



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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

APPLICANT	Mpact Operations (Pty) Limited Corrugated, Epping
WASTE STREAM OR PORTION OF A WASTE STREAM	Ash from Combustion
BENEFICIAL USE/S	Landfill cover material
WASTE GENERATING FACILITY	Mpact Corrugated Epping
PHYSICAL ADDRESS OF FACILITY	Losack Avenue, Epping, Cape Town
GPS CO-ORDINATES OF WASTE GENERATING FACILITY	Latitude: 33° 56' 17.96"S Longitude: 18° 33' 17.69"E
CONTACT PERSON	
NAME	Justin Sparks
ADDRESS	PO Box 46, Eppingdust, 7475

EMAIL ADDRESS	jsparks@mpact.co.za		
TELEPHONE	021 507 6700		
* DETAILED DESCRIPTION OF WASTE GENERATING PROCESS	Boilers are used to generate steam for corrugated board production. Boiler Ash is generated through the combustion process. Ash particles are separated in the Grit Arrestor and both Boiler Ash and Ash Grit are removed by a trolley to the Ash Skip.		
PRODUCTION PROCESS FLOW CHART ATTACHED	YES	X	NO
IDENTIFICATION OF HAZARDS	Environmental Hazards: Dust, Leachate Boiler ash is not classified as an environmental hazard in terms of SANS 10234 but is classified as having potential health hazards to workers without appropriate personal protective equipment		
WASTE CLASSIFICATION	HAZARDOUS		GENERAL
			X
* 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	Accidental spillage into the environment	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
		Leachate from stockpiled material during rainfall	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
Transportation	Windblown ash	Air	Deterioration of local air quality	3	4	2	2	24
		Air	Deterioration of local air quality	3	4	2	2	24
		Air borne ash		3	4	2	2	24
		Accidental spillage into the environment	Soil contamination	3	4	3	2	27
Transportation	Accidental spillage into the environment	Soil	Soil contamination	3	4	3	2	27
		Surface water	Contamination transported to surface water	2	4	3	2	18

Activity	Risk Description	Environmental receptors	Impact	Assessment of the risk				
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		Groundwater	Percolation into groundwater	3	4	3	2	27

Manufacturing	Windblown ash	Air	Deterioration of local air quality	3	4	2	2	24
		Visual	Visual impact from windblown waste	3	4	2	2	24
		Air	Deterioration of local air quality	3	4	2	2	24
	Spillage during mixing process	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 chances 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, S.B. STEENKAMP 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) JONATHAN BENJAMIN STEENKAMP

Designation GENERAL MANAGER

Signature 

Date 14 September 2018 Place SPRINGS

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