



## environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

# AMENDMENTS TO THE NOTICE OF LISTED ACTIVITIES AND ASSOCIATED MINIMUM EMISSION STANDARDS, 2018

<b>Circulation:</b>	Air Quality Management Stakeholders	<b>Compiled by:</b>	Mr. Olebogeng Matshediso (CEO Grade B: Atmospheric Policy, Norms and Standards)
<b>Revision No:</b>	0	<b>Reference No.:</b>	Government Gazette No. 41650, Notice No.516

### INTENTION TO AMEND THE LIST OF ACTIVITIES WHICH RESULT IN ATMOSPHERIC EMISSIONS WHICH HAVE OR MAY HAVE A SIGNIFANT DETRIMENTAL EFFECT ON THE ENVIRONMENT, INCLUDING HEALTH, SOCIAL CONDITIONS, ECONOMIC CONDITIONS, ECOLOGICAL CONDITIONS OR CULTURAL HERITAGE

The Minister has announced her intention to amend the list of activities and associated minimum emission standards in terms of section 21 (4)(a), read with section 57 of the National Environmental Management: Air Quality Act, 2004 (Act No.39 of 2004) on the 25<sup>th</sup> May 2018 (Government Notice No. 516, Gazette No. 41650). Members of the public have been invited to submit written representations or objections on this Notice of intention. Written representations have been received from the following organizations:

GOVERNMENT	INDUSTRIES & INDUSTRY ASSOCIATIONS	CIVIL ORGANIZATIONS
Department Of Trade And Industry	Sonae Arauco (Pty) Ltd	Centre For Environmental Rights
Western Cape Department Of Environmental Affairs And Developmental Planning	Yellow Tree Environmental Pty (Ltd)	
Ethekwini Metropolitan Municipality	Chemical And Allied Industries Association	

	North West Air Pollution Control Forum	
	Stack Testers Association	
	Mineral Council South Africa	
	The Sawmillers' Association Of South Africa	
	Paper Manufacturers Association Of South Africa	
	PG Bison	
	FAR Timbers	
	South African Petroleum Industry Association	
	Sasol	
	Engen Oil Refinery	
	Chevron South Africa (Pty) Limited	
	Association For Cementitious Materials Producers	
	Legacy Pet Crematorium	

The following are the comments received, and the department's responses and actions on them.

#### COMMENTS AND RESPONSE DATABASE

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
<b>SONAE ARAUCO (PTY) LTD</b>				
<b>Subcategory 9.5</b>	Under Subcategory 9.5 – There has been a change in terms of the process description from <i>“The drying of wood by an external source of heat; and the manufacture of laminated and compressed wood products”</i> to <i>“The drying of wood using direct-fired kilns; and the manufacture of laminated and compressed wood products”</i>	Could the department kindly clarify if a direct rotary-type particleboard dryer is also considered a kiln? We are aware of	<b>No. The direct rotary –type particle dryer is not considered a kiln. However, the subcategory is intended to regulate both emission sources.</b>	<b>To expand the description to include the particleboard dryers</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>significant differences between a wood drying kiln and a particleboard dryer, these include:</p> <ul style="list-style-type: none"> <li>• A kiln is regarded as a batch process in which large segments of timber is placed within the kiln and dried over lengthened periods (24hours – 300hours) until the optimum moisture content is attained.</li> <li>• A rotary-type dryer (As used in the particle board process), is an application whereby woodchips continuously pass through the dryer drum and the wood chips/flakes are dried to the specific moisture requirements within minutes.</li> </ul>		
		May rotary-type dryer be	<b>Concurs with the exclusion</b>	

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		<p>considered as a kiln then the oxygen reference of 10 % is not appropriate. Could the department kindly clarify why 10% oxygen correction is applied when:</p> <ul style="list-style-type: none"> <li>• A particle board dryer and supporting press are used to produce compressed wood products. No dilution of air or combustion is applied throughout the process. Therefore, the oxygen reference of 10% cannot be applied, because combustion does not occur in either pieces of equipment, and oxygen references cannot be used when ambient oxygen concentrations (21 %) are measured.</li> </ul>	<p><b>of oxygen reference where combustion does not occur</b></p>	
<b>Annexure A</b>	The monitoring methods for both SO <sub>2</sub> and NO <sub>x</sub> have been		<b>Concur</b>	<b>List of methods</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>changed to impinger methods. EPA Method 8 has been noted for SO<sub>2</sub>, and EPA Method 7D has been noted for NO<sub>x</sub>. Prior monitoring methods included instrumental EPA Methods 6C and 7E.</p> <ul style="list-style-type: none"> <li>• The prior approved methods (EPA Methods 6C and 7E – Instrumental methods) provided real time data as opposed to the newly suggested methods.</li> <li>• The turnaround times at laboratories for the newly suggested impinger methods are in order of a 32 days.</li> <li>• All of the above relates to extensive costing additions for no added value in terms of the outcomes derived.</li> <li>• In a very troublesome South African economy, we kindly request that we are not forced overspend where no added value is derived.</li> </ul>			updated accordingly to include EPA Method 6C and 7E.
<b>YELLOW TREE ENVIRONMENTAL PTY (Ltd)</b>				
<b>Paragraph 2.(a) – (b)</b>	<b>Postponements</b> The proposed postponement regulations and timeframes seem fair and have been well thought out.		<b>No response required</b>	<b>Noted.</b>
<b>Subcategory 2.4</b>	<b>Subcategory 2.4</b> The subcategory has been laid out clearly and the threshold of 1 000 m3 combined storage is now more visible than in the previous 2013 List of Activities.		<b>No response required</b>	<b>Noted.</b>
<b>Subcategory 5.4 and 5.5</b>	<b>Subcategory 5.4 and 5.5</b> The addition of more lenient SO <sub>2</sub> limits when pyritic limestone is		<b>No response required</b>	<b>Noted.</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	used has been noted.			
<b>Subcategory 5.9</b>	<b>Subcategory 5.9</b> It is sensible that provision has been made for those burning alternative fuels. I am not familiar with the Waste Act, however, the term "after waste ceases to be waste" seems confusing. Perhaps this is because of my unfamiliarity with the Waste Act.			<b>Noted.</b>
<b>Subcategory 9.2</b>	<b>Subcategory 9.2</b> The addition of a 5 % oxygen reference and the provision of different SO <sub>2</sub> and NOx emissions limits for Kraft and bisulphite processes has been noted.			<b>Noted.</b>
<b>Subcategory 9.5</b>	<b>Subcategory 9.5</b> a) It is noted that the description has been changed from "The drying of wood <b>by an external source of heat</b> ; and the manufacture of laminated and compressed wood products" to "The drying of wood <b>using direct-fired kilns</b> ; and the manufacture of laminated and compressed wood products"	Clarification is sought regarding the definition of a kiln. Is a direct rotary-type particleboard dryer also considered a kiln? Yellow Tree is aware of five such dryers in South Africa. The distinctions between a wood drying kiln and a particleboard dryer include: A kiln is a batch process in which large planks of wood are placed for a long period of time (a number of days). The plans are removed from the kiln	<b>No. The direct rotary –type particle dryer is not considered a kiln. However, the subcategory is intended to regulate both emission sources.</b>	<b>To expand the description to include the particleboard dryers.</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>once they are dry.</p> <ul style="list-style-type: none"> <li>In a rotary-type particleboard dryer, wood chips are dried continuously. The flakes pass through the dryer within a couple of minutes.</li> </ul>		
		<p>b) If a rotary-type dryer is also considered a kiln, the oxygen reference of 10 % is not appropriate, as has been described in Yellow Tree's proposal DEA001/01 dated the 02nd of August 2017. I have attached this proposal to the email which accompanies this letter.</p>	<p><b>BAT document will be used to inform the revision of the Oxygen reference for dryers.</b></p>	<p><b>Specific oxygen reference for dryers as informed by the BAT.</b></p>
<p><b>Subcategory 9.5</b></p>	<p>The description "The drying of wood using direct-fired kilns; and the manufacture of <b>laminated and compressed wood products</b>" refers.</p>	<p>Clarity is sought over whether the phrase "laminated and compressed wood products" implicates that <u>indirect MDF dryers and particleboard and</u></p>	<p><b>Yes. The subcategory is intended for all other mill sources other than external heat sources, as these are controlled as combustion sources under category 1 of S21 Notice; small boilers</b></p>	<p><b>Description to be expanded to clarify that the emission limits apply to all other point sources other than external heat</b></p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		MDF presses are also required to be tested. Both MDF dryers and presses are used to produce compressed wood products.	declared in terms of S23; or fuel-burning appliances listed under specific municipal by-laws.	sources.
		If so, the oxygen reference of 10 % cannot be applied, because combustion <u>does not occur in either pieces of equipment</u> , and oxygen references cannot be used when ambient oxygen concentrations (21 %) are measured.	BAT document will be used to inform the revision of the Oxygen reference for dryers.	Specific oxygen reference for dryers/pressers as informed by the BAT.
		This description would also implicate that particleboard dryers need to be tested because they are also used in the manufacture of compressed wood products.	Yes. They are an emission source	No action taken.
Annexure A	a) Great, clear layout. Much easier to follow than the previous version, and much more comprehensive.		Noted.	Noted.
	The EPA Methods 6C and 7E have not been included for SO <sub>2</sub> and		Concur	List of methods

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	<p>NOx. These are both instrumental methods. EPA Method 8 has been noted for SO<sub>2</sub>, and EPA Method 7D has been noted for NOx. These are both impinger methods. Impinger methods are more costly to perform (this cost is ultimately transferred by the stack testing company to the client) and the analysis takes time as this has to be outsourced to external laboratories which can have lead times of up to 30 days. Instrumental methods provide information in real time. Both methods 6C and 7E were included in Annexure A in the 2013 List of Activities. It is acknowledged that instrumental methods can be inaccurate if the incorrect equipment is used or if calibration is not performed frequently, however, the licencing authority should be able to detect this when the emissions report is received.</p>			<p>updated accordingly to include EPA Method 6C and 7E.</p>
<b>PG BISON</b>				
<b>Subcategory 9.5</b>	<p>In light of the information provided in Section 2, it is proposed that the oxygen reference for direct fired dryers, indirect-fired dryers, and presses in the wood products industry be removed. This is in line with other Subcategories in the Listed Activities where drying processes in other industries do not have an oxygen reference, and processes which do not involve any combustion do not have an oxygen reference.</p>	<p>Two detailed proposals attached as annexures to this Comments-Response Database</p>	<p><b>BAT document will be used to inform the revision of the Oxygen reference for dryers.</b></p>	<p><b>Specific oxygen reference for dryers as informed by the BAT.</b></p>
<b>Subcategory 9.5</b>	<p>It is also proposed that the emissions limit for NOx emissions from the combustion of wood containing urea-formaldehyde resin be increased.</p>	<p>Two detailed proposals attached as annexures to this Comments-Response Database.</p>	<p><b>Where the NO<sub>x</sub> emissions attributed to the use of urea-formaldehyde resin containing materials are</b></p>	<p><b>The department to mitigate the inherent risk of urea-formaldehyde</b></p>

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			<p>observed, abatement techniques in line with best practicable environmental option must be employed to mitigate the impacts of such emissions on environment. That is the primary purpose of the emission standards. Furthermore, urea-formaldehyde materials increase the environmental risk of the sources as additional pollutants are expected to be exceeded. This risk will therefore be mitigated by introducing the emission limit for volatile organic compounds in line with the sector's best available techniques.</p>	<p>utilization by introducing reasonable control measures.</p>
	<p>Lastly, the conflict regarding wood fired boilers being classified as Listed Activities or Controlled Emitters should be clarified.</p>	<p>Two detailed proposals attached as annexures to this Comments-Response Database</p>	<p>Concur. Legislation should be clear to both the regulated community and the regulators. Where there appears to be ambiguity as expressed by the wood processing sector, this will</p>	<p>The department to clarify the potential ambiguity by separating the requirements for external combustion</p>

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			be resolved in line with the primary intention of the National Environmental Management: Air Quality Act.	installations used in this sector in line with the intention of the Act.
<b>AC WHITCHER (PTY) LTD</b>				
	Regarding the amendments to Subcategory 9.5, it is noted that boilers which are used at sawmills and wood treatment facilities will no longer be required to undergo emissions testing as per the Listed Activities legislation. These boilers will instead be classified under the Controlled Emitters legislation, if they have a net heat input which is greater than 10 MW. This makes sense because as it currently stands, wood fired boilers which have an NHI greater than 10 MW are classified under two conflicting pieces of legislation; the Listed Activities legislation as well as the Controlled Emitters legislation.	In summary, AC Whitcher supports the amendments to the Listed Activities legislation.	<b>Yes. The subcategory is intended for all other mill sources other than external heat sources, as these are controlled as combustion sources under category 1 of S21 Notice; small boilers declared in terms of S23; or fuel-burning appliances listed under specific municipal by-laws.</b>	<b>Description to be expanded to clarify that the emission limits apply to all other point sources other than external heat sources.</b>
<b>CHEVRON SOUTH AFRICA (PTY) LIMITED</b>				
	The grouping of Sampling Method per parameter is a good improvement, however it is noted that a lot of the Sampling methods included in the MES 2013 have been omitted. The reason for this is not clear, but this poses a big concern as the changing of sampling method at this stage would pose a risk to <b>compliance verification continuity</b> and could introduce additional <b>cost burden</b> to industry as new/different sampling		<b>The support of recategorization is noted. The intention of revamped Annexure A is not to omit the relevant measurement methods which are currently used in the country, but to</b>	<b>List of methods updated accordingly to include all relevant methods.</b>

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	<p>equipment would need to be purchased. In addition there is a risk that all the hard work that have gone into the compilation of the <b>Norms and Standards for Air Quality Monitoring</b> would need to be re-evaluated as some of the methods would no longer be included in Annexure A.</p> <p>The methods that are missing, but that are used by our facility are summarized below as example:</p> <ul style="list-style-type: none"> <li>• US EPA Method 10 (for CO)</li> <li>• US EPA Method 5F (for FCCU PM)</li> <li>• US EPA Method 6 (for SO2)</li> <li>• US EPA Method 7E (for NOx)</li> </ul>		<p>provide a clear guidance on what methods are acceptable for measurement of all variables. Furthermore, the list intends to remove any method that is dated or irrelevant for use, and to incorporate those methods that are relevant but where not in the former list. The department will ensure that all methods that are appropriate for use are not unintentionally omitted.</p>	
<b>STACK TESTING ASSOCIATION OF SOUTH AFRICA</b>				
<b>Annexure A</b>	<p>Our main concern relates to the list of methods presented in Annexure A. We have the following comments and motivate for certain changes in order to ensure that testers apply the correct method for the source in question.</p>		Noted	Noted
	<p>We would prefer a register of approved methods, potentially published on SAAQIS that would dictate the acceptable list of methods. These methods could be updated more regularly and independently of the Regulations.</p>		<p>This will not be in line with the prescripts of S21 (3) which requires the Notice to include the manner in which measurements must be carried out as part of the requirements. The</p>	<p>Recommendation not accepted.</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
			administrative process that the Minister would have to follow when amending the register will be the same as of the Notice, thus there is no benefit in keeping a register of methods outside the Notice.	
	We feel that the introductory paragraph to Annexure A should indicate that the classification of a method for a specific test should not be considered exclusive as the methods might be integral to or a precursor of an additional test. For instance, Method 2 for the testing of flow is integral to Method 5 for the measurement of Particulate. While this might be understood, we would not want the applications to be legally exclusive.		The recommendation does not have a negative bearing on the intent of the Notice, and its inclusion will be as additional guidance on how to use the schedule of methods. The recommendation is thus accepted.	The inclusion of paragraph indicating that the classification is not exclusive.
	In addition to the expanded list of acceptable methods, which are welcomed, we request that the methods also included in Table 1, below, be considered for inclusion.	<u>Secondary Parameters:</u> <b>Carbon Monoxide</b> - (USEPA Method 10, 10A and 10B)  <u>Dust:</u> <b>Particulate Matter –</b> <ul style="list-style-type: none"> <li>• (BS EN 13284-2 (for automated</li> </ul>	Recommendation accepted.	Methods included in the schedule.

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>measuring systems)</p> <ul style="list-style-type: none"> <li>• USEPA Method 5D (for positive pressure baghouses)</li> <li>• US EPA Method 5A to 5I)</li> </ul> <p><b>Metals:</b></p> <ul style="list-style-type: none"> <li>• Mercury (USEPA Method 29)</li> <li>• Chromium ("304" to be corrected to 306: "USEPA Method 306" US EPA Method 0061: Hexavalent chrome)</li> </ul> <p><b>Inorganic Compounds:</b></p> <ul style="list-style-type: none"> <li>• Chlorine / Hydrogen Chloride (USEPA Method 26A)</li> <li>• Hydrogen Fluoride (USEPA Method 26)</li> <li>• Sulphur Dioxide (USEPA Method 6, 6A, 6B and 6C ISO 11632 (Determination of mass concentration</li> </ul>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>of sulphur dioxide Ion chromatography method))</p> <ul style="list-style-type: none"> <li>• Oxides of Nitrogen (USEPA Method 7, 7A, 7B, 7C, 7D and 7E)</li> <li>• HCN (Method 426 should presumably read CARB 426 <b>NIOSH Method is not supported.</b>)</li> </ul> <p><b>Opacity:</b> Opacity (USEPA Method 203)</p> <p><b>Organic compounds:</b> PAH (CARB 429; US EPA 0010)</p>		
	We have included methods for the emission of radioactive compounds in the list.	<p><b>Radioactive compounds:</b></p> <ul style="list-style-type: none"> <li>• Radionuclide (USEPA Method 114)</li> <li>• Polonium-210 (USEPA Method 111)</li> <li>• Radon-222 (USEPA</li> </ul>	The recommendation has not been explained/motivated for, thus it is unclear on why the Minister should prescribe methods for compounds not controlled under this Notice.	Recommendation not adopted.

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		Method 115)		
	Where methods have been published for emission testing for a given compound, our preference would be that these are the preferred method (in the place of NIOSH or occupational hygiene methods) such as for cyanide.		Concur. NIOSH methods should only be used where stack emissions measurement methods for a certain compound has not been published.	Inclusion of a clause in the regulation, restricting the use of occupational hygiene methods in compliance assessment processes.
	We have one comment related to the reporting of TVOC for Sub-category 2.4 for instance. The preferred methods are either US EPA 25A or 25B which relate to broad responses to organic compounds using analysers typically calibrated using methane or propane. The TVOC are then reported as a function of the response to a calibration gas	It would be appreciated if the basis for the TVOC could be confirmed as ppmc (parts per million of carbon), for instance, referenced to the response to methane.		
	We further understand that TVOC should rightly exclude methane and ethane and should properly be defined as TNMHC or total non-methane hydrocarbons, but we think that his is understood.			
<b>NORTH WEST AIR POLLUTION CONTROL FORUM (NAPCoF)</b>				
<b>Annexure A</b>	With respect to Schedule 6 regarding "ANNEXURE A – METHODS FOR SAMPLING AND ANALYSIS": It is recommended that the following methods be <b>added</b> to those	<b>Secondary Parameters:</b> <b>Carbon Monoxide</b> - (USEPA Method 10, 10A and 10B)	Recommendation accepted.	Methods included in the schedule.

