



**forestry, fisheries
& the environment**

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

**RISK MANAGEMENT PLAN IN TERMS OF REGULATION 10 OF THE WASTE
EXCLUSION REGULATIONS**

	(For official use only)
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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	Illovo Sugar (South Africa) (PTY) Ltd
CONTACT PERSON	Nicole Geoffrey (SHERQ Officer: Environment & Risk)
NAME	Nicole Geoffrey (SHERQ Officer: Environment & Risk)
ADDRESS	1 Mill Road, Sezela, Kwazulu-Natal. 4215.
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TELEPHONE	General Mill Contact no: 039 975 8000 Tel: +2731 450 7821
CELL PHONE	+2778 496 9843

WASTE FACILITY OR FACILITIES							
SOURCE (S) OF WASTE	SUGAR CANE						
WASTE TO BE BENEFICIATED	FILTER CAKE						
GPS CO-ORDINATES AT CORNERS OF WASTE GENERATING FACILITY OR FACILITIES	Pin locations	LATITUDE			LONGITUDE		
	A	30°	24'	46,08"S	30°	40'	37.76"E
	B	30°	24'	46.22"S	30°	40'	37.92"E
	C	30°	24'	46.33"S	30°	40'	37.51"E
	D	30°	24'	46.45"S	30°	40'	37.71"E
BENEFICIAL USE/S	TO BE USED AS A SOIL ENHANCER/SOIL FERTILIZER FOR SUGAR CANE FARMS.						

WASTE GENERATING PROCESS		
MSDS ATTACHED IF HAZARDOUS	YES	NO
WASTE GENERATING FACILITY	HAZARDOUS	GENERAL

RISK MANAGEMENT PLAN

Activity	Risk Description	Action(s) to minimise/manage the risk	Responsibility (Who is responsible to carry out the action(s))
<p>Context:</p> <ul style="list-style-type: none"> • Illovo Sugar (South Africa) Sezela Sugar Mill and Downstream Production Plant (ISSM) has on their SHEQ system: <ul style="list-style-type: none"> ○ The Illovo Code of Conduct and Business Ethics and an overarching ILLOVO SHERQ policy. ○ Illovo has developed its own Integrated Risk Management System (IIRMS) to ensure that the standards to which the business conforms are unified under a single platform, guiding and measuring compliance. ○ IIRMS guidelines have been developed from best practices in the Illovo Group, and from 		<ul style="list-style-type: none"> • It is the responsibility of ISSM staff and those involved in the supply chain that will be <ul style="list-style-type: none"> ○ handling, ○ transporting, ○ storing, or ○ working with the filter cake waste stream, to be made aware of the safety data sheet its contents, how to read it and where to obtain it. • Each party; • Generator; • driver/owner; and • recipient of the filter cake; are to have the latest, legal copy of the safety data sheet. • Training must be held for the contents and understanding of the contents for all relevant stakeholders. • ISSM must incorporate the safety data sheet into the: <ul style="list-style-type: none"> • waste management system and • emergency management systems, and • contents • into the work instructions, together with training and include these into the induction program. 	<p>ISSM staff and all stakeholders working with the waste.</p>

best practice in their industry where necessary.

- IIRMS assists in the management of environmental risks at Illovo and ensures that these standards are implemented by the whole group.

- Safety Data Sheet is a document for management of the filter cake to minimise any risk.
- The GHS classification and the SSV comparison of the filter cake give very good indications of the hazards encountered by all affected stakeholders when working with filter cake. It helps to identify areas which must be managed in order to minimise or eliminate risks. The intention is to maximize the intended beneficial use of the waste, while minimising any unacceptable impacts

