

# WONDERKOP CONCERN

## COMMUNITY

20 JULY 2023

A warm welcome to everyone in  
Attending.

Content :Tailing Dam Facility

:Blocked Sewer Line

:Smelter Operation Query

:Wonderkop Koppie

# Wonderkop Concern Community



# International Council on Mining And Metals (Tailings Principles)

- ▣ The Global Industry Standard on Tailings Management (the Standard) strives to achieve the ultimate goal of zero harm to people and the environment. Underpinned by an integrated approach to tailings management, the Standard aims to prevent catastrophic failure and enhance the safety of mine tailings facilities across the globe. It embodies a step-change in terms of transparency, accountability and safeguarding the rights of project affected people.
- ▣ To conform with the Standard, operators must use specified measures to prevent the catastrophic failure of tailings facilities and to implement best practices in planning, design, construction, operation, maintenance, monitoring, closure and post closure activities.

# International Council on Mining And Metals (Tailings Principles)

- ▣ Topic Area I focuses on project-affected people. To respect human rights, including the individual and collective rights of indigenous and tribal peoples, a human rights due diligence process is required to identify and address those that are most at risk from a tailings facility or its potential failure. To demonstrate respect, project-affected people must be afforded opportunities for meaningful engagement in decisions that affect them. The requirements within Topic Area I are intended to be cross-cutting in terms of being addressed across all operational activities and ongoing throughout the tailings facility lifecycle.

# Tailing Dam Facility No6 Pettition

- 26/05/2023
- TDF 6
- This letter serves as petition letter that Wonderkop Community request assistance from NGO`s **Mining Watch Canada ,Bench Marks Foundation and Earthworks** to intervene in the tailing dam (TDF 6) that is constructed behind our village without the Community engagement and consultation prior the construction of the tailing dam.
- According to NEMA Act 107 of 1998 all affected parties or community should be engaged and consulted to address all the risk and safety associated with the tailing dam operations prior the commencement of the project.
- The EIA report was received from Sibanye Stillwater however the EIA report is not adequate enough to address all the risk that can impact Wonderkop Community.
- The EIA report is generic and not specific to the tailing dam and it talks a lot about mining operation not tailing dam e.g (stockpiles, Shafts, Plant).
- All the contributing factors to the tailing dam failure are excluded; Altitude, Radius, Underground blasting, Open cast blasting and Adverse weather conditions.
- All risk ratings are from Low-Medium while the tailing dam pose the Community in high risk especially when we are 1.28 Km away from the tailing dam and the tailing dam is sloping towards our community.
- Community participation meeting minutes and attendance registers not attached on the EIA report (Appendix2)
- The EIA report was not properly conducted we would like intervention on this matter with Sibanye Stillwater and Above mention NGO`s.

# Spillage Hazards & Risk

- ▣ Soil and Water contamination.
- ▣ Health and Environmental risk to the community members, livestock and aquatic animals.
- ▣ Community members fishing.
- ▣ Children swimming in the river and the dams.
- ▣ Spiritual healer and church members conducting baptism ceremonies.
- ▣ Live stock drinking and grazing on contaminated areas.

# Tailing Dam Spillage to the river



# Livestock grazing on affected area



# Lab Report Of Analysis

MC-LF-04-06

PREPARATION PROCEDURE USED: MC-LP-PP-01-04

ANALYTICAL PROCEDURE USED: MC-LP-IN-32-02

REFERENCE MATERIAL USED: AMIS 0388 AND INHOUSE QG

REPORT OF ANALYSIS TO COMPANY: BROWN (WONDERKOP)

DATE RECEIVED: 18-Jul-23  
 CUSTOMER NAME: BROWN MATLOKO 065 186 0954  
[gomotsegangbrown@hotmail.com](mailto:gomotsegangbrown@hotmail.com)

DATE OF ANALYSIS: 19-Jul-23  
 MATERIAL TYPE: FINES  
 WAYBILL NUMBER: 197 052 570  
 REPORT NUMBER: F9113

CHEMICAL ANALYSIS

				Fire Assay	Wet Chem	Wet Chem	Calc	ICP ELEMENTS					XRF	
FULL XRF SCAN				4E PGM	Cr <sub>2</sub> O <sub>3</sub>	FeO	Cr/Fe:1	SiO <sub>2</sub>	MgO	Al <sub>2</sub> O <sub>3</sub>	CaO	P	S	Moisture
SAMPLE ID	SAMPLING DATE	LAB ID	Mass (g)	g/t	%	%	Calc	%	%	%	%	%	%	%
TAILING DAM SPILLAGE	18-Jul-23	F9113	1020.80				#DIV/0!							

Declaration

- We, [redacted] fully independent laboratory, hereby certify that, for the product as described above,
1. Metchem Laboratory is not responsible for the sampling activity related to this sample
  2. The measurements are traceable to national and international standards.
  3. The results relate only to the items tested and are reported on the dry basis.
  4. Control Charts for the QC's are updated and kept for each sample analysed by the laboratory
  5. Any deviations outside the estimated uncertainty on each element analysed and reported will be stated.

