



ASSOCIATION OF CEMENTITIOUS MATERIAL PRODUCERS



NATIONAL ENVIRONMENTAL ENVIRONMENTAL MANAGEMENT ACT AMENDMENT BILL: WASTE

Parliament

28th January 2014

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NATIONAL ENVIRONMENTAL MANGEMENT ACT AMENDMENT BILL: MINING

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1. INTRODUCTION: Who is the ACMP?

The ACMP acts as an umbrella body for six South African clinker and cementitious material producer companies, specifically guiding and representing their interests in the fields of

- environmental stewardship,
- health and safety practices, and
- community and stakeholder interaction

All members produce cement in **compliance SABS standards**

The ACMP's member companies include:



- ❖ AfriSam: www.afrisam.com
- ❖ Lafarge South Africa: www.lafarge.com
- ❖ NPC-CIMPOR: www.cimpor.com
- ❖ Pretoria Portland Cement Company Ltd: www.ppc.co.za
- ❖ Cemlock(Gauteng) Pty Ltd
- ❖ I.D.M. Cement (Pty) Ltd): www.vibro.co.za





ACMP- Communication partner of the WBCSD-CSI



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Waste definition



DRAFT	COMMENT	RECOMMENDATION
<p>(g) " waste means any substance, material or object, which the holder of waste or the generator thereof discards, stores, stockpiles or is required to discard or that</p> <p>(c) must be treated or disposed of; or</p> <p>(d) is defined as a waste by the Minister by notice in the <i>Gazette</i>, and includes waste generated by the mining, medical or other sector.</p> <p>Any portion of waste, once re-used, recycled and recovered, ceases to be waste".</p>	<ul style="list-style-type: none"> • Stockpiles: storage of waste is a listed activity and hence inclusion of stockpiles may cause confusion and render some non waste materials classified as waste. <p>EXAMPLE Overburden or screenings material is often sought after as low-grade aggregate for road construction and fill. These materials are only subject to excavation and at most mechanical processing and therefore pose minimal risk to the environment. This approach undermines the principles of NEMA in that the ability to optimally exploit non-renewable resources is compromised through the legislative sterilisation of minerals unless waste permit authorised</p> • Treated: <p>"treatment" means any method, technique or process that is designed to</p> <ul style="list-style-type: none"> (a) change the physical, biological or chemical character or composition of a waste; or (b) remove, separate, concentrate or recover a hazardous or toxic component of a waste; or (c) destroy or reduce the toxicity of a waste, <ul style="list-style-type: none"> • Magnetite, Synthetic gypsum, GBFS, fly ash: status may still be subjective • The waste definition confirms "any portion of waste, once re-used, recycled and recovered, ceases to be waste". <ul style="list-style-type: none"> ○ For materials to be re-used and/or recycled they need to be "recovered". <ul style="list-style-type: none"> ▪ Hence these materials already cease to be a waste before reuse or recycled ○ It is our understanding that any waste material destined to cement kilns will not require a waste permit if the material complies with : <ul style="list-style-type: none"> ▪ "controlled extraction" 	<ul style="list-style-type: none"> • Consider the EU definition: waste' means any substance or object which the holder discards or intends or is required to discard • must be treated for disposal

By-product definition



DRAFT	COMMENT	RECOMMENDATION
<p>(a) the deletion of the definition of "by-product";</p>	<p>Officials will once again subject the Industrial sectors to interpretation with regards to product vs waste if by-product is not defined.</p> <ul style="list-style-type: none"> • Eg. WIS will be referred to • For example, fly ash destined to the cement sector will be considered a waste based on the fact that it is <ul style="list-style-type: none"> • Considered waste and not CCP • Consequence of air emission abatement equipment, • It is not an intended product by the Generator during the production of heat for electricity generation. • The definition of recovery (verb) is also not clear as to when the material ceases to be a waste as it includes "controlled extraction". <p>It is not clear what is meant by "controlled" When does the controlled act start and finish.</p> <ul style="list-style-type: none"> • For example, is gathering of fly ash with a spade considered controlled act (OHS compliant) and once the fly ash is in the spade it ceases to be waste. <p>The waste definition states that a waste is: materials must be treated or disposed of. Is blending consider as "treated" to produce final cement product – if so, then all fly ash will be considered as waste although it complies with the SABS specifications.</p>	<p>Include definition of by-product</p> <ul style="list-style-type: none"> • Consider an International approach: By-products (EU Waste Directive) A substance or object, resulting from a production process, the primary aim of which is not the production of that item, may be regarded as not being waste but as being a by-product if the following conditions are met: <ol style="list-style-type: none"> a) further use of the substance or object is <u>certain</u>; b) the substance or object can be used directly without any further processing other than <u>normal industrial practice</u>; c) the substance or object is produced as <u>an integral part of a production process</u>; and d) further use is <u>lawful</u>, i.e. the substance or object fulfils all relevant product, environmental and health protection requirements for the specific use and will not lead to overall adverse environmental or human health

