



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)
File Reference Number:	12/9/11
NEAS Reference Number:	
Date Received:	

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.

BACKGROUND INFORMATION	
APPLICANT	Sasol South Africa (Ltd)
CONTACT PERSON	
NAME	Pieter de Beer (Sasolburg and Ekandustria Operations (SEO): Senior Manager Process Utilities)
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WASTE GENERATING FACILITY OR FACILITIES						
PHYSICAL ADDRESS OF FACILITY OR FACILITIES	Steam Station I - Klasie Havenga Road, Sasolburg, 1947 Steam Station II - Bergius Road, Sasolburg, 1947					
GPS CO-ORDINATES AT CORNERS OF WASTE GENERATING FACILITY OR FACILITIES	LATITUDE			LONGITUDE		
	Steam Station I					
	26°	49'	21.35"	27°	50'	16.70"
	26°	49'	16.04"	27°	50'	27.72"
	26°	49'	19.15"	27°	50'	29.54"
	26°	49'	24.38"	27°	50'	18.55"
	Steam Station II					
	26°	49'	14.62'	27°	50'	45.80"
	26°	49'	9.25'	27°	50'	57.03"
	26°	49'	18.42'	27°	51'	2.50"
26°	49'	23.53'	27°	50'	51.40"	
WASTE STREAM OR PORTION OF A WASTE STREAM TO BE EXCLUDED FROM THE DEFINITION OF WASTE	Coal Riddlings					
BENEFICIAL USE/S	a. Brickmaking b. Block making c. AFR d. Road aggregate					

WASTE GENERATING PROCESS		
DETAILED DESCRIPTION OF WASTE GENERATING PROCESS ¹	Coal is sent to the silos via conveyor belt. From the silos the coal is transferred to the bunkers. The coal gravitates from the bunker into the mill where it pulverised to the desired size for the boilers. Riddlings is the material that resisted pulverisation and is screened out of the boiler feed coal as it is not suitable to be used in the boiler. Riddlings consists of a mixture of coal and rock fragments. It is discharged from the mill into trolleys and transported to the collection area.	
PRODUCTION PROCESS FLOW CHART ATTACHED	YES X	NO
WASTE CLASSIFICATION	HAZARDOUS	GENERAL X
IF HAZARDOUS LIST THE HAZARDS OF THE WASTE	[REDACTED]	

¹ A process flow chart must be attached with this form for the process description

RISK ASSESSMENT WITHOUT MITIGATION

ACTIVITY	RISK DESCRIPTION	ENVIRONMENTAL RECEPTORS	ASSESSMENT OF RISK				SIGNIFICANCE
			Impact	Probability	Magnitude	Duration	
1 Loading of riddlings onto trucks	Loss of containment of riddlings	Air	<ul style="list-style-type: none"> Localised dust generation Air pollution 	Inherent: Definite: 5	Inherent: Minor: 2	Inherent: Immediate: 1	Inherent: Site only: 1 Inherent: 20, low environmental significance
2 Transportation of riddlings	Loss of containment of riddlings	Air	<ul style="list-style-type: none"> Dust generation along transportation route Air pollution 	Inherent: Definite: 5	Inherent: Minor: 2	Inherent: Immediate: 1	Inherent: Local: 2 Inherent: 25, low environmental significance
		Land	<ul style="list-style-type: none"> Load of riddlings deposited on land in the vicinity of the road Land pollution 	Inherent: Medium probability: 3	Inherent: Low: 4	Inherent: Short term (0 to 12 months): 2	Inherent: Site only: 1 Inherent: 21, low environmental significance
3 Off-loading of riddlings	Loss of containment of riddlings	Water	<ul style="list-style-type: none"> Load of riddlings deposited in water body in the vicinity of the road Water pollution 	Inherent: Medium probability: 3	Inherent: Moderate: 6	Inherent: Short term (0 to 12 months): 2	Inherent: Site only: 1 Inherent: 27, low environmental significance
		Air	<ul style="list-style-type: none"> Localised dust generation Air pollution 	Inherent: Definite: 5	Inherent: Minor: 2	Inherent: Immediate: 1	Inherent: Site only: 1 Inherent: 20, low environmental significance
4 Storage of riddlings	Loss of containment of riddlings	Air	<ul style="list-style-type: none"> Localised dust generation Air pollution 	Inherent: Highly probable: 4	Inherent: Minor: 2	Inherent: Immediate: 1	Inherent: Site only: 1 Inherent: 16, low environmental significance
		Land	<ul style="list-style-type: none"> Riddlings carried by run-off deposited on land in the vicinity of the riddlings storage area Land degradation 	Inherent: Medium probability: 3	Inherent: Minor: 2	Inherent: Short term (0 to 12 months): 2	Inherent: Site only: 1 Inherent: 15, low environmental significance