Approval of certificate

[redacted] Laboratory Manager/Chemist  
 [redacted] 19-Jul-23  
 Technical Signatory Date Issued

7/19/2023

Sample Name	<b>BROWN F9113</b>	Dilution Material	<b>HWC</b>
Method	<b>Geochem Traces (A) current control</b>	Sample Mass	<b>5.0000</b>
Sample Folder	<b>July 2023</b>	Dilution Mass	<b>1.0000</b>
Sample Type	<b>Pressed Tablet</b>	Dilution Factor	<b>0.8333</b>
Sample Status	<b>AAAAXXX</b>	Measurement Date	<b>7/19/2023 9:09 AM</b>
Operator	<b>Admin User</b>	Evaluation Date	<b>7/19/2023 9:09 AM</b>

*Tailing Dam Spillage*

Results - BROWN F9113

The error is the statistical error with 1 sigma confidence interval

Element	Concentration	Abs. Error
11 Na <sub>2</sub> O	Sodium oxide 5.234 %	0.036
12 MgO	Magnesium oxide 9.798 %	0.024
13 Al <sub>2</sub> O <sub>3</sub>	Aluminium oxide 5.236 %	0.013
14 SiO <sub>2</sub>	Silicon dioxide 17.01 %	0.01
15 P	Phosphorus 0.00738 %	0.00063
16 S	Sulfur 9.992 %	0.004
17 Cl	Chlorine 3.884 %	0.002
19 K <sub>2</sub> O	Potassium oxide 0.1167 %	0.0008
20 CaO	Calcium oxide 4.917 %	0.003
21 Sc	Scandium < 0.0011 %	-
22 TiO <sub>2</sub>	Titanium dioxide 0.6611 %	0.0008
23 V <sub>2</sub> O <sub>5</sub>	Vanadium pentoxide 0.03258 %	0.00035
24 Cr <sub>2</sub> O <sub>3</sub>	Chromiumoxide 2.227 %	0.001
25 MnO	Manganese(II) oxide 0.1190 %	0.0003
26 FeO	FeO 4.341 %	0.003
27 Co	Cobalt < 0.00010 %	-
28 Ni	Nickel 0.01315 %	0.00011
29 Cu	Copper 0.00363 %	0.00005
30 Zn	Zinc 0.00522 %	0.00005
31 Ga	Gallium 0.00085 %	0.00002
32 Ge	Germanium 0.00006 %	0.00001
33 As	Arsenic 0.7 ppm	0.1
34 Se	Selenium < 0.00001 %	-
35 Br	Bromine 0.00821 %	0.00003
37 Rb	Rubidium 0.00052 %	0.00001
38 Sr	Strontium 0.01755 %	0.00003
39 Y	Yttrium 0.00072 %	0.00001
40 Zr	Zirconium 0.01246 %	0.00003
41 Nb	Niobium 0.00036 %	0.00002
42 Mo	Molybdenum < 0.00002 %	-
44 Ru	Ruthenium < 0.3 ppm	-
45 Rh	Rhodium < 0.2 ppm	-
46 Pd	Palladium < 0.3 ppm	-
47 Ag	Silver < 0.2 ppm	-
48 Cd	Cadmium < 0.00002 %	-
49 In	Indium < 0.3 ppm	-
50 Sn	Tin 0.00031 %	0.00002
51 Sb	Antimony < 0.00007 %	-
52 Te	Tellurium < 0.00005 %	-
53 I	Iodine < 0.00015 %	-
55 Cs	Cesium 0.00081 %	0.00010

1 / 2

7/19/2023

56 Ba	Barium	0.01225 %	0.00019
57 La	Lanthanum	0.00250 %	0.00020
58 Ce	Cerium	0.00344 %	0.00029
59 Pr	Praseodymium	0.00176 %	0.00025
60 Nd	Neodymium	< 0.00007 %	-
62 Sm	Samarium	0.00096 %	0.00047
70 Yb	Ytterbium	< 0.00020 %	-
72 Hf	Hafnium	0.00051 %	0.00009
73 Ta	Tantalum	0.00035 %	0.00012
74 W	Tungsten	0.00032 %	0.00008
77 Ir	Iridium	-	-
78 Pt	Platinum	0.0 ppm	0.0
79 Au	Gold	< 0.2 ppm	-
80 Hg	Mercury	< 0.00002 %	-
81 Tl	Thallium	0.00006 %	0.00002
82 Pb	Lead	0.00047 %	0.00002
83 Bi	Bismuth	< 0.00003 %	-
90 Th	Thorium	0.7 ppm	0.1
92 U	Uranium	< 0.3 ppm	-

*Tailing Dam Spillage*

2 / 2

# Hazard Identification of Chemicals

- ▣ Routes of Entry:

Eye Contact. Inhalation. Ingestion. Absorbed through skin.

