

APPLICANT	Sappi Saiccor Mill
REFERENCE NO	
WASTE STREAM/S	Boiler Ash
BENEFICIAL USE	Agriculture, Artificial aggregates, Landfill capping and/or covering, Mine rehabilitation, Soil conditioning, Soil stabilisation

REQUIREMENTS		YES	PARTIAL	NO	COMMENTS	RESPONSE
REQUIREMENTS FOR EXCLUSION						
7	The Minister may exclude a waste stream or a portion of a waste stream, from the definition of waste for the purposes of beneficial use, provided that the -					
7(a)	application demonstrates that the waste is being or has been or will be used for a beneficial purpose either locally or internationally;	✓			<p>Application form states that boiler ash has not been utilised for the beneficial uses applied for.</p> <p>Artificial aggregates, as approved at Sappi Ngodwana Mill and Sappi Tugela Mill. Soil ameliorant, as approved at Sappi Ngodwana Mill. Landfill capping and/or cover material, as approved at Sappi Ngodwana Mill and Sappi Tugela Mill.</p>	

					Reference to article supporting beneficial use attached below.	
7(b)	applicant undertakes a risk assessment and submits a risk management plan demonstrating that the intended beneficial use of the excluded waste can be managed in such a way as to ensure that the intended beneficial use will not result in significant adverse impacts on the environment; and	✓			Risk assessment report and risk management plan are submitted	
7(c)	Risk management plan developed and responding to the risks identified in the risk assessment undertaken in terms of paragraph (b) above accompanies any delivery of the excluded waste to the user.	✓			A risk management plan has been developed that addresses the risks identified.	
RISK ASSESSMENT						
8(1)	A risk assessment undertaken in terms of regulation 7(b) must include the following elements:					
(a)	provide information that is facility based;	✓				
(b)	description and source of the waste;	✓				
(c)	intended uses of the excluded waste;	✓				
(d)	description of the methodology used to assess the hazardous characteristics of the waste that is to be excluded;	✓			Methodology described in the assessment.	
(e)	identification of any potential risks relating to all the activities associated with the intended beneficial use of the excluded waste; and	✓				
(f)	Identification of mitigation measures that can be used to manage the risks identified in paragraph (e) above.	✓			Risk Management Plan provides mitigation measures for each identified risk in the risk assessment	
RISK MANAGEMENT PLAN						

9	The risk management plan contemplated in regulation 7(c) must include the following:					
(a)	a Safety Data Sheet which complies with the requirements of SANS 10234, where the waste material is classified as hazardous;	✓			Waste classification attached. Material is Boiler ash and is classified as non-hazardous, therefore SDS is not required.	
(b)	permitted uses for which the waste material may be used; and	✓			Risk management plan includes the beneficial uses.	
(c)	A mechanism to record the amount of waste distributed to specific users for a permitted use; including the number of enterprises established or supported and the extent to which previously disadvantaged individuals have been supported.	✓			Records will be maintained on site and will be available on request	

General comments:

The final decision letter issued by the Department should include conditions on how the following will be recorded and reported to the Department:

1. the distribution of the waste to specific users;
2. the number of enterprises that will be established or supported; and
3. the extent to which PDIs have been supported.

A record of the amount of waste that is provided for beneficial use will be maintained. A record of the following activities will be kept and made available to the department on request:

- *Amount of waste distributed to entities undertaking identified beneficial uses*
- *Number of enterprises established and supported*
- *Number of existing enterprises supported*
- *Extent to which previously disadvantaged individuals have been supported.*

Coal Ash Material Safety: A Health Risk-Based Evaluation of USGS Coal Ash Data from Five US Power Plants

Executive Summary:

The US Geological Survey (USGS)¹ recently published a report that provides data for concentrations of metals and inorganics in coal ash from five power plants across the United States. The objective of this study, undertaken by the American Coal Ash Association (ACAA), was to conduct a human health risk-based evaluation of the USGS coal ash data, using risk-based screening levels developed by the US Environmental Protection Agency (USEPA)² that are protective of a child's direct exposure to residential soils (including ingestion, dermal contact and inhalation routes of exposure). These screening levels are considered by the Agency to be protective for daily exposure by humans (including sensitive groups) over a lifetime. Constituent concentrations in coal ash were also compared to background concentrations in soils in the US. The results indicate that with few exceptions constituent concentrations in coal ash are below screening levels for residential soils and are similar in concentration to background US soils. Thus, coal ash does not qualify as a hazardous substance based on its composition, and it also should not be classified as hazardous on a human health risk basis. Because exposure to constituents in coal ash used in beneficial applications, such as concrete, road base, or structural fill would be much lower than assumed for a residential scenario, these uses should also not pose a direct contact risk to human health.

AECOM. (2012). Coal Ash Material Safety: A Health Risk-Based Evaluation of USGS Coal Ash Data from Five US Power Plants. Chelmsford, MA: American Coal Ash Association.