<p>to people, environment and economic harm.</p> <ul style="list-style-type: none"> • SOP for management of dam/SHERQ Policy. • Incident investigations for any non compliances. 			
<p>Filter cake removal on request</p>	<ul style="list-style-type: none"> • Running out of storage space • Storage for extended time and running out of emergency storage space, if the removal rate is low. • Possible overflows into stormwater or sludge dams of the filter cake and filter cake 	<ul style="list-style-type: none"> • Ensure no pollution occurs from this waste source. • The particular recipients of this waste are recorded for the administration to keep records of this activity: <ul style="list-style-type: none"> ○ the quantity of waste, ○ the frequency of waste removal and ○ to whom the waste is being distributed to. • The monitoring of the filter cake demand must match the amount of filter cake so that if any is stored on the platform in the mill during an emergency is also distributed to recipients. • This must not build up and cause an overflow into the sludge dam. • Should there be circumstances that would reduce the removal rate of the filter cake then the effluent sludge level must be closely monitored to ensure this facility can cope with any overflow from the mill. • The tractor trailer must be maintained to prevent any breakdowns and down-time. • The farmer's demand for the product would be co-ordinated with the season that the fertilization of the fields is happening and hence be coordinated with the supply, to prevent build-up of the material. 	<p>ISSM:</p> <ul style="list-style-type: none"> • Manager in charge of the storage area for the filter cake. • Manager responsible for the sludge dam, • SHERQ manager. • Manager responsible for the distribution of the waste. • Production manager to know the quantity of waste generated. • Security Manager to ensure that the vehicles used are roadworthy and sound for the purpose that was engaged for.

			<p>Farmers:</p> <ul style="list-style-type: none"> who collect the waste for appropriate distribution either directly or through a driver.
<p>Access to filter cake storage area</p>	<p>Security and safety.</p> <ul style="list-style-type: none"> Unauthorised entry into the facility. Unauthorised removal of filter cake. Risk of fires due to unauthorised person's negligence and unmanaged behaviour 	<p>ISSM Mill gate security:</p> <ul style="list-style-type: none"> Retain security and access control at the gates. Access to the key for entrance is carefully monitored. No inspection done on entry of site however as a min requirement each service provider/customer will be required to meet the min requirements for their HSE file. Checklist attached. Site induction covers the safety and health risks and requirements for entering the site. Induction to be renewed every year. The SDS is to be given to each farmer and worker. Works instructions to include the vehicle checks. Security to check no overfilled tractors when leaving. ISSM: Ensure that adequate fire fighting equipment is available in the area should a fire occur. 	<p>ISSM Mill gate security:</p>
<p>Process of transferring filter cake from the storage bins to the receiving vehicles.</p>	<p>Dust: Windblown from the process of filter cake (if dried) transfer with front end loader. Sparks could trigger a fire.</p> <p>Spillage:</p>	<ul style="list-style-type: none"> Keep the filter cake moist to minimise dust formation and hence from being wind-blown. Ensure that only the responsible personnel needed for the activity are in the area for the duration of the transfer. Ensure correct PPE is used in the area as per SDS: appropriate <ul style="list-style-type: none"> clothing footwear and 	<p>Manager responsible for waste and operations.</p>

	<p>onto area outside of banded area. Onto personnel not authorised to be at the location. Safety: Fires from sparks.</p>	<ul style="list-style-type: none"> ○ respiratory protection is worn that is appropriate for the dust that may be generated. ● Eye wash and safety shower station to be clearly demarcated and close by. ● Careful management of the transfer of filter cake to vehicles. <ul style="list-style-type: none"> ○ Service provider will be responsible for the handling of waste. Site requirement is Safety file including 37.2 agreement. Weighbridge documentation issued by SHERQ ● Procedure very clear for limit of filter cake load to fill vehicle trailer or bin; no overfilling, to minimise on-site and off-site spillage. ● Clean-up of storage area with each batch of filter cake. ● Ensure the area is cleaned at the end of the working day to minimise the chance of any oil grease or other materials to contaminate the filter cake. ● Clean up any litter and other materials that can contribute to the contamination of the filter cake. ● Ensure fire equipment available should there be a problem. ● Incident reporting and investigation by ISSM. 	
<p>Transporting of filter cake to the farm.</p>	<p>Health, Safety and Environment.</p> <ul style="list-style-type: none"> ● Overfilling receiving vehicle trailer with filter cake. ● Spillage onto roads, causing a nuisance as well as a safety hazard for vehicles by slipping. ● Filter cake has a strong odour. ● Road accidents. 	<ul style="list-style-type: none"> ● Ensure the driver is trained on the contents of the SDS and appropriate actions needed should an emergency arise. ● Ensure vehicles are well maintained with service records available. ● The condition of the vehicle is to be monitored by the owner/onsite garage to include regular maintenance, driver reports for any concerns on the vehicle performance, <ul style="list-style-type: none"> ○ Service provider will be responsible for the handling of waste. Site requirement is Safety file including 37.2 agreement. Weighbridge documentation issued by SHERQ 	<ul style="list-style-type: none"> ● ISSM SHEQ/risk manager, ● driver supervisor, ● driver, ● security.