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	published:	<p><b>Dust:</b></p> <p><b>Particulate Matter –</b></p> <ul style="list-style-type: none"> <li>• (BS EN 13284-2 (for automated measuring systems)</li> <li>• USEPA Method 5D (for positive pressure baghouses)</li> <li>• US EPA Method 5A to 5I)</li> </ul> <p><b>Metals:</b></p> <ul style="list-style-type: none"> <li>• Mercury (USEPA Method 29)</li> <li>• Chromium (“304” to be corrected to 306: “USEPA Method 306” US EPA Method 0061: Hexavalent chrome)</li> </ul> <p><b>Inorganic Compounds:</b></p> <ul style="list-style-type: none"> <li>• Chlorine / Hydrogen Chloride (USEPA Method 26A)</li> <li>• Hydrogen Fluoride (USEPA Method 26)</li> </ul>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<ul style="list-style-type: none"> <li>• Sulphur Dioxide (USEPA Method 6, 6A, 6B and 6C ISO 11632 (Determination of mass concentration of sulphur dioxide Ion chromatography method))</li> <li>• Oxides of Nitrogen (USEPA Method 7, 7A, 7B, 7C, 7D and 7E)</li> <li>• HCN (Method 426 should presumably read CARB 426 <b>NIOSH Method is not supported.</b>)</li> </ul> <p><b>Opacity:</b> Opacity (USEPA Method 203)</p> <p><b>Organic compounds:</b> PAH (CARB 429; US EPA 0010)</p>		
Annexure A		<p><b>Radioactive compounds:</b></p> <ul style="list-style-type: none"> <li>• Radionuclide</li> </ul>	The recommendation has not been explained/motivated for,	Recommendation not adopted.

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		(USEPA Method 114) <ul style="list-style-type: none"> <li>• Polonium-210 (USEPA Method 111)</li> <li>• Radon-222 (USEPA Method 115)</li> </ul>	<b>thus it is unclear on why the Minister should prescribe methods for compounds not controlled under this Notice.</b>	
2. (b)	<p>In view of economic cycles and phased implementation of capital projects to enable compliance with new plant standards, <u>it is recommended that:</u></p> <ul style="list-style-type: none"> <li>- Paragraphs (11A) and (11B) be amended in such a manner as to allow for two postponement applications, subject thereto that both postponements will bring about a step change towards compliance and that the impact of the facility does not result in exceedance/s of the National Ambient Air Quality Standards during its second postponement period, with the first postponement period being till 2025 and the second till 2030, after which no postponement will be valid.</li> <li>- By implementing abovementioned it will give equal opportunity to existing facilities to either be decommissioned by 2030 or compliant by 2030.</li> </ul>			
4. (b)	<p>The following refers with respect to Subcategory 5.5 and other Subcategories/processes which could use waste/alternative fuels in the process, but not specifically listed as a combustion or incineration operation, where the required emission standards are similar to/aligned with, or referenced against that of Subcategory 1.6:</p>		<b>Recommendation is not supported. Environmental risks associated with such levels should be mitigated to acceptable levels as per emission limits under</b>	<b>No action taken.</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>- The situation arises where other raw materials used in the process, i.e. not the fuel, such as ore, other minerals, etc. will contain the metals referenced to such an extent that the contribution thereof alone could potentially result in non-compliance;</p> <p><u>It is therefore recommended that a special arrangement be included for Subcategory 5.5 to allow for exemption to those standards subject to:</u></p> <ul style="list-style-type: none"> <li>- results of baseline sampling conducted without the use of waste/alternative fuels, indicate that those standards would not be achievable; and</li> <li>- a Health Risk Impact assessment by means of an Atmospheric Impact Report indicating negligible or acceptable risk levels to the receiving environment with the combined use of waste/alternative fuels;</li> </ul>		Subcategory 1.6	
<b>MINERALS COUNCIL SOUTH AFRICA</b>				
Paragraph 2(b)	<p><b>Proposed regulation 2(b): Introduction of a “once-off postponement” of compliance timeframes with new plant standards, for a 5 year period that cannot extend past 31 March 2025:</b></p> <ul style="list-style-type: none"> <li>• <b>DEA seems to have ignored submissions, by business, to reconsider the expectation that existing plants conform to “new plant standards”.</b> The request by business, that DEA consider the practical constraints existing plants face, in making</li> </ul>		It is feasible	

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	significant technology modifications has also been ignored with more stringent regulations now being enforced.			
	<ul style="list-style-type: none"> <li>Postponements are the only mechanism legally available to existing plants to extend compliance time frames in respect of new plant standards and whilst the existing framework permits postponements for a period of up to 5 years <i>per application</i>. The proposed amendments now seek to curtail that mechanism by allowing only one, 5 year postponement, which postponement may not exceed 31 March 2025, without providing for alternate mechanisms to assist in compliance.</li> </ul>		Correct, that's the intention	
	<ul style="list-style-type: none"> <li>The proposed regulations fail to incorporate DEA's submission to the Portfolio Committee on Environmental Affairs (Committee) on the postponement of compliance with 2020 MES, in terms of NEMAQA, held on 8 February 2018: in this regard: <ul style="list-style-type: none"> <li>DEA noted, during the consultation, that it was working with industry on finding a solution for compliance with SO<sub>2</sub>, in a sustainable manner;</li> <li>the Committee requested that DEA establish a panel of experts to investigate companies affected by the 2020 MES and to produce a report containing findings and recommendations before 2020.</li> </ul> </li> </ul>			SO <sub>2</sub> standard for existing plants – revised in a special arrangement
	<ul style="list-style-type: none"> <li>It is our view that the proposed regulations are premature as the requests made by the Committee have not been resolved.</li> </ul>		Request to Minister to establish panel made	
	<ul style="list-style-type: none"> <li>The amendments contained in Regulation 3 fail to consider instances where an organisation is required to comply with the 2020 MES for multiple facilities. In the majority of these</li> </ul>		Postponement clauses were established as a transitional measure, they were never	None.

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	instances, the costs associated with compliance are so exorbitant that it may not be possible for the business to outlay the capital. The regulatory regime expressly provides for postponements, precisely because it was accepted that "minimal capital investment" would likely not enable existing plants to comply with a five-year plan. To now limit the availability postponement to 31 March 2025 appears to signal bad faith on the part of the DEA.		meant to apply in perpetuity.	
	<p><b>Proposed regulation 3: The amendment of Subcategory 2.4: Storage and Handling of Petroleum Products</b></p> <p>Subcategory 2.4 of the List falls under "Category 2: Petroleum Industry, the production of gaseous and liquid fuels as well as petrochemicals from crude oil, coal, gas or biomass" The mining industry is not included in this definition for "production" of petroleum products.</p>		Noted	No action taken
Category 9	<p><b>Proposed regulation 5: the amendment of Subcategory 9.2 and 9.5: Chemical Recovery Furnaces</b></p> <p>Subcategory 9.2 and 9.5 falls under the "Category 9: Pulp and Paper Manufacturing Activities, including By-Products Recover" The mining industry is not included in the "Pulp and Paper Manufacturing" industry.</p>		Noted	No action taken
Category 5	<p><b>Amendment of Category 5 of the List</b></p> <p>The mining industry is excluded from Category 5 that deals with the cement and ceramic industry.</p>		Noted	No action taken
Annexure A	<b>ANNEXURE A - METHODS FOR SAMPLING AND ANALYSIS</b>		S21 Notice is not intended to	No action taken.

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>Mining industry in support of the guidance provided for specific sampling methodologies. Key risk to note, is that sampling experts will need to conform to this regulation and methodologies required.</p> <p>This must be incorporated within the SABS/SANS processes that inform the sampling experts.</p>		<p>regulate the stack testers, but for the listed activities. It is the responsibility of stack testers to keep themselves updated on the legal requirements to ensure that they provide appropriate support to their clients. The department will thus not initiate any separate capacity building processes for consultants in the stack testing industry.</p>	
	<p>Clarity is required in the “point source monitoring” and “ambient monitoring methodologies” for this Section 21 list, example, Dust Fallout is included. If the ambient monitoring methods apply, this must be aligned to the current National Ambient Air Quality Standards for priority pollutants.</p>		<p>The schedule of the methods listed under Annexure A of the Notice is for pollutants regulated under this Notice. This include the dusfall. Appropriate method (SANS 1137/ASTM D1739) has been included in the list. No additional action has to be taken.</p>	<p>No action taken</p>
<b>FAR TIMBERS</b>				
	<p>FAR Timbers is a sawmilling and wood preservation facility</p>		<p>Noted.</p>	<p>No action taken</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	located at Mpolweni in KwaZulu- Natal, manufacturing and supplying turned pine post and rail fencing material as well as treated gum poles. The facility's wood drying process triggers Subcategory 9.5: <i>Wood burning, drying and the production of manufactured wood products</i> of Government Notice Regulation 893 of 2013, promulgated in line with Section 21 of the National Environmental Management: Air Quality Act 39 of 2004.			
	FAR Timbers was issued an Atmospheric Emissions License (AEL) in May 2016. The existing engineering design at FAR Timbers does not allow for isokinetic emission testing, which is stipulated under Subcategory 9.5. In 2017, with permission from the National Air Quality Officer (NAQO), FAR Timbers demonstrated compliance with the Minimum Emission Standards (MES) using an alternative stack sampling methodology, one which is not prescribed under Annexure A of the Listed Activities. The NAQO stated that the use of alternative methods to meet FAR Timbers' annual emissions testing obligations could not be granted on a permanent basis and that the facility is expected to make the necessary modifications to accommodate the prescribed testing methods. This would require a costly overhaul of the facility. This is not financially viable and the facility is facing closure under this requirement.		<b>Emission limits prescribed under S21 Notice requires the measurement at the stack, as well as the control of emissions using best available techniques to ensure continuous compliance to the Notice.</b>	<b>No action taken.</b>
	On 25 May 2018 the Department of Environmental Affairs released their notice of intention to amend the list of activities (Government Notice No. 516 of 2018) with proposed changes to the description of Subcategory 9.5. The current description of		<b>Delisting of saw mills has not been supported. However, external sources of heat used (i.e. small</b>	<b>Clarity to be provided on the applicability of small boilers/ by-</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>Subcategory 9.5 defines this listed activity as “<i>The burning or drying of wood by an external source of heat...</i>” The proposed amendment replaces this portion of the description with “<i>The drying of wood using direct-fired kilns...</i>” The wood drying process at FAR Timbers does not utilise a direct-fired kiln. Should the intended amendments be promulgated, FAR Timbers will no longer trigger the listed activity and therefore their AEL and associated conditions will become void.</p>		<p>boilers/fuel burning appliances) remain regulated under specific regulatory tools. The department has provided this clarity in the final notice.</p>	<p>laws standards for small scale combustion installations used in the lumbar and wood products processes.</p>
	<p>FAR Timber's would thus like to formally support the proposed change to Subcategory 9.5 of the Listed Activities as intended in Government Notice No. 516 of 2018 for the following reasons:</p> <ul style="list-style-type: none"> <li>• The current description of Subcategory 9.5 is generalized such that small businesses are triggering the listed activity and are grouped with large-scale polluters in the same industry type. FAR Timbers is an example of this;</li> <li>• Due to the cost implications of testing, monitoring, reporting and license renewal obligations associated with an AEL, small businesses, such as FAR Timbers, cannot stay competitive with larger industries (those at which the Listed Activities and associated emission controls are aimed);</li> <li>• The authority's requirement that FAR Timbers must re-engineer the facility to accommodate a prescribed monitoring method will liquidate this business, with associated loss of employment; and</li> <li>• Stack emissions tests conducted show that emission concentrations from the kilns at FAR are well below MES.</li> </ul>		<p>This sector remains a regulated listed activity as it is regarded as a significant emission source. However, further clarity is provided to ensure that the Notice is consistent with other regulatory tools published in terms of this Act.</p>	<p>No action taken.</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
<b>CHEMICAL AND ALLIED INDUSTRIES ASSOCIATION (CAIA)</b>				
	<p>CAIA brings the following to the attention of the Department of Environmental Affairs (DEA) for the purposes of consideration, response and further engagement.</p> <p><b>Socio-Economic Impact Assessment System (SEIAS) Studies Reports Outstanding</b></p> <p>It is noted that the outcomes of the SEIAS studies – a requirement of the Department of Planning, Monitoring and Evaluation in the Presidency - have not been published with either of the draft Notices. The Initial Impact Assessment of the SEIAS study is designed to <i>“ensure that the policy is on the right track by requiring evaluation of alternative approaches. It should help drafters avoid finalising an inappropriate solution because they moved too quickly to select a strategy without adequately analysing the roots of the problem and considering alternative measures. It should facilitate a brainstorm about issues involved in the problem and full range of alternatives to deal with them”</i>, and even includes the need for initial cost-benefit analyses to be undertaken.</p>	<p>It is CAIA's understanding that such investigations have not been carried out nor the necessary reports provided for consideration. <b>The further development and or progression of these draft amendments must not go ahead until such time as the SEIAS studies have been received, contemplated and engaged upon.</b></p>	<p><b>The proposed amendments to specific subcategories of the listed activities does not introduce any new legislative requirements, but provide clarity to existing legislative requirements as requested by and agreed to with the affected sectors. The update of the scheduled list of measurement methods does not introduce any new policy/legislative/regulatory requirements, but provide an updated methods to ensure that monitoring assessments of the compliance is consistent with the original intent of this Notice. CAIA's recommendation to subject these clarification requirements to study “designed to ensure that the policy in on the right tract by</b></p>	<p><b>No action taken.</b></p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
			requiring alternative approaches..." is thus misplaced.	
	<p>Since the new MES were promulgated, there have been a multitude of engagements with Government regarding their stringency, lack of flexibility and the overall environmental benefit that would be achieved through their implementation, most notably in certain areas. These engagements have been ongoing and held directly between the DEA and companies, and between the DEA and business associations and industry associations, respectively. Further engagements that have been directed to take place by senior Government have not transpired – such as the establishment of the Technical Panel and the Independent Review. It is CAIA's understanding that there has been a general lack of formal response to these engagements by the DEA and this is not only disappointing, but not within the bounds of administrative justice. The strategic, technical and socially complex nature of the ambient air quality management policy in South Africa is such that it requires alternative mechanisms to be introduced so that a sustainable approach to socio-economic development can be achieved, and so that the Best Practicable Environmental Option(s) – including flexibility being built into policy - can be introduced that balance these imperatives.</p>		<p>Promulgation of the Notice on Listed Activities was as a result of an intensive consultation process that exceeded legislated minimum requirements. CAIA and all affected sectors were party to the processes that established these compromised emission standards that extended for a period of 5 years. These processes included the independent standardization process within the SABS, which was dominated and led by industry sectors. This process was followed by the independent facilitation process after members of the SABS technical committee and associated subcommittees and working</p>	<p>No action taken.</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
			groups could not reach consensus required by the Standards Act, and SANS 1-1. Furthermore, legislated processes in terms of sections 56 and 57 of the Act where undertaken, resulting in these standards. The Department has proved to have satisfied all the prescripts of administrative justice required to publish the standards on 31 March 2010, and subsequently in refinements made in 2013.	
	Further time is needed for stakeholders to sit around a table, and commit to rational, justifiable science- and risk-based policy making for the sound socio-economic development of our country. The Department's negative response to Business Unity South Africa when the latter, of which CAIA is a member, encouraged a robust process, is noted.			
<b>General</b>	<p><b>Sub-category 7.2: Production of Acids</b></p> <p>In the last amendment to subcategory 7.2 of the Section 21 Notice that took place on 22 November 2013 that did not include transitional arrangements, the scope of the sub-category was changed from the "production of acids" through:</p> <ul style="list-style-type: none"> <li>• in the description, adding "bulk handling and or use in</li> </ul>	CAIA submits that the amendments to subcategory 7.2 that were included in, and have perpetuated since the 22 November 2013	<b>This comment is not responding to the proposed amendments as published. The Department is however taking note of this for future deliberations with the</b>	<b>Noted.</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>manufacturing” activities; and</p> <ul style="list-style-type: none"> <li>in the application, adding “handling and or using”.</li> </ul> <p>The title of the subcategory also changed, from “<i>Primary Production of Acids</i>” to “<i>Production of Acids</i>”.</p> <p>Unfortunately, this amendment was only noted after the Notice was published and CAIA has confirmed that a licence was not needed before the amendment, whereas an Atmospheric Emissions Licence (AEL) has since become required. It would appear that the amendment may have been made in error at that time.</p>	<p>amendment are repealed, as the current amendment of the Section 21 Notice provides this opportunity.</p>	<p><b>sector, taking into account all processes followed in the 2013 amendments Notice, which CAIA actively contributed to.</b></p>	
	<p>The implementation thereof has been handled inconsistently by different local authorities when the matter has been engaged upon with them, in terms of the considerations of applications for AELs. Some authorities agree that any emissions would not be considered as “point source” emissions, adding to the belief that emissions would most likely be low and would not “...have or may have a significant detrimental effect...” - the mandate of Section 21 of the NEMAQA. Furthermore, some authorities have required public participation processes and/or environmental impact assessments to be undertaken, while others have not.</p>			
	<p>As can be imagined, this has resulted in:</p> <ul style="list-style-type: none"> <li>confusion regarding whether “handling and or use” was in fact intended to be included in the amendment or not, and regarding the requirements for licence applications; and</li> <li>unnecessary substantive costs being borne which are likely to rise further due to the necessary administration, processing</li> </ul>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>fees, Atmospheric Impact Reports, annual emissions monitoring and annual compliance audits being required.</p> <p>It is not understood why the amendment was included, as the environmental impact is believed to be negligible from the "handling and or use" activity.</p>			
	<p>Furthermore, CAIA believes that the NEMAQA provides for such an amendment to be undertaken without Section 56 nor Section 57 consultative processes being required, as shown below in <b>bold font</b>:</p> <p>"(4) (a) Before publishing a notice in terms of subsection (1) or any amendment to the notice, the Minister or MEC must follow a consultative process in accordance with sections 56 and 57.</p> <p><b>(b) Paragraph (a) need not be complied with if the notice is amended in a non-substantive way."</b></p> <ul style="list-style-type: none"> <li>• CAIA believes that removing handling and or use activities would be a non-substantive amendment from the perspective of potential environmental impact but would offer considerable relief to licence holders.</li> <li>• CAIA would like to engage further on this matter to understand the purported environmental impact that is being experienced through handling and or use that led to the inclusion of these activities in the amendment of the Section 21 Notice in 2013.</li> </ul>		<p><b>Sections 56 and 57 consultative processes where followed prior to publication of the amendments.</b></p>	<p><b>No action taken.</b></p>
	<p>Kindly confirm receipt of the input as well as provide the SEIAS studies reports. It is expected that the latter are published in the Government Gazette. A response to the comments that have</p>		<p><b>The proposed amendments to specific subcategories of the listed activities does not</b></p>	<p><b>No action taken.</b></p>

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	<p>been provided will be appreciated in the interim, as well as an opportunity to engage on the two matters raised above; namely the MES regulatory regime, as well as the proposed amendment of sub-category 7.2 to remove handling and use activities from the scope of the requirements. Both of these matters have negative socio-economic impacts associated with them and it is critical that these are appreciated and a way forward developed and operationalised. Please feel free to contact the Association where further clarity is required. CAIA looks forward to your response.</p>		<p>introduce any new legislative requirements, but provide clarity to existing legislative requirements as requested by and agreed to with the affected sectors. The update of the scheduled list of measurement methods does not introduce any new policy/legislative/regulatory requirements, but provide an updated methods to ensure that monitoring assessments of the compliance is consistent with the original intent of this Notice. CAIA's recommendation to subject these clarification requirements to study "designed to ensure that the policy in on the right tract by requiring alternative approaches..." is thus misplaced.</p>	

