



**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 (decommissioned gasifiers)		
<b>WASTE TO BE BENEFICIATED</b>	Weathered coarse ash		
<b>BENEFICIAL USE/S</b>	<p>Sasol Weathered coarse ash may be beneficially utilised in the construction and agricultural sectors. Its uses may include but are not limited to:</p> <p>(a) Brickmaking; (b) Block making; (c) Production of cement.</p>		
<b>SDS ATTACHED IF HAZARDOUS</b>	YES X	NO	
<b>WASTE GENERATING FACILITY</b>	Sasolburg Operations (decommissioned gasifiers)		
<b>PHYSICAL ADDRESS</b>	Klasie Havenga Road, Sasolburg, 1947		
<b>GPS CO-ORDINATES OF WASTE GENERATING FACILITY (e.g. 60° 29' 30" Latitude; 34° 20' 15" Longitude)</b>	<p>Coarse Ash dump and the fine ash dam 1,2 &amp; 3 complex</p> <p>26°49'28.34"S: 27°50'11.06"E</p> <p>26°49'50.27"S: 27°50'23.71"E</p> <p>26°50'20.40"S: 27°50'5.04"E</p> <p>26°50'8.79"S: 27°49'33.59"E</p> <p>26°49'48.31"S: 27°49'28.40"E</p> <p>Coarse ash dump centre point: 26°50'20.50"S: 27°50'7.10"E</p>		
<b>POSTAL ADDRESS</b>	P.O. Box 1 Sasolburg		

	1947		
<b>CONTACT PERSON</b>	Pieter de Beer (Sasolburg Operations (SO): Senior Manager GLUC, Utilities)		
<b>TELEPHONE</b>	+27 16 960 3158	<b>CELL:</b>	+27 82 804 0242
<b>EMAIL</b>	<u><a href="mailto:Pieter.debeer@sasol.com">Pieter.debeer@sasol.com</a></u>	<b>FAX:</b>	

## RISK MANAGEMENT PLAN

Beneficial use of weathered coarse ash in the construction and agricultural sectors  
(Brickmaking; Block making; Production of cement.)

Activity	Risk Description	Action(s) to minimise/ manage the risk	Responsibility (Who is responsible to do it)
1. Loading of ash onto trucks	Loss of containment of ash	<b>Preventative mitigation measure</b> <ul style="list-style-type: none"> <li>Dust management during loading of ash through wetting of ash</li> <li>Stop loading of ash during extreme wind conditions</li> </ul>	<ul style="list-style-type: none"> <li>Ash generator i.e. Sasolburg Operations and Secunda Operations</li> </ul>
		<b>Corrective mitigation measure</b> <ul style="list-style-type: none"> <li>Wearing of relevant PPE (dust mask and eye protection) during ash loading</li> </ul>	<ul style="list-style-type: none"> <li>Ash generator employees</li> <li>Ash transporter employees</li> </ul>
2. Transportation of ash	Loss of containment of ash	<b>Preventative mitigation measure</b> <ul style="list-style-type: none"> <li>Dust management during transportation of ash through covering of trucks)</li> </ul>	<ul style="list-style-type: none"> <li>Ash transporters</li> </ul>
		<b>Corrective mitigation measure</b> <ul style="list-style-type: none"> <li>None</li> </ul>	
3. Off-loading of ash	Loss of containment of ash	<b>Preventative mitigation measure</b> <ul style="list-style-type: none"> <li>Dust management during loading of ash through wetting of ash</li> <li>Stop off-loading of ash during extreme wind conditions</li> </ul>	<ul style="list-style-type: none"> <li>Ash transporters</li> <li>Ash users</li> </ul>
		<b>Corrective mitigation measure</b> <ul style="list-style-type: none"> <li>Wearing of relevant PPE (dust mask and eye protection) during ash off-loading</li> </ul>	
4. Storage of ash	Loss of containment of ash	<b>Preventative mitigation measure</b> <ul style="list-style-type: none"> <li>Dust management during loading of ash through wetting of ash</li> <li>Avoid loading of ash during extreme wind conditions</li> </ul>	<ul style="list-style-type: none"> <li>Ash users</li> </ul>
		<b>Corrective mitigation measure</b> <ul style="list-style-type: none"> <li>Wearing of relevant PPE (dust mask and eye protection) when working in ash storage area</li> </ul>	
		<b>Preventative mitigation measure</b> <ul style="list-style-type: none"> <li>Storage area designed to prevent rainfall run-off from carrying ash away</li> <li>Discourage excessive storage of ash - Facilities storing more than a 100 m<sup>3</sup> of ash at a time, should have a firm impermeable surface on which to place the ash and a system to collect and store run-off arising from the ash storage facility.</li> </ul>	
		<b>Corrective mitigation measure</b> <ul style="list-style-type: none"> <li>The use of Safety Data Sheet (SDS) with hazard classification which is provided to all ash users.</li> <li>Clean-up plan to be implemented where ash is carried away from storage area</li> </ul>	

Activity	Risk Description	Action(s) to minimise/ manage the risk	Responsibility (Who is responsible to do it)
5. Handling of ash (i.e. screening, crushing, blending etc.)	Loss of containment of ash	<p><b>Preventative mitigation measure</b></p> <ul style="list-style-type: none"> <li>Dust management during loading of ash through walling of ash</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 ash handling</li> </ul>	Ash users
a. Brickmaking; b. Block making; c. Production of cement.	The point at which coal ash enters the production process of bricks, blocks and cement to the actual products is outside the scope of this risk assessment. The incorporation of coal ash into these existing production processes is matured. The quality of the products from these processes is regulated by relevant standards.		Ash users
6. Disposal of ash and ash containing products	Loss of containment of ash	<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 Norme 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 ash is not disposed properly.</li> </ul>	Ash users
7. Residual ash stockpiled after closure, decommissioning or change of ownership of user facility	Loss of containment of ash	<p><b>Preventative mitigation measure</b></p> <ul style="list-style-type: none"> <li>Contractual agreement with ash 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 ash, 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>	Ash users

**DECLARATION**

I, Pieter de Beer 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) Pieter de Beer  
Designation Sasolburg Operations (SO): Senior-Manager GLUC, Utilities

Signature \_\_\_\_\_

Date 19/09/18 Place SASOLBURG

**FOR OFFICE USE ONLY**

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