



## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

### RISK MANAGEMENT PLAN IN TERMS OF REGULATION 10 OF WASTE EXCLUSION REGULATIONS

<b>APPLICANT</b>	Sasol South Africa (Ltd)		
<b>SOURCE(S) OF WASTE</b>	Sasolburg Operations		
<b>WASTE TO BE BENEFICIATED</b>	Brine filter cake/sludge		
<b>BENEFICIAL USE/S</b>	<p>Brine filter cake/sludge may be beneficially utilised in the in the construction and agricultural sectors. Its uses may include but are not limited to:</p> <p>(a) Brickmaking (b) Block making</p>		
<b>SDS ATTACHED IF HAZARDOUS</b>	<b>YES X</b>	<b>NO</b>	
<b>WASTE GENERATING FACILITY</b>	Sasolburg Operations		
<b>PHYSICAL ADDRESS</b>	Bergius Road, Sasolburg, 1947		
<b>GPS CO-ORDINATES OF WASTE GENERATING FACILITY (e.g. 60° 29' 30" Latitude; 34° 20' 15" Longitude)</b>	<p><b>Chlor-Alkali plant, Midlands site</b></p> <p>26°49'20.42"S: 27°52'35.27"E          26°49'21.76"S: 27°52'23.7"E          26°49'32.74"S: 27°52'25.65"E          26°49'29.28"S: 27°52'36.62"E          26°49'27.57"S: 27°52'29.7"E (centre point)</p>		
<b>POSTAL ADDRESS</b>	P.O. Box 1 Sasolburg 1947		
<b>CONTACT PERSON</b>	Albie Bloem (Sasolburg Operations (SO): Senior Manager Chlor-Alkali)		

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# RISK MANAGEMENT PLAN

Beneficial use of Brine filter cake/sludge in the carbon and AFR sectors  
(Replacement material substitute for specialised carbon products & AFR.)

Activity	Risk Description	Action(s) to minimise/ manage the risk	Responsibility (Who is responsible to do it)
1. Loading of Brine filter cake/sludge onto trucks	Loss of containment of Brine filter cake/sludge	<p><b>Preventative mitigation measure</b></p> <ul style="list-style-type: none"> <li>Dust management during loading of Brine filter cake/sludge through wetting of Brine filter cake/sludge</li> <li>Stop loading of Brine filter cake/sludge during extreme wind conditions</li> </ul> <p><b>Corrective mitigation measure</b></p> <ul style="list-style-type: none"> <li>Wearing of relevant PPE (dust mask and eye protection) during Brine filter cake/sludge loading</li> </ul>	<ul style="list-style-type: none"> <li>Brine filter cake/sludge generator i.e. Sasolburg Operations</li> <li>Brine filter cake/sludge generator employees</li> <li>Brine filter cake/sludge transporter employees</li> </ul>
2. Transportation of Brine filter cake/sludge	Loss of containment of Brine filter cake/sludge	<p><b>Preventative mitigation measure</b></p> <ul style="list-style-type: none"> <li>Dust management during transportation of Brine filter cake/sludge through covering of trucks)</li> </ul> <p><b>Corrective mitigation measure</b></p> <ul style="list-style-type: none"> <li>None</li> </ul> <p><b>Preventative mitigation measure</b></p> <ul style="list-style-type: none"> <li>Compliance with the Road Traffic Act;</li> <li>Sasol Transport Policy and Procedures;</li> <li>Access to Brine filter cake/sludge limited to customers and transporters that have commercial contracts with Sasol.</li> </ul> <p><b>Corrective mitigation measure</b></p> <ul style="list-style-type: none"> <li>Implementation of the Emergency response plan;</li> <li>Use of Safety Data Sheet (SDS) with hazard classification which is provided to all customers and transporters.</li> </ul>	<ul style="list-style-type: none"> <li>Brine filter cake/sludge transporters</li> </ul>
3. Off-loading of Brine filter cake/sludge	Loss of containment of Brine filter cake/sludge	<p><b>Preventative mitigation measure</b></p> <ul style="list-style-type: none"> <li>Dust management during loading of Brine filter cake/sludge through wetting of Brine filter cake/sludge</li> <li>Stop off-loading of Brine filter cake/sludge during extreme wind conditions</li> </ul> <p><b>Corrective mitigation measure</b></p> <ul style="list-style-type: none"> <li>Wearing of relevant PPE (dust mask and eye protection) during Brine filter cake/sludge off-loading</li> </ul>	<ul style="list-style-type: none"> <li>Brine filter cake/sludge transporters</li> <li>Brine filter cake/sludge users</li> </ul>
4. Storage of Brine filter cake/sludge	Loss of containment of Brine filter cake/sludge	<p><b>Preventative mitigation measure</b></p> <ul style="list-style-type: none"> <li>Dust management during loading of Brine filter cake/sludge through wetting of Brine filter cake/sludge</li> <li>Avoid loading of Brine filter cake/sludge during extreme wind conditions</li> </ul> <p><b>Corrective mitigation measure</b></p> <ul style="list-style-type: none"> <li>Wearing of relevant PPE (dust mask and eye protection) when working in Brine filter cake/sludge storage area</li> </ul> <p><b>Preventative mitigation measure</b></p> <ul style="list-style-type: none"> <li>Storage area designed to prevent rainfall run-off from carrying Brine filter cake/sludge away</li> <li>Discourage excessive storage of Brine filter cake/sludge - Facilities storing more than a 100 m<sup>3</sup> of Brine filter cake/sludge at a time, should have a firm impermeable surface on which to place the Brine filter cake/sludge and a system to collect and store</li> </ul>	<ul style="list-style-type: none"> <li>Brine filter cake/sludge users</li> </ul>

