

# BACKGROUND INFORMATION DOCUMENT AND OPPORTUNITY TO COMMENT

## OCTOBER 2018



### 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 requirements of the Minimum Emission Standards (MES) (published in Government Notice 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 certain of Sasol's operations in Secunda and Sasolburg.
- An outline of the legal framework governing air quality management in South Africa and specifically the MES, pertinent to this background information document (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 in the long term in a safe, ethical, compliant and environmentally responsible way, consistent with its safety, health and 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 integrated reporting, available at: <http://www.sasol.com/about-sasol/company-profile/overview>.

<sup>1</sup> The information provided herein with regards to the company description and Sasol's environmental commitments must be read in conjunction with Sasol's Integrated Report for 2017 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 many 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. 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. 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

The 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 prescribes 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 an application for postponement 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 (NAQO) at the Department of Environmental Affairs.

As part of its application, Sasol is required to submit an atmospheric impact report (AIR) 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 R326 (2017) promulgated under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA).

Sasol has previously applied and been granted postponement in terms of the 2015 MES by the NAQO, with the concurrence of its licensing officer. However, Sasol will be unable, in certain instances, to timeously meet the more stringent 2020 MES compliance requirements. These further postponement applications are mainly requested for purposes of safe and proper completion of the associated projects in the interest of sustained compliance with the new plant standards.

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.

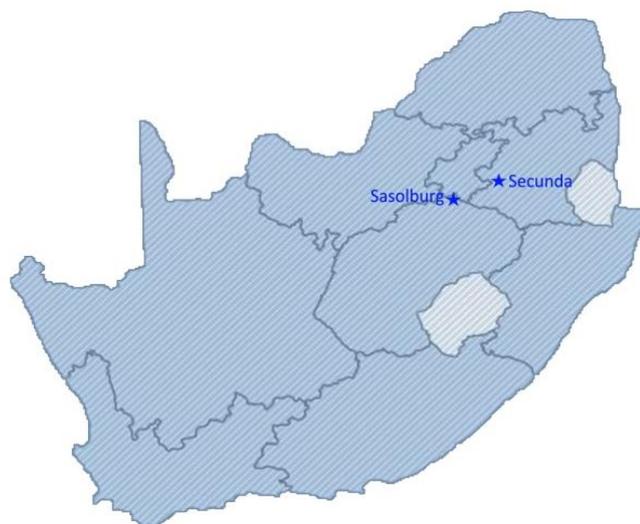
# SASOL'S APPLICATIONS

## SECUNDA SYNFUELS OPERATIONS

Secunda Synfuels Operations (SSO) 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 SSO, 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 atmospheric emission license (AEL):

- Sub-category 1.1: Steam plant boilers - particulate matter (PM), and oxides of nitrogen (NO<sub>x</sub>)
- Sub-category 2.2: Synfuels catalytic cracker – PM
- Sub-category 2.4: Storage tanks - total volatile organic compounds (TVOCs)
- Sub-category 8.1: High organic waste and biosludge incinerators – PM, carbon monoxide, SO<sub>2</sub>, NO<sub>x</sub>, hydrogen chloride, hydrogen fluoride, sum of lead, arsenic, antimony, chromium, cobalt, copper, manganese, nickel, vanadium, mercury, cadmium and thallium, VOCs, ammonia



## SASOL CHEMICALS OPERATIONS

Sasol Chemicals Operations (SCO) is also located in the Sasol Secunda complex. SCO produces a diverse range of products that include industrial explosives, fertilisers, polymers and solvents.

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

- Subcategory 7.3: Ammonium nitrate – PM, ammonia
- Sub-category 2.4: Storage tanks and fuel loading – TVOCs

## SASOLBURG OPERATIONS

The Sasolburg Operations facility 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.

Postponement applications will be submitted for:

- Sub-category 1.1: Steam Station 1 – PM, NO<sub>x</sub>
- Sub-category 1.1: Steam Station 2 – PM, NO<sub>x</sub>
- Sub-category 8.1: Thermal Oxidation Plant (Incinerators) - SO<sub>2</sub>, NO<sub>x</sub>, Sum of Lead, arsenic, antimony, chromium, cobalt, copper, manganese, nickel, vanadium, TOCs, CO, HF and PM



