

# BACKGROUND INFORMATION DOCUMENT AND OPPORTUNITY TO COMMENT

OCTOBER 2016



## APPLICATIONS FOR POSTPONEMENT OF CERTAIN REQUIREMENTS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT - MINIMUM EMISSION STANDARDS, FOR SASOL'S OPERATIONS IN SECUNDA AND SASOLBURG

### INTRODUCTION

The purpose of this document is to provide stakeholders with the following:

- Information on the background to Sasol's applications for postponements from certain of the requirements of the Minimum Emission Standards (MES) (published in GNR No. 893 of 22 November 2013) published in terms of section 21 of the National Environmental Management: Air Quality Act 39 of 2004 ("NEMAQA") for some of Sasol's operations in Secunda and Sasolburg (The location of these facilities is indicated on pages 3).
- An outline of the legal framework governing air quality management in South Africa and specifically the MES, pertinent to this BID and related applications.
- Information on the stakeholder engagement and application process that will be followed.
- Information regarding opportunities to provide comments relating to the applications.

### BACKGROUND

Sasol is an international integrated chemicals and energy company that leverages technologies and the expertise of 30 100 people working in 33 countries. Sasol develops and commercialises technologies, and builds and operates world-scale facilities to produce a range of high-value product streams, including liquid fuels, chemicals and low-carbon electricity. Sasol is a significant business partner in the South African economy and has manufacturing operations located predominantly in Secunda, Mpumalanga and Sasolburg, Free State.<sup>1</sup>

Sasol is committed to growing its business for the long term in a safe, ethical, compliant and environmentally responsible way, consistent with its Safety, Health & Environment policy and Sasol values. It is continuously implementing new actions and processes to align with its commitments. Sasol reports on its environmental improvement objectives as part of its annual Sustainability Reporting, available at: <http://www.sasol.com/sustainability/reports>

<sup>1</sup> The information provided herein with regards to the company description and Sasol's environmental commitments has to be read in conjunction with Sasol's Integrated Report and Sustainability Report for 2016 as available from the Sasol website.

## AIR QUALITY MANAGEMENT

The term “ambient air quality” refers to the state of the air in our surrounding environment. Good air quality is important not only for humans, but for other organisms and the environment in general. Poor air quality is a result of a number of factors, including emissions from various sources, both natural (such as veld fires) and human-induced (industrial and domestic emissions).

The role of the regulatory authorities is to ensure that ambient air quality meets standards set to protect human health and the environment. In order to achieve this, the Department of Environmental Affairs has promulgated two related but distinct standards. The first are referred to as point source emission standards (also called Minimum Emission Standards (MES)), which place limits on the concentration of emissions from certain industrial activities. These are contained in the MES. The second are ambient air quality standards which seek to set total emissions from all contributors (i.e. industry, citizens and natural causes) to a level that protects human health and the environment.



Sasol’s approach to air quality management is well aligned with the risk-based philosophy adopted by the ambient air quality standards.

Sasol monitors the total quality of ambient air near its facilities through a network of accredited monitoring stations. It also prepares dispersion model scenarios to understand its impacts on ambient air quality in the regions in which it operates, and its capacity to improve these outcomes with point source emission reduction technologies e.g. electrostatic precipitators for particulate matter. This is contextualised against the backdrop of other sources of ambient air pollution, to identify the most effective actions to achieve ambient air quality improvements. This approach helps to inform Sasol’s air quality management priorities, by identifying the key actions to effectively improve ambient air quality.

## LEGAL REQUIREMENTS

NEM:AQA provides for various specific air quality management measures. These include the declaration of priority areas such as the Vaal Triangle Priority Area and the Highveld Priority Area, ambient air quality standards and point source emission standards as regulated in the MES. The MES prescribe the limits for point source emissions from existing plants which became effective from 1 April 2015 (the so-called ‘existing plant standards’) and which Sasol has previously made application for postponement for as mentioned below, as well as more stringent limits that must be met by 1 April 2020 (the so-called ‘new plant standards’) (termed “Compliance Timeframes”). Part 2 of the MES allows for applications for postponements of the prescribed compliance timeframes. Postponement applications must be made to the National Air Quality Officer at the Department of Environmental Affairs.

