



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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Ref: MP/SAS-S/20140328

Enquiries: Mr V. Senene

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Attention: Ms Wrenelle Stander

Sasol Limited

P.O. Box 234

Sasolburg

1947

Dear Applicant,

RE: APPLICATION FOR POSTPONEMENT OF COMPLIANCE TIME-FRAMES WITH NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT 39 OF 2004 S21 MINIMUM EMISSION STANDARDS FOR SASOL SECUNDA

The above-mentioned application has reference.

Your application has been processed and the National Air Quality Officer has made the decision (with the concurrence of the Atmospheric Emission Licensing Authority), as follows:

S21 Category	Appliance	Postponement Sought	Emission Standards			
			Minimum Emission Standards (mg/Nm ³)			Decision
			Pollutant	2015	2020	
Subcategory 1.1: Solid Fuel Combustion Installations*	Steam Plant	2015 – 2020	PM	100	50	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2020 with a limit of 120 mg/Nm ³ .
			SO ₂	3500	500	Postponement of compliance with the minimum emission standards for new plant is granted from 01 April 2020 to 31 March 2025 with a limit of 2000 mg/Nm ³ during this period. The requirement to comply with minimum emission standards for existing plant remains in place.



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S21 Category	Appliance	Postponement Sought	Emission Standards			
			Minimum Emission Standards (mg/Nm ³)			Decision
			NO _x expressed as NO ₂	1100	750	Our finding is that the facility is operating in compliance with the 2015 standards and so the postponement application is declined. The requirement to comply with minimum emission standards for existing plant remains in place.
Subcategory 2.2: Catalytic Cracking Unit*	Superflex Catalytic Cracker	2015 – 2021	PM	100	50	Postponement of compliance with the minimum emission standards for existing from 01 April 2015 to 31 March 2020 with a limit of 330 mg/Nm ³ during this period.
Subcategory 3.6 Synthetic Gas Production & Cleanup**	Rectisol & Sulphur Recovery Plants	2015-2020	H ₂ S	4200	3500	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2020 with a limit of 8400 mg/Nm ³ during this period.
			TVOCs	250	130	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2020 with a limit of 300 mg/Nm ³ during this period.
			SO ₂	3500	500	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2017 and the facility is required to undertake emission measurement and to report quarterly until 01 April 2017. The minimum emission standard for existing plant of 3500 mg/Nm ³ will be applicable during this period.
Subcategory 3.6 Synthetic Gas Production & Cleanup**	Phenosolvan	2015-2020	TVOCs	250	130	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 and the facility is required to undertake emission measurement and to report quarterly until 01 April 2018. The minimum emission standard for existing plant of 250 mg/Nm ³ will be applicable during this period.
Subcategory 3.3 and 3.6 Tar Processes Synthetic Gas Production & Cleanup**	Sources in Tar Value Chain-Value 1	2015-2020	TVOCs	250	130	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2017. Emissions are to be incorporated into the site fugitive emissions monitoring plan.

S21 Category	Appliance	Postponement Sought	Emission Standards		
			Minimum Emission Standards (mg/Nm ³)		Decision
Subcategory 3.3: Tar Processes	Sources in Tar Value Chain-Value 2	2015 – 2020	TVOCs	Type 3 storage vessels shall be of the following type: a) External floating-roof tank with primary rim seal and secondary rim seal for tank with a diameter greater than 20m, or b) fixed-roof tank with internal floating deck/roof fitted with primary seal, or c) Fixed roof tank with vapour recovery system	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2017. Emissions are to be incorporated into the site fugitive emissions monitoring plan.
Category 6: Organic Chemicals Industry	Storage Tanks (Solvents)	2015 - 2020	TVOCs	All installations with a throughput of greater than 50,000m ³ per annum of products with a vapour pressure greater than 14 kPa, must be fitted with vapour recovery or vapour destruction units. Emission limits for vapour recovery/destruction using non-thermal treatment: Existing plant standard: 40 000 & New plant standard: 40 000	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2020 on condition that a detailed plan and schedule for the retrofit is provided to Department of Environmental Affairs. Emissions are to be incorporated into the site fugitive emissions monitoring plan during this period.
Subcategory 2.4:	Storage Tanks	2015 - 2020	TVOC	Type 3 storage vessels shall be	Postponement of compliance with the minimum emission standards for