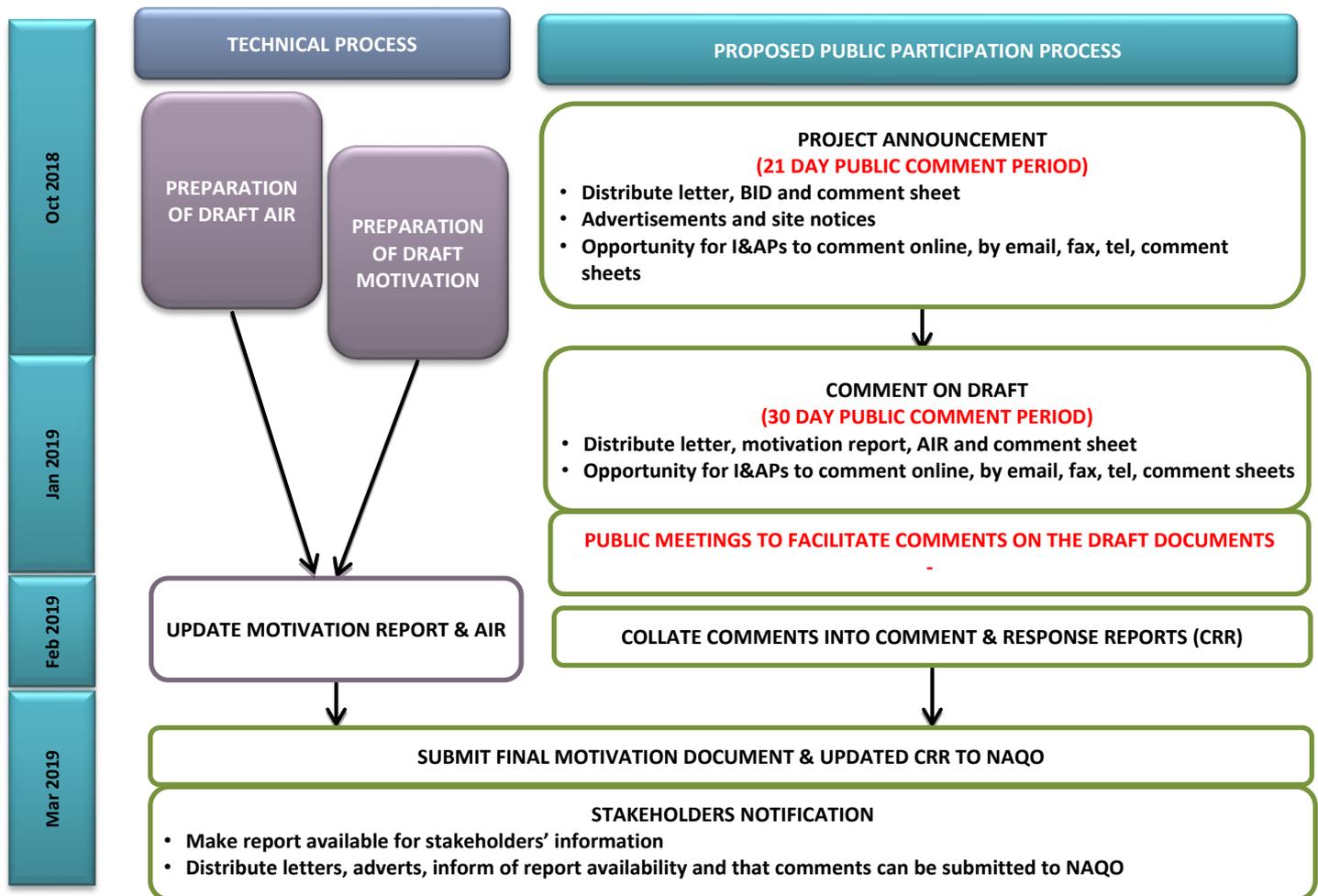
## APPLICATION PROCESS

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 with the compilation of the Motivation Report. Airshed Planning Professionals (Pty) Ltd has been appointed to prepare the atmospheric impact reports (AIRs). Sasol has also appointed an independent party, Exponent, to peer review 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 interested and affected parties (I&APs) the opportunity to provide comments during the public participation process. The approach to the public participation process has been guided by the requirements for consultation in terms of the 2017 EIA Regulations. Responses to comments received during the stakeholder engagement process will be submitted together with the motivation report to the authority for consideration during decision making.

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 do so online at the following link: <https://arcg.is/H05W9>



Alternatively, please complete the enclosed registration and comment form and submit it to SRK, at the adjacent contact details, by the **09 November 2018**.

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