Other definitions



DRAFT	COMMENT	RECOMMENDATION
<p>(d) " 'recovery' means the controlled extraction or retrieval of energy, any substance, material or object from waste to produce a product;"</p>	<ul style="list-style-type: none"> • Definition of controlled: <ul style="list-style-type: none"> • take with a spade good enough; or • will AQ abatement equipment be considered as controlled extraction) • The revised definition is silent that status of recovered substances is not a "waste" • Is the recovered material or is it the final product? 	<p>There must be clarity when the recovered material ceases to be a waste. Understand "controlled extraction"</p> <p>Consider end of waste status protocol</p>
<p>(e) " 're-use' means to utilise articles from the waste stream for a similar or different purpose without changing the form or properties of the articles;"</p>	<ul style="list-style-type: none"> • The ACMP is of the view that this is covered by the definition of recovered. • (What is form??) • or properties of the articles;" do you have an example other than a returned cold drink bottle) 	<ul style="list-style-type: none"> • The difference between recovered material and reused/ recycled material must be clarified in the context of the waste definition.
<p>residue and stockpiles definition</p>	<p>The ACMP notes and appreciates that this has not been included in the Waste Bill as was proposed in terms of the National Environmental management laws amendment Bill (August 2013).</p>	



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SOUTH AFRICAN NATIONAL STANDARD

Portland cement extenders

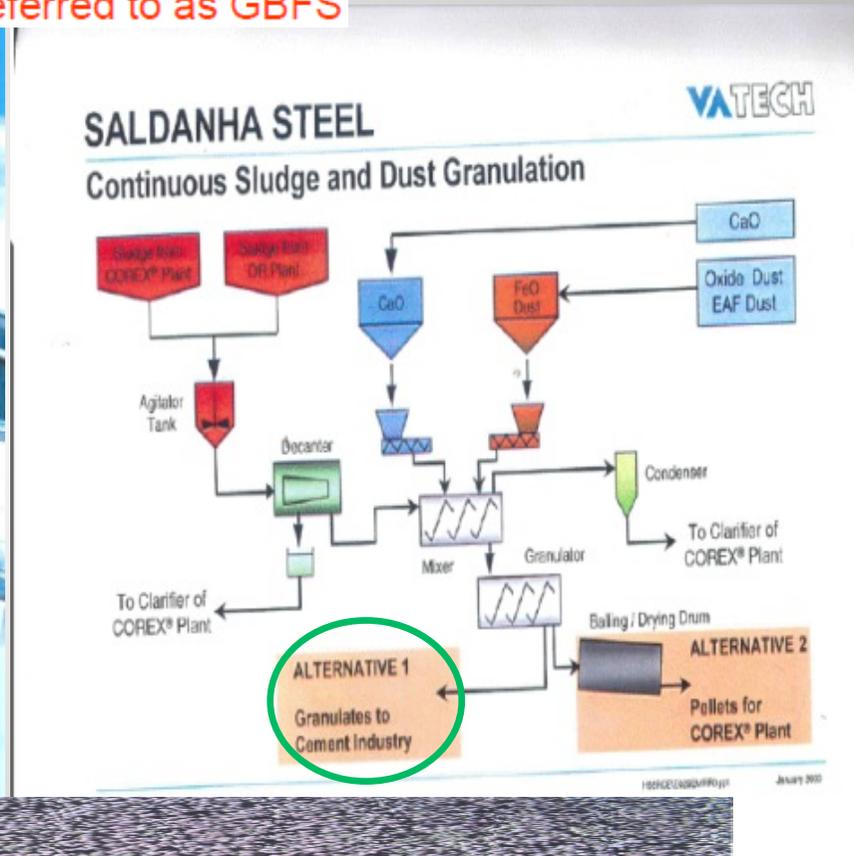
Part 1: Ground granulated blast-furnace slag