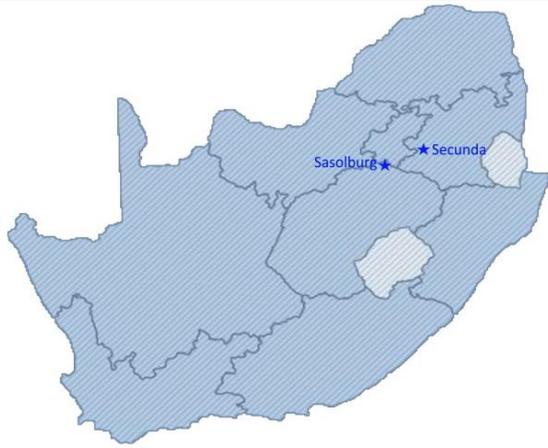
As part of its application, Sasol is required to submit an Atmospheric Impact Report (AIR) and supported by detailed justification and reasons. The MES also require that Sasol make these documents available for public comment as prescribed in Chapter 6 of the Environmental Impact Assessment (EIA) Regulations GN R982 (2014) promulgated under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA).

Between 2013 and 2014 Sasol undertook a process to apply for postponements from the 2015 compliance timeframes of the MES. Sasol was granted postponements for a number of its operations by the National Air Quality Officer (NAQO), with the concurrence of its licensing officer. However Sasol will be unable, in certain instances, to timeously meet the compliance requirements of the 2015 MES where postponements have been granted for less than five years, as initially requested.

Sasol has spent approximately R2 billion per year over the past decade on environmental improvement projects, most of which has been focused on air quality improvement.

For the next decade, Sasol has outlined a committed roadmap which informs progressive improvements to its existing facilities which will enable a sustainable transition toward meeting the stringent standards set for new plants, under the MES.

## SASOL'S APPLICATIONS



In 2014 Sasol South Africa (Pty) Ltd., operating through its **Secunda Synfuels and Sasolburg Operations** applied for, and was granted, postponements from the existing plant standards for some of its activities. The present postponement application therefore constitutes a further postponement application for some sources, to extend the initial three year compliance extension granted. These further postponement applications are requested for purposes of completing the associated projects in the interest of sustained compliance with the existing plant standards.

### SECUNDA SYNFUELS OPERATIONS

The Secunda Synfuels Operations is located in the Sasol Secunda Complex in the Govan Mbeki Local Municipality, which forms part of the Gert Sibande District Municipality in the Mpumalanga Province. The Sasol Secunda site incorporates a number of business activities, including the Secunda Synfuels Operations, which operates the world's only commercial coal-gasification based synthetic fuels manufacturing plant.



Postponement applications will be submitted for the following processes that will be unable to meet the compliance timeframes stipulated in the AEL:

- Phenolvan Plant - Subcategory 3.6 Synthetic Gas Production & Cleanup
- HOW and Biosludge Incinerators - Subcategory 8.1: Thermal Treatment of Hazardous & General Waste

Emissions that will be included in the AIR in relation to the applications are as follows:

Particulate Matter (PM)	Carbon Monoxide (CO)	Volatile Organic Compounds (VOCs)
Hydrogen Fluoride (HF)	Sulfur Dioxide (SO <sub>2</sub> )	Ammonia (NH <sub>3</sub> )
		Nitric Oxide and Nitrogen Dioxide (NO <sub>x</sub> )



### SASOLBURG OPERATIONS

The Sasolburg Operations is located in Sasolburg in the Metsimaholo local municipality which is part of the Fezile Dabi District Municipality in the Free State Province. Sasolburg Operations, provides a services platform for reforming natural gas into synthesis gas, produces a variety of chemicals and provides various utility services to other Sasol entities as well as third party customers, such as process steam and industrial and municipal waste water treatment.

Further postponement applications will be submitted for the Incinerators with regards to the prescribed limits as explained in- Subcategory 8.1: Thermal Treatment of Hazardous & General Waste. Emissions that will be included in the AIR are as follows:

Sulfur Dioxide (SO <sub>2</sub> )	Carbon Monoxide (CO)	Nitric Oxide and Nitrogen Dioxide (NO <sub>x</sub> )
Hydrogen Fluoride (HF)	Metals	Particulate Matter (PM)
		Total Organic Compounds (TOCs)

