



**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	Southern Proteins Ltd
CONTACT PERSON	Peet Venter
NAME	Southern Proteins Ltd
ADDRESS	Portion 45 (Remaining extent) of the farm Weltevreden 227, Registration Division IR, Victor Khanye Local Municipality, Mpumalanga
E-MAIL ADDRESS	Peet.Venter@afgrifeeds.co.za
TELEPHONE	0136651027
CELL PHONE	

WASTE GENERATING FACILITY OR FACILITIES				
PHYSICAL ADDRESS OF FACILITY OR FACILITIES	Portion 45 (Remaining extent) of the farm Weltevreden 227, Registration Division IR, Victor Khanye Local Municipality, Mpumalanga			
GPS CO-ORDINATES AT CORNERS OF WASTE GENERATING FACILITY OR FACILITIES	LATITUDE		LONGITUDE	
	26° 06'	52.18"	28° 45'	0.43"
	26° 06'	52.24"	28° 45'	3.08"
	26° 07'	2.16"	28° 45'	2.66"
	26° 07'	2.99"	28° 45'	2.20"
	26° 07'	3.39"	28° 45'	1.70"
	26° 07'	3.54"	28° 44'	55.36"
	26° 06'	57.76"	28° 44'	55.59"
	26° 06'	57.82"	28° 44'	57.99"
	26° 06'	55.15"	28° 44'	58.37"
26° 06'	55.23"	28° 45'	0.10"	
WASTE STREAM OR PORTION OF A WASTE STREAM TO BE EXCLUDED FROM THE DEFINITION OF WASTE	Boiler ash			
BENEFICIAL USE/S	Brick making			

WASTE GENERATING PROCESS		
DETAILED DESCRIPTION OF WASTE GENERATING PROCESS ¹	At Southern Proteins a skip is loaded with the boiler ash and as soon as it is filled it will go through a weigh bridge and a waste manifest will be prepared. It will be taken straight to three communities in Botleng where the bricks are to be manufactured. Botleng is adjacent to Middelburg and is located in Nkangala District Municipality, Mpumalanga. The finished bricks then will be sold again to the community for re-use.	
PRODUCTION PROCESS FLOW CHART ATTACHED	<u>YES</u> X	NO
WASTE CLASSIFICATION	<u>HAZARDOUS</u> X	GENERAL
IF HAZARDOUS LIST THE HAZARDS OF THE WASTE	Silica (Si), aluminium (Al), calcium (Ca) and iron (Fe) recorded in concentrations >1%	

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

Table 12: Risk Assessment without Mitigation for the beneficial use of boiler ash

Activity	Risk description	Environmental Receptors	Assessment of Risk					Significance
			Impact	Probability	Magnitude	Duration	Scale	
Storage	Accidental spillage into the environment	Soil	Soil contamination	3	2	3	1	18
		Surface water	Ash carried by run-off deposited in storm water channels and water body in the vicinity of the ash storage area	3	3	2	2	21
		Groundwater	Seepage into groundwater and contamination	3	2	3	1	18
	Leachate from stockpiled material during rainfall	Soil	Soil contamination	3	2	3	1	18
		Surface water	Ash carried by run-off deposited in storm water channels and water body in the vicinity of the ash storage area	3	3	2	2	21
		Groundwater	Seepage into groundwater and contamination	3	2	3	1	18

Activity	Risk description	Environmental Receptors	Assessment of Risk					Significance
			Impact	Probability	Magnitude	Duration	Scale	
	Windblown ash	Air	Localised dust generation and air pollution	3	3	2	2	21
Loading of ash onto trucks	Accidental spillage into the environment	Air	Localised dust generation and air pollution	3	3	2	2	21
Transportation	Windblown ash	Air	Localised dust generation and air pollution	3	3	3	2	24
		Soil	Soil contamination	3	2	3	1	18
		Surface water	Ash carried by run-off deposited in storm water channels and water body in the vicinity of the ash storage area	3	3	2	2	21
		Groundwater	Seepage into groundwater and contamination	3	3	3	2	24
Brick manufacturing	Windblown ash	Air	Localised dust generation and	3	4	2	2	24

