



# environmental affairs

Department:  
Environmental Affairs  
**REPUBLIC OF SOUTH AFRICA**

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

<b>APPLICANT</b>	Sappi Southern Africa Limited – Lomati Mill
<b>WASTE STREAM OR PORTION OF A WASTE STREAM</b>	Biomass (sawdust and bark)
<b>BENEFICIAL USE/S</b>	Composting
	Particle board manufacture
	Animal bedding
<b>WASTE GENERATING FACILITY</b>	Sappi Lomati Mill
<b>PHYSICAL ADDRESS OF FACILITY</b>	Townlands, Barberton
<b>GPS CO-ORDINATES OF WASTE GENERATING FACILITY</b>	25°46'20.57" Latitude; 31° 2'26.05" Longitude
<b>CONTACT PERSON</b>	

<b>NAME</b>	Christopher Scrimnenger	
<b>ADDRESS</b>	PO Box 155, Barberton, 1300	
<b>EMAIL ADDRESS</b>	Christopher.scrimnenger@sappi.com	
<b>TELEPHONE</b>	(013) 712 9800	
<b>* DETAILED DESCRIPTION OF WASTE GENERATING PROCESS</b>	The Mill receives saw logs, which are passed through a debarking and sorting process, after which the logs are sawn into various size classes. The sawn timber is then dried in kilns to the required moisture content and then joined to produce standard lengths prior to distribution. The process produces general waste streams including dry sawdust, wet sawdust, bark, off-cuts and pulp chips.	
<b>PRODUCTION PROCESS FLOW CHART ATTACHED</b>	YES	NO
<b>IDENTIFICATION OF HAZARDS</b>	Environmental Hazards: Dust, Leachate	
<b>WASTE CLASSIFICATION</b>	HAZARDOUS	GENERAL
<b>* A process flow chart must be attached to the process description</b>		

**RISK ASSESSEMENT WITHOUT MITIGATION**

Activity	Risk Description	Environmental receptors	Impact	Assessment of the risk				
				Probability	Magnitude	Duration	Scale	Significance
Storage	Fire risk	Air	Deterioration of local air quality	3	4	1	1	18
	Leachate from stockpiled material during rainfall	Soil	Soil contamination	3	4	3	1	24
		Surface water	Contaminated stormwater transported to surface water	2	4	3	2	18
Transportation	Airborne material	Groundwater	Percolation into groundwater	2	4	3	2	18
		Air	Deterioration of local air quality	3	4	2	2	24
	Air borne material	Air	Deterioration of local air quality	3	4	2	2	24
		Soil	Soil contamination	3	4	3	2	24
	Accidental spillage into the environment	Surface water	Contaminated stormwater transported to surface water	2	4	3	2	18
		Groundwater	Percolation into groundwater	2	4	3	2	18

Activity	Risk Description	Environmental receptors	Impact	Assessment of the risk				
				Probability	Magnitude	Duration	Scale	Significance
Processing	Accidental spillage into the environment	Soil	Soil contamination	3	4	3	1	24
		Surface water	Contaminated stormwater transported to surface water	2	4	3	2	18
		Groundwater	Percolation into groundwater	2	4	3	2	18
Land Application	Concentration of contaminants due to incorrect application rates	Soil	Soil contamination	3	4	3	1	24
		Surface water	Contamination transported to surface water	2	4	3	2	18
		Groundwater	Percolation into groundwater	2	4	3	2	18

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

MAGNITUDE (Severity)		Criteria	
10 - Very high		5 - Permanent (longer than 10 years)	DURATION
8 - High		4 - Long-term (5 to 10 years)	
6 - Moderate		3 - Medium-term (12 months to 5 years)	
4 - Low		2 - Short-term (0 to 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 - Improbable	
0 - None		0 - None	

**Magnitude**  
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 impact to occur. The potential impact could be most likely to occur, unlikely, etc.

**Assessment of Significance of Impact**

Significance rating of the potential impacts illustrates the importance of the impact itself. The size of 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 impact, the following method was used:

$$\text{Significance Points (SP)} = (\text{Magnitude} + \text{Duration} + \text{Scale}) \times \text{Probability}$$

The values of SP are then ranged as follows:

	Rating	Description
SP >60	Indicates high environmental significance	An impact which could influence the decision about whether or not to proceed with the activities regardless of any possible mitigation.
SP 30 - 60	Indicates moderate environmental 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	Indicates low environmental 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 positive consequences/effects

I, DC Scammenger hereby declare that I have read the completed the 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).

Applicant (Full names) Denck David Christopher Scammenger

Designation Risk Manager

Signature *Scammenger*

Date 28 08 2018 Place Berburton.

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Date Received			
Decision Taken	Authorised	Not Authorised( provide reasons)	
Reference Number			