



**forestry, fisheries  
& the environment**

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

**RISK ASSESSMENT IN TERMS OF REGULATION 8 OF THE WASTE  
EXCLUSION REGULATIONS**

	(For official use only)
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Risk Assessment for an application for exclusion of waste stream or portion of waste stream in terms of the National Environmental Management: Waste Act, 2008(Act No.59 of 2008), as amended.

**Kindly note that:**

1. This form is current as of 01 April 2021. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
2. The information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing.
3. Incomplete forms (including information as required in the application form) may be returned to the applicant for revision and the inclusion of additional information.
4. Unless protected by law, all information filled in on this application will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this application on request, during any stage of the application process.

<b>BACKGROUND INFORMATION</b>	
<b>APPLICANT</b>	Royal Bafokeng Platinum (Pty) Ltd
<b>CONTACT PERSON</b>	Malebabo Tsolo (Environmental Manager)
<b>NAME</b>	As above
<b>ADDRESS</b>	The Pivot, No 1 Monte Casino Boulevard, Block C, 4th Floor, Fourways
<b>E-MAIL ADDRESS</b>	MalebaboT@bafokengplatinum.co.za
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<b>CELL PHONE</b>	082 470 2821

<b>WASTE GENERATING FACILITY OR FACILITIES</b>						
<b>PHYSICAL ADDRESS OF FACILITY OR FACILITIES</b>	Royal Bafokeng Platinum Maseve Mine (1) Concentrator plant adjacent to the mill; and (2) Maseve South Waste Rock Dump (WRD).					
<b>GPS CO-ORDINATES AT CORNERS OF WASTE GENERATING FACILITY OR FACILITIES</b>	<b>LATITUDE</b>			<b>LONGITUDE</b>		
Royal Bafokeng Platinum Maseve Mine (1) Concentrator plant adjacent to the mill	25°	25'	25.84"S	27°	5'	12.11"E
	25°	25'	26.20"S	27°	5'	14.10"E
	25°	25'	28.48"S	27°	5'	11.70"E
	25°	25'	27.78"S	27°	5'	10.73"E
(2) Maseve South Waste Rock Dump	25°	25'	26.16"S	27°	5'	18.15"E
	25°	25'	26.32"S	27°	5'	21.35"E
	25°	25'	27.96"S	27°	5'	22.92"E
	25°	25'	29.84"S	27°	5'	20.33"E
	25°	25'	26.16"S	27°	5'	18.15"E
<b>WASTE STREAM OR PORTION OF A WASTE STREAM TO BE EXCLUDED FROM THE DEFINITION OF WASTE</b>	Scats					
<b>BENEFICIAL USE/S</b>	Concrete making, brick making and road construction					

<b>WASTE GENERATING PROCESS</b>	
<b>DETAILED DESCRIPTION OF WASTE GENERATING PROCESS<sup>1</sup></b>	As provided in the process flow chart.
<b>PRODUCTION PROCESS FLOW CHART ATTACHED</b>	YES Figure 8 and Appendix B of the Report
<b>WASTE CLASSIFICATION</b>	NON-HAZARDOUS Section 3.2.1 and Appendix C of the Report
<b>IF HAZARDOUS LIST THE HAZARDS OF THE WASTE</b>	Type 3, total inorganic concentration exceedances in Cu and Ni and high leachable concentrations in Fe and Al (section 3.2.1.3 of the Report).

<sup>1</sup> A process flow chart must be attached with this form for the process description

## RISK ASSESSMENT WITHOUT MITIGATION

ACTIVITY	RISK DESCRIPTION	ENVIRONMENTAL RECEPTORS	Impact	ASSESSMENT OF RISK			SIGNIFICANCE
				Probability	Magnitude	Duration	
Reclamation of waste scats	Risk to health and safety of workers due to instability e.g., steep side slopes of the scats stockpiles during adding or removing scats from the heap.	Workers	Stability of stockpiles	2	8	5	30 Moderate
	Risk to health and safety of workers, as well as nearby communities, terrestrial and aquatic flora and fauna, and soil and surface water resources, due to dust from reclamation activities.	<ul style="list-style-type: none"> <li>■ Workers</li> <li>■ Nearby communities</li> <li>■ Nearby terrestrial fauna and flora</li> <li>■ Nearby aquatic fauna and flora</li> <li>■ Nearby soil and surface water resources</li> </ul>	Wind-blown dust	3	6	2	30 Moderate
Transportation of waste scats	Risk to health and safety of workers, as well as nearby communities, terrestrial and aquatic flora and fauna, and surface water resources, due to transportation of waste scats from the stockpiles to the end user's site for concrete, brick making and road construction. The transport of waste scats may	<ul style="list-style-type: none"> <li>■ Workers</li> <li>■ Nearby communities</li> <li>■ Nearby terrestrial fauna and flora</li> <li>■ Nearby aquatic fauna and flora</li> </ul>	Wind-blown dust and spillages.	3	6	2	30 Moderate