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<b>CENTRE FOR ENVIRONMENTAL RIGHTS</b>				
<b>General</b>	<p>We address you on behalf of the Life After Coal/Impilo Ngaphandle Kwamalahle Campaign (“the Campaign”), made up of the Centre for Environmental Rights, Earthlife Africa, and groundWork. The Campaign aims to discourage investment in new coal-fired power stations and mines; accelerate the retirement of South Africa’s coal infrastructure; and enable a just transition to renewable energy systems for the people.</p>		<p>Continued participation of the civil organizations mention here on behalf of communities is greatly acknowledged and welcomed.</p>	<p>No action taken.</p>
	<p>As you are probably aware, we have been integrally involved in the implementation of and amendment to the List of activities which result in atmospheric emissions which have or may have a significant detrimental effect on the environment, including health, social conditions, economic conditions, ecological conditions or cultural heritage (“the List of Activities”). Upfront, we wish to commend the Department of Environmental Affairs (“the DEA”, or “the Department”) for proposing, through these draft amendments to the List of Activities (“the draft List of Activities”), the following:</p> <ul style="list-style-type: none"> <li>• the elimination of any further opportunities to postpone compliance with existing plant minimum emission standards (MES). In this regard, we point out that Eskom has re-applied to postpone existing plant MES for sulphur dioxide (SO2) for Medupi and Matimba, despite such application having been refused in February 2015. We have submitted that such application is illegal,<sup>1</sup> and are advised that no decision has been made by the National Air Quality Officer (NAQO) on this application to date; and</li> </ul>		<p>Noted.</p>	<p>No action taken</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<ul style="list-style-type: none"> <li>the elimination of what Eskom has referred to as “rolling postponements” i.e. re-applying for postponements of compliance every 5 years until eventual decommissioning of its stations. We have consistently argued that these so-called rolling postponements are the equivalent of illegal exemptions from the MES. Only one postponement of new plant MES is permitted, for a maximum of 5 years.</li> </ul>			
<b>Paragraph 2</b>	The effect of this draft legislation is to confirm, among other things, not only that <b>no further postponements of existing plant MES are permitted</b> , but that <b>no further postponements of new plant MES are permitted beyond 31 March 2025</b> . We support these amendments.		<b>CER’s understanding in this regard is correct.</b>	<b>No action taken.</b>
<b>General</b>	We have some concerns about other aspects of the amendments, which we address below. Given the insufficient period provided to make detailed submissions (as addressed below), our representations focus on the proposed amendments to the postponement provisions (paragraphs 11-14 of the List of Activities). We reserve our rights to make additional representations on other aspects of the draft List of Activities at a later stage.		<b>In provision of 30 days commenting period, the department has met its legislative requirements with respect to section 56 and 57 consultations.</b>	<b>No action taken.</b>
<b>Paragraph 2</b>	In summary: <ul style="list-style-type: none"> <li>the requirements in paragraph 5.4.3.3 of the 2012 National Framework for Air Quality Management in the Republic of South Africa (“the Framework”) have to be met before an application for postponement (or suspension) can be considered;</li> </ul>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
Paragraph 2	<ul style="list-style-type: none"> <li>all application documents must be made publicly available for comment; and, in the case of the once-off suspension, this must include a copy of the “clear decommissioning schedule” provided by the applicant;</li> </ul>			
Paragraph 2	<ul style="list-style-type: none"> <li>in many cases, facilities that seek once-of suspensions are able – and should be required - to meet far stricter emission standards (determined by a health impact assessment) than the existing plant standards. At no stage should emission standards in atmospheric emission licences (AELs) be weakened as a result of an application for a suspension;</li> </ul>			
Paragraph 2	<ul style="list-style-type: none"> <li>the decommissioning deadline – in the case of a once-off suspension – must be made clear;</li> </ul>			
Paragraph 2	<ul style="list-style-type: none"> <li>the draft List of Activities must make clear what the role is of the licensing authority in granting and reviewing a once-off suspension – we argue that such decisions should be taken in concurrence with the licensing authority; and</li> </ul>			
Paragraph 2	<ul style="list-style-type: none"> <li>the decision on an application must be made timeously, so as to ensure that there is sufficient time for an industry whose application is refused to take the necessary steps and make the necessary investments in order to ensure timeous compliance with the MES.</li> </ul>			
Paragraph 2	<p>Before doing so, we point out South Africa’s National Ambient Air Quality Standards (NAAQS)<sup>3</sup> and its MES<sup>4</sup> are both weak and require review and updating for purposes of making these stricter to provide better protection for human health and well-being. In this regard, both the National Environment Management: Air Quality Act, 2004 (AQA)<sup>5</sup> and the Framework<sup>6</sup> require the review</p>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	of both sets of standards at least every 5 years.			
<b>Paragraph 2</b>	The requirements set out in the List of Activities for an application to be made do not match the requirements set out in the Framework.	We argue that the “missing” provisions from the Framework should also be incorporated into the List of Activities.		
<b>Paragraph 2</b>	Section 5.4.3.3 of the Framework indicates that provisions have been made to postpone compliance with MES “ <i>provided ambient air quality standards are in compliance and will remain in compliance even if the postponement is granted</i> ”. The Framework also requires that the industry demonstrate that its current and proposed air emissions are not causing and will not cause any adverse impacts on the surrounding environment. This is particularly important in relation to the 3 air quality priority areas, all of which are in non-compliance with NAAQS, despite the passage of more than 12 and 10 years since the declaration of the Vaal Triangle and Highveld Priority Areas, respectively. Industries in these areas, and in the Waterberg-Bojanala Priority Area, should not even be permitted to apply for postponement. Granting postponements or suspensions of compliance to such facilities will only exacerbate the high air pollution with its dire on human health, well-being, and the environment, and make it even more difficult for the Priority Areas to meet their goals of ensuring compliance with NAAQS.			
<b>Paragraph 2</b>	The Framework also requires that any postponement application must be made at least 1 year before the specified compliance date. As set out in paragraph 24 below, 1 year may be an			

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	inadequate period. The Framework also requires compliance with any other requirements specified by the NAQO.			
Paragraph 2	Although paragraph 11 makes reference to the Framework, it falls to make clear that its requirements must also be met before any application is made. These requirements from the Framework are not specified in the List of Activities. It is submitted that they should be.	It is proposed that paragraph 11 be amended as follows: “(11) As contemplated... of this Act, <b>and provided that ambient air quality standards in the area are in compliance and will remain in compliance even if the application is granted,</b> an application may be made to the National Air Quality officer <b>by 31 March 2019</b> for the postponement <b>or suspension</b> of the compliance time frames <b>[in paragraphs (9) and (10)]</b> for an existing plant.”		
Paragraph 2		In addition, all application documents must be made available for comment to enable		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>interested and affected parties an opportunity to participate meaningfully in the process, with due regard to all relevant documents. In the case of the once-off suspension, these must include the decommissioning schedules provided by the applicant.</p>		
<p><b>Paragraph 2</b></p>		<p>It is proposed that paragraph 12 be amended as follows:  “(12) The application contemplated in paragraph 11 must include-  (a) an air pollution impact assessment compiled in accordance with the regulations prescribing the format of an Atmospheric Impact Report...in the appropriate category;</p>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>(b) a demonstration that the facility's current and proposed air emissions are not causing and will not cause any adverse impacts on the surrounding environment;</p> <p>[(b)] (c) a detailed justification and reasons for the application, and in the case of a suspension, a copy of the clear decommissioning schedule; [and]</p> <p>[(c)] (d) a concluded public participation process undertaken as specified in the NEMA Environmental Impact Assessment Regulations, in terms of which the complete application, including all documents referred to</p>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>in (a)-(c) above, are made available for comment; and  (e) such other requirements as may be specified by the National Air Quality Officer.</p>		
<p><b>Paragraph 2</b></p>	<p>We must point out that the Atmospheric Impact Report requirements for a health impact study should be substantially more comprehensive, given the dire impacts of air pollution on human health. Currently, these simply state:  <i>“Analysis of Emissions' Impact on Human Health  In order to assess the atmospheric impact of the facility on human health a dispersion modelling exercise must be undertaken. Any dispersion modelling study undertaken as part of an Atmospheric Impact Report must be done in accordance with the Regulations Regarding Air Dispersion Modelling specified for regulatory purposes - developed in terms of section 53 of AQA. The impact assessment should take the emissions of the facility under consideration as well as prevailing ambient air concentrations into account during this assessment. A compliance assessment must be undertaken using the national ambient air quality standards, specifically in residential areas and other areas where human exposure could occur”.</i></p>			
<p><b>Paragraph 2</b></p>	<p>The World Health Organisation has proposed some general principles for such air pollution health risk assessments.<sup>7</sup> We</p>	<p><b>Stricter emission standards than existing</b></p>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	submit that, at a minimum, the health risk assessment should include: estimates of the population exposure to the relevant pollutants (ambient concentrations and population distribution), including taking cognisance of secondary PM2.5 and ozone and the long-range dispersion of pollutants from tall stacks; the estimation of health risks; and the quantification of health impacts as numbers of attributable deaths and disease in the area of impact.	<p><b>plant MES – informed by a health risk assessment - should apply to once-off suspensions</b></p> <p><b>The decommissioning deadline must be made clear</b></p>		
<b>Paragraph 2</b>	As indicated above, South African MES are very weak. Our existing plant MES particularly so.			
<b>Paragraph 2</b>	<p>Given the significant impacts of air pollution on human health, well-being, the environment, and on section 24 of the Constitution of the Republic of South Africa, 1996 (“the Constitution”), it is not reasonable, appropriate, or acceptable to permit facilities seeking a once-off postponement of compliance to emit pollution at concentrations far above new plant standards for up to a decade longer than was envisaged by the new plant standards (i.e. until decommissioning by 2030).</p> <p>The consequences of this would be particularly severe in the air quality priority areas already out of compliance with NAAQS. Ideally, stricter emission standards than existing plant standards – informed by a health risk assessment - should be imposed as a condition of the once-off suspension – by the NAQO in concurrence with the relevant licensing authority<sup>9</sup> – and the licensing authority, upon its subsequent variation of the facility’s AEL following a successful suspension application, should ideally incorporate stricter emission standards into the AEL. At the very</p>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	least, when AELs applicable at the time of the application prescribe such stricter emission standards (which are still weaker than the new plant MES), these should be confirmed if a suspension is granted: the facility should not be permitted to weaken current emission standards in its AELs by means of an application for once-off suspension.			
Paragraph 2	The once-off suspension provision assumes that the facility will be decommissioned by 2030 at the very latest.	The List of Activities must make this clear.		
Paragraph 2	We propose that paragraph 11F be amended as follows: “(11F) An existing facility granted a once-off suspension of compliance timeframes with new plant standards shall <b>be required to comply with stricter emission standards than the existing plant standards, during the suspension period and until the existing plant is decommissioned, by the date indicated in the 11D decommissioning schedule, which cannot be later than 2030.</b> ”			
Paragraph 2		The decision-making process for suspensions, including the role of the licensing authority in granting and reviewing suspensions, must be made clear. Decision-making must be timeous		
Paragraph 2	The draft List of Activities does not propose amendments to paragraphs 13 and 14 of the List of Activities to make clear that			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>these also apply also to once-off suspensions. It is presumed that this was an oversight. In any event, we argue that these two paragraphs, as amended, should also apply to once-off suspensions of compliance.</p>			
<p><b>Paragraph 2</b></p>	<p>There is no reason why the licensing authority should not also be involved in considering applications to grant suspensions and in considering reviews and possible withdrawals of suspensions (as is the case for postponement applications and reviews). Where NAAQS are out of compliance, and given the serious impacts of air pollution, suspensions – as well as postponements – should be reviewed and potentially withdrawn in order to protect environmental rights.</p>			
<p><b>Paragraph 2</b></p>	<p>We note that applications for both postponement and suspension of compliance with new plant standards have to be made by 31 March 2019. However, decisions on such applications must be made well in advance of the compliance dates. In this regard, we point out the NAQO's last round of postponement decisions was announced a mere 5 weeks before facilities were required to comply with the existing plant MES. In most cases, this would clearly not allow sufficient time for timeous planning, investment, and retrofitting where applications were refused. The List of Activities must indicate the deadline for the decision on such applications; which cannot be less than 6 months. If it is not possible for timeous compliance within 6 months, the deadline to make application for both postponements and suspensions should be longer than 1 year, so as to ensure that public participation is not unnecessarily curtailed.</p>	<p>We propose the following amendments:  “(13) The National Air Quality Officer... may grant a postponement <b>or suspension</b> of the compliance time frames <b>[in paragraphs (9) and (10)]</b> for an existing plant <b>at least six (6) months before the compliance date [for a period not exceeding 5 years per postponement]</b>.  (14) The National Air</p>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>Quality Officer... may –            (a) from time to time to review any postponement <b>or</b> <b>suspension</b> granted ....; and            (b) on good grounds, withdraw any postponement <b>or</b> <b>suspension</b> following –            (i)....; and (ii)....            communities”.</p>		
<b>Paragraph 2</b>	<p>The draft List of Activities fails to make clear what happens in the situation where a facility's postponement application is refused (partially or fully), or where a postponement of less than 5 years was granted and a further postponement (for a cumulative maximum period of 5 years] is sought. It is submitted that it must be made clear that the reference in 11A to a “once-off” postponement means that no facility is permitted: to re-apply for a postponement of new plant standards if a previous postponement was refused (partially or fully); or, assuming a shorter postponement was sought and obtained, to apply for a further postponement (even if such cumulative postponement period is only up to 31 March 2015).</p>			
<b>General</b>	<p>We place on record that we have not had an adequate, fair, and reasonable opportunity to provide full comment on the draft List of Activities. On 25 May 2018, the DEA published the draft List of Activities, the draft Framework, and draft amendments to the Dust</p>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>Control Regulations, for comment by the same deadline, 25 June 2018. All of these are essential documents for air quality management, and the Life After Coal Campaign has particular expertise and interest in all 3 documents – as the DEA is aware. But the extremely short commenting period for all 3 documents substantially curtailed our ability to make detailed, meaningful input on all 3. In addition, we have only been able to make submissions in relation to the postponement provisions of the draft List of Activities. As will be described in our submissions on the Framework, our request for an extra 30 days to comment on the Framework was refused, and only 4 extra days were afforded. This is unreasonable and unfair.</p>			
<b>General</b>	<p>In addition, it is highly regrettable that we were only informed of the 14 June 2018 workshop on the draft List of Activities and the draft Framework on 12 June 2018 (and not by the Department), and that it was not possible for us to attend at such short notice. To date, and despite request, we have not received the minutes of this workshop. It is not understood why the Department does not circulate such notices to stakeholders; and in particular to those such as the Campaign who have been active, vocal participants in air quality processes for many years. In any event, it is essential for the Department to consult with those people worst impacted by the devastating impacts of air pollution – in particular the priority areas - and that those meetings should be held in the areas where these people reside in order to afford them a fair and reasonable opportunity to exercise their rights to be heard. To date, and despite our request, this has not been</p>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	done. We submit that these are appropriate circumstances for the Minister to use her power in terms of section 57 (3) of AQA, to allow interested persons and communities to present oral representations or objections.			
<b>General</b>	In short, we record our objection to this simultaneous process of public consultation, with only 30 days to comment on 3 such important air quality-related documents, and submit that it inconsistent with section 57 of AQA, with the National Environmental Management Act, 1998, and with section 24 of the Constitution.			
<b>General</b>	We reserve all of our rights in relation to the public participation process followed.			
<b>General</b>	We submit that the amendments set out above should be made, and ask for clarity on the issues we have highlighted.			
<b>General</b>	Kindly also advise us of the status of the postponement application described in paragraph 2.1 above. We also ask that you share any schedule of planned postponement and/or suspension applications that you have received, or are still to receive from Eskom or Sasol in order to enable us to plan for these accordingly.			
<b>General</b>	We look forward to hearing from you in relation to this amendment process and are available to meet with the Department and to answer any questions on these submissions. We also reiterate our request made to the Department on prior occasions that we be timeously informed, by email, of all air quality-related meetings and documents for comments.			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
<b>EDEN DISTRICT MUNICIPALITY</b>				
<b>Subcategory 9.5</b>	<p>My comments as so far as the proposed changes to Category 9: Subcategory 9.5: Wood Drying and the Production of Manufactured Wood Products.</p> <p>Our role is to protect the environment and specifically the Air Quality Environment. I understand the dynamics with this category as so far as the size of the boiler and double regulating it as both Controlled Emitter as well as Atmospheric Emission licencing. However, this is not the case. Where Atmospheric Emission Licences were issued to wood dryers, the authorities only issued an AEL and not registering them as Controlled Emitters as well.</p> <p>Furthermore, most of the SA wood dryers are making use of indirect methods of drying. That is generation of steam by an external source of heat. By changing it to direct drying only, we exclude a substantial amount of Wood dryers- if not all. If we test this against the protection of the environment, you will see that the same emissions will be produced by the direct firing method and then we are failing the environment. Besides the emissions, wood dryers also emit dust which we control in terms of the AEL.</p>		<p><b>Yes. The subcategory is intended for all other mill sources other than external heat sources, as these are controlled as combustion sources under category 1 of S21 Notice; small boilers declared in terms of S23; or fuel-burning appliances listed under specific municipal by-laws.</b></p>	<p><b>Description to be expanded to clarify that the emission limits apply to all other point sources other than external heat sources.</b></p>
	<p>If the direct emissions are combining with wood to give of volatiles, then surely one should include VOC's as part of the minimum emission limits for the category.</p>		<p><b>True. Emission of the volatile organic compounds is expected due to inherent organic nature of the raw materials used, as well as the use of the urea-formaldehyde containing resin in the manufacturing</b></p>	<p><b>Noted.</b></p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
			of laminated and compressed wood products. The significance of this pollutant has not been quantified by the sector. Eden's recommendation is noted.	
	I also don't understand the rationale behind the part: and the manufacture of laminated and compressed wood products. Why should the category include this and how does it correspond to the emission limits?		Rotary dryers used in the manufacturing of laminated and compressed wood products and presses are some of the emission sources that are controlled for these processes. Use of wood chips, saw dust etc. in the mills generate particulate matter, and the use of urea-formaldehyde containing materials results in oxidation of these into NOX. The other pollutant that is currently not regulated is VOCs.	No action taken.
	Particulate Matter is problematic at wood dryers and they will struggle to meet new plant standards without abatement. By de-listing them we are creating an air pollution challenge, especially with PM. I don't support the de-listing of wood dryers at all.	As last resort I am proposing that the current category must at least be declared as	While this comment is inconsistent with the above comment where you question the rationale of	No action taken.