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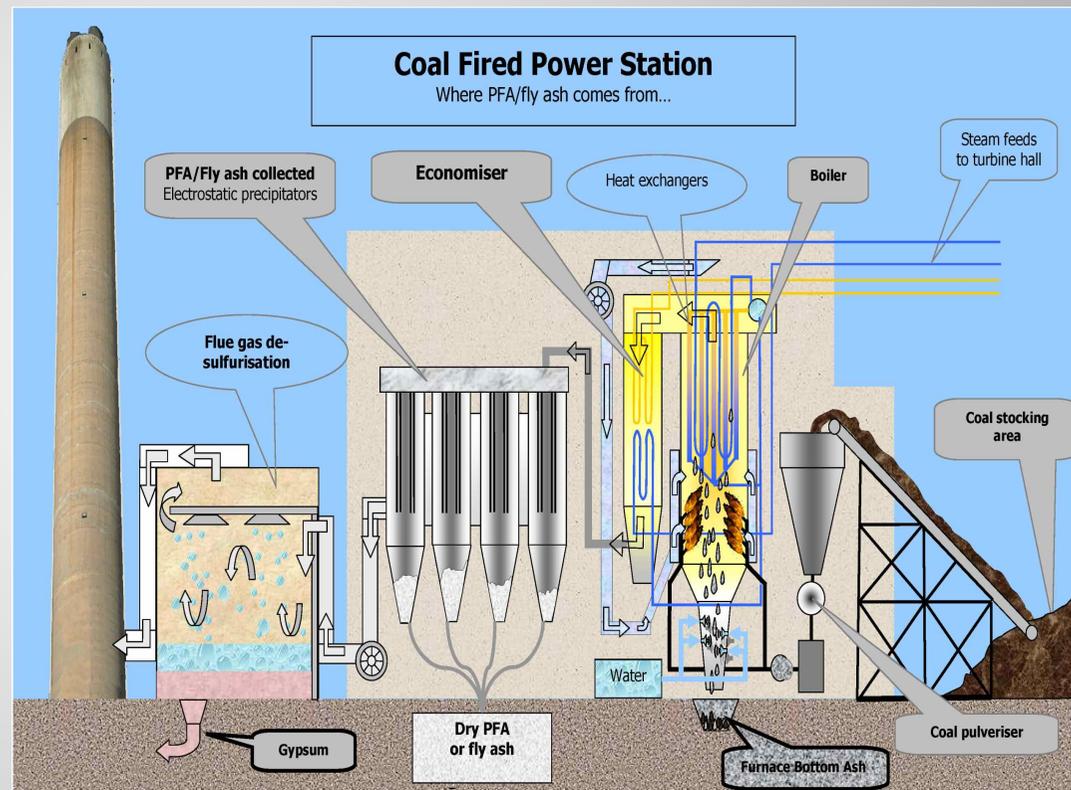
EXAMPLE 1: GRANULATED BLAST FURNACE SLAG – A product NOT a waste

