



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

APPLICANT	Kimberly-Clark of South Africa (Pty) Limited
WASTE STREAM OR PORTION OF A WASTE STREAM	Biomass
BENEFICIAL USE/S	Landfill cover material
	Raw material in biogas plant
	Brickmaking
	Composting
	Particle board manufacture
WASTE GENERATING FACILITY	Kimberly-Clark Enstra Mill

PHYSICAL ADDRESS OF FACILITY	East Geduld Road, Enstra, Springs, 1559	
GPS CO-ORDINATES OF WASTE GENERATING FACILITY	Latitude: 26° 12' 24.84"S Longitude: 28° 26' 25.44"E	
CONTACT PERSON		
NAME	Sithembile Dlamini	
ADDRESS	Private bag X57, Springs, 1560	
EMAIL ADDRESS	Sithembile.Dlamini@kcc.com	
TELEPHONE	011 360 7271	
* DETAILED DESCRIPTION OF WASTE GENERATING PROCESS	Recycled waste paper is pulped in order to break the paper into fibres. It goes through a series of cleaning and screening, deinking and washing processes to remove contaminants, fines, ash and ink. Water recovered during these processes is sent to the water recovery and water treatment plant. Sludge is generated during the water recovery and treatment processes where solids and water are separated. It is then dewatered and conveyed into skips.	
PRODUCTION PROCESS FLOW CHART ATTACHED	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
IDENTIFICATION OF HAZARDS	Environmental Hazards: Leachate	
WASTE CLASSIFICATION	HAZARDOUS <input type="checkbox"/>	GENERAL <input checked="" type="checkbox"/>
*A process flow chart must be attached to the process description		

RISK ASSESSEMENT WITHOUT MITIGATION

Activity	Risk Description	Environmental receptors	Impact	Assessment of the risk				
				Probability	Magnitude	Duration	Scale	Significance
Storage	Leachate from stocked material during rainfall	Soil	Soil contamination	2	4	3	1	16
		Surface water	Contaminated stormwater transported to surface water	2	4	3	2	18
		Groundwater	Percolation into groundwater	2	2	3	2	14
Transportation	Accidental spillage into the environment	Soil	Soil contamination	3	4	3	2	24
		Surface water	Contaminated stormwater transported to surface water	2	4	3	2	18
		Groundwater	Percolation into groundwater	2	2	3	2	18
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

Activity	Risk Description	Environmental receptors	Impact	Assessment of the risk				
				Probability	Magnitude	Duration	Scale	Significance
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:

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:

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

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, **Sithembile Dlamini** 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) **Sithembile Dlamini**

Designation **Environmental Engineer**

Signature  _____

Date **10/10/2018**

Place **Springs**

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