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		Controlled Emitters, irrespective of boiler size. A substantial amount of complaints are residing from emissions from this category and there must be a tool to regulate them. The normal permitting system of small boilers at local municipal level is inadequate to control and regulate their emissions.	<b>pollutants controlled, it is appreciated that you understand that particulate matter is a problem in wood dryers, thus need to be controlled as per this subcategory.</b>	
	Furthermore it is also very unfair towards current applications that went through expensive EIA's, dealing with appeals, etc. just to know that all their application processes was in vain.		<b>Saw mills remain regulated under section 21 Notice on the basis of their significance in contribution of local emission problems.</b>	<b>No further action taken.</b>
<b>General</b>	It seems that District municipalities and Metros are being excluded from the Air Quality Act. In terms of the Constitution Air Quality is a Local Government competency. Therefore the shift from APPA to NEMAQA. The changes of Licencing Authority to National Minister (National priorities), DMR and in terms of the Waste Act and now the delisting of most of the wood dryers are just a few examples. Districts and Metros as Licencing Authorities should have more input in important decisions such as Listed Activity changes as we		<b>This comment is unfortunate as it ignores that the atmospheric emission licencing authorities are involved in all decision-making processes. Furthermore, it should be noted that authorities are the ones who triggered the</b>	<b>No action taken.</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	have to implement Section 21.		clarification of this subcategory.	
<b>SAWMILLERS' ASSOCIATION OF SOUTH AFRICA</b>				
<b>General</b>	The comments are only related to the proposed amendments to Category 9, Subcategory 9.5: Wood Drying and the Production of Manufactured Wood Products (paragraph 5(b) of the Notice) ("Activity 9.5").		Noted.	Noted.
<b>Subcat. 9.5</b>	Firstly we would like to extend our gratitude for the proposed exclusion of the word "Burning" from the activity title and also the specification of direct-fired kilns in the description of the activity. We believe that this is a move in the right direction and we appreciate that the Department of Environmental Affairs had considered our comments on the matter.		Noted.	Noted.
<b>Subcategory 9.5</b>	<p>Even though we welcome the proposed changes, Activity 9.5 as published in the Notice is still confusing due to the following:</p> <ul style="list-style-type: none"> <li>• <b>The Title:</b> The title of Activity 9.5 is <i>Wood Drying and the Production of Manufactured Wood Products</i>. Wood drying and the production of manufactured wood products are two unrelated activities and should not be categorised under the same Activity. Wood drying is related to the production of lumber and the drying thereof in kilns. The production process of manufactured wood products (i.e. plywood, MDF, etc.) is completely different to the lumber production process.</li> <li>• <b>The Description:</b></li> </ul>	Taking the above mentioned into consideration, Sawmilling SA recommends that the manufacture of laminated and compressed wood products be removed from Activity 9.5 completely as none of the Activity's listed substances that have set limits and need to be monitored are emitted to	<b>Rotary dryers used in the manufacturing of laminated and compressed wood products and presses are some of the emission sources that are controlled for these processes. Use of wood chips, saw dust etc. in the mills generate particulate matter, and the use of urea-formaldehyde containing materials results in oxidation of these into</b>	

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>The Description of Activity 9.5 is <i>The drying of wood using direct-fired kilns; and the manufacture of laminated and compressed wood products</i>. Once again the use of direct-fired kilns and the manufacture of laminated and compressed wood products are used in the same description although they are completely unrelated. The processes are not similar in any way so it would not make sense to group them under one Listed Activity.</p> <ul style="list-style-type: none"> <li>• <b>Substances or Mixture of Substances:</b> The substances listed in Activity 9.5 are Particulate Matter (PM) and Oxides of Nitrogen (NO<sub>x</sub>). The limits set for these substances is only relevant to the drying of wood using a direct-fired kiln and are not relevant to the manufacture of laminated and compressed wood products for the following reasons: <ul style="list-style-type: none"> <li>○ <i>Particulate matter:</i> The processes involved in the manufacturing of laminated and compressed wood products emit PM within the confines of a building and not to the atmosphere. The PM emissions are controlled with dust extraction installations which remove the PM from within the building to a dedicated holding bin. The PM can therefore not be measured and proposing a concentration limit in terms of PM is thus impractical.</li> <li>○ <i>NO<sub>x</sub>:</i> NO<sub>x</sub> is produced from the reaction of nitrogen and</li> </ul> </li> </ul>	<p>the atmosphere by the production process of laminated and compressed wood products.</p>	<p><b>NO<sub>x</sub>. The other pollutant that is currently not regulated is VOCs. The recommendation is thus not accepted as these activities remain sources of concern where they are operated. Clarification has however been provided to address ambiguity related to heat sources that are regulated in other regulatory tools such as controlled emitters.</b></p>	

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>oxygen in the air during combustion. The process of combustion is thus required for NO<sub>x</sub> to be created in industrial applications. The process of producing laminated and compressed wood products does not involve combustion and thus cannot be viewed as a source of NO<sub>x</sub>.</p> <p>The only combustion that takes place is within the boilers that are used to create steam for the manufacturing process. However, these boilers are already regulated under the Declaration of a Small Boiler as a Controlled Emitter Regulations and do not have be included in Activity 9.5.</p>			
<b>DEPARTMENT OF TRADE AND INDUSTRY (the dti)</b>				
<b>General</b>	<p>The dti supports environmental accountability of business and industry and has always been consistent in its input to the DEA that interaction between policies both in terms of trade-offs and synergies must be considered when designing and implementing a mix of regulatory policy instruments in an attempt to achieve the clean air quality objective for the Republic.</p>		<b>Noted with gratitude.</b>	<b>Noted.</b>
	<p>It is our view that while policies and measures should be effective, the cost and regulatory burden on industry should be minimized as far as possible.</p>		<b>The cost of regulatory burden are always considered in line with the cost of environmental degradation, cost to human health and other considerations in line with</b>	<b>No action take.</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
			the principles of sustainable development.	
	The proposed amendments do not appear to have an additional negative impact on the competitive position of the affected industries and it is our understanding that the amendments focus is to improve the interpretation of the act and in a number of cases provide for a slight relaxation of requirements to allow industry more time to comply or relax emission limits.		Noted.	Noted.
	The dti further welcomes the postponement of compliance timeframes for existing facilities to meet the required standards by 2025 and by 2030 for existing facilities that intends to decommission before or during 2030.		Noted.	Noted.
	It is further our understanding that comprehensive consultation on the proposed amendments took place between DEA and affected industries and that a final consultation session will take place on 14 June 2018. The dti would also like to attend this session.		This understanding is correct.	No action taken.
<b>WESTERN CAPE DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING</b>				
<b>General</b>	The Department of Environmental Affairs ("DEA") failed to consult with any licensing authorities regarding proposed changes to the list of activities which result in atmospheric emission which have or may have a significant detrimental effect on the environment, including health, social conditions, economic conditions, ecological conditions or cultural heritage, as published in terms of section 21(1)(a) of the National		This is incorrect. The draft amendments were in some instances triggered by authorities. Furthermore, processes for Mintech WG 2 and WG 11 form part of section 56 and 57 processes that authorities are currently	No action taken.

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>Environmental Management Air Quality Act, 2004 ("the List"). Instead of discussing proposed amendments with licensing authorities and requesting inputs on what should be amended in the List, licensing authorities were presented with an already amended document. The List was also not discussed at MinTech Working Group 2, or Working Group 11.</p>		<p>participating on.</p>	
<p><b>General</b></p>	<p>Section 21(3) of the National Environmental Management Air Quality Act, 2004 requires that "...a notice must establish minimum emission standards in respect of a substance or a mixture of substances resulting from a listed activity and identified in the notice, including the permissible amount, volume, emission rate, or concentration of that substances that may be identified and the manner in which measurements of such emissions must be carried out". Category 10, i.e. "Animal Matter Processing" however remains without specific pollutants prescribed.</p>	<p>As required in section 21(3), substances or a mixture of substances resulting from animal matter processing (Category 10) must be identified, including permissible amount, volume, emission rate or concentration of the substance and the manner in which measurements of such emissions must be carried out. Emission standards for specific pollutants such as, for example, H<sub>2</sub>S, should be included in the Listed Activities, Category 10.</p>	<p><b>Animal matter processing will remain regulated in the current format until the new regulatory tool to manage odour is developed in terms of section 35 of the Act. This has always been the position of the air quality officers in three spheres of government, which was informed by avoidance of regulatory gap that may occur if the processes are delisted without alternative measures.</b></p>	<p><b>Noted.</b></p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
<b>General</b>	<p>(Sub-Category 4.21            In the "Description", i.e. "The recovery of metal from any form of scrap material by the application of heat" has often been referred to as those pertaining to scrap materials of an "organic nature".            Some authorities have therefore not included this Listed Activity where metal is recovered from any form of scrap metal by the application of heat. Facilities that use Electric Arc Furnaces (Sub-Category 4.7) have therefore been excluded from measuring the emissions of a mixture of metals (see Sub-Category 4.21).</p>	<p>It is recommended that the "Description" of Sub-Category 4.21 be amended to include the terms "matter/metal", to read as follows:            "The recovery of metal from any form of scrap metal/material/matter by the application of heat".            This will ensure that there is no misunderstanding in terms of what is meant when any metal is recovered from any scrap metal/matter/ material.            In terms of Dioxins and Furans, a special arrangement should apply, where required, as not all scrap metal/material/matter will emit these. A special arrangement to address this must therefore be included.</p>	<p><b>This comment is not responding to the draft amendments. The province's recommendations are however noted to be addresses in future.</b></p>	<p><b>Noted.</b></p>
<b>General</b>	Sub-Category 4.7	The substances or		

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	The substances or mixture of substances required to be monitored should be the same as those in Sub-Category 4.21, excluding the combustion related pollutants such as CO and Dioxins and Furans.	mixture of substances required to be monitored should be the same as those in sub-category 4.21 (hydrogen chloride; hydrogen fluoride; sum of lead, arsenic, antimony, chromium, cobalt, copper, manganese, nickel, & vanadium; mercury; cadmium & thalium; TOC's; ammonia), excluding the combustion related pollutants such as CO and Dioxins and Furans.		
<b>Subcat.2.4</b>	It is not clear whether "Subcategory 2.4: Storage and Handling of Petroleum Products" will include the storage of bitumen, a petrochemical product. There are a number of bitumen storage facilities that are not categorized as Macadam processes as they only blend bitumen with other binders and do not use gravel in the process.	The "Description" and "Application" under "Subcategory 2.4: Storage and Handling of Petroleum Products" must be clarified.	<b>The subcategory is clear that it regulated storage and handling of petroleum products. No further clarity is required.</b>	<b>No action taken.</b>
Clause 3(b)(ii)	In order to avoid any potential confusion regarding the mandatory nature of this provision, consider amending "shall" with to "must".	The provision should be amended as follows: "The roof legs, slotted pipes and/or dipping well	<b>Recommendation accepted</b>	<b>"shall" replaced with "must"</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		on floating roof tanks (except for domed floating roof tanks or internal floating roof tanks) <b>[shall]</b> must have sleeves fitted to minimise emissions”.		
Clause 3(b)(iii)	In order to confirm the mandatory nature of this provision, the term “should” must be substituted with the “must”.	The provision should be amended as follows: “Relief valves on pressurised storage <b>[should]</b> must undergo periodic checks for internal leaks. This can be carried out using portable acoustic monitors or if venting to atmosphere with an accessible open end, tested with a hydrocarbon analyser as part of an LDAR programme”.	<b>Recommendation accepted</b>	<b>“should” replaced with “must”</b>
Clause 3(c) “Subcategory 2.4: Storage and Handling	Why is non-thermal destruction of Total Volatile Organic Compound (“TVOCs”) being permitted when it is so much less efficient than thermal destruction methods?	Non-thermal destruction of TVOCs should not be permitted given the vast disparity in achievable	<b>Non-thermal treatment of TVOCs is provided for cases where it is not economically and environmentally feasible</b>	<b>No action taken.</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
of Petroleum Products”		emission limits.	to require the use of thermal treatment techniques (e.g. where strength of vocs in the flue gases will require the use of additional fuel). This is in line with best practicable environmental option principle. Recommendation is thus not acceptable.	
Clause 4(a) “Substitution in Subcategory 5.4”	The “Description” and “Application” should not apply to stand-alone facilities that undertake cement storage and packaging.	The “Description” and “Application” should not apply to stand-alone facilities that undertake cement storage and packaging.	This comment is not responding to the draft amendments. The province’s recommendations are however noted to be addresses in future.	Noted.
Clause 5(b) “Subcategory 9.5: Wood Drying and the Production of Manufactured Wood Products”	Only “direct-fired kilns” are addressed here.	This category should cover both direct and indirect methods of heating.	Yes. The subcategory is intended for all other mill sources other than external heat sources, as these are controlled as combustion sources under category 1 of S21 Notice; small boilers declared in terms of S23; or fuel-burning appliances listed under specific	Description to be expanded to clarify that the emission limits apply to all other point sources other than external heat sources.

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
			municipal by-laws.	
<b>ETHEKWINI METROPOLITAN MUNICIPALITY</b>				
<b>Subcategory 9.5</b>	In subcategory 9.5 laminated and compressed wood would use glues, possible formaldehyde. Are the pollutants adequately covered?		No, total volatile organic compounds are emitted but currently not covered. The significance of these compounds in the total emission profile of these sources have not been understood.	
<b>PAPER MANUFACTURERS' ASSOCIATION OF SOUTH AFRICA (PAMSA)</b>				
<b>General</b>	As you are aware, under the current Listed Activities, existing plants, such as those operated by PAMSA members, had to comply with the minimum emission standards for existing plants (" <b>Existing Standards</b> ") by 1 April 2015 (subject to various compliance timeframe postponements that were granted). 2 Existing plants are also required under the Listed Activities to comply with the minimum emission standards for new plants by 1 April 2020 (" <b>Future Standards</b> ").			
<b>General</b>	PAMSA members have invested considerable amounts of capital into putting in place measures to ensure that they comply with the Future Standards come 2020.			
<b>General</b>	The Notice aims to amend several Existing Standards (referred to in this submission as the " <b>Amended Existing Standards</b> ") and Future Standards (referred to in this submission as the		<b>Chemical recovery boilers used in the pulp and paper industry are currently</b>	<b>Oxygen correction for existing plants will remain 10%,</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	"Amended Future Standards").		regulated under one category, as it was intended by the Department. The separation of the kraft chemical recovery boilers from the , with relaxed emission limits for SO2 and NOX for bisulphate processes has been requested by the members of PAMSA. The alignment of these proposals with BAT results in the oxygen correction of existing boilers to 5%. The sector's concern is that the investments made since the promulgation of the emission standards where to comply with the new plant standards at the current oxygen reference of 10%, thus asks the department to consider this in decision making. This is a reasonable request that the department is accepting.	and 6% for new plants. This is effected as a special arrangement under the subcategory.
<b>General</b>	The Notice does not contain any transitional provisions and only		Chemical recovery boilers	Oxygen correction