	<ul style="list-style-type: none"> • Non –compliance to the ROAD TRAFFIC ACT. (RTA). • Vehicle properly placarded for the waste stream. • Soil contamination from spillages. • Stormwater and natural water resource contamination by unmanaged washing of spillages from roads into the stormwater drains. • Affects the flora and local animals, domestic and wild as well as residents. • Natural water sources contamination. 	<ul style="list-style-type: none"> • Should there be any incident on the public road or on farm roads, an enquiry is to take place, to investigate whether any actions are needed. • Illovo ISSM contact number (0800) clearly seen by outside persons affected by driver conduct or any incidents. • Procedure for off-loading of filter cake in the designated drop-off zones. • The protocol to ensure the off-loading vehicle driver knows the process for minimising the impact of the vehicle on the environment after completing the off-loading. • Driver to mill/contact farmer or contractor service provider management to clear up any spillages that occur on public roads. If mill is not responsible, then the driver will contact the relevant supervisor/manager to deal with the spill. • Have a hotline for public complaints for filter cake spillage and nuisance and register these on the SHERQ system. <ul style="list-style-type: none"> ○ Address these with the responsible owner/driver. • Regular training and tool-box talks for the drivers of vehicles. • Emergency procedures clearly outlined with issuing of the SDS for the implications of accidents and clean-up. • Clean-up protocols sufficient for clean-up to deal with the maximum loads for big spillages. <ul style="list-style-type: none"> ○ Including clean-ups, barriers, fires, injuries, etc. All outlined in the correct and updated SDS. • Checks for correct driver emergency equipment and training to deal with the emergency. • Vehicles to comply with all requirements for Road Traffic Act and <ul style="list-style-type: none"> ○ correct placarding with correct documentation held by driver for transporting hazardous materials. 	
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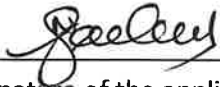
<p>Vehicle filter cake off-loading on designated area.</p>	<p>Spillage:</p> <ul style="list-style-type: none"> • Outside of designated area. • Depending on the offloading procedure, the vehicle used to offload the filter cake may spill residual filter cake when travelling to other places to do work 	<ul style="list-style-type: none"> • Ensure that the filter cake is remains moist to reduce the potential of windblown dust nuisance. • Any run-off is redirected away any natural water source. <ul style="list-style-type: none"> ○ This can be prevented by ensuring the riparian zone on the water course is intact. • The protocol for spreading onto the soils would be the same as any commercial fertilizer and lime additives to the soil management. • Ensure correct and appropriate PPE is used. Eye wash bottles to be available on the off-loading vehicle. • From a cradle to grave perspective the Mill would be responsible to ensure that no such fertiliser is offloaded or spilled in non-designated areas e.g. National road or entry point intersections or traverse areas. 	<ul style="list-style-type: none"> • ISSM agriculture • User of the filter cake.
<p>Storage at end user facilities</p>	<p>Health, Safety and Environment</p> <ul style="list-style-type: none"> • Run off and possible windblown dust if filter cake is allowed to dry. • Unauthorised removal of material. • Biological degradation of natural materials inside body of filter cake thus causing temperatures to rise above the flash point and cause internal perpetual smouldering in the body of the stored filter cake. • Smouldering causing cavities within the body. 	<ul style="list-style-type: none"> • Unauthorised removal of material is minimised by the farmer's internal security service by preventing trespassing in the property. • There should be no long term storage before dispersing onto the soils, to prevent any smouldering or fires. <ul style="list-style-type: none"> ○ It is strongly advised that the filtercake be dispersed onto the fields immediately as soon as practically possible and be ploughed in or dispersed as practical for the use. ○ This mitigates or even eliminates the risk of fires. 	<p>Farmer.</p>