S21 Category	Appliance	Postponement Sought	Emission Standards		
			Minimum Emission Standards (mg/Nm ³)		Decision
Storage & Handling of Petroleum Products	(Synfuels)			of the following type: a) External floating-roof tank with primary rim seal and secondary rim seal for tank with a diameter greater than 20m, or b) fixed-roof tank with internal floating deck/roof fitted with primary seal, or c) Fixed roof tank with vapour recovery system	existing plant is granted from 01 April 2015 to 31 March 2020 on condition that a detailed plan and schedule for the retrofit is provided to Department of Environmental Affairs. Emissions are to be incorporated into the site fugitive emissions monitoring plan during this period.
Subcategory 2.4: Storage & Handling of Petroleum Products	Storage Tanks (Sasol Oil)	2015 - 2020	TVOC	Type 3 storage vessels shall be of the following type: a) External floating-roof tank with primary rim seal and secondary rim seal for tank with a diameter greater than 20m, or b) fixed-roof tank with internal floating deck/roof fitted with primary seal, or c) Fixed roof tank with vapour recovery system	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2020 on condition that a detailed plan and schedule for the retrofit is provided to Department of Environmental Affairs. Emissions are to be incorporated into the site fugitive emissions monitoring plan during this period.
Subcategory 2.4: Storage & Handling of Petroleum Products	Loading Station	2015 - 2020	TVOC	All installations with a throughput of greater than 50,000m ³ per annum of products with a	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2020. Emissions are to be incorporated into the site fugitive emissions monitoring plan during this period.

S21 Category	Appliance	Postponement Sought	Emission Standards			
			Minimum Emission Standards (mg/Nm ³)		Decision	
				vapour pressure greater than 14 kPa, must be fitted with vapour recovery or vapour destruction units. Emission limits for vapour recovery/destruction using non-thermal treatment: Existing plant standard: 40 000 New plant standard: 40 000		
Sub-category 7.2: Production of Acids**	Wet Sulphuric Acid Plant	2020-2025	SO ₂	2800	350	Postponement of compliance with the minimum emission standards for new plant is declined as the appliance is in compliance with the minimum emission standards for existing plant and there are no reliable measurement results indicating that the facility will not comply with the minimum emission standards for new plant.
			SO ₃	100	25	Postponement of compliance with the minimum emission standards for new plant is declined as the appliance is in compliance with the minimum emission standards for existing plant and there are no reliable measurement results indicating that the facility will not comply with the minimum emission standards for new plant.
Sub-category 8.1: Thermal Treatment of Hazardous & General Waste*	HOW Incinerators	2015-2020	PM	25	10	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 400 mg/Nm ³ during this period.
			NO _x expressed as NO ₂	200	200	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 1600 mg/Nm ³ during this period.

S21 Category	Appliance	Postponement Sought	Emission Standards			
			Minimum Emission Standards (mg/Nm ³)			Decision
			HF	1	1	Postponement of compliance with the minimum emission standards for existing plant is declined as emission results were below detection limit.
			Sum of Pb, As, Sb, Cr, Co, Cu, Mn, Ni and V.	0.5	0.5	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 21 mg/Nm ³ during this period.
			Hg	0.05	0.05	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 0.27 mg/Nm ³ during this period.
			Cd & Tl	0.05	0.05	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 0.12 mg/Nm ³ during this period.
			TOC	10	10	Postponement of compliance with the minimum emission standards for existing plant is not granted as there are no reliable emission measurements to indicate current performance. The requirement to comply with minimum emission standards for existing plant remains in place.
			Exit gas temperatures must be maintained below 200°C			Exit gas temperatures must be between 350°C and 400°C from 01 April 2015 to 31 March 2018.
Sub-category 8.1: Thermal Treatment of Hazardous & General Waste*	Biosludge Incinerators	2015-2020	PM	25	10	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 300 mg/Nm ³ during this period.
			CO	75	50	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 3000 mg/Nm ³ during this period.
			SO ₂	50	50	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 70 mg/Nm ³ during this period
			NO _x	200	200	Postponement of compliance with the

