



DEPARTMENT OF ENVIRONMENTAL AFFAIRS
PRIN
DATE: 28/02/2020

environmental affairs

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

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

APPLICANT	Mpact Operation (Pty) Ltd Paper, Springs Mill
WASTE STREAM OR PORTION OF A WASTE STREAM TO BE EXCLUDED FROM THE DEFINITION OF WASTE	Biomass (Paper sludge from board making process)
BENEFICIAL USE/S	Composting
WASTE GENERATING FACILITY OR FACILITIES	
PHYSICAL ADDRESS OF FACILITY OR FACILITIES	82-84 Steel road, Springs, New Era
GPS CO-ORDINATES OF WASTE GENERATING FACILITY OR FACILITIES	North-south: -26.2596116 East-west: 28.4020465
CONTACT PERSON	
NAME	Yadhna Narainsamy
ADDRESS	82-84 Steel road, Springs, New Era
EMAIL ADDRESS	YNarainsamy@mpact.co.za
TELEPHONE	011 360 4327
* DETAILED DESCRIPTION OF WASTE GENERATING PROCESS	Process water recovered during the pulping of recycled waste paper is processed in a water clarification plant where solids and water are separated. The resultant sludge is then sent to a belt press where excess water is removed. The dewatered sludge is conveyed onto skips as a final product.

PRODUCTION PROCESS FLOW CHART ATTACHED	YES X	NO
WASTE CLASSIFICATION	HAZARDOUS	GENERAL X
IF WASTE IS HAZARDOUS LIST THE HAZARDS OF THE WASTE	Environmental hazards: Dust, Leachate	
*A process flow chart must be attached to the process description		

Process flow chart attached.

RISK ASSESSEMENT WITHOUT MITIGATION

Activity	Risk Description	Environmental Receptors	Assessment of Risk					Significance
			Impact	Probability	Magnitude	Duration	Scale	
Storage	Run off from materials stored during rainfall	Surface water	Contamination of storm water	3	4	2	1	21
	Leachate from material during rainfall	Groundwater	Percolation into groundwater	3	2	2	2	18
	Soil contamination from materials	Soil	Soil contamination	2	2	2	1	10
	Dust dislodged from material in windy conditions	Air	Deterioration of air quality around the vicinity	2	2	1	1	8
	Fire risk	Air	Deterioration of air quality around the vicinity	2	4	1	1	12

Activity	Risk Description	Environmental Receptors	Assessment of Risk					Significance
			Impact	Probability	Magnitude	Duration	Scale	
Handling	Dust dislodged during handling	Air	Health impacts on personnel handling the waste material	2	2	1	1	8
		Soil	Soil contamination from material	2	2	1	1	8
	Accidental spillage during handling	Surface water	Storm water contamination from material during rainfall	2	4	2	2	16
		Groundwater	Percolation into ground water	2	4	2	2	16
Transportation	Dust dislodged during transportation	Air	Deterioration of air quality around the vicinity	2	2	1	2	10
	Accidental spillage into the environment	Soil	Soil contamination from materials Storm water	2	2	1	1	8
		Surface water	contamination from material during rainfall	2	4	2	2	16

Activity	Risk Description	Environmental Receptors	Assessment of Risk					Significance
			Impact	Probability	Magnitude	Duration	Scale	
		Groundwater	Percolation into ground water	2	2	2	2	12
Processing	Accidental spillage into the environment	Soil	Soil contamination from materials	2	4	1	1	12
		Surface water	Storm water contamination from material during rainfall	3	4	2	2	24
		Groundwater	Percolation into ground water	2	4	2	2	16
Compost application	Concentration of contaminants due to incorrect application rates	Soil	Soil contamination from materials	2	2	2	1	10
		Surface water	Storm water contamination from material during rainfall	3	4	2	2	24
		Ground water	Percolation into ground water	2	4	2	2	16

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, HUGH MICHAEL THOMSON 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) HUGH MICHAEL THOMSON

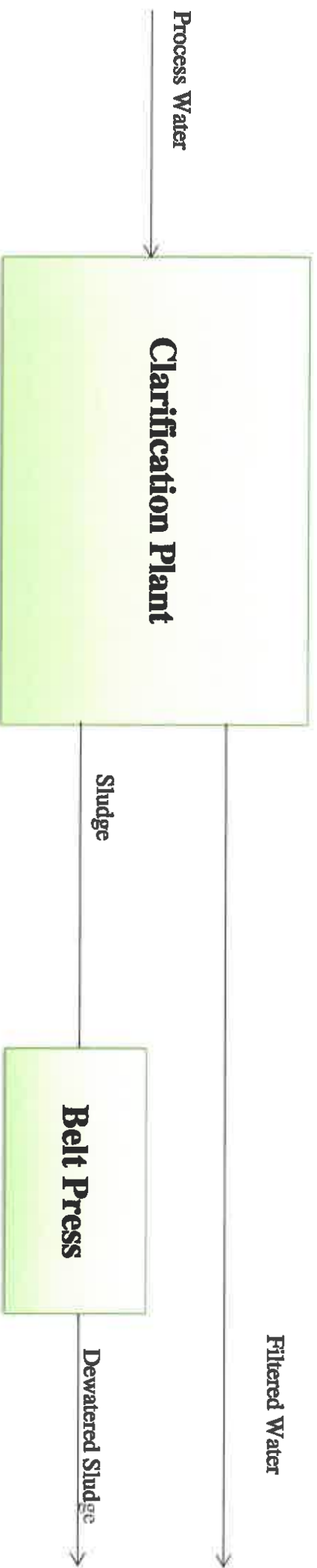
Designation MD PAPER

Signature 

Date 21/02/2020 Place MELROSE AROM

FOR OFFICE USE ONLY

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



Process Water

Clarification Plant

Sludge

Belt Press

Dewatered Sludge

Filtered Water

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M.P. Dorigweva, M.B. Lungu-Royds, T.D.A. Ross, M.M. Thompson, M.N. Siquane (Company Secretary)