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>allows a postponement from compliance with the Amended Future Standards for existing plants. This has the potential to have far-reaching consequences for the paper and pulp industry in particular, which has invested considerable capital in order to meet the Existing Standards and has put/ is putting in place various mechanisms to ensure that it meets the Future Standards. The introduction of the Notice in its current form will mean that:</p> <ul style="list-style-type: none"> <li>• in some instances, members will immediately be in noncompliance with the Amended Existing Standards. This is especially since no postponement from compliance with the Amended Existing Standards is allowed in terms of the Notice;</li> <li>• members current efforts and significant capital expenditure in order to ensure compliance with Future Standards will be wasted as they now must put in place different mechanisms to meet the Amended Future Standards instead;</li> <li>• since there are no suspension or postponement provision made in respect of new plants, new plants currently being commissioned on the specifications of the Future Standards will be immediately non-compliant, since in some instances it is too late to change the design parameters; and given that no postponement or suspension will valid beyond 31 May 2025 in respect of existing plants,6 members will not be able to comply with Amended Future Standards. This is because in order to comply with Amended Future Standards significant capital expenditure will be required and this will have not been budgeted for since capital expenditure budgets are commonly</li> </ul>		<p>used in the pulp and paper industry are currently regulated under one category, as it was intended by the Department. The separation of the kraft chemical recovery boilers from the , with relaxed emission limits for SO2 and NOX for bisulphate processes has been requested by the members of PAMSA. The alignment of these proposals with BAT results in the oxygen correction of existing boilers to 5%. The sector's concern is that the investments made since the promulgation of the emission standards where to comply with the new plant standards at the current oxygen reference of 10%, thus asks the department to consider this in decision making. This is a reasonable request that the</p>	<p>for existing plants will remain 10%, and 6% for new plants. This is effected as a special arrangement under the subcategory.</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>constructed to cover periods of between 5 to 10 years. Furthermore, members will not be able to comply immediately as they operate on conservative cash flow management practices because of the inherent volatility of the paper and packaging markets, exchange rate influences and ever-declining profit margins.</p>		<p>department is accepting. With existing plants complying to emission standards at 10%, and new plants at 6%, the emission limits does not change thus no further transitional period is justifiable.</p>	
<p><b>General</b></p>	<p>PAMSA submits that the failure to include transitional mechanisms, such as postponements, offends against the principles of legality and more broadly the rule of law. The principle of legality requires that law must be certain, clear and stable. "Legislative enactments are intended to give fair warning of their effect and should only affect future matters and not take away existing rights, [this is] basic to notions of fairness and justice which are integral to the rule of law, a foundational principle of our Constitution." The changing of the standards which have to be complied with immediately and for which entities can be found non-compliant with and punished cannot be said to be in keeping with the rule of law, which requires the government to act in accordance with pre-announced clear and general rules that are enforced by impartial courts in accordance with fair procedures. This is especially given that members have been working towards a specific target (i.e. the Future Standards). To simply change the target without allowing for some sort of transitional arrangement is not consistent with the rule of law and administrative justice.</p>		<p>Chemical recovery boilers used in the pulp and paper industry are currently regulated under one category, as it was intended by the Department. The separation of the kraft chemical recovery boilers from the , with relaxed emission limits for SO2 and NOX for bisulphate processes has been requested by the members of PAMSA. The alignment of these proposals with BAT results in the oxygen correction of existing boilers to 5%. The sector's concern is that the investments made</p>	<p>Oxygen correction for existing plants will remain 10%, and 6% for new plants. This is effected as a special arrangement under the subcategory.</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
			<p>since the promulgation of the emission standards where to comply with the new plant standards at the current oxygen reference of 10%, thus asks the department to consider this in decision making. This is a reasonable request that the department is accepting. With existing plants complying with emission standards at 10%, and new plants at 6%, the emission limits does not change thus no further transitional period is justifiable.</p>	
	<p><b><u>Compliance timeframes in Regulation 11 and alignment</u></b>            Transitional provisions should be included so that the Amended Existing Standards and Amended Future Standards are phased in for both existing and new plants. In this regard, PAMSA suggest that:</p> <ul style="list-style-type: none"> <li>existing plants be given a postponement of compliance with the Amended Existing Standards, given the substantial changes that would have to be made to ensure compliance if the Notice is promulgated in its current form (reasons why this should not be done are canvassed below);</li> </ul>		<p>As per above, further postponements are unjustifiable where emission standards are not changed by the introduction of 5% oxygen reference condition.</p>	<p>Oxygen correction for existing plants will remain 10%, and 6% for new plants. This is effected as a special arrangement under the subcategory.</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<ul style="list-style-type: none"> <li>new plants that are already being designed and commissioned at the date of the amendments coming into effect be allowed a postponement from compliance with the Amended Future Standards.</li> </ul>			
	If Regulations 11A and B are enacted, then the time lines in Regulation 9 should be removed to avoid duplication and confusion. Similarly, Regulation 13 which provides for the postponement timeframes should also be removed to avoid confusion and to ensure alignment.			
<i>Subcategory 9.2</i>	<ul style="list-style-type: none"> <li>PAMSA welcomes the inclusion of Bisulphite boilers into this sub-category, but strongly disagrees with the proposed change to the emission standards for Listed Activity 9.2 to allow for a 5% oxygen correction. This is because this change to the defined emissions standards will have significant implications for recovery boilers, especially existing Kraft recovery boilers and Bisulphite boilers.</li> <li>Best Available Technology ("BAT") specifies oxygen correction at 6%. 8 The proposed 5% is therefore lower than available technology will allow.</li> </ul>		<b>Support of the separation of kraft from bisulphate boilers is noted. The department has accepted PAMSA request to change existing plants oxygen reference condition to 10%, and for new plants 6%.</b>	<b>Oxygen correction for existing plants will remain 10%, and 6% for new plants. This is effected as a special arrangement under the subcategory.</b>
	<p><b><u>Kraft recovery boilers</u></b></p> <p>PAMSA members' Kraft boilers currently run at 9-10% oxygen and therefore currently comply with the Future Standards. A 5% correction, as proposed under the Notice, will mean that members will not be able to comply with the Amended Existing Standards and Amended Future Standards and in particular will not be able to comply with the particulate matter ("PM") standards under this Listed Activity. If the amendments are enacted, installations</p>	Suggestion: PAMSA suggests that the oxygen correction in respect of Kraft boilers be removed altogether, or that the Standards for PM, H2S, SO2 and NO2 prescribed be increased to	<b>Support of the separation of kraft from bisulphate boilers is noted. The department has accepted PAMSA request to change existing plants oxygen reference condition to 10%, and for new plants 6%.</b>	<b>Oxygen correction for existing plants will remain 10%, and 6% for new plants. This is effected as a special arrangement under</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>where PM emission compliance is marginal will immediately be noncompliant with the Existing Standards, which standards were determined in 2013 and which served as the basis upon which members have implemented measures to ensure compliance with the Future Standards.</p>	<p>accommodate for the correction and to align it with BAT. In addition, PAMSA suggests including both daily and yearly emission aggregates (as is done in the European Directive on BAT for large combustion plants, as opposed to set Standards currently for PM, H2S, SO2 and NO2. If the correction cannot be removed, then PAMSA requires that a 10% correction be allowed for as is currently allowed for in sub-category 1.1 of the Listed Activities. PAMSA understands that the oxygen correction in Category 9.2 was introduced for Bisulphite boilers. In light of this, PAMSA maintains that its</p>		<p>the subcategory.</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>position that a separate subcategory under Category 9.2 for Bisulphite boilers, as incorporating it into the current Category 9.2 will have unforeseen consequences for Kraft Recovery Boilers discussed above.</p>		
	<p>All mitigation measures included in some of our members approved Atmospheric Emission Management Plans ("AEMPs") and atmospheric emissions licences<sup>10</sup> were on the basis that there would be no prescribed oxygen correction levels. Considerable capital has been spent on the design, construction, and installation of mitigation measures in accordance with these AEMPs and the Future Standards. These installations are new, with some only being completed in 2018. On the basis of the proposed amendments (i.e. if the O<sub>2</sub> correction changes to 5%), the installations will no longer guarantee PM emission compliance with the Amended Future Standards, when the emission standard is reduced from 100 mg/Nm<sup>3</sup> to 50 mg/Nm<sup>3</sup>, i.e. will not comply with the Amended Future Standards.</p>			
	<p>As mentioned, members have taken specific measures to ensure compliance with the Future Standards, in particular:</p> <ul style="list-style-type: none"> <li>• Mondi may commission a recovery boiler at its Richards Bay operations to accommodate for expansion. The suppliers of the</li> </ul>		<p><b>Support of the separation of kraft from bisulphate boilers is noted. The department has accepted PAMSA</b></p>	<p><b>Oxygen correction for existing plants will remain 10%, and 6% for new</b></p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>boiler has indicated that BAT will allow for SO<sub>2</sub> at a daily average value of 50mg/m<sup>3</sup> at a 6% oxygen correction. The Amended Future Standards only allow for 30mg/m<sup>3</sup> which is significantly lower than BAT.</p> <ul style="list-style-type: none"> <li>• Sappi's Ngodwana mill has aligned its maintenance and 5-year CAPEX plan to ensure compliance with its Atmospheric Emissions Licence and the Future Standards. These steps (which come at a significant cost) include: <ul style="list-style-type: none"> <li>○ annual inspection and maintenance of electrostatic precipitators for the Kraft boilers by a reputable expert;</li> <li>○ regular isokinetic measurement to ensure accuracy of online equipment;</li> <li>○ notable CAPEX expenditure on installing more reliable and accurate online particulate measurement devices, refurbishing existing Kraft Boilers and upgrades to the Kraft Boilers to ensure a PM performance guarantee of &lt;50mg/Nm<sup>3</sup> dry at 10% O<sub>2</sub>.</li> </ul> </li> </ul>		<p>request to change existing plants oxygen reference condition to 10%, and for new plants 6%.</p>	<p>plants. This is effected as a special arrangement under the subcategory.</p>
	<p><b><u>Bisulphite Boilers</u></b>  The current Listed Activities do not prescribe limits in respect of Bisulphite boilers, while PAMSA welcomes their inclusion under the proposed amendments; it believes that compliance with the Amended Existing Standards/ Existing Standards cannot be immediate. This would offend against the principles of legality. If enacted in its current form, the amendments will require that operators comply with the Existing Standards for Bisulphite boilers immediately. According to the proposed Regulation 11G there can be no postponement or suspension of the timeframes for Existing</p>	<p>Suggestion: Transitional provisions be included into the Notice that allows for the phasing in of compliance with the Amended Existing Standards for existing Bisulphite boilers.</p> <p>In addition, members</p>	<p>The department has accepted PAMSA request to change existing plants oxygen reference condition to 10%, and for new plants 6%. Transitional provisions are thus not necessary.</p>	<p>Oxygen correction for existing plants will remain 10%, and 6% for new plants. This is effected as a special arrangement under the subcategory.</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	Standards.	<p>who are in the process of commissioning new Bisulphite Boilers only have a short time to now comply (including designing, building and commissioning) with the limits for the Amended Future Standards ahead of the deadline for compliance in 2020. Some members are currently introducing Bisulphite boilers based on the Future Standards with design parameters, which allow for a 6% oxygen correction in accordance with Industry best practice and BAT. PAMSA members have spent significant amounts of money to ensure compliance with the Future Standards, to change the standards at</p>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>this stage would result in undue hardship and would offend against the rule of law, as mentioned above. 12 Furthermore, considerable expenditure (which has not been budgeted for) will be needed to redesign the Bisulphite boilers to comply with a 5% oxygen correction.</p>		
	<p>Furthermore a too low oxygen concentration is not desirable since at some plants this will result in too much H2S being produced.</p>	<p>3.2.6.1. Suggestion: Transitional provisions be included into the Notice that allows for the phasing in of compliance with the Amended Future Standards in respect of new Bisulphite boilers. PAMSA, has in previous submissions stated limits for Bisulphite boilers but none of these made provision for a prescribed oxygen correction. PAMSA requests that a</p>	<p><b>he department has accepted PAMSA request to change existing plants oxygen reference condition to 10%, and for new plants 6%.</b></p>	<p><b>Oxygen correction for existing plants will remain 10%, and 6% for new plants. This is effected as a special arrangement under the subcategory.</b></p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		6% oxygen correction be allowed for in respect of new Bisulphite Boilers, as this is in line with BAT and 10% oxygen correction for existing boilers, which do not have the benefit of BAT.		
<i>Subcategory 9.5:</i>	PAMSA supports the descriptions change to this section and the omission of the reference to "wood burning".		<b>Noted</b>	<b>Noted</b>
<b>MONDI Ltd.</b>				
<b>General</b>	Mondi Limited Richards bay Mill is the holder of an atmospheric emission license issued to it by the Uthungulu District Municipality for a number of listed activities under the current list published in GN248 on 31 March 2010 and amended by GN893 on 22 November 2013 ("the AEL"). It is valid until 29 September 2020.		<b>Noted</b>	<b>Noted</b>
	Included in the AEL is Subcategory 9.2 for our chemical recovery furnaces. We are currently in the process of applying for the necessary permission to implement a project to upgrade our Richards bay recovery furnaces, which will inter alia ensure that we are able to meet the current 2020 Minimum Emission Standards ("MES).		<b>Noted</b>	<b>Noted</b>
	The notice intends making certain changes to Subcategory 9.2.			
	We wish to highlight our concerns to the proposed Subcategory 9.2. These concerns are as follows:			
<b>Subcategory</b>	<b><u>Introduction of an oxygen content at 5%.</u></b>	We therefore	The department has	Oxygen correction

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
9.2	<p>The current MES do not specify an oxygen content for Subcategory 9.2. It is not clear what the department's rationale is for introducing an O<sub>2</sub> content at the proposed 5%.</p> <p>However best available technology ("BAT") specifies O<sub>2</sub> at 6%. The proposed 5% is therefore lower than available technology will allow.</p> <p>In support of BAT for O<sub>2</sub> being set at 6% we refer you to the following:</p> <ul style="list-style-type: none"> <li>• The attached European Union decision regarding the establishment of BAT for large combustion plants dated 31 July 2017. At page L212/10 under the heading "BAT-AELs for Emission to Air" it sets the combustion of solid fuels, or solid fuels in combination with liquid and/or gaseous fuels and waste incineration at 6% O<sub>2</sub>.</li> <li>• European BAT of relevance to our Richards Bay emissions is discussed in Chapter <a href="#">8.2.2.2</a><sup>1</sup></li> </ul>	<p>request the Department to reconsider the proposed 5% O<sub>2</sub>, and to revise it to 6% O<sub>2</sub>.</p>	<p>accepted PAMSA request to change existing plants oxygen reference condition to 10%, and for new plants 6%.</p>	<p>for existing plants will remain 10%, and 6% for new plants. This is effected as a special arrangement under the subcategory.</p>
<b>Subcategory 9.2</b>	<p>Additionally it will be noted from the above that an important distinction between the European Union and the notice to amend, is that the former sets both <u>daily averages</u> at 10-50mg/Nm<sup>3</sup> at 6% O<sub>2</sub>, and as <u>year average</u> at 5-25mg/Nm<sup>3</sup> (see the table below). This is a more flexible standard than what is being proposed in the notice to amend.</p>		<p>South African emission standards are based on daily averages to ensure protection of environment and prevent impacts of acute exposures. BAT documents referenced here provide guidance of achievable emission limits</p>	<p>No action taken.</p>

<sup>1</sup> [http://eippcb.jrc.ec.europa.eu/reference/BREF/PP\\_revised\\_BREF\\_2015.pdf](http://eippcb.jrc.ec.europa.eu/reference/BREF/PP_revised_BREF_2015.pdf)

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
			in ranges for the EU community members, to allow them to make regulatory decision. They are not flexible standards as implied in this suggestion.	
	In further support of our contention that there is a disconnect between the notice to amend and BAT, Subcategory 9.1 in the current MES prescribes the O <sub>2</sub> content at 6%. Subcategory 9.5, which is also subject to proposed amendments in the notice to amend, retains an O <sub>2</sub> content of 10%.		. The department has accepted PAMSA request to change existing plants oxygen reference condition to 10%, and for new plants 6%.	Oxygen correction for existing plants will remain 10%, and 6% for new plants. This is effected as a special arrangement under the subcategory.
Subcategory 9.2	<p><b>New (Kraft) Process Sulphur Dioxide Limit of 30mg/Nm<sup>3</sup></b></p> <p>The Richards Bay mill may in future install a new recovery boiler. The new Recovery boiler will be sized for future growth meaning it will be run at a reduced load for an extended period of time whilst the mill expands. The timeline for the expansion is dependent on prevailing market conditions. The lifespan of the new recovery boiler is estimated at 30 years. Should Mondi not install a new recovery boiler then the current recovery boilers will be upgraded to meet the standards as contained in BAT.</p> <p>The suppliers have indicated that BAT will allow for a guaranteed turndown ratio (reduced load) of SO<sub>2</sub> at a daily average value of</p>	Based on the above the Department is requested to review the 30mg per m <sup>3</sup> based on an hourly average for new Kraft processes under Subcategory 9.2, to align with BAT and set the SO <sub>2</sub> limit at 50mg per m <sup>3</sup> at 6% O <sub>2</sub> based on a daily average.	Revised EU BREF for Kraft Recovery Boilers is <u>10-70 mg/Nm<sup>3</sup></u> at 6% O <sub>2</sub> , where dry solids are below 75%, and <u>10-50 mg/Nm<sup>3</sup></u> where dry solids are increased to 75-83%. The 30mg/Nm <sup>3</sup> which was adopted in the 2010 Notice is thus still within BAT, although at the lower range. The department accepts the	A kraft recovery boiler emission limit is revised to 50mg/Nm <sup>3</sup> at STP, 6% O <sub>2</sub> .

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>50mg per m<sup>3</sup> at 6% O<sub>2</sub> when the boiler is operating at 70% of design.</p> <p>The SO<sub>2</sub> limit of 30mg per m<sup>3</sup> based on an hourly average is therefore significantly lower than BAT.</p> <p>In support of this we attach hereto technical reports prepared by the only two possible leading technology suppliers of the new recovery boiler (Andritz &amp; Valmet).</p>		<p>recommendation to adopt the highest range of BAT as this is in consistent with approach adopted for all other sectors.</p>	
<b>ASSOCIATION FOR CEMENTITIOUS MATERIAL PRODUCERS (ACMP)</b>				
<b>Paragraph 2</b>	<ul style="list-style-type: none"> <li>• It is our understanding that postponement and suspension applications will be related to new plant standards.</li> <li>• Postponement applications will only be granted to 31 March 2025.</li> <li>• Suspension applications will require decommissioning by 2030.</li> <li>• Annexure A is applicable to inform methods for sampling and analysis.</li> </ul>			
<b>Subcategory 5.5 &amp; 5.5</b>	<p><b>Amendment of Category 5, Subcategory 5.4</b></p> <p>The amendment has included a sulphur dioxide limit of 400mg/Nm<sup>3</sup> where pyritic limestone is being used. The ACMP previously motivated a sulphur dioxide limit of 800mg/Nm where pyritic limestone is being used. It is recommended that the draft limit of 400mg/Nm<sup>3</sup> where pyritic limestone is being used be revised to <b>500mg/Nm<sup>3</sup></b>.</p> <p>This is based on the following:</p> <ul style="list-style-type: none"> <li>• The proposed standard may result in non-use of some of our</li> </ul>	<ul style="list-style-type: none"> <li>• The limit of 400mg/Nm<sup>3</sup> where pyritic limestone is being used be revised to <b>500mg/Nm<sup>3</sup></b></li> <li>• The amendment include the following special condition: Raw materials bound</li> </ul>	<p><b>While the department does not support PPC's recommendation to include a clause that provides for a lenient SO<sub>2</sub> emission limit for "pyritic limestone", it has included this proposal in the draft amendment Notice to provide all stakeholders with an opportunity to deliberate</b></p>	

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>natural limestone resources which may negatively impact on regional mining and industrial objectives with negative consequences to regional economic development and job retention.</p> <ul style="list-style-type: none"> <li>Avoidance of unsustainable mining practice and consequences thereof.</li> <li>Appropriate and sustainable use of the mined raw material.</li> <li>Water management to avoid utilisation of unnecessary excess water in the scrubbers to mitigate air emissions, particularly in the effected area of concern which is water scarce with strict water demand management requirements. That South Africa is a water constraint country and increasingly becoming more vulnerable to climate change is well documented and recognised. Water demand management and water conservation are key priorities identified by the Department of Water Affairs for the entire country. This is further re-inforced in our national climate change response strategy. The national Government is currently planning to host water Phakisa to address the national water challenges.</li> <li>Air quality impact assessment for the elevated SO2 emissions on the ambient environment concludes that there are no detrimental effects.</li> <li>The cost of mitigation is estimated at R150m with no environmental benefit.</li> <li>Atmospheric Impact report supporting the AEL application demonstrated that there was no impact on the ambient air quality.</li> </ul>	<p>emissions are exempt from these emission limit exceedances where elevated emissions result from conventional fuels or raw materials as established through baseline monitoring and where an Atmospheric Impact report modeling the impacts of the specific emission on the nearest receptor does not show unacceptable impacts.</p>	<p>further on this issue, as it has been recurring since 2006-2010 period. Thus it has been put on record that this is not department's intent but PPCs/ACMPs.</p> <p>The department's position on this matter is as follows:</p> <ol style="list-style-type: none"> <li>Minimum emission standards are generic requirements for all listed activities, thus company/plant specific issues cannot be specified in the regulations, but should be dealt with in atmospheric emission licensing. The insistence of inclusion of company specific issues in regulations impacts negatively on the original intention of the regulation, for every</li> </ol>	

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>International practice where emission limits do take into account challenges with inbound raw materials. For example, UK has high limits of 600- 2500mg/Nm<sub>3</sub> in cases where there are unavoidable high levels of sulphate or sulphur in the kiln feed. Other EU countries too have differentiated air emission limits for sulphur dioxide. For example, Norway has the upper limit of 500 mg/Nm<sub>3</sub>. Switzerland too has a limit of 500 mg/Nm<sub>3</sub>. Hence, the ACMPs proposes the limit of 500 mg/Nm<sub>3</sub>.</p> <ul style="list-style-type: none"> <li>• It is to be noted that the proposed limit of 500mg/Nm<sub>3</sub> falls well below the permitted levels of many industrial processes included in the s21 air emissions standards in force at present in South Africa.</li> </ul> <p>With the current national emphasis on sustainable development objectives, circular economy, regional economic development and job creation/retention the category should address possible emerging challenges where alternate raw materials used in the process, i.e. not the fuel, such as ore, other minerals, etc. will contain the metals referenced to such an extent that the contribution thereof alone could potentially result in non-compliance;</p> <p>It is therefore recommended that a special arrangement be included for Subcategory 5.4 and 5.5 to allow for exemption to those standards subject to:</p> <ul style="list-style-type: none"> <li>• results of baseline sampling conducted without the use of waste/alternative fuels, indicate that those standards would not be achievable; and</li> </ul>		<p><b>sector regulated.</b></p> <p><b>2. Minimum emission standards are based on best available techniques approach for all sectors, employing the lowest range of BAT to accommodate the country's development ambitions, in line with the principle of BPEO for sectors regulated, not for individual plants.</b></p> <p><b>3. The emission limits established has to encourage responsible environmental protection, thus a do-nothing scenario approach defeats the purpose of sustainable environmental performance.</b></p> <p><b>Currently, the plants that are subject to this ACMP motivation have requested a</b></p>	

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<ul style="list-style-type: none"> <li>a Health Risk Impact assessment by means of an Atmospheric Impact Report indicating negligible or acceptable risk levels to the receiving environment with the combined use of waste/alternative fuels;</li> </ul>		<p>limit of 400mg/Nm<sup>3</sup>, which will ensure a safety cap for them, as their average emission performance is 350mg/Nm<sup>3</sup>, thus it will ensure a do-nothing scenario, as the company does not see the need to make further investments in the area as it currently meets the national ambient air quality standards. This motivation is also fully outlined in their applications for postponement of compliance timeframes.</p> <p>Furthermore, the ACMP has in their latest submission made a recommendation to change this proposed emission limit to 500mg/Nm<sup>3</sup>, without provision of any additional reasons for this proposal.</p>	
SOUTH AFRICAN PETROLEUM INDUSTRY ASSOCIATION				

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
2(b) 11C page 40	A maximum of 10 years of operation at existing plant standard allowed by means of the once off suspension mechanism, while a maximum of 5 years allowed by means of postponement mechanism. This could introduce unfair advantage to the company receiving suspension.	Consider aligning the maximum timeframe allowed for suspension with the maximum timeframe allowed for postponement to avoid unfair advantage.		
2(b) 11C page 40	The suspension allowance refers to 2030 in general and not a specific date in 2030. This could allow operation for more than 10 years post 1 April 2020 at existing plant standards.	State specific date for suspension case e.g. "not beyond 31 March 2030"		
2(b) 11E page 40	The suspension application shall not be accepted after 31 March 2019. Based on the content of the proposed amended AQM Framework 2012 published on 25 May 2018 it is understood that the suspension authorisation process is same as the Postponement authorisation process. This process requires a completed AIR as well as completed public participation (same as the EIA BAR process). These activities require at least 6 months to complete. Considering that the amended AQM Framework as well as this MES amendment is not yet published as final and that the month of December cannot be utilized for public participation it is highly unlikely that any candidate can conclude this processes before 31 March 2019.	Consider changing submission date of suspension applications to 1 October 2019 to give reasonable time to complete required application deliverables.		
3(a) page 41	Inclusion of transitional arrangement relating to LDAR with commencement date of 1 Jan 2014 is no longer relevant.	Consider rewording this section so that it applies	<b>Concurs. The transitional arrangement is now</b>	<b>The transitional arrangement is</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		to existing and new plant for example: "The following special arrangement shall apply for the storage and handling of raw material, intermediate and final products with a vapor pressure greater than 14kPa at operating temperature - A Leak Detection and repair (LDAR) program approved by licensing authority to be in place."	translated into a special arrangement.	now translated into a special arrangement, and the date is deleted.
3 (b) (ii) page 41	By correcting the wording in Subsection 2.4 of MES 2013 the detail prescriptive requirement relating to the fitting of sleeves on floating roof tanks becomes strictly applicable.	Consider removing detail prescriptive emission control requirement relating to the fitting of sleeves on floating roof tanks.	No reasons to support the recommendation if provided.	No action taken.
Annexure A pages 45 to 53	The grouping of Sampling Method per parameter is a good improvement, however it is noted that a lot of the Sampling methods included in the MES 2013 have been omitted. The reason for this is not clear. This poses a big concern as the changing of sampling method at	Update Annexure A to include all Sampling Methods originally contained in MES 2013 to allow for continuity and	The support of recategorization is noted. The intention of revamped Annexure A is not to omit the relevant measurement	List of methods updated accordingly to include all relevant methods.