- ▣ Potential Health Effects:

- ▣ Eyes

May cause slight eye irritation and local inflammation.

- ▣ Skin

May be harmful if absorbed through skin. May cause slight skin irritation.

- ▣ Inhalation

May be harmful if inhaled. May cause respiratory tract irritation.

# Hazard Identification of Chemical

## ▣ Ingestion

May be harmful if swallowed.

It may cause irritation and/or a burning sensation in the mouth, pharynx, oesophagus and gastrointestinal tract. Symptoms may include abdominal pain, nausea, vomiting and diarrhoea.

# Accidental Release Measures

## ☐ Personal Precautions:

Use personal protective equipment. Avoid substance contact and inhalation. Avoid dust formation. Ensure adequate ventilation.

## ☐ Environmental Protection Measures:

Do not allow to enter sewerage system or the river.

## ☐ Small Spill:

Use appropriate tools and personal protective equipment. Pick up spillage. Dispose of in a waste disposal container. Do not allow to enter sewerage system or the river.

## ☐ Large Spill:

Use appropriate tools and personal protective equipment. Contain material. Take up spillage limiting generation of dust. Dispose of in a waste disposal container. Do not allow to enter sewerage system or the river

# Carcass near affected area



# No Proper Maintenance on pipes going through the Tailing dam(Leaking to the river)



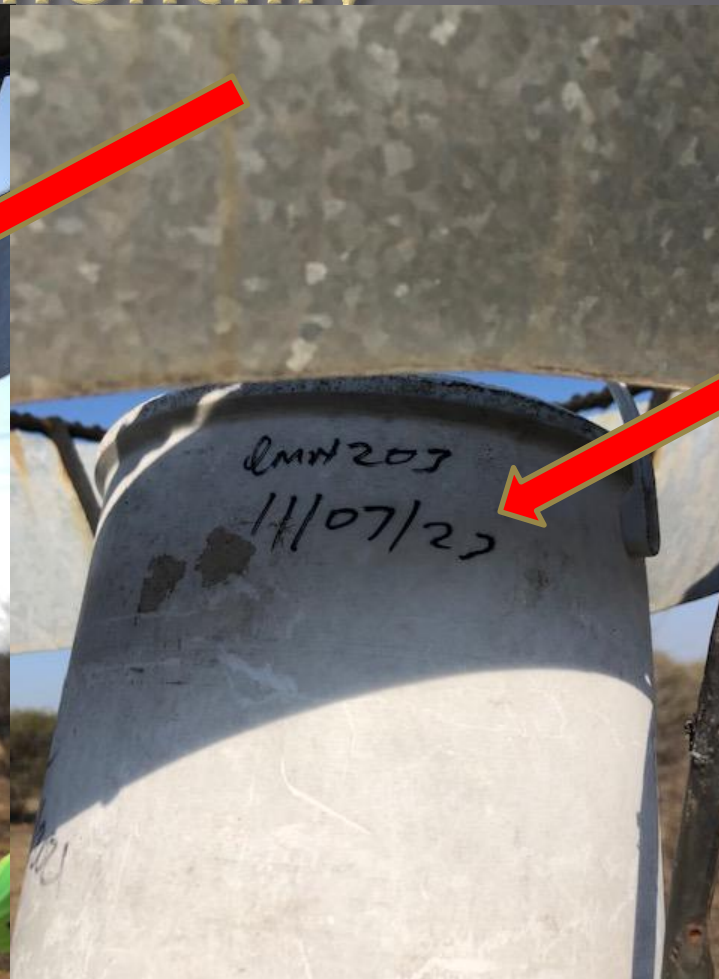
# Slurry deposited into the river



# Slurry deposited into the river



# Bucket Dust monitor data collection done quarterly not monthly



# Blocked Sewer line

- ❑ This matter was brought to Sibanye Stillwater`s attention since 20th January 2020 even now the matter is not resolved.
- ❑ Sewerage that flows to our village causes Health and environmental risk to our lives.
- ❑ In many Occasion we reported the same issue and still not resolved see below dates ;
- ❑ 16 November 2022 /13March 2023 /22 March 2023 /26 June 2023.
- ❑ Sibanye doesn`t show any commitment to address issues affecting the community.

# Blocked Sewer line



# Sewerage going trough the village



# Sewerage going trough the village



# Children playing in the Sewerage



# Blocked sewer line get worst in rainy days



# Blocked sewer line get worst in rainy days



# Manhole build inadequately and can injure community or livestock



# Sewerage flowing to the river



# Smelter Air Pollution



# Smelter Query

- ▣ Sibanye to tell us what is happening on the previous slide?

# Wonderkop Koppie

- ▣ Why Wonderkop Koppie Called Marikana Koppie?

- ▣ In conclusion long term effect comes with long term benefits



Questions?



THANK YOU !!!!!!!!!!!