Storage of waste scats	<p>result in aggregate dust being blown off the back of the trucks, as well as spillages along the route. In large quantities, such spills on the sides of the roads may be detrimental to the environment.</p>	<p>Nearby soil and surface water resources</p>	4	6	3	2	44 Moderate
<p>Risk to soils, surface water and groundwater resources at the end-user's site with storage of fine aggregate from waste scats on unlined areas without bunding.</p>	<p>Storage of waste scats on unlined areas without bunding</p>	<p>Nearby soil, groundwater and surface water resources Nearby communities Nearby terrestrial fauna and flora Nearby aquatic fauna and flora</p>	2	6	2	2	20 Acceptable
<p>Risk to soils, surface water and groundwater resources at the end user's site with spillage of waste scats stockpiles stored onto unlined areas during harsh weather conditions, such as thunderstorms.</p>	<p>Spillage of waste scats onto unlined areas</p>	<p>Nearby soil, groundwater and surface water resources Nearby communities Nearby terrestrial fauna and flora</p>	2	6	2	2	20 Acceptable

	<ul style="list-style-type: none"> <li>■ Nearby aquatic fauna and flora</li> </ul>		4	6	3	1	40 Moderate
<p>Risk to workers with storage of waste scats at the end-user's site in areas that are insufficiently ventilated. This may have a negative impact on health of workers.</p>	<p>Workers</p>	<p>Storage of waste scats in insufficiently ventilated areas</p>	4	4	1	2	14 Acceptable
<p>Risk to workers, and nearby communities, terrestrial and aquatic flora and fauna, soils and surface water resources, due to wind-blown dust from finer waste scats aggregate stockpiles at the end-user's site.</p>	<ul style="list-style-type: none"> <li>■ Workers</li> <li>■ Nearby communities</li> <li>■ Nearby terrestrial fauna and flora</li> <li>■ Nearby aquatic fauna and flora</li> <li>■ Nearby soil and surface water resources</li> </ul>	<p>Wind-blown dust from waste scats stockpiles</p>	2	4	1	2	14 Acceptable
<p>Risk to soils, surface water and groundwater resources at the end-user's site without proper stormwater management measures of fine aggregate from waste scats.</p>	<ul style="list-style-type: none"> <li>■ Nearby soil, groundwater and surface water resources</li> <li>■ Nearby communities</li> <li>■ Nearby terrestrial fauna and flora</li> </ul>	<p>Storage of waste scats at end user without proper stormwater management.</p>	4	6	3	2	44 Moderate

Production of concrete, bricks and road laying using waste scats	<ul style="list-style-type: none"> <li>■ Risk to workers, and nearby communities, terrestrial and aquatic flora and fauna, soils and surface water resources, due to wind-blown dust and spillages from the separation of steel pebbles from scats, and use of scats aggregate in concrete, brick production and road construction.</li> </ul>	Nearby aquatic fauna and flora	<ul style="list-style-type: none"> <li>■ Workers</li> <li>■ Nearby communities</li> <li>■ Nearby terrestrial fauna and flora</li> <li>■ Nearby aquatic fauna and flora</li> <li>■ Nearby soil and surface water resources</li> </ul>	Wind-blown dust	3	4	1	2	21 Acceptable
Risk to workers, and nearby communities, terrestrial and aquatic flora and fauna, soils, surface water and groundwater resources, with improper management of secondary waste at the end-user's site.	<ul style="list-style-type: none"> <li>■ Workers</li> <li>■ Nearby communities</li> <li>■ Nearby terrestrial fauna and flora</li> <li>■ Nearby aquatic fauna and flora</li> <li>■ Nearby soil, surface water and groundwater resources</li> </ul>	Nearby aquatic fauna and flora	<ul style="list-style-type: none"> <li>■ Workers</li> <li>■ Nearby communities</li> <li>■ Nearby terrestrial fauna and flora</li> <li>■ Nearby aquatic fauna and flora</li> <li>■ Nearby soil, surface water and groundwater resources</li> </ul>	Secondary waste generation	4	8	2	2	48 Moderate