5 Handling of riddlings (i.e. screening, crushing, blending etc.)	Water	<ul style="list-style-type: none"> Riddlings carried by run-off deposited in storm water channels and water body in the vicinity of the riddlings storage area Water pollution 	Inherent: Low probability: 2	Inherent: Low: 4	Inherent: Short term (0 to 12 months): 2	Residual: Local: 2	Inherent: 16, low environmental significance
a. Brickmaking; b. Block making; c. AFR d. Road aggregate	Air	<ul style="list-style-type: none"> Localised dust generation Air pollution 	Inherent: Definite: 5	Inherent: Minor: 2	Inherent: Immediate: 1	Inherent: Site only: 1	Inherent: 20, low environmental significance
The point at which coal riddlings enters the production process of bricks and blocks to the actual products is outside the scope of this risk assessment. The quality of the products from these processes is regulated by relevant standards. AFR – Riddlings contains under pulverised coal, that has calorific (heating) value that can be use as coal replacement, as is.							
6 Disposal of riddlings and riddlings containing products	Air	<ul style="list-style-type: none"> Localised dust generation Air pollution 	Residual: Medium probability: 3	Inherent: Minor: 2	Inherent: Short term (0 to 12 months): 2	Inherent: Site only: 1	Inherent: 15, low environmental significance
Residual riddlings stockpiled after closure, decommissioning or change of ownership of user facility	Land	<ul style="list-style-type: none"> Load of riddlings disposed illegally on land Land degradation 	Inherent: Medium probability: 3	Inherent: Low: 4	Inherent: Short term (0 to 12 months): 2	Inherent: Site only: 1	Inherent: 21, low environmental significance
Residual riddlings stockpiled after closure, decommissioning or change of ownership of user facility	Water	<ul style="list-style-type: none"> Illegally disposed riddlings reaching water body in the vicinity of the dumping area Water pollution 	Inherent: Medium probability: 3	Inherent: Low: 4	Inherent: Short term (0 to 12 months): 2	Inherent: Site only: 1	Inherent: 21, low environmental significance
Residual riddlings stockpiled after closure, decommissioning or change of ownership of user facility	Air	<ul style="list-style-type: none"> Localised dust generation Air pollution 	Inherent: Medium probability: 3	Inherent: Minor: 2	Inherent: Immediate: 1	Inherent: Site only: 1	Inherent: 12, low environmental significance
Residual riddlings stockpiled after closure, decommissioning or change of ownership of user facility	Land	<ul style="list-style-type: none"> Riddlings carried by run-off deposited on land in the vicinity of the riddlings storage area Land degradation 	Inherent: Medium probability: 3	Inherent: Low: 4	Inherent:	Inherent: Site only: 1	Inherent:

						Short term (0 to 12 months): 2	21, low environmental significance
Water	<ul style="list-style-type: none"> Riddlings carried by run-off deposited in storm water channels and water body in the vicinity of the riddlings storage area 	Inherent: Low probability: 2	Inherent: Low: 4	Inherent: Short term (0 to 12 months): 2	Residual: Local: 2	Inherent: 16, low environmental significance	

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

CRITERIA	
Magnitude (Severity)	Duration
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
Scale	Probability (Likelihood)
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:

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

I, PJ AE BEER. (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: Waset Act, 2008 (Act 59 of 2008).


Signature of the applicant²/ Signature on behalf of the applicant:

PJ AE BEER.

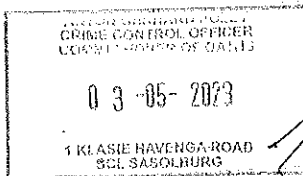
Name of Applicant:

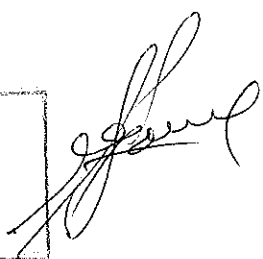
SRM MANAGER, PRODUCTIONS.

Designation

03 MAY 2023

Date:





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