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>this stage would pose a risk to compliance verification continuity and could introduce additional cost burden to industry as new/different sampling equipment would need to be purchased.</p>	<p>avoid unnecessary additional cost burden.</p>	<p>methods which are currently used in the country, but to provide a clear guidance on what methods are acceptable for measurement of all variables. Furthermore, the list intends to remove any method that is dated or irrelevant for use, and to incorporate those methods that are relevant but where not in the former list. The department will ensure that all methods that are appropriate for use are not unintentionally omitted.</p>	
Paragraph 2	<p>What is the significance of the date 2030? Why is the suspension process allowing a maximum of 10 years operation at existing plant standards, while the postponement process is only allowing a maximum of 5 years? This will allow parts of industry to operate at an unfair advantage for 10 years.</p>			
	<p>Is it practicable to introduce the once-off suspension process at this late stage, considering the short timeframe that will remain between finalization of this Amendment (and the Framework amendment) and the submission due date of 31 March 2019?</p>			
<b>SASOL</b>				

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
Paragraph 2	<p>All existing plants are obliged, in terms of paragraph (10) of the MES, to comply with the minimum emission standards for new plant (as contained in Part 3 of the MES) by 1 April 2020.</p> <p>The effect of the proposed amendments to the National Framework and the MES will, if enacted, be that:</p> <ul style="list-style-type: none"> <li>• Existing plants may apply for one postponement of the new-plant standards for up to a five-year period. If granted, such an application would result in the plant in question being permitted to comply with the standards applicable to existing plants for up to a further 5 years (i.e., from 1 April 2020 to 31 March 2025), after which the plant would be bound by the standards applicable to new plants.</li> <li>• If the operator of an existing plant realises that its plant will not be able to comply with the new-plant standards from 1 April 2025 onwards then, as appears from the draft wording, it has only one option: to decommission the plant by 2030. This is because, if the proposed amendments are effected, it will be possible for an existing plant to obtain a once-off postponement of the new-plant standards until 2030 but conditional on the plant being decommissioned by that point. There is no indication of what the consequences might be if a plant's application for postponement until 2030 is unsuccessful.</li> <li>• In other words, the proposed amendments envisage only two categories of existing plants that are unable to comply with the new-plant standards from 1 April 2020: <ul style="list-style-type: none"> <li>○ OPTION1: If they are able to demonstrate that they will be able to comply with the new plant standards on or</li> </ul> </li> </ul>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>before 31 March 2025, and can otherwise satisfy the application requirements, they may apply for a postponement of the new-plant standards until 31 March 2025 or a date before then by which they can comply.</p> <ul style="list-style-type: none"> <li>○ OPTION 2: If they can only comply with the new plant standards sometime after 1 April 2025 (or not at all), then they can apply for the suspension of the new-plant standards until 31 March 2030 in exchange for demonstrating a clear timetable leading to decommissioning on or before that date.</li> </ul> <p>No further postponements will be granted in respect of the existing plant standards in the MES. This is apparently regardless of the actual ambient air quality impact or the results of any independent cost benefit analysis.</p>			
General	<ul style="list-style-type: none"> <li>● Sasol has engaged with government on an ongoing basis, in relation to the challenges that it faces in meeting the new-plant standards in relation to H2S and SO2, as well as in relation to the proposed amendments generally.</li> <li>● On 28 March 2017, Sasol addressed a meeting of the Portfolio Committee on Environmental Affairs in Parliament. The PowerPoint presentation that was delivered there, is annexed here as <b>SASOL1</b>. At the presentation, explained the challenges that it would face in complying with the new plant standards.</li> <li>● In numerous engagements which followed, Sasol again emphasised the difficulties that it would have in complying with new plant standards for steam and power plant sulphur</li> </ul>			<p><b>SO<sub>2</sub> standard for existing plants – revised in a special arrangement</b></p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>dioxide (SO<sub>2</sub>) and coal gasification plant hydrogen sulphide (H<sub>2</sub>S). Those difficulties, as well as their implications for the proposed amendments to the National Framework and MES, are discussed below. We do not annex here all of the other submissions made to the Department or the Portfolio Committee during 2017 and early 2018, because they are already in the possession of the Department. In addition, the Department attended and was present at the said Portfolio Committee meetings. However, all documents can be made available to the Department, if needs be.</p> <ul style="list-style-type: none"> <li>• During these engagements, Sasol also raised a series of mechanisms which, in its respectful view, would strike the correct balance between the need for an improvement in ambient air quality and the need to adopt a targeted, socio-economically sustainable approach. These issues are discussed again below. At this stage, the purpose of highlighting Sasol's engagements with government is to point out that the proposed new postponement/suspension regime marks a significant departure from what has been discussed before. We note that a form of "grandfathering" has been introduced. However, we firmly believe that it is crucial that this concept needs to take into account the age of the plants as well as the transitioning journey (or transitional implications) that this entails. The Department has not necessarily taken into account some of the key issues raised by Sasol in its engagements with government.</li> </ul>			
	<b><u>SASOL'S CONCERNS</u></b>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>Against the backdrop sketched above, it is now possible to explain Sasol's concerns in respect of the proposed amendments. As noted in the introduction, the focus of these submissions is on the change to the postponement regime envisaged by the MES. Sasol's main concerns may be broken down into three broad categories:</p> <ul style="list-style-type: none"> <li>• Concerns relating to the amendment process;</li> <li>• Concerns relating to the practical impact of the proposed amendments;</li> <li>• Concerns relating to the prohibition of postponements of existing plant standards.</li> </ul>			
General	<p><b><i>Concerns relating to process</i></b>  <u>No cost-benefit analysis</u></p> <ul style="list-style-type: none"> <li>• Section 2(2) of the National Environmental Management Act 107 of 1998 ("NEMA") requires environmental management to "place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably." Section 2(3) requires development to be "socially, environmentally and economically sustainable." Section 2(4)(b) of NEMA requires that "environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option" ("BPEO"). The national department has defined BPEO as the option that provides the</li> </ul>	<p>Based on what has been said above, Sasol submits that one of the following options would be preferable as opposed to what has been contained in the proposed amendments as they currently read:</p> <ul style="list-style-type: none"> <li>○ OPTION 1 - would be to remove the inflexible rule that no postponements of new plant standards may be granted beyond 31 March</li> </ul>		

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	<p>most benefit or causes the least damage to the environment as a whole, at a cost acceptable to society in the long-term as well as in the short-term.</p> <ul style="list-style-type: none"> <li>• When the 2012 National Framework was first published, the ability of industries bound by the MES to apply for postponements of the compliance timeframes was directly linked to the fact that no cost-benefit analysis had been conducted before the MES were published. The relevant text currently reads as follows: “Given the potential economic implications of emission standards, and mindful that emission standard setting in South Africa was not based on comprehensive sector-based CBA (at least not for the initial group of Listed Activities as the intention was to ensure that there is no regulatory vacuum when the APPA was repealed), provision has been made for specific industries to apply for possible extensions to compliance time frames....”.</li> <li>• As the Minister is aware, no cost-benefit analysis has ever been conducted in respect of the listed activities covered by the MES. Indeed, in recognition of this fact, the proposed amendments, while dropping the reference to the APPA (which is a reference to the Atmospheric Pollution Prevention Act 45 of 1965), retain the reference to the fact that no cost-benefit analysis has been conducted in respect of the listed activities.</li> <li>• Sasol supports the objective of NEMAQA to provide for various reasonable measures on air quality management towards creating an environment that is not harmful to human</li> </ul>	<p>2025 to enable the NAQO to retain a discretion to permit further postponements if a consideration of all relevant factors (including, for example, minimal impact on the surrounding airshed) justifies it.</p> <ul style="list-style-type: none"> <li>○ OPTION 2 –in determining an appropriate decommissioning timeframe for existing and maturing plants and accordingly applicability of the MES it is necessary to conduct an appropriate cost-benefit analysis for a facility. . The results of the cost benefit</li> </ul>		

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	<p>health or well-being. This must, according to the NEMAQA, include meaningful and sustainable improvements in ambient air quality with due consideration of associated socio-economic impacts. It is imperative that justifiable economic and social development is still promoted and aligned with the principles explained in NEMA, mentioned above. This is what is envisaged by BPEO.</p> <ul style="list-style-type: none"> <li>As shown below, the implication of the proposed amendments will be that Sasol cannot comply with a limited number of the MES and will, as a result, be forced to shut down significant parts of its operations. Given the integrated nature of its operations, such shut down cannot be achieved on a partial basis, but would require a shutdown in entirety. This will have significant negative impacts on the company (which contributes approximately 4-5% of national GDP), significant knock-on effects on the economy and wider social and indirect economic <b>impacts</b> including impacts to the region and more specifically the communities in which we operate. Sasol is not the only major South African company that is likely to be affected in this way.</li> <li>These are precisely the types of issues that would form the subject-matter of a cost-benefit analysis. The benefits to be achieved by enforcing specific MES should be weighed against the cost to the economy, which would then lead to a reasoned assessment of whether to adopt them. Other considerations, such as the impact of non-industrial sources of pollution and how to mitigate them, would also form part of</li> </ul>	<p>analysis must be targeted at ensuring that any benefits in applying the MES strictly to existing and maturing plants are not outweighed by the cost (i.e. unjustified socio-economic impacts) or rendered inappropriate by the marginal environmental gains to be had. Sasol is willing to take the lead in procuring a cost-benefit analysis relevant to its operations and the relevant areas in which they are located, under the guidance of the Department. Consideration of the results would of</p>		

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	<p>the analysis. Importantly, the fact that the adoption of measures envisaged by the MES could have unanticipated knock-on effects on the environment (for instance, by requiring the adoption of technology which is very water intensive or which causes different, but also harmful, emissions, or an increased generation of solid wastes) could be considered in detail. If this approach is followed, then there would not necessarily need to be a built-in mechanism for postponements in the MES because all of the implications of adopting certain standards would have been considered in advance.</p> <ul style="list-style-type: none"> <li>• In a situation, such as was the case before the MES were initially published, in which a cost-benefit analysis cannot be done for whatever reason, the use of postponements is a suitable alternative. That approach is simply a different procedural mechanism of achieving roughly the same outcome – rather than conducting a sector-wide cost benefit analysis at the outset, the NAQO is vested with a discretion to consider the postponement of certain MES on a case-by-case basis. And, in a properly-formulated model, the NAQO would be vested with an appropriate discretion and flexibility to consider all of the negative impacts on industry, the economy and communities against the impact on ambient air quality as part of the balancing exercise relevant to a particular postponement application.</li> <li>• If the proposed amendments are adopted in their present form, then the NAQO will have no flexibility and will not have</li> </ul>	<p>course be a precursor to, and inform, an appropriate decommissioning timeframe for existing facilities and any proposed amendments to the National Framework and the MES in particular. It is our understanding that this approach has been adopted in other countries as well.</p> <p>There are additional mechanisms and/or alternative mechanisms that could be introduced to co-exist with the flexible approach considered above and alongside any issues arising from the cost-benefit analysis. We list</p>		

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	<p>any power to grant postponements of the new plant standards as they will apply to existing plants from 1 April 2025, regardless of the circumstances. In fact, not only will the NAQO be stripped of this discretion but the MES (read with the National Framework) will go further and make it explicitly clear that an existing plant that cannot comply with the new plant standards by no later than 1 April 2025 (the outer reach of the one-off postponement that may be granted) will have to shut down and the application which includes notification of such is required to be submitted by 31 March 2019. This is an unreasonable and inflexible rule, applicable in all cases and regardless of the economic or environmental consequences. It would also not align with the objectives set out in NEMAQA. The implication of this scenario for Sasol is that further investment decisions associated with Sasol's South African value chain will be prejudiced resulting in a review and reduction of further investments in these assets. Sasol's boilers are used for steam generation. Steam generation is a critical component of our business model and it must be noted that intermittent renewable energy is unable to supply the necessary steam generation required for our facilities and subsequent value chain. Given the integrated nature of our value chain, shutting down the boilers will have a profound impact on our viability as a business. This is an untenable situation in South Africa's economic environment.</p>	<p>certain additional/alternative mechanisms below which afford reasonable accommodation and an acceptable measure of flexibility while preserving NEMAQA objectives. However, this list is by no means exhaustive. We submit that these considerations are effective mechanisms to achieve the founding principles of NEMA, discussed above, as opposed to a blanket prohibition of postponements after a particular date. This is because they are well-equipped to provide substantial and real improvement to ambient air quality, while at the same time protecting socio-economic</p>		

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		<p>considerations:</p> <ul style="list-style-type: none"> <li>• <u>The measurement of compliance:</u> <ul style="list-style-type: none"> <li>○ It is respectfully submitted that tangible ambient air quality can best be achieved through a flexible approach which incorporates a variety of air quality management tools.</li> </ul> </li> </ul> <p>Compliance with the MES for air quality can be measured in two ways - by pollutant concentration, or pollutant load. Concentration is the mass of a pollutant in a defined volume</p>		

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		<p>of air. Load is the amount (mass) of a pollutant that is discharged into the airshed during a period of time (i.e. tons of pollutant per year).</p> <ul style="list-style-type: none"> <li>○ The unintended consequence of adopting a concentration basis for the MES is that sources with a negligible footprint and impact can trigger a Listed Activity. We respectfully submit that these small sources should not be a priority for costly abatement, since</li> </ul>		

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		<p>the intent of NEMAQA is to drive ambient air quality improvement. Improvements can be achieved through a variety of means rather than solely through a system which is exclusively dependent on point source emission standards, particularly for negligible sources.</p> <ul style="list-style-type: none"> <li>○ Pollutant loading is a useful measure of air quality; when evaluating an airshed, one can calculate the load</li> </ul>		

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		<p>of a given pollutant that can be accommodated from various sources (industry, residential fuel burning, vehicles, etc.) without the airshed exceeding the ambient air quality standards. Assessing pollutant load would be a more accurate approach to evaluating the impact of individual facilities on the receiving environment. Sasol recommends that pollutant loading</p>		

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		<p>is included in the Framework review as a mechanism to demonstrate compliance to the MES, provided the emission mass of a given pollutant of a facility is also demonstrated not to have significant ambient impact through appropriate monitoring or modelling.</p> <ul style="list-style-type: none"> <li>• <u>The use of a bubble approach:</u> <ul style="list-style-type: none"> <li>○ Under a bubble approach, emissions from different points within a facility are all treated as</li> </ul> </li> </ul>		

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		<p>if they originated under a single enclosed "dome" or "bubble." Thus, facility operators are allowed to reduce selected emissions within that bubble to meet one overall emission limit for the entire facility.</p> <ul style="list-style-type: none"> <li>○ The bubble is an effective way to provide flexibility and reduce costs while still achieving the same air quality goals. A plant-wide bubble represents a reasonable balance of (competing) economic and environmental</li> </ul>		

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		<p>interests. A cost benefit analysis would demonstrate as much.</p> <ul style="list-style-type: none"> <li>• <u>Pollution Prevention Plans (PPP) as an alternative to decommissioning</u> <ul style="list-style-type: none"> <li>○ PPPs are mechanisms already provided for in Section 29 of the Air Quality Act.</li> <li>○ They are fit for purpose mechanisms that can be utilized for mitigation of identified priority pollutants (not a one size fits all) by identified entities (or categories of operators).</li> </ul> </li> </ul>		

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		<ul style="list-style-type: none"> <li>○ A PPP is a commitment to on site mitigation measures to be implemented to address the total footprint of the declared priority pollutant(s) from all associated sources at the site to achieve identified Ambient Air Quality improvements.</li> <li>○ The Minister may, by notice in Government Gazette (GG):               <ul style="list-style-type: none"> <li>a) Declare any substance contributing to air pollution as a priority</li> </ul> </li> </ul>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>pollutant; and</p> <p>b) Require a person specified in a specific category to prepare and submit a PPP for approval.</p> <p>o Further, the Minister may by written notice (not in the GG) require a person conducting a listed activity, involving a substance declared as a priority pollutant, to prepare, submit for approval and</p>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>implement a PPP.</p> <ul style="list-style-type: none"> <li>○ PPPs could be used as an alternative to requiring a plant to decommission, and would enable sufficient flexibility to take socio-economic and other relevant factors into account.</li> </ul>		
General	<p>By way of concluding this section, it may be noted that the premise of the proposed amendments, as reflected in the proposed new wording of the section of the National Framework that will be entitled "Postponement/suspension of compliance timeframes", is that "the year 2020 marks 10 years since the publication of the [MES]. Therefore, sufficient time has been afforded to industry towards compliance with the initial MES by 2020." However, this statement is, with respect, not correct. Over the past several years, Sasol has repeatedly explained to the Department that, in the case of certain listed activities, and certain technologies, the timeframes envisaged by the existing and new plant standards are not achievable. These submissions have not been based on Sasol's slowness in adapting to the requirements</p>	<ul style="list-style-type: none"> <li>○</li> </ul>		

