



04 April 2019
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Attention: Interested and Affected Party

Dear Interested and Affected Party

FINAL MOTIVATION AND ATMOSPHERIC IMPACT REPORT

Applications for postponement of certain requirements of the National Environmental Management: Air Quality Act - Minimum Emission Standards, for Sasol South Africa Limited operations in Secunda

Sasol South Africa Limited (Sasol) is an international integrated energy and chemical company which owns and operates facilities at Secunda in Mpumalanga. Secunda Synfuels Operations (SSO), Secunda Chemicals Operations (SCO) and Sasol Oil are located in the Sasol Secunda complex south of central Secunda. Sasol is required to comply with Minimum Emission Standards (MES), published in terms of the National Environmental Management: Air Quality Act (Act No 39 of 2004). Sasol has previously applied and been granted postponement. However, new, more stringent standards will come into effect in April 2020 and Sasol will be challenged to meet the 2020 new plant standards in certain instances.

Sasol has therefore applied for postponements from the compliance timeframes.

A summary of the postponement request is provided in Table 1 on the following page.

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Table 1: Summary of Sasol Secunda's requests

Plant area	Emission component	Emission standard for new plants	Alternative emission limit requested (ceiling limit)	Compliance averaging period	Postponement period
		<i>All values specified at 10% O₂, 273 K and 101,3 kPa, mg/Nm³</i>			
Steam plant	Oxides of nitrogen	750	1 100	Daily average	Effective from 01 April 2020 for 5 years until 31 March 2025
	Particulate matter	50	120		
Synfuels catalytic cracker unit	Particulate matter	100	300	Daily average	
High organic waste (HOW) incinerators	Particulate matter	10	900	Daily average Monthly average ^{Note 1}	
	Carbon monoxide	50	1 300		
	Oxides of sulphur	50	423 ¹		
	Oxides of nitrogen	200	4 215		
	Hydrogen chloride	10	64		
	Hydrogen fluoride	1	3		
	Total organic compounds	10	113		
	Sum of lead, arsenic, antimony, chromium, cobalt, copper, manganese, nickel, vanadium	0.5	21	Daily average	
	Mercury	0.05	0.43		
	Cadmium + thallium	0.05	0.13		
	Ammonia	10	14.5		
	Dioxins and furans	0.1 ^{Note 2}	4.2		
	n/a	Exit gas temperatures must be maintained below 200°C	400 °C	Not applicable	
Bio-sludge incinerators	Particulate matter	10	850	Daily average Monthly average ^{Note 1}	Effective from decision for 5 years
	Carbon monoxide	50	4 490		
	Oxides of sulphur	50	240		
	Oxides of nitrogen	200	630		
	Hydrogen chloride	10	23		
	Hydrogen fluoride	1	20		
	Total organic compounds	10	3 673		
	Sum of lead, arsenic, antimony, chromium, cobalt, copper, manganese, nickel, vanadium	0.5	8.77	Daily average	
Mercury	0.05	2.46			

¹ The alternative emission limit requested was incorrectly indicated as "23" in the draft motivation. This was a typing error in the draft motivation only and the modelling and impact assessment detailed in the air impact report are correct.

Plant area	Emission component	Emission standard for new plants	Alternative emission limit requested (ceiling limit)	Compliance averaging period	Postponement period
		<i>All values specified at 10% O₂, 273 K and 101,3 kPa, mg/Nm³</i>			
	Cadmium + thallium	0.05	0.12		
	Ammonia	10	104		
	Dioxins and furans	0.1 ^{Note 2}	0.43		
Ammonium nitrate plant	Particulate matter	50 ^{Note 3}	50 (on a wet basis)	Daily average	Effective 01 April 2020 for 5 years until 31 March 2025
	Ammonia	50 ^{Note 3}	180 (on a wet basis)		
Tanks	Total volatile organic carbon	Identified tanks according to the approach detailed in section 4.8 to be fitted with abatement		Fugitive management plan	Effective 01 April 2020 for 5 years until 31 March 2025

Note 1: Monthly average where continuous online monitoring is done.

Note 2: ng I-TEQ/Nm³ under normal conditions of 10% oxygen, 273 Kelvin and 101.3 kPa.

Note 3: The oxygen correction (10%) does not apply to these sources as described further in the Motivation Report.

Currently, continuous emission monitoring (online analysers) are installed on one HOW and one bio-sludge incinerator. The compliance solution under consideration may limit the long-term use of some of the analysers if these were to be installed on all of the remaining incinerators. Sasol requests that, in addition to the installed analysers serving as proxy measurements for the other incinerators, compliance and/or validation through the continued application of periodic third party sampling, is acceptable for monitoring purposes on the remaining incinerators until the completion of the incinerator abatement project towards compliance with the new plant standards. These measurement results will be recorded, processed and presented in a quarterly emissions monitoring report. This will be for the extended compliance period that is the subject of this postponement application.

This application is supported by Part 2 of the MES. In accordance with the requirements for postponements contained in the MES, Sasol has submitted an atmospheric impact report (AIR) together with the motivation report containing detailed justification and reasons, both of which have been subjected to public participation. Airshed Planning Professionals (Pty) Ltd (Airshed) prepared the AIR while SRK Consulting (South Africa) (Pty) Ltd (SRK) has undertaken the public participation process and assisted Sasol in compiling the motivation report.

The Final Motivation including the Atmospheric Impact Report and Public Participation Report has been uploaded to SRK's website at:

<https://www.srk.co.za/en/za-sasol-2019-mes-postponement-applications>

Should you wish to make any additional comments please liaise directly with the National Air Quality Officer (NAQO), Please also forward a copy of the correspondence to SRK. Kindly do so before 6 May 2019. Contact details are listed below:

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Yours faithfully,

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SRK Consulting Certified Electronic Signature

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