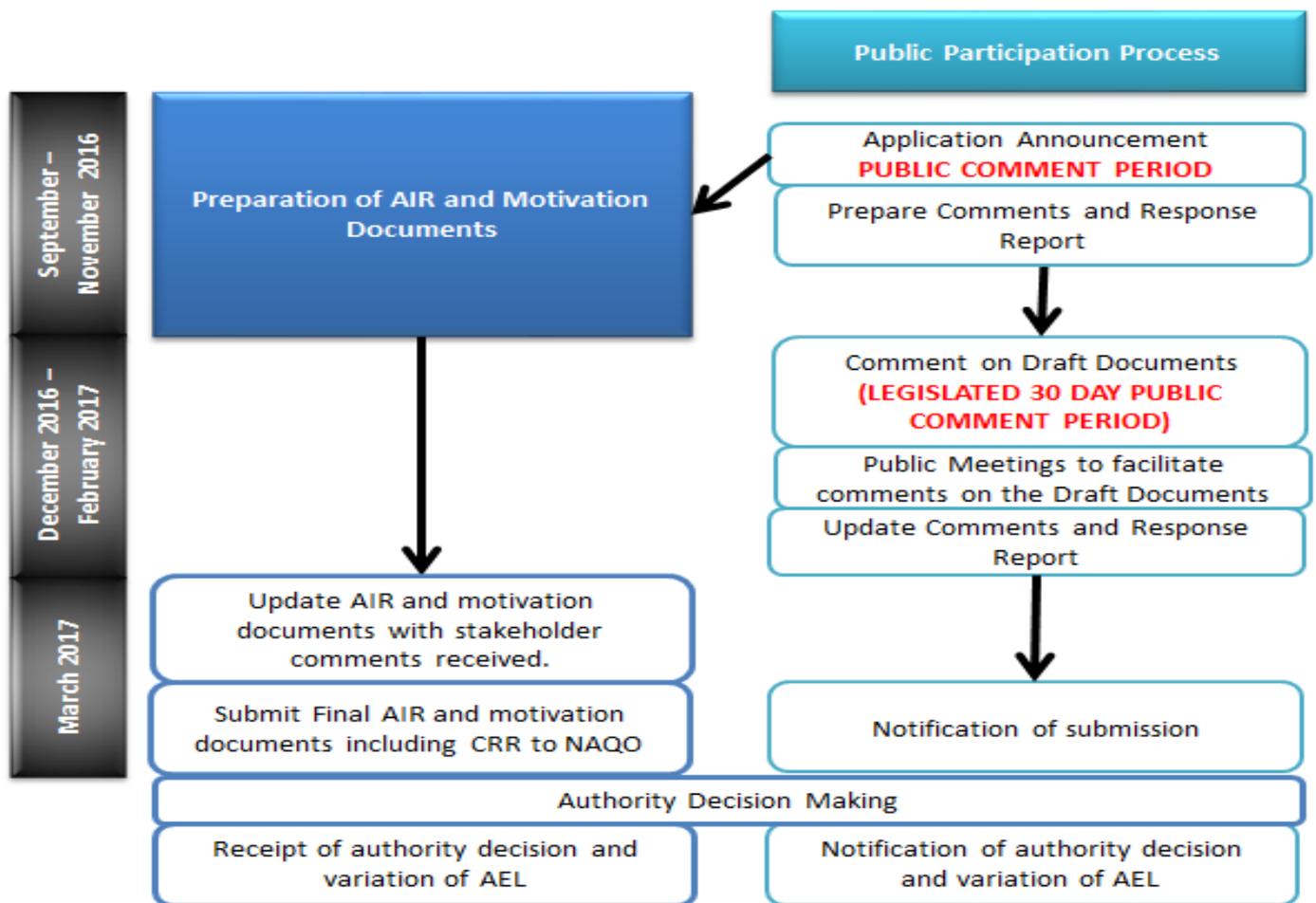
## APPLICATION PROCESS

Sasol has appointed a team of independent specialists to assist with the applications. SRK Consulting (Pty) Ltd has been appointed to undertake the stakeholder engagement process and assist Sasol in compiling the Motivation Report containing the related justification and reasons. Airshed Planning Professionals (Pty) Ltd has been appointed to prepare the AIRs. Sasol has appointed an independent fourth party as peer reviewer to comment on the air dispersion modelling approach.

The AIRs, will detail Sasol’s impact on ambient air quality in the areas affected by its facilities. The Motivation Report will be informed by the AIR as required in terms of Part 2 of the MES. It will detail the reasons and justification for the postponement application and outline the steps to be taken by Sasol to achieve compliance.

Sasol is committed to affording I&AP’s the opportunity to provide comments during the public participation process. This will include inviting all I&AP’s that registered as part of the previous process’ to comment. This process has been informed by the requirements for consultation in terms of the EIA Regulations. Responses to comments received during the stakeholder engagement process will be submitted together with the Motivation Report to the authority for consideration in deciding on this application.

The proposed technical and public participation activities, as well as the broad timeframes for roll out of these processes are shown below.



## INVITATION TO COMMENT

Should you wish to register as an interested and affected party for this process, please complete the enclosed registration and comment form and submit it to SRK, at the contact details below, by the **9 December 2016**.

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