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	<p>of the MES; on the contrary, they have related to inherent technological challenges that could not be overcome in the timeframe envisaged by the National Framework and the MES. Nothing has changed in this regard and so the statement that industry has had "sufficient time" to comply is inaccurate. This demonstrates, with respect, that a fundamental premise of the abolition of postponements beyond 1 April 2025 is flawed. This is yet a further reason why the Minister should, with respect, consider reverting to the more flexible postponement model currently envisaged by the MES or adopting the alternatives suggested by Sasol above.</p>			
General	<p><u>The technical panel</u>  We have referred above to the various engagements held with government since 2017 about proposed amendments to the National Framework and related matters. A meeting was held with the Portfolio Committee on 6 February 2018. At that meeting, Sasol once again raised the practical difficulty that it faces regarding its inability to comply with the new plant standards for steam &amp; power plant SO<sub>2</sub>. In response to this concern, the chairperson requested the appointment of a technical panel to assess and address this issue. This is of critical importance because the findings of the panel were intended to have a material bearing on what amendments, if any, ought to be made to the regulatory framework.  As far as we understand the position, there have been delays in the appointment of the technical panel. In this context, we consider it unfortunate that the proposed amendments to the</p>		Request made to Minister to appoint the panel	<b>SO<sub>2</sub> standard for existing plants – revised in a special arrangement</b>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>National Framework and the MES have been published in their present form. Sasol submits that it would be inappropriate for any amendments to be adopted before the technical panel has been appointed and conducted its work. It is self-evident that the information that will emerge from the technical panel's work will have a critical bearing on what amendments ought to be made.</p>			
General	<p><u>The independent review</u>  Reference was made above to the independent review report that is envisaged by paragraph 6.3 of the National Framework. As noted above, Sasol has not yet seen that report. It is submitted that the report is a vital piece of evidence that must be taken into account when assessing any proposed amendments to the National Framework and the MES. Sasol submits that it would be clearly inappropriate for any amendments to be made to the National Framework or the MES without the dissemination of the report to stakeholders such as Sasol and an opportunity provided for detailed engagement with it.</p>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
<p><b>Concerns relating to the practical implications of the amendments</b></p>	<p><u>Insufficient guidance on the contents of an application</u></p> <p>As noted above, if the proposed amendments are enacted, then a facility that cannot comply with new plant standards by 1 April 2020 will be faced with the following options:</p> <ul style="list-style-type: none"> <li>○ It may apply for a postponement of the relevant MES up to no later than 31 March 2025.</li> <li>○ If it cannot comply with the new plant standards even by then, it may apply to be permitted to comply with the existing plant standards until 2030, so long as it provides a detailed decommissioning schedule with decommissioning by 2030.</li> <li>○ However, both of these options may only be permitted on application to the NAQO and the NAQO has to exercise a reasonable discretion whether to approve such an application. If she does not, then the only option facing the applicant will be to shut the affected facility immediately, often with disastrous consequences. These applications therefore are of critical importance.</li> <li>○ A major difficulty with the proposed amendments is that no guidance is provided to the NAQO on what factors to take into account when deciding whether to grant such an application. Sasol has been advised by its legal representatives that the Constitutional Court, in Dawood v</li> </ul>			

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	<p>Minister of Home Affairs 2000 (3) SA 936 (CC), emphasised the importance of the provision of guidelines to decision-makers. This is extremely important in the present context – not only is it important to assist the NAQO in the exercise of her discretion, but it is important to assist applicants such as Sasol to know what to include in their applications.</p> <ul style="list-style-type: none"> <li>○ It is submitted that the proposed amendments should not be adopted in their present form because there is insufficient guidance as to what factors will be taken into account in the granting or refusal of the relevant applications.</li> </ul>			
General	<p><u>The need for a discretion</u></p> <p>It has already been argued above that the proposed amendments in their present form are problematic because they do not build-in any of the alternatives that would, in Sasol's respectful submission, give better effect to the founding principles of NEMA. This is particularly so because, at the same time, they would remove the discretion previously conferred on the NAQO to grant more than one postponement if the circumstances so require it.</p> <p>With reference to Sasol's specific circumstances, which are set out below, it may be demonstrated that the fact that the proposed amendments will prevent the NAQO from exercising a discretion to allow postponements beyond 1 April 2025 gives rise to the possibility of disastrous outcomes.</p> <p>Sasol will be unable to comply with the new plant standards for steam &amp; power plant SO<sub>2</sub> by 1 April 2025:</p> <ul style="list-style-type: none"> <li>○ Our fleet of boilers in Secunda and Sasolburg are located in</li> </ul>		Noted. Work has been done in this regard.	SO <sub>2</sub> standard for existing plants – revised in a special arrangement

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	<p>compact space footprints, and are designed primarily to provide a stable supply of process steam for fuel and chemical production. These boilers are fuelled by the coal from Sasol's five coal mines. SO<sub>2</sub> emissions are driven by the sulphur content of coal.</p> <ul style="list-style-type: none"> <li>○ In Secunda, owing to the integrated nature of our processes, we have the additional complexity that the boiler offgas is designed to be hot to increase buoyancy of much cooler Rectisol offgas to improve co-dispersion through the East and West plant main stacks. We have evaluated all commercially available technologies for the abatement of SO<sub>2</sub>, and given the above, have found these to be significantly challenging to retrofit at a brownfield site. Sasol therefore regards it as infeasible when viewed in the light of the expected minimal ambient improvements. It must be noted that model results from our Postponement applications have clearly demonstrated that Sasol's SO<sub>2</sub> emissions do not result in ambient concentrations exceeding the NAAQS for SO<sub>2</sub>.</li> </ul> <p>Sasol is of the opinion that the rectisol and steam plant processes are an integrated process and includes heat exchange of the Sulphur Recovery Unit (SRU) with the boilers in the stack and that it does comply in terms of the current point of measurement in the stack. There is a need to align on the battery limit for sulphur recovery with the Department.</p> <p>In the event that point of measurement is no longer in the stack, it is unclear whether Sasol will be able to comply by 1 April 2025.</p> <p>Sasol is a unique participant in the South African economy. In</p>			

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	<p>particular, it:</p> <ul style="list-style-type: none"> <li>○ contributes between 4-5% to GDP;</li> <li>○ employs over 26 000 people in South Africa;</li> <li>○ is one of the world's largest producers of synthetic fuels; and</li> <li>○ supplies more than 25% of the country's liquid fuels, generating savings in foreign exchange from import replacement (petrol and diesel).</li> </ul> <p>Sasol's position demonstrates the dangers of an approach that acknowledges no flexibility and inhibits the ability of the NAQO to exercise an appropriate discretion on the desirability of a postponement of the MES. If the NAQO was vested with a discretion to grant postponements in appropriate circumstances, even beyond 1 April 2025, then she would be able to take all relevant circumstances into account to decide how best to balance Sasol's inability to comply with certain MES with the socio-economic impacts of Sasol being bound strictly to the MES in the circumstances.</p>			
General	<p><u>Priority areas</u></p> <p>As noted above, Sasol contributed to a submission made by BUSA to the Department in September 2017. In that submission, the issue of postponements in priority areas was raised. The submission speaks for itself – self-evidently, the Department has decided not to adopt the recommendations made by BUSA in that submission.</p> <p>Sasol stands by what was said in the submission made by BUSA and encourages the Minister to reconsider the inclusion of the</p>			

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	<p>requirement, in the proposed amendment to the National Framework, that “ambient air quality in the area is in compliance with the applicable National Ambient Air Quality Standards” in order for a postponement/suspension of the new plant standards to be considered. We have already explained above that there are mechanisms entirely removed from the notion of postponements, which may be considerably better and more effective than the postponement model. However, in the event that the mechanism of postponements is retained, Sasol could be effectively precluded from being granted a postponement because of the location of its premises in a priority area even where it can be shown that its operations are not a significant contributing factor to the fact that ambient air quality in the area is not compliant with the NAAQS. This would be extremely unfair and prejudicial and should, with respect, be avoided.</p>			
Paragraph 2	<p><b><i>Concern relating to the postponement of the existing plant standards</i></b></p> <p>If the proposed amendments are adopted in their present form, no further postponements to the existing plant standards will be able to be granted.</p> <p>As the Minister is aware, Sasol has been providing the Department with regular updates on the various roadmaps towards compliance to which it has committed. The most recent update was provided to the Department on 31 March 2018, and is attached here for convenience as <b>SASOL2</b>.</p> <p>Sasol has provided total transparency to the Department about the deadlines by which it will be able to comply with both the</p>			

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	<p>existing and new plant standards. As the Department is aware, there are limited circumstances in which compliance with existing plant standards remains problematic. To take sub-category 2.3 (Sulphur Recovery Unit ("SRU") – integrating amine treating) as an example: a postponement has already been granted to 31 March 2020. To the knowledge of the Department, a feasibility study was concluded in November 2017. A series of potential incremental improvements, including solutions to increase sulphur recovery unit availability, have been identified for further development in the basic engineering phase which is in progress. The project is on track to meet the standards in 2022 as per the schedule indicated in the initial postponement application. It has therefore been Sasol's expectation that a further postponement application may need to be made to request extended time for this compliance project.</p> <p>If the proposed amendments are passed in their present form, Sasol's roadmap regarding the SRU will be stopped in its tracks. This would be extremely unfair to Sasol, given its good faith compliance with the road-maps that it has regularly provided to the Department. The Minister is therefore urged to reintroduce reasonable flexibility to the decision-making process, to ensure that limited further postponements from existing plant standards may be granted in appropriate circumstances.</p>			
General	Sasol remains committed to engaging with the Department to assist in the determination of a regulatory framework that gives effect to the principles enshrined in NEMA. The discussion above demonstrates that the proposed amendments, in their present			

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	<p>form, pose a grave threat to Sasol's business, the region and more specifically the communities where we operate and therefore to the broader South African economy with far reaching consequences. Sasol therefore calls on the Minister to delay the proposed amendments in order to:</p> <ul style="list-style-type: none"> <li>○ allow Sasol to prepare a cost-benefit analysis, which may be used as a vehicle to determine an appropriate dispensation;</li> <li>○ allow Sasol to consider the independent review and other relevant submissions and comment on them;</li> <li>○ allow the technical panel to be appointed and for it to conduct its work the results of which will then inform any amendments to be made to the National Framework or the MES; and</li> <li>○ for the Minister and the Department to give consideration to the alternatives proposed above which, in Sasol's respectful submission, strike a more appropriate balance between the various important interests that are at stake.</li> </ul>			
<b>ENGEN OIL</b>				
General	<p>Engen welcomes the opportunity to comment on the draft amendments to S21 of the NAM: AQA. Firstly, Engen would like to reiterate our previous comments with regard to the provisions in the NEM:AQA</p> <p>The Act provides for the setting of ambient air quality standards that are protective of health and well-being of our communities. The Act also provides for the setting of minimum air quality</p>			

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	<p>standards. It further provides for declaration of priority areas in the event the ambient air quality standards are compromised. All these provisions are well thought and should be used to manage air quality. If these are applied there is no need for setting of standards to meet new plant standards. We therefore propose these provisions to be used as the basis for managing air quality in South Africa.</p> <p>If we do this, there will be no need for unnecessary postponements and impact on the economy. The department needs to take into consideration the current economic conditions in the country, as well as high unemployment rate. The notion of removing postponement clause even when ambient air quality standards are met should be reviewed. If the department still want to maintain the clause that facilities should meet new plant stands, then we propose that postponement clause be maintained and continue with dong impact analysis as part of the postponement process.</p>			
Subcategory 2.4	We welcome clarification with respect to Section 2.4 of the regulations.			
<b>ESKOM</b>				
	The following draft legislation bears reference: National Environmental Management: Air Quality Act (39/2004): Notice of Intention to Amend the List of Activities which Result in Atmospheric Emission which have or may have a Significant Detrimental Effect on the Environment, including Health, Social			

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	<p>Conditions, Economic Conditions, Ecological Conditions or Cultural Heritage (Government Gazette No. 41650 No. 516 of 25 May 2018).</p> <p>Eskom's comments are submitted based on Eskom's mandate as a State Owned Company (SOC), the pending Integrated Resource Plan (IRP) to be published by the Department of Energy, Eskom's contribution to ambient air quality, the lack of the Department of Environmental Affairs' consideration of the potential techno-socio-economic implications of the emission standards and these proposed changes and the aspects set out in the draft 2017 National Framework for Air Quality Management in the Republic of South Africa.</p> <p>Eskom Holdings state-owned company (SOC) Ltd (Registration Number 2002/015527/30) is South Africa's primary electricity supplier and is wholly owned by the South African government. Eskom generates and distributes approximately 95% of the electricity used in South Africa and approximately 40% of the electricity used on the African continent, according to figures from StatsSA and the International Energy Agency (IEA).</p> <p>The mandate from the Government of the Republic of South Africa states that Eskom's key role is to assist in lowering the cost of doing business in South Africa, enable economic growth, and provide stability of electricity supply through</p>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>providing electricity in an efficient and sustainable manner. Furthermore, Eskom will achieve this through an electricity network that includes generation, transmission and distribution while ensuring that this is done within acceptable benchmark standards.</p> <p>As a state-owned entity, Eskom must implement government policy and strategy. This includes, amongst others the National Development Plan (NDP) (this is a 20-year plan) and the Integrated Resource Plan (IRP) which guides SOCs in terms of planned plant life in the future. The IRP (IRP 2010) incorporated a number of government objectives, including affordable electricity and carbon mitigation. Following the promulgation of the IRP, the Department of Energy (DoE) develops plans for the implementation of IRP, starting with Ministerial Determinations (as per Section 34 of the Electricity Regulation Act).</p>			
	<p><i>Emissions from some industries often have a measurable impact on air quality. In this regard, industry too has a responsibility not to impinge on everyone's right to air that is not harmful to health and well-being. Furthermore, in terms of section 28 of the NEMA, industries that cause, have caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring,</i></p>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p><i>or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment (Page 23 and 24 of 110 of the draft 2017 National Framework for Air Quality Management). In this regard Eskom acknowledges its corporate responsibility and environmental duty of care.</i></p> <p>Eskom acknowledges that set out in the 2<sup>nd</sup> South Africa Environment Outlook: a report on the state of the environment (First published in 2016 © Department of Environmental Affairs)</p> <p><a href="http://soer.environment.gov.za/State_of_the_Environment.html">http://soer.environment.gov.za/State_of_the_Environment.html</a>:  <i>"Elevated Particulate Matter concentrations still occur in various parts of the country, exceeding the South African annual PM10 ambient air quality standard especially in residential areas.</i></p> <p><i>National government has set a target that by 2020, air quality in all low-income settlements should be in full compliance with ambient air quality standards. Particulate matter is therefore a national concern due to exceedances of the National Ambient Air Quality Standards (NAAQS), which are designed for the protection of the environment and human health". Eskom's air quality improvement plan has historically been and is still therefore focused on particulate matter.</i></p>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>Based on the dissertation for the degree in Master of Engineering (Environmental Engineering) by Marilize Grobler as submitted in partial fulfilment of the requirements for in the Department of Chemical Engineering Faculty of Engineering, Built Environment and Information Technology University Of Pretoria in February 2016 titled "<i>Evaluating the Costs and Benefits Associated with the Reduction in SO<sub>2</sub> Emissions from Industrial Activities on the Highveld of South Africa</i>" it is stated that "<i>the results indicate that, given the information currently available, it is unlikely that the benefit of reducing SO<sub>2</sub> emissions to the required standard outweighs the cost of implementation</i>". It is acknowledged that the current listing of activities were required to have been informed by appropriate analysis, such as cost-benefit analysis (CBA), but were not in the case of setting that for SO<sub>2</sub> and the electricity sector. Eskom's comments are therefore specifically related to the need to allow for existing plant<sup>2</sup> to only comply with existing plant standards for SO<sub>2</sub> up until their final decommissioning excluding Medupi, which despite meeting the definition of an existing plant will continue to implement a flue gas desulphurisation retrofit project.</p>		CBA work done by the Department.	<b>SO<sub>2</sub> standard for existing plants – revised in a special arrangement</b>

<sup>2</sup> "existing plant" unless where specified, shall mean any plant or process that was legally authorized to operate before 01 April 2010 or any plant where an application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), was made before 01 April 2010.

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>Based on the thesis submitted for the degree in PhD (Geography and Environmental Management) by Isle Pretorius in November 2015 titled "Impacts and control of coal fired power station emissions in South Africa" the following main conclusions were presented:</p> <ul style="list-style-type: none"> <li>a. <i>The potential health exposure of population groups to individual power station emissions differ substantially from power station to power station and from pollutant to pollutant.</i></li> <li>b. <i>The secondary PM contribution to total annual intake (kg per year) from total fine particulates is more prominent than that of primary PM10</i></li> <li>c. <i>It makes more sense both from a cost and a human health standpoint that emissions from power stations be managed on an individual power station basis and not by means of blanket minimum emission standards.</i></li> <li>d. <i>The intake and intake fraction methodology proposed in this study can be used to identify individual power stations that contribute to the highest potential human health exposure. These power stations can then be targeted for emission reduction interventions.</i></li> </ul>			
	<p><i>The listing of activities therefore must be informed by appropriate analysis, such as cost-benefit analysis (CBA). In targeting industry sectors for which information on emissions and impacts is less available or inconclusive, particularly those</i></p>			

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	<i>comprising small and/or older operations, provision for CBA studies will be made so as to extend the list of activities and associated set of national minimum emission standards in a manner which does not lead to unjustified economic impacts or mass non-compliance (Page 60 of 110 of the draft 2017 National Framework for Air Quality Management).</i>			
	<i>(Page 61 of 110 of the draft 2017 National Framework for Air Quality Management) ... the process to establish national emission standards will be based on the application of the Best Practicable Environmental Option (BPEO) principle informed by the Best Available Technology/Technique (BAT) approach. Section 4(2)(b) of NEMA requires that “environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option” (BPEO). The national department has defined BPEO as the option that provides the most benefit or causes the least damage to the environment as a whole, at a cost acceptable to society in the long-term as well as in the short-term (DEAT, 2004).</i>		BPEO principles considered in the revision of the FGD requirement.	<b>SO<sub>2</sub> standard for existing plants – revised in a special arrangement</b>
	<i>Compliance time frames have been informed by industry cycles. Based on international experience, an effective approach would be to set minimum time frames for compliance</i>			

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p><i>nationally (taking account of industry cycles), with provision being made for more restricted compliance time frames to be specified by provinces or municipalities for industries within their jurisdictions and/or stricter timetables being negotiated for inclusion in permits (Page 63 of 110 of the draft 2017 National Framework for Air Quality Management).</i></p>			
	<p>Eskom's power stations form the basis of the Department of Energy's Integrated Resource Plan (IRP) and therefore their operation and associated life of plant is directly linked to that set out in the IRP so as to ensure security of electricity supply in South Africa. While it is noted that the current IRP 2010 has been revised, it is still to be published. The revised version of the IRP therefore has direct implications as to the planned decommissioning of Eskom's power stations.</p> <p>While the proposed amendment of the 2012 National Framework for Air Quality Management in the Republic of South Africa acknowledges the <i>potential economic implications of emission standards, and mindful that emission standard setting in South Africa was not based on comprehensive sector-based CBA (at least not for the initial group of Listed Activities)</i> that again amendment are being proposed without the full knowledge of the economic implications of these changes.</p> <p>Eskom's comments are therefore an attempt to ensure that these are taken into account. Eskom has determined the</p>			

