

- ( ) Yes
- (●) No

Waste Storage : Stormwater drains in place & connected to the polluted stormwater system

- ( ) Yes
- (●) No

Waste Storage : For pits, ingress of water is prevented

- ( ) Yes
- (●) No

Any other practice

Waste Treatment Plant

Waste Treatment Plant : Capacity to handle the 1:50 year storm event

- ○ Yes
- ◉ No

Waste Treatment Plant : Stormwater collection system in place

- ○ Yes
- ◉ No

Waste Treatment Plant : Stormwater diversion measures in place

- ◉ Yes
- ○ No

Waste Treatment Plant : Seepage collection system in place

- ○ Yes
- ◉ No

Waste Treatment Plant : Adequate structures in place to ensure capture of a 1:50 year storm event

- ◉ Yes
- ○ No

Emergency incident structures in place

- ◉ Yes
- ○ No

Any other practice

Declaration by Applicant

The applicants declaration, as to the correctness of the information provided, is pending the sign off signature. This will be updated once all the documentation and registration forms have been completed. There may be more pages of information for you to complete after this page.

It is a criminal offence to provide information that is false or misleading.