Granulated Corex Slag (GCS) often also referred to as GBFS

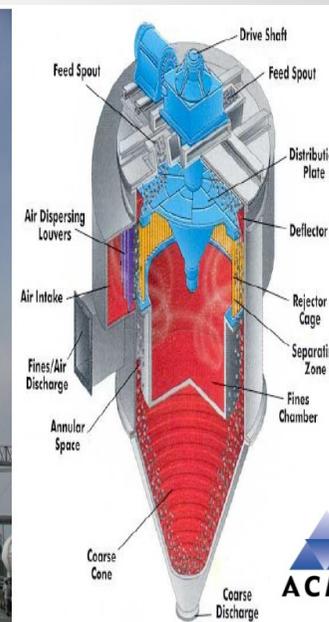
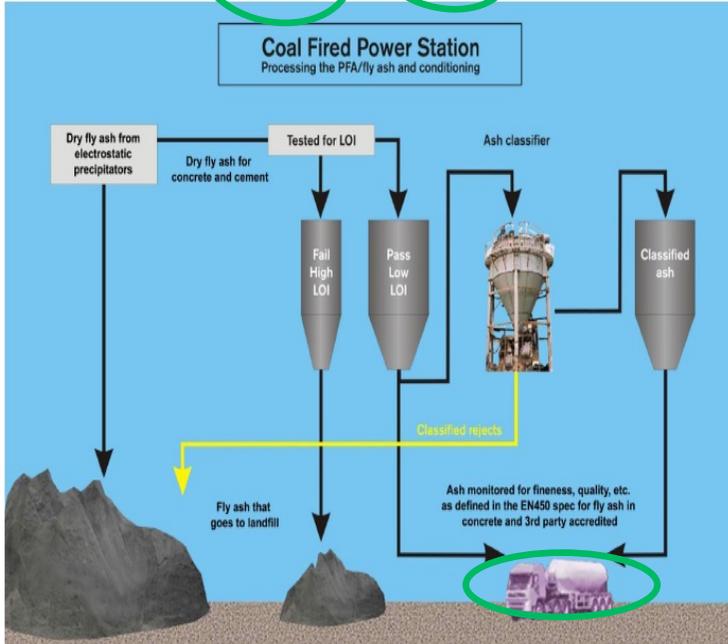
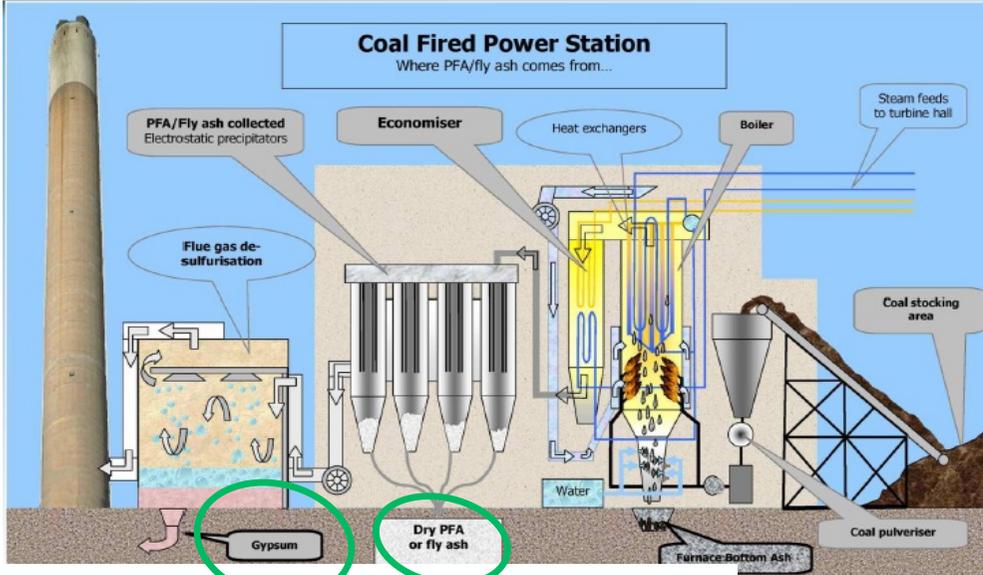


Example 2 – SABS Classified Fly Ash (PFA)

- Secondary product of electricity production
- Equivalent product for Cement Clinker
- Natural equivalent material found as Pozzolan
- Unclassified PFA is “dumped” = waste
- Excess PFA = unwanted / surplus = Technically By- Product but Legally Waste



EXAMPLE 2: Fly Ash: A product NOT a waste



Production process fully **integrated with the Eskom** power plants
 Various types of fly ash products are produced based on fineness of **the fly ash product for Construction:** cement and concrete industry Industries such as mining, plastics, bricks and tiles etc