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	<p>financial implications of the current and draft legislation. Eskom's 2014 postponement application proposed a phased and prioritised approach which is estimated to cost the organization R 70 billion in the next 10 years. The DEA accepted this approach but required Flue Gas Desulphurisation at Matimba and Kendal based on their significant impact on ambient air quality and no confirmed decommissioning date, this decision increased the cost over the next 10 years to R 140 billion. This plan would result in a required electricity tariff increase of 3 – 3.5%.</p>			
	<p>The draft regulations, which allow for a suspension against the new plant minimum emission standards, on condition that the plant is decommissioned prior to 2030 will increase the cost of compliance to R 250 – R300 billion and result in an electricity tariff increase of at least 7%. Further to this there are operational costs of approximately R 5 billion per annum.</p> <p>Eskom, in order to remain a going concern, is unable to absorb the additional cost without receiving the required electricity tariff increases.</p> <p>The other resources required to achieve full compliance include:</p> <ul style="list-style-type: none"> <li>• <b>Outages:</b> 150- to 190-day outages for all units before April 2025. In some years 14% planned maintenance</li> </ul>			

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	<p>(planned capability loss factor, PCLF) for existing fleet for the emission retrofits alone.</p> <ul style="list-style-type: none"> <li>• <b>Increase in auxiliary power consumption:</b> Energy output from the coal fleet will be reduced by almost 2 255 GWh per annum. (equivalent to 257MW used 24/7/365)</li> <li>• <b>Water:</b> An additional 67 million cubic metres of water per annum by 2025 (20% increase), at a time when there is projected to be a deficit in the Vaal River catchment.</li> <li>• <b>Sorbent:</b> 6.5 million tons per annum. This will entail the development of new mines, and potentially the import of sorbent (lime/limestone).</li> <li>• <b>Increase in CO<sub>2</sub> emissions:</b> Over a million additional tons of CO<sub>2</sub> may be released due to the wet FGD process. Eskom's relative CO<sub>2</sub> emissions (ton/GWh) deteriorates.</li> </ul> <p>Further, the recently published draft Carbon Tax Bill 2017 if implemented in its current form will require an additional 3% increase in the electricity tariff.</p>			
	<p>Eskom intends to complete a cost benefit analysis in its current postponement application. However, it is the role of DEA to consider the strategic implications of the latest legislative changes and the negative socio-economic and environmental impact which will materialise while the intended positive impact</p>			

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	<p>on human health will be limited when one considers current ambient air quality and the significant contribution of low level sources compared with emissions from stacks.</p> <p>Eskom has progressed with its air quality improvement programme, which is a phased and prioritised approach to emissions reduction, considering the remaining life of the power stations within its fleet and the impact on ambient air quality.</p>			
	<p>This is the status of the <b>emission reduction projects</b> being undertaken:</p> <ul style="list-style-type: none"> <li>• Between 1993 and 2010, Eskom installed fabric filter plants at Arnot, Duvha (units 1, 2 and 3), Camden, Hendrina, Grootvlei (units 1, 5 and 6) and Majuba power stations.</li> <li>• The Grootvlei power station retrofit of fabric filter plant (FFP) on Units 2 to 4 was completed in October 2017.</li> <li>• Commencement with placing units into extended cold reserve at Duvha (unit 3), Komati (units 1, 2 and 6), Grootvlei (units 4, 5 and 6) and Hendrina (units 1 and 3).</li> <li>• Installation of low NOx burners at four of the units at Camden power station completed.</li> <li>• The refurbishment of the electrostatic precipitators on</li> </ul>			

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	<p>four of the six units at Matla Power Station was completed, resulted in an improving trend in particulate emission performance.</p> <ul style="list-style-type: none"> <li>• Lethabo power station is busy with phase one of the particulate emissions reduction solution with the installation of high frequency power supply (HFPS) on all six of its units. To date high frequency transformers have been installed on one unit at Lethabo. Phase two is being developed for the refurbishment of the ESP, upgrading the SO<sub>3</sub> plant and installation of an ammonia injection plant</li> <li>• Planning for the installation of high frequency transformers to reduce particulates is progressing at Matla and Duvha Power Stations, while Lethabo, Kendal and Matimba are on track for construction from 2021 to 2025. To date high frequency transformers have been installed on one unit at Duvha.</li> <li>• Development work continues for low NOx burner retrofits or replacement at Tutuka, Majuba and Matla, Detailed designs for Majuba Power Station were completed in October 2017.</li> <li>• Tutuka and Kriel FFP retrofits are behind schedule due to budget cuts as well as lengthy engineering, project and commercial processes. The PFMA application for the Kriel retrofit project was declined by DPE in February 2018 due to the "lack of policy</li> </ul>			

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	<p>direction on life extension of coal-fired power stations and that it would be presumptuous to commence the project in the absence of a revised Integrated Resource Plan from the DPE”.</p> <ul style="list-style-type: none"> <li>• Medupi and Kusile power stations are being constructed with fabric filter plants and low NOx burners.</li> <li>• The flue gas desulphurisation (FGD) plant is to be retrofitted to the units at Medupi continues, but these are behind schedule.</li> <li>• The units at Kusile are being constructed with FGD plant included.</li> </ul>			
	<p><b>Air Quality Offset programmes:</b> As per our Minimum Emissions Standards (MES) postponement commitments, an air quality offset plan to improve ambient air quality (especially particulate matter levels) in communities close to Eskom's power stations, was approved by DEA and the affected district municipalities in September 2016. The offset plan has a nominal cost in excess of R4 billion over the next nine years.</p> <p>Air quality offsets will be rolled out in settlements in the KwaZamokuhle, Ezamokuhle, Sharpeville/Vaal and Marapong areas during 2018 and 2019. The focus of the interventions will be on switching households from using coal and waste burning to electricity in combination with LPG. Health assessments are</p>			

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	planned in parallel to confirm the improved health status when ambient and indoor air pollution is reduced.			
	<p>Eskom trusts that the input will be received as value adding to the finalisation of the legislation aimed at ensuring the constitutional rights of all people in South Africa <i>to an environment that is not harmful to their health or well-being</i> are met.</p> <p>Eskom's comments on the National Environmental Management: Air Quality Act (39/2004): Notice of Intention to Amend the List of Activities which Result in Atmospheric Emission which have or may have a Significant Detrimental Effect on the Environment, including Health, Social Conditions, Economic Conditions, Ecological Conditions or Cultural Heritage (Government Gazette No. 41650 No. 516 of 25 May 2018) are set out in Table 1 below.</p>			
Section 2(b)	<p>[Note: see Eskom's comments on the National Environmental Management: Air Quality Act (39/2004); Notice of intention to Amend the 2012 National Framework for Air Quality Management in the Republic of South Africa (Government Gazette No. 518 of 25 May 2018).]</p> <p>The provision of "suspension "and proposed revision of the Framework for Air Quality Management, is welcomed in light of the socio-economic implication of emissions standards on</p>	It is therefore recommended that all existing plant must comply with existing plant standards, but existing plant are not required to comply with new plant standards on		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>existing plant, specifically large infrastructure such as power stations. This especially with regard to that of SO<sub>2</sub> abatement Flue Gas Desulphurisation (FGD), which requires significant resources to construct and operate based on current legal requirements as described in the overarching comments above.</p> <p>It is also necessary to take into account that decommissioning is not an event but a process that takes place over a number of years. In the case of Eskom's power stations, this can be in the region of four to six years, if not longer.</p> <p>(11B): The validity date for postponements granted should have alignment to decommissioning date. At present there is a gap "gap" between the two dates, which can have implications on the various scenarios of facilities that would apply for postponement (as per 11A) can only be for a "once-off", it should not be limited to 2025. For example, currently the retrofit of Flue Gas Desulphurisation (FGD) on Medupi may not be completed by 31 March 2025, which means in terms of the 11B Eskom may not get a postponement beyond 31 March 2025- meaning Medupi Units without FGD would not be able to operate beyond 31 March 2025. There is a need for a mechanism to allow for such scenarios where retrofit project extend beyond 31 March 2025.</p> <p>It is therefore supported that section (11D) should remain, however, the adjective "clear" should be removed so as to read</p>	<p>condition that a decommissioning schedule is provided.</p> <p>There is therefore a need to accommodate retrofit project timeframes just as provision is made for decommissioning timeframes. It is recommended that such a timeframe should be linked to the facility retrofit project programme.</p> <p>It is therefore recommended that the</p>		

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	<p>as follows:</p> <p>(11D) A once-off suspension application of compliance timeframes with new plant standard contemplated in paragraph (11C) must be accompanied by a decommissioning schedule. It is however, noted that provision must be made for changes to decommissioning schedules, as in the case of Eskom this is subject to the IRP and the mandate of the Department of Energy in terms of ensuring security of supply.</p> <p>(11E) It only makes reference to a <u>once-off suspension</u> application not be accepted after 31 March 2019 and does not mention applications for postponement. However, in the framework document (page 63) it refers to both? There is a need for clarity on postponement application cut-off date if needed at all.</p> <p>In terms of the timeframe associated with (11E), there is concern that there will not be sufficient time between when the legislation is enacted and 31 March 2019 to have such applications submitted. This is based on the need to compile an atmospheric impact report and the undertaking of public participation. It is therefore recommended that the deadline of 31 March 2019 should be either changed to state “...shall not be accepted one year after publication promulgation in the Government Gazette” or 31 March 2019 be the date that one needs to submit only ones intention to submit such a postponement or suspension application and applications to be</p>	<p>clause read as follows:</p> <p>(11B) A postponement of compliance timeframes may only be granted up to 2025, if the air quality improvement schedule for a plant is only due to be completed after this date a maximum of three additional years up to 2028 may be granted.</p> <p>It is recommended that section (11C) should be as follows:</p> <p>(11C) An existing facility/plant may apply for a once-off suspension of compliance timeframes with new plant standards up until final decommissioning.</p>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	submitted six months after notifying ones intent. 11F): It is our understanding that in the case of a once off suspension being granted, the facilities current AEL would be amended by the applicable licensing authority to reflect this decision.			
<b>HILLSIDE ALUMINIUM (PTY) Ltd.</b>				
General	Primary aluminum production is a listed activity (listed under subcategory 4.3) as per section 21 of the South African National Environmental Management Air Quality Act (No. 39 of 2004). This that Hillside Aluminum requires an AEL to operate. The current emission limit for hydrogen fluoride(HF) gases in point sources is 1 mg/Nm <sup>3</sup> and for Sulphur dioxide(SO <sub>2</sub> ) for reduction processes is 250 mg/Nm <sup>3</sup> .		While the department notes that the issues of concern are not related to the proposed amendments, it has provided responses to these issues here.	
	On the 12 June 2015, the government notice 551 published in the Government Gazette 38863 amended the current air emission limit for point sources with more stringent emissions criteria for activities listed under subcategory 4.3. The new HF emission limit that Hillside Aluminium will have to comply with is 0.5 mg/Nm <sup>3</sup> and it applies to all seven stacks on the Hillside site (i.e. 2 Fume Treatment Centre FTC stacks and 5 Gas Treatment Centre GTC stacks). <b>It should be noted that the new limit is an hourly-average.</b>		This statement is incorrect. The 2015 Amendment Notice did not change the HF emission limits of the two original notices. Furthermore, Hillside's understanding of average period for this pollutant is incorrect. The Notice is clear that the emission limits are daily average limits	
	For Hillside Aluminium to comply with the new emission limit			

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	<p>changes must be made for existing operations. Current performance is such that the existing limit already poses challenges and in order to be able to comply at a high level of probability with the new limit, Hillside sought the assistance of an international consultant, Hatch Ltd, to study current operations and identify practical improvements in work practices, and the introduction of new technologies, to find an implementation strategy that could bring Hillside in compliance with the new limit of 0.5 mg/Nm<sup>3</sup> HF.</p>			
	<p>Hillside Aluminium previously requested that different production processes are split with a corresponding split in SO<sub>2</sub> limits namely carbon process(500mg/Nm<sup>3</sup>) and reduction process (250mg/Nm<sup>3</sup>). Since the change, online analyzers have been installed that conduct hourly measurements. Measured hourly SO<sub>2</sub> levels showed several exceedances related to critical maintenance activities. To understand these exceedances, Hillside conducted a detailed investigation which indicated that there is an inverse relationship with HF-the more HF that is scrubbed, the high the SO<sub>2</sub> emissions. The GTCs and FTCs are designed to scrub HF and dust only.</p>			
	<p><b>Motivation for amendment to HF emission limit for subcategory 4.3:</b> The study conducted by Hatch concluded that implementing several improvements, that the expected probability of Hillside meeting the new limit of 0.5 mg/Nm<sup>3</sup> all the time is more like 80% to 90% and certainly not 100%.</p>	<p>It is therefore recommended to change the 2020 limit for HF from 0.5 mg/Nm<sup>3</sup> to 0.8 mg/Nm<sup>3</sup>.</p>	<p>Recommendation not supported.</p>	<p>No action taken.</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>Overall, the limit of 0.5 mg/Nm<sup>3</sup> in a warm climate like Richards Bay is considered as very low when compared to the performance of other GTCs (from the same supplier) but in different locations/countries. The manner the limit stipulated as an hourly average is also making it difficult for Hillside to have a probability of 100% of the time meeting the limit. Realistically one should expect a probability of 80% to 90% of the time at best.</p> <p>The study identified that Hillside would need to install new technology at each GTC, called the "Cascade system" to potentially meet the 0.5 mg/Nm<sup>3</sup> limit. This would result in significant capital investment which during the current economic state of the smelter is not achievable.</p> <p>Dispersion modelling conducted in 2014 using current emissions (point sources and line sources) show localized impact, thus the HF emissions from Hillside are not negatively impacting sensitive receptors. Further, 95% of the HF emissions from a primary aluminium smelter are released from the line sources (potroom roofvent emissions). Point sources only account for 5% of the emissions, thus changing the emission limit will not have significant change on the overall HF impact to the ambient air quality.</p>			
	<p><b>Motivation for amendment to SO<sub>2</sub> emission limit for subcategory 4.3:</b>  The Hillside GTCs are not designed to scrub SO<sub>2</sub>. SO<sub>2</sub> controlled only by low Sulphur coke. The market to obtain low</p>	<p>It is therefore recommended to change the reduction process SO<sub>2</sub> emission</p>	<p>This motivation is not in synch with the objects of the Act and is rejected.</p>	<p>No action taken.</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>Sulphur is becoming increasingly challenging and there is no guarantee that this will be available long term. There is currently no other means of controlling or reducing SO<sub>2</sub> emissions based on the existing technology.</p> <p>Hillside Aluminium remains committed to being a responsible corporate citizen and reducing our on the environment.</p>	<p>limit from 250 mg/Nm<sup>3</sup> to 400 mg/Nm<sup>3</sup>.</p>		
<b>LEGACY PET CREMATORIUM</b>				
	<p>Legacy Pet Crematorium has provided collection and cremation services to animal welfare organisations and veterinary facilities in Gauteng and KwaZulu-Natal since 1996 and 2008 respectively. As a dedicated pet crematorium, only deceased companion animals are treated at the facilities. Cremation is a more desirable alternative to the disposal of deceased companion animals to landfill as it provides a more dignified end for beloved pets, it reduces the human health risk of waste pickers at landfill facilities consuming deceased animals containing euthanasia drugs, and it results in decreased waste volumes being disposed of to landfill. Legacy Pet Crematorium strives to minimise any environmental impacts associated with providing their invaluable service, and during normal operating conditions, no visible smoke is emitted from the stacks and operations do not result in malodorous conditions. No complaints in this regard have been received since the facilities began operating. In addition, Legacy Pet</p>	<p>Legacy Pet Crematorium is hereby appealing to the Department to re-evaluate the MES, taking into consideration the following:</p> <ul style="list-style-type: none"> <li>The United States Environmental Protection Agency decided not to regulate human or animal crematoria after an intensive, costly and aggressive testing project conducted</li> </ul>	<p>that the issues of concern are not related to the proposed amendments, it has provided responses to these issues here.</p> <p>This motivation is not in synch with the objects of the Act and is rejected.</p>	<p>No action taken.</p>

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
	<p>Crematorium have investigated measures that will be required in order for the facilities to comply with the Minimum Emission Standards (MES) for new plant, as stipulated in Government Notice 893 of 2013 under Subcategory 8.2: Crematoria and Veterinary Waste Incineration, by April 2020.</p> <p>Investigations have shown that in order for Legacy Pet Crematorium to comply with the MES for new plant, extensive pollution abatement systems will have to be implemented at both facilities, which will require significant capital investment. The cost of these systems could render the business economically unsustainable at worst, or, at best, see the costs of such technology transferred to the consumer. A large percentage of the companion animals cremated at the facilities are welfare cases cremated at a 70% discounted rate charged to veterinarians and pet owners. Welfare organisations would not be able to carry the additional cost. Higher costs could therefore result in an increase in alternative disposal methods, the environmental and socio-economic implications of which require consideration.</p> <p>Air quality impact assessments conducted by an independent air quality specialist found that the operation of the facilities does not have a significant detrimental impact on the environment or public health, as atmospheric dispersion modelling results showed that ambient concentrations of pollutants at breathing height (even in the direct vicinity of the</p>	<p>jointly with the Cremation Association of North America in 1999 on working crematoria, which encompassed most emissions, including particle matter and carbon monoxide.</p> <ul style="list-style-type: none"> <li>The European Union do not regulate facilities solely used for incineration of animal carcasses under the stringent Waste Incineration Directive 2000/76/EC (repealed by 2010/75/EU) due to the lower risk posed by the material treated. Animal carcasses are</li> </ul>		

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	<p>facilities) are significantly lower than the National Ambient Air Quality Standards. In light of the above, compliance with the new plant MES will only result in normal air quality benefits being realised.</p>	<p>instead regulated as animal by-products under 1069/2009/EU and 142/2011/EC, which do not prescribe emission limits, but rather specify temperature and residence time requirements:  “plants shall be designed, equipped , built and operated in such a way that the gas resulting from the process is raised in a controlled and homogeneous fashion, even under the most unfavorable conditions, to a temperature of 850 °C for at least 2</p>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>second or to a temperature of 1100 °C for 0.2 seconds”.</p> <ul style="list-style-type: none"> <li>The United Kingdom Department for Environment, Food and Rural Affairs published a guidance note for the control of emissions from animal carcass incineration facilities (including pet crematoria) with a rate of between 50 kg/hr and 1000 kg/hr and a capacity under 10 tons per day. Emission limits, based on British, European and international standards, are</li> </ul>		

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		<p>stipulated in the guidance note (particulate matter-100 mg/Nm<sup>3</sup> and carbon monoxide-100 mg/Nm<sup>3</sup> under reference conditions of 273.1K, 101.3kPa, 11% oxygen, dry gas) which are considered to be achievable with the implementation of best available techniques.</p> <ul style="list-style-type: none"> <li>• The Australasian Cemeteries and Crematoria Association published environmental guidelines which stipulate emission limits for crematoria (particulate matter-</li> </ul>		

REFERENCE	COMMENT	RECOMMENDATION	DEPARTMENT'S RESPONSE	ACTION TAKEN
		<p>250 mg/Nm<sup>3</sup>; carbon monoxide-150 mg/Nm<sup>3</sup>; and nitrogen oxides expressed as nitrogen dioxide – 500 mg/Nm<sup>3</sup> under reference conditions of 273.1K, 101.3kPa, 7% oxygen and 12% CO<sub>2</sub> for particulates, dry gas) based on guidelines recommended by the National Health and Medical Research Council, The Australian and New Zealand Environment Conservation Council and Victorian Environmental</p>		

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		<p>Protection Agency.</p> <p>With the aim of promoting justifiable development, we request that our motivations herein be considered favorably and that the Department consider aligning the regulatory regime for the pet cremation industry with those adopted internationally.</p>		