S21 Category	Appliance	Postponement Sought	Emission Standards			
			Minimum Emission Standards (mg/Nm ³)			Decision
			express ed as NO ₂			minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 500 mg/Nm ³ during this period.
			HF	1	1	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 20 mg/Nm ³ during this period.
			HCl	10	10	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 12 mg/Nm ³ during this period.
			Sum of Pb, As, Sb, Cr, Co, Cu, Mn, Ni and V.	0.5	0.5	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 1 mg/Nm ³ during this period.
			Hg	0.05	0.05	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 0.5 mg/Nm ³ during this period.
			Cd & Ti	0.05	0.05	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 0.12 mg/Nm ³ during this period.
			TOC	10	10	Postponement of compliance with the minimum emission standards for existing plant is declined as there are emission results to indicate current emission levels. The requirement to comply with minimum emission standards for existing plant remains in place.
			NH ₃	10	10	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2018 with a limit of 30 mg/Nm ³ during this period.
Sub-category 8.1: Thermal Treatment of Hazardous &	Sewage Solids Incinerators	2015-2020	PM	25	10	Postponement of compliance with the minimum emission standards for existing plant is granted from 01 April 2015 to 31 March 2017 in order for the
			CO	75	50	
			SO ₂	50	50	

S21 Category	Appliance	Postponement Sought	Emission Standards			
			Minimum Emission Standards (mg/Nm ³)		Decision	
General Waste*			NO _x expressed as NO ₂	200	200	facility to undertake emission measurement and to report to the Department of Environmental Affairs quarterly until 31 March 2017.
			HF	1	1	
			HCl	10	10	
			Sum of Pb, As, Sb, Cr, Co, Cu, Mn, Ni and V.	0.5	0.5	
			Hg	0.05	0.05	
			Cd & Tl	0.05	0.05	
			TOC	10	10	
			NH ₃	10	10	
			PCDD/P CDF***	0.1	0.1	
			Exit gas temperatures must be maintained below 200°C	Exit gas temperatures must be between 350°C and 400°C		

* Minimum emission standards are expressed on a daily average basis, under normal conditions of 273 K, 101.3 KPa, 10% oxygen and dry gas.

** Minimum emission standards are expressed on a daily average basis, under normal conditions of 273 K and 101.3 KPa

***Minimum emission standards expressed as ng I-TEQ /Nm³ under under normal conditions of 273 K, 101.3 KPa, 10% oxygen, dry gas and on a daily average basis.

This decision will have to be reflected in your Atmospheric Emission License to be of force and effect. You are required to liaise with the relevant Atmospheric Emission Licensing Authority in this regard as soon as is reasonably possible so that the required amendments, variations and additions to your Atmospheric Emission License can be effected.

In addition, Sasol is required to implement an offset programme to reduce PM and SO₂ pollution in the ambient/receiving environment. A definite offset implementation plan is expected from Sasol as agreed by 30 June 2015.

Thank you for the co-operation in matters regarding your application.

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Yours sincerely,

A handwritten signature in black ink, appearing to read 'Thuli Mdluli', with a stylized, cursive script.

Dr Thuli N. Mdluli

Department of Environmental Affairs

Designation: National Air Quality Officer

Date: 23/02/2015