Activity	Risk description	Environmental Receptors	Assessment of Risk					Significance
			Impact	Probability	Magnitude	Duration	Scale	
			air pollution					
	Dust generation due to mixing process	Air	Localised dust generation and air pollution	3	4	2	2	24
	Spillage due to mixing processes	Soil	Soil contamination	3	3	3	1	21
		Surface water	Ash carried by run-off deposited in storm water channels and water body in the vicinity of the ash storage area	3	3	2	2	21
		Groundwater	Seepage into groundwater and contamination	3	3	3	2	24
Final end beneficial use	Dust generation	Air	Localised dust generation and air pollution	1	1	1	1	3
	Leachate generation	Soil	Soil contamination	1	1	1	1	3
		Surface water	Ash carried by run-off deposited in storm water	1	1	1	1	3

Activity	Risk description	Environmental Receptors	Assessment of Risk					Significance
			Impact	Probability	Magnitude	Duration	Scale	
			channels and water body in the vicinity of the ash storage area					
		Groundwater	Seepage into groundwater and contamination	1	1	1	1	3

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, Charlotte Maphah (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).

[Handwritten Signature]

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

Charlotte Maphah

Name of Applicant:

Environmental officer

Designation

14/11/2022

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.

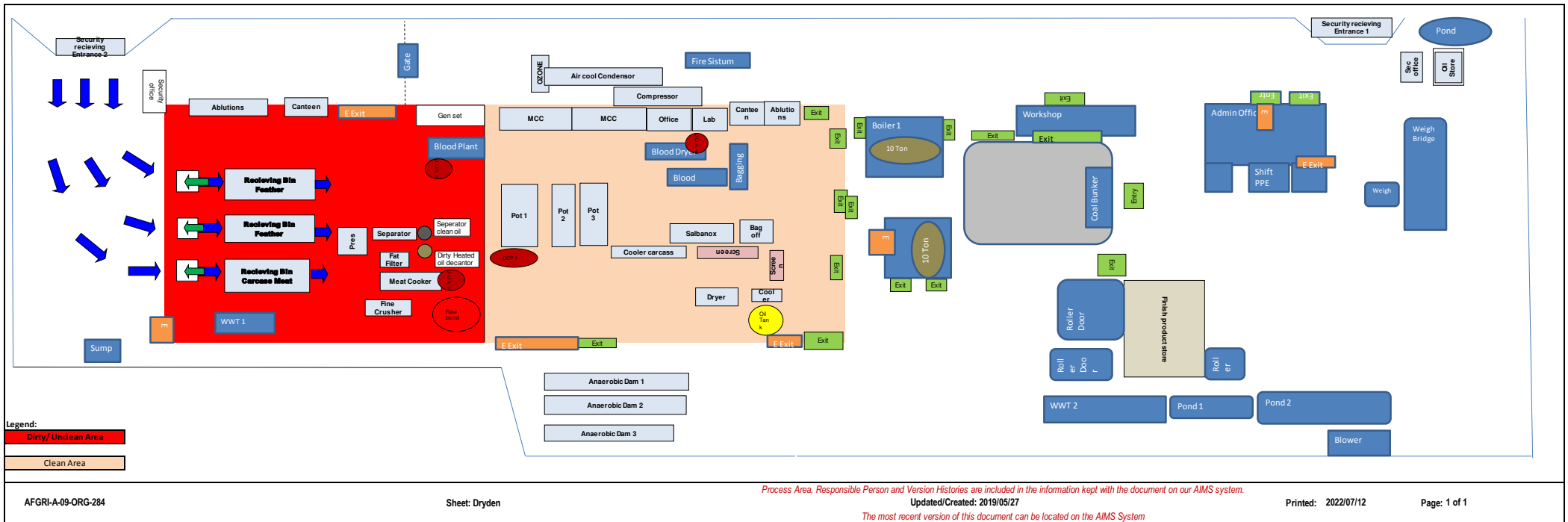


Figure 1: Process Flow illustration