Future opportunities (proven abroad - Europe and the US): mine rehabilitation waste stabilization land fill, agriculture, soil stabilization (road and other) asphalt

Categorization of the fly ash products as waste would complicate the penetration of new markets for fly ash

Example: Silica fume

Silica Fume NR880

Silica Fume NR900

Silica Fume NR920

Silica Fume NR950

Silica Fume NR970

Silica Fume Concrete

Silica Fume Refractory

Require COA and MSDS

Silica Fume, Microsilica, Undensified Silica Fume, Undensified Microsilica, Densified Silica Fume, Densified Microsilica, Silica Ash

product introduction

Silica fume, also known as microsilica,

it is a very fine pozzolanic material, composed of amorphous silica produced by electric arc furnaces as a byproduct of the production of elemental silicon or ferro silicon alloys. Silica fume can be used in a variety of cementitious products such as concrete, grouts, and mortars as well as elastomer, polymer, refractory, ceramic and rubber applications.

Newreach silica fume specification





3. Industrial waste management plan

ISSUE	RECOMMENDATION
<p>S28: MEC and Min to act in concurrence when request Industry waste management plans</p>	<p>It is recommended that the amendment clarify what is meant by an Industrial waste management plan.</p> <p>Guidelines should be provided by the Department to confirm the approach and processes required to prepare and approve Industrial waste management plan.</p>
	<p>It noted that the proposed Waste Agency will facilitate the development of industrial waste plans.</p>
	<p>MEC should not be able to require a plan for activities that are not unique to that province. Concurrence of the Minister is an essential amendment as a national plan may be more appropriate and provide national consistency</p>

4. WASTE AGENCY



ISSUE	RECOMMENDATION
<p>Establishment of a Waste Agency:</p> <p>It is noted that in the case of air quality management the Department has included the establishment of an Air Quality Advisory Committee in terms of the Air Quality Act and no longer as a subcommittee of the National Environmental Advisory Forum (NEAF) (in terms of NEMA).</p> <ul style="list-style-type: none"> • It is not clear why this approach to establish a waste management Advisory Forum is not the preferred option: • It is not clear what waste streams the department intends to manage that it may require an agency to do it on its behalf. • The Act makes provision for the Department to regulate the management of waste streams by others. 	<p>The ACMP is of the view that the Agency may not necessarily improve implementation of the Act as the various matters could be addressed using existing regulatory or institutional mechanisms.</p> <ul style="list-style-type: none"> • Section 28 (1) of the Act empowers the Minister to require a specific category of persons or an industry that generates waste to prepare and submit an industry waste management plan to the Minister for approval. • This is further supported by section 28(4) for the Minister when exercising this power. • Section 28(5) requires consultation with affected generators before the exercise of this power. • Section 28(6) It is also understood that the discretionary power in section 28(6) to require an “independent person” to prepare the plan would form part of the consultation contemplated in subsection (5). • In terms of the National Waste management strategy, national strategy for sustainable development and the EIA management processes there is sufficient regulatory mechanisms to ensure implementation of the hierarchy of waste principles and the ACMP is confident that supply chain of these waste streams will be adequately dealt with through market forces and/or end of waste discharge costs. The ACMP does not support the imposition of levies on value chains except in exceptional circumstances. • The recently published waste regulations providing prohibition of landfilling of various waste streams within specified timeframes will also provide various opportunities for recycling of waste. <p>It is noted that there may be additional financial burdens placed on Industry although implementation can be undertaken under current regulatory mechanisms.</p>

5. CONCLUSION

- The work towards the amendments is commendable
- The current effort to improve systems across all spheres of government is encouraging.
- However, in conclusion we would like to recommend
 - The Department establish sound co-operative governance and implementation systems to ensure
 - The different regulatory functions are aligned – reporting requirements in terms of Provincial waste plans
 - The different definitions be tested to ascertain any possible unintended consequences particularly in the context of stockpiles and residues
 - NEMWA be amended to allow for **end of waste status protocol** so as to support future beneficiation and other strategies for those stockpiles and residues defined as waste.



Thank you!