	<p>The increase in job opportunities for skilled and unskilled people from nearby communities at the concrete-making, brick-making and road construction sites is expected to result in a positive significance rating. The resulting direct and indirect job creation will positively be impacting the local economy.</p>	<ul style="list-style-type: none"> <li>■ Direct and indirect employment.</li> <li>■ Local economy.</li> </ul>	<p>Job creation</p>					<p>Positive</p>
<p>Removal / closure of Maseve's scats stockpiles and the end-user's sites.</p>	<p>Risk to workers, and nearby communities, terrestrial and aquatic flora and fauna, soils, surface water and groundwater resources, with improper removal / closure of Maseve's stockpiles and the end-user's sites.</p>	<ul style="list-style-type: none"> <li>■ Nearby communities</li> <li>■ Nearby terrestrial fauna and flora</li> <li>■ Nearby aquatic fauna and flora</li> <li>■ Nearby soil, surface water and groundwater resources</li> </ul>	<p>Improper closure of Maseve's two stockpiles of waste scats and the end-user's sites.</p>	<p>3</p>	<p>6</p>	<p>2</p>	<p>1</p>	<p>27 Acceptable</p>

The following factors and criteria must be used to assess the impacts of the activities:

<b>CRITERIA</b>	
<b>Magnitude (Severity)</b>	<b>Duration</b>
10 – Very high	5 – Permanent (longer than 10 years)
8 – High	4 – Long term (5 – 10 years)
6 – Moderate	3 – Medium term (12 months to 5 years)
4 - Low	2 – Short term (< 12 months)
2 - Minor	1 – Immediate
<b>Scale</b>	<b>Probability (Likelihood)</b>
5 – International	5 – Definite
4 – National	4 – Highly probable
3 – Regional	3 – Medium probability
2 – Local	2 – Low probability
1 – Site only	1 – Improbably
0 – None	0 - None

#### **Magnitude**

Measures the size of the impact

#### **Duration**

Duration refers to the lifetime of the impact i.e. how long it will last

#### **Scale**

The scale refers to the extent of the impact

#### **Probability**

The probability refers to the chance of the impact to occur. The potential impact could be most likely to occur, unlikely, etc.

#### **Assessment of Significance of Impact**

Significance rating of the potential impact illustrates the importance of the impact itself. The size of the area affected by pollution may be extremely high but the significance of this effect is dependent on the concentration or level of pollution in that area. In order to determine the significance of an impact, the following method should be used:

Significance (S) = (Magnitude + Duration + Scale) x Probability



The values of S must then be categorised as follows:

<b>RATING</b>		<b>DESCRIPTION</b>
<b>SP &gt; 60</b>	<b>High significance</b>	<b>An impact which could influence the decision about whether or to proceed with the activities regardless of any possible mitigation</b>
<b>SP 30 - 60</b>	<b>Moderate significance</b>	<b>An impact or benefit which is sufficiently important to require management and which could have an influence on the decision unless it is mitigated</b>
<b>SP &lt; 30</b>	<b>Low significance</b>	<b>Impacts with little real effect and which will not have an influence on or require modification of the activities</b>
<b>+</b>	<b>Positive impact</b>	<b>An impact that is likely to result in a positive consequence/effect</b>

I, J. Mayer (the Applicant) hereby declare that I have read the completed Risk Assessment form and hereby confirm that the information is, to the best of my knowledge, true and correct

Furthermore, I declare that I am fully aware of my responsibilities in terms of the Waste Exclusion Regulations, and that failure to comply with these Regulations may constitute an offence in terms of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008).

  
\_\_\_\_\_  
Signature of the applicant<sup>2</sup>/ Signature on behalf of the applicant:

J. Mayer  
\_\_\_\_\_  
Name of Applicant:

Act. Conc. Manager  
\_\_\_\_\_  
Designation

15 | 7 | 21  
\_\_\_\_\_  
Date:

<sup>2</sup> If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority.