



## forestry, fisheries & the environment

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

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

	(For official use only)
File Reference Number:	12/9/11
NEAS Reference Number:	
Date Received:	

Risk Assessment for an application for exclusion of Waste stream or portion of Waste stream in terms of the National Environmental Management: Waste Act, 2008(Act No.59 of 2008), as amended.

#### Kindly note that:

1. This form is current as of 01 April 2021. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
2. The information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing.
3. Incomplete forms (including information as required in the application form may be returned to the applicant for revision and the inclusion of additional information.
4. Unless protected by law, all information filled in on this application will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this application on request, during any stage of the application process.

BACKGROUND INFORMATION	
APPLICANT	Mondi South Africa Pty Ltd (Mondi)
CONTACT PERSON	Ms. C. Webb
NAME	Candice
ADDRESS	P.O. Box 1551, Richards Bay,3900
E-MAIL ADDRESS	<a href="mailto:Candice.Webb@mondigroup.com">Candice.Webb@mondigroup.com</a>
TELEPHONE	035 902 2031
CELL PHONE	082 405 1688

WASTE GENERATING FACILITY OR FACILITIES						
PHYSICAL ADDRESS OF FACILITY OR FACILITIES	7 Western Arterial, Lot 6724, Alton Industrial Area, Mondi Richards Bay, South Africa, 3900					
GPS CO-ORDINATES AT CORNERS OF WASTE GENERATING FACILITY OR FACILITIES	LATITUDE			LONGITUDE		
	28°	45'	29.31" S	32°	0'	10.93" E
	28°	46'	11.78" S	31°	59'	55.52" E
	28°	45'	49.93" S	31°	59'	16.65" E
WASTE STREAM OR PORTION OF A WASTE STREAM TO BE EXCLUDED FROM THE DEFINITION OF WASTE	Green Liquor Dregs (GLD)					
BENEFICIAL USE/S	<ul style="list-style-type: none"> <li>• Used as an additive/ component material in the manufacture of commercial fertilizer</li> <li>• Treatment of low pH (Acidic) waste streams prior to disposal at registered landfills</li> </ul>					

WASTE GENERATING PROCESS	
DETAILED DESCRIPTION OF WASTE GENERATING PROCESS <sup>1</sup>	<p><b>Green Liquor Dregs (GLD)</b> is a solid waste stream which originates from the Kraft process. At the beginning of the process, white liquor is fed into the digester. This liquor contains high amount go effective alkaline which is used to digest the wood.</p> <ul style="list-style-type: none"> <li>•Spent liquor (black liquor) is removed from the digester. Black liquor contains low levels of effective alkali and large amounts pf organic compounds that are removed and burned in a reco0very boiler furnace.</li> <li>•The resultant mass of organic residue is dissolved to form green liquor in the dissolving tank. The green liquor is feed from the dissolving tank to a green</li> </ul>

<sup>1</sup> A process flow chart must be attached with this form for the process description

	liquor clarifier for the removal of sludge called Green Liquor Dregs (GLD)	
<b>PRODUCTION PROCESS FLOW CHART ATTACHED</b>	<b>YES X</b>	<b>NO</b>
<b>WASTE CLASSIFICATION</b>	<b>HAZARDOUS X</b>	<b>GENERAL</b>
<b>IF HAZARDOUS LIST THE HAZARDS OF THE WASTE</b>	<b>Corrosive due to high pH</b>	

## RISK ASSESSMENT WITHOUT MITIGATION

Activity	Risk Description	Affected Pathways	Environmental Receptors	Impact	Assessment of impact criteria				
					Probability	Magnitude	Duration	Scale	Significance Rating
1. Waste Production, Handling and Storage	Health hazards associated with exposure and airborne waste	Physical contact, Inhalation of mist or vapours	Personnel	<b>Negative Health Hazards:</b> Skin burns and damage to eyes and respiratory system	3	10	3	2	45
2. Waste Production, Handling and Storage	Fire hazards during storage and transportation	Emissions into ambient air, Fire Risk	Personnel, Local Community	<b>Negative: Safety and Health hazards</b> associated with fire accidents and/or accidents and resulting air pollution	1	10	3	2	15
3. Waste Production, Handling and Storage	Water quality impacts due to release and spills into surface water and percolation into groundwater	Food Chain, Local water resources	Aquatic Ecosystem, Local water users	<b>Negative: Ecological, Social and Health impacts</b> linked to water pollution	2	10	3	2	30
4. Waste Production, Handling and Storage	Soil quality impacts due release and spills onto grounds and/or land	Pollutants released onto grounds and/or land	Vegetation, Wildlife, Ecosystem and Local water users	<b>Negative: Ecological and Social impacts</b> linked to soil pollution and changes in soil chemistry	2	10	3	2	30

Activity	Risk Description	Affected Pathways	Environmental Receptors	Impact	Assessment of impact criteria				
					Probability	Magnitude	Duration	Scale	Significance Rating
5. Waste Collection, Transportation and Distribution	Soil Contamination due to accidental release and spills onto grounds and/or land	Pollutants released onto grounds and/or land	Vegetation, Wildlife, Ecosystem and Local water users	<b>Negative: Ecological and Social impacts</b> linked to soil pollution and changes in soil chemistry	3	10	3	2	45
6. Waste Collection, Transportation and Distribution	Water Pollution due to accidental release and spills into waterways	Food Chain, Pollutants released into surface water and percolation into groundwater	Aquatic Ecosystem, Local water users	<b>Negative:</b> Ecological, Social and Health impacts linked to water pollution	3	10	3	2	45
7. Waste Collection, Transportation and Distribution	Health hazards associated with accidental exposure and airborne waste	Physical contact, Inhalation of mist or vapours	Personnel, Local community	<b>Negative Health Hazards:</b> Skin burns, tissue, eyes and respiratory system damage	2	10	3	2	30
8. Waste Collection, Transportation and Distribution	Mandatory Legal Compliance Requirement: Legitimacy of Waste Management and/or Waste Manifest System	Legal compliance requirement, Waste Management, waste distribution for specific use	Ecology, Local Community, Waste Generator and Waste users	<b>Legal non-compliance:</b> Insufficient system to demonstrate waste is managed in an environmentally-friendly manner	3	8	3	4	45

Activity	Risk Description	Affected Pathways	Environmental Receptors	Impact	Assessment of impact criteria				
					Probability	Magnitude	Duration	Scale	Significance Rating
9. The use of GLD as additive/component in the manufacture of commercial fertilizer	Legalities applicable to Fertilizer manufacturing Authorizations and /or Registrations requirements with the Department of Agriculture Forestry and Fisheries (DAFF) in terms of Regulations Relating to Fertilizers in terms of Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947)	Legal obligation in terms of Fertilizer manufacturing processes	Fertilizer manufacturer, Industry	<b>Legal non-compliance:</b> Non-compliance with the requirements of the Regulations Relating to Fertilizers	3	10	3	4	51
10. The use of GLD in treatment of acidic Landfill waste	Legalities applicable to Hazardous Waste Landfill Sites Authorizations and /or Registrations requirements with the Department of Environmental Affairs	Legal obligation in terms of Waste Treatment Facility operations		<b>Legal non-compliance:</b> Non-compliance with the requirements of the Regulations Relating to Landfill Site Licencing and operations	3	10	3	4	51