Activity	Risk Description	Action(s) to minimise/ manage the risk	Responsibility (Who is responsible to do it)
		<p>run-off arising from the Brine filter cake/sludge storage facility.</p> <p><b>Corrective mitigation measure</b></p> <ul style="list-style-type: none"> <li>• The use of Safety Data Sheet (SDS) with hazard classification which is provided to all Brine filter cake/sludge users.</li> <li>• Clean-up plan to be implemented where Brine filter cake/sludge is handled.</li> </ul>	
5. Handling of Brine filter cake/sludge (i.e. screening, crushing, blending etc.)	Loss of containment of Brine filter cake/sludge	<p><b>Preventative mitigation measure</b></p> <ul style="list-style-type: none"> <li>• Dust management during loading of Brine filter cake/sludge through wetting of Brine filter cake/sludge</li> <li>• Adherence to production process and product standards and regulations</li> </ul> <p><b>Corrective mitigation measure</b></p> <ul style="list-style-type: none"> <li>• Wearing of relevant PPE (dust mask and eye protection) during Brine filter cake/sludge handling</li> </ul>	Brine filter cake/sludge users
a. Brickmaking b. Block making		<p>The point at which Brine filter cake/sludge enters the production process of bricks and blocks to the actual products is outside the scope of this risk assessment. The incorporation of Brine filter cake/sludge into these existing production processes is matured. The quality of the products from these processes is regulated by relevant standards.</p>	Brine filter cake/sludge users
6. Disposal of Brine filter cake/sludge and Brine filter cake/sludge containing products	Loss of containment of Brine filter cake/sludge	<p><b>Preventative mitigation measure</b></p> <ul style="list-style-type: none"> <li>• The use of Safety Data Sheet (SDS) where disposal guidance is provided.</li> <li>• The use of the National Norms and standard for the assessment of waste for disposal and the Regulations for the classification and management of waste.</li> </ul> <p><b>Corrective mitigation measure</b></p> <ul style="list-style-type: none"> <li>• Clean-up plan to be implemented where Brine filter cake/sludge is not disposed properly.</li> </ul>	Brine filter cake/sludge users
7. Residual Brine filter cake/sludge stockpiled after closure, decommissioning or change of ownership of user facility	Loss of containment of Brine filter cake/sludge	<p><b>Preventative mitigation measure</b></p> <ul style="list-style-type: none"> <li>• Contractual agreement with Brine filter cake/sludge customers to include the following clause: <i>"The owner of the facility, including the subsequent owner of the facility will remain responsible for any adverse impacts on the environment and health stemming from stockpiled Brine filter cake/sludge, even after operations have ceased."</i></li> </ul> <p><b>Corrective mitigation measure</b></p> <ul style="list-style-type: none"> <li>• Land remediation</li> </ul>	Brine filter cake/sludge users

**DECLARATION**

I, Albie Bloem hereby declare that I have read the completed Risk Management 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) ALBERT BLOEM

Designation Sasolburg Operations (SO): Senior Manager Chlor-Alkali

Signature 

Date 16/10/2019

Place SASOLBURG



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Date Received				
Decision Taken	Authorised		Not authorised (provide reason)	
Reference Number				