<p>Filter cake management during distribution onto the intended farm soil as the fertilizer/soil enhancer</p>	<p>Dust: Health.</p> <ul style="list-style-type: none"> There may be health impacts from working with the possibly dried filter cake during the spreading of fertilizer operations. Possible irritation of eyes if product goes into the eyes. <p>Environment: Any run-off from the filter cake spreading operations will affect the receiving environment if not managed correctly, especially near to natural water sources.</p>	<ul style="list-style-type: none"> All staff in the field are to be supplied with the correct PPE and trained for application rates of the filter cake as well as correct placement within the area of the field. <ul style="list-style-type: none"> This is to keep the filtercake away from the possibility of runoff to cause pollution in the natural water sources. The same protocols would apply as to application of commercial fertilizer onto the fields. The filter cake should be ploughed into the soils immediately to reduce the effect of the odour quickly. Allow the filter cake to cool off at the storage area before use, and keep away from the public. Unauthorised removal of material is minimised by the farmer's internal security service by preventing trespassing in the property. 	<ul style="list-style-type: none"> Farmer, Property owner. Field staff with field supervisors:
<p>Repeat application onto the same fields.</p>	<p>Environment: The soils may have salinity or other chemical build up if the soils and application are not monitored</p>	<ul style="list-style-type: none"> Ensure that the work is conducted with the inputs of a qualified agronomist that the soil viability if retained. <ul style="list-style-type: none"> To prevent salinity build up and correct pH management, as well as other specific soil requirements to keep the crop healthy. 	<ul style="list-style-type: none"> Farmer. Property owner Field staff
<p>Secondary waste generation</p>	<p>Environment:</p> <ul style="list-style-type: none"> Secondary waste generation would involve filter cake with a multitude of other contaminant items like litter, oils, grease, as well as other items if the storage sites are not managed. 	<ul style="list-style-type: none"> The management of the filter cake emergency storage or removal platform includes the monitoring of any <ul style="list-style-type: none"> oil, grease, other waste stream spillages that may contaminate the filter cake and filter cake waste. This would render them unusable on the farm. <ul style="list-style-type: none"> This includes the clean-up of litter. Should there be a spill on this area: <ul style="list-style-type: none"> immediately isolate the spill and 	<ul style="list-style-type: none"> ISSM mill waste manager SHERQ manager.

	<ul style="list-style-type: none"> Filter cake may also contaminate other streams if spillages occur. 	<ul style="list-style-type: none"> clean it up, together with any <ul style="list-style-type: none"> contaminated ash, filter cake and other contaminated items. These contaminated streams are to be isolated and managed for as per SHEQ protocol. Disposal is to be safe and legal. NOTE: the waste must be pre-treated before disposal. <p>The guidance of a qualified agronomist is required to manage the soils and the filtercake waste streams to ensure good nutrient availability and soil conservation.</p>	
<p>Emergency responders</p>		<ul style="list-style-type: none"> The SDS MUST be made available to these personnel, to be able to understand the requirements for their own protection and the management of any spill. The drivers of the vehicles too, are to be trained in how to respond SAFELY to any incident involving the load and who to contact in the case of any emergency. The driver must know the protocol to manage the incident: and who to contact: <ul style="list-style-type: none"> Owner, emergency responders – fire, and medical. <p>First aid skill, as required at the level of the driver too.</p>	<ul style="list-style-type: none"> ISSM mill waste manager. SHERQ manager Affected staff:

I, NICOLE GEOFFREY (the Applicant) hereby declare that I have read the completed Risk Management Plan 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).



Signature of the applicant¹/ Signature on behalf of the applicant:

ILLOVO SUGAR (SOUTH AFRICA) (PTY) LTD

Name of Applicant:

SHERQ OFFICER

Designation

26 SEPTEMBER 2023

Date:

¹ If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority.