



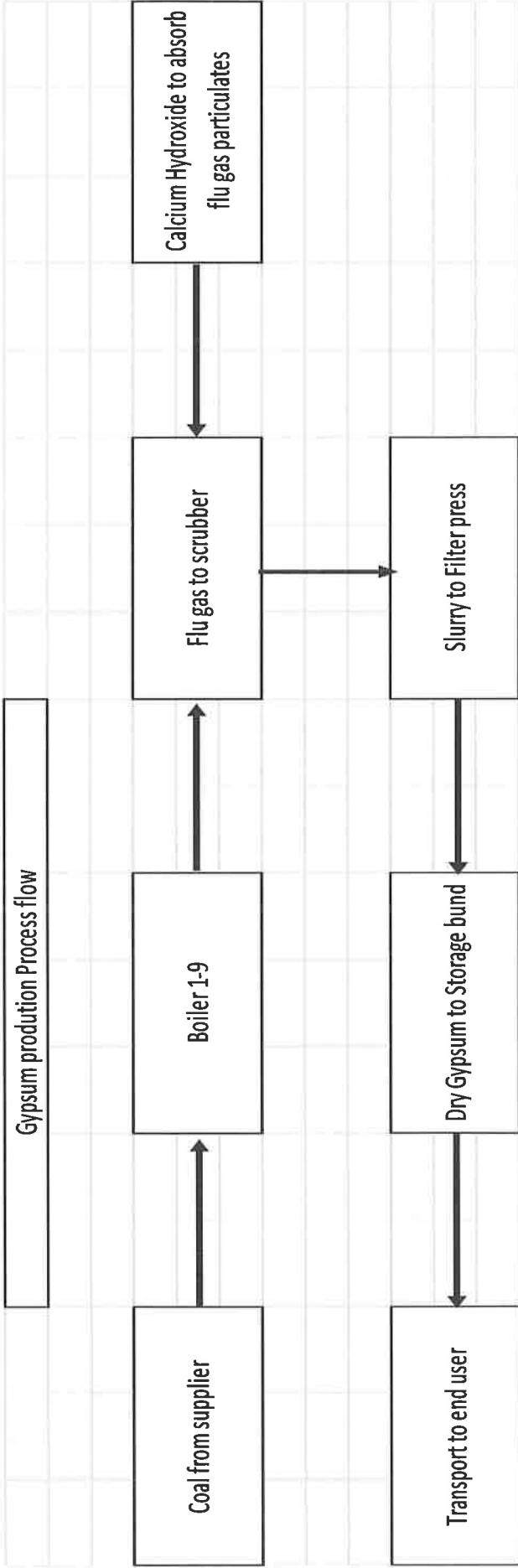
environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

APPLICANT	Sappi Southern Africa Limited – Saiccor Mill
WASTE STREAM OR PORTION OF A WASTE STREAM TO BE EXCLUDED FROM THE DEFINITION OF WASTE	Gypsum
BENEFICIAL USE/S	Agriculture: soil ameliorant, soil conditioning, soil rehabilitation
	Plasterboard manufacturing
WASTE GENERATING FACILITY OR FACILITIES	
PHYSICAL ADDRESS OF FACILITY OR FACILITIES	1 Umkomanzi Drift KZN, 4170
GPS CO-ORDINATES OF WASTE GENERATING FACILITY OR FACILITIES	30°18'11" Latitude; 30°77'16" Longitude
CONTACT PERSON	
NAME	Jurie Marx
ADDRESS	PO Box 62, Umkomaas, 4170
EMAIL ADDRESS	Jurie.marx@sappi.com
TELEPHONE	039 973 8430
* DETAILED DESCRIPTION OF WASTE GENERATING PROCESS	Slaked calcium oxide is used to scrub the Coal fire Boiler flue gas in order to remove any particulates. The slurry is passed through a press to remove moisture and the cake is disposed of as dry Gypsum.
PRODUCTION PROCESS FLOW CHART ATTACHED	YES

WASTE CLASSIFICATION	HAZARDOUS	
IF WASTE IS HAZARDOUS LIST THE HAZARDS OF THE WASTE		
*A process flow chart must be attached to the process description		



RISK ASSESSEMENT WITHOUT MITIGATION

Activity	Risk Description	Environmental receptors	Assessment of the risk					Significance
			Impact	Probability	Magnitude	Duration	Scale	
Storage	Leachate from stockpiled material during rainfall	Soil	Soil contamination	4	6	3	1	40
		Surface water	Contamination transported to surface water	3	4	3	2	27
		Groundwater	Percolation to groundwater	4	4	3	2	36
Transportation	Airborne material	Air	Deterioration of local air quality	5	4	1	2	35
	Air borne material	Air	Deterioration of local air quality	5	4	1	2	35
	Accidental spillage into the environment	Soil	Soil contamination	2	4	2	1	14
		Surface water	Contamination transported to surface water	2	4	2	2	16
		Groundwater	Percolation to groundwater	2	4	2	2	16

Activity	Risk Description	Environmental receptors	Assessment of the risk					Significance
			Impact	Probability	Magnitude	Duration	Scale	
Processing	Accidental spillage into the environment	Soil	Soil contamination	2	4	2	1	14
		Surface water	Contamination transported to surface water	2	4	2	2	16
		Groundwater	Percolation to groundwater	2	4	2	2	16
	Leachate generation	Soil	Soil contamination	4	6	3	1	40
		Surface water	Contamination transported to surface water	3	4	3	2	27
		Groundwater	Percolation to groundwater	4	4	3	2	36
Land Application	Concentration of contaminants due to incorrect application rates	Air	Deterioration of local air quality	3	4	2	2	24
		Soil	Soil contamination	4	6	3	1	40
		Surface water	Contamination transported to surface water	3	4	3	2	27
		Groundwater	Percolation to groundwater	4	4	3	2	36

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 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:

Significance Points (SP) = (Magnitude + Duration + Scale) x 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

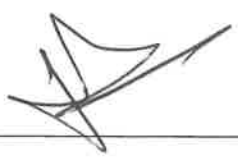
I, Jurie Francois Marx, hereby declare that I have read the completed the Risk Assessment form and hereby confirm that the information is to the best of my knowledge true and correct.

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) : Jurie Francois Marx

Designation : SHEQ Development Manager

Signature _____



Date _____

18/2/20

Place _____

Ukhomas

FOR OFFICE USE ONLY

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