



# Highveld Priority Area Second-Generation Air Quality Management Plan: Status of Plan Development and Implementation thereof

BUSA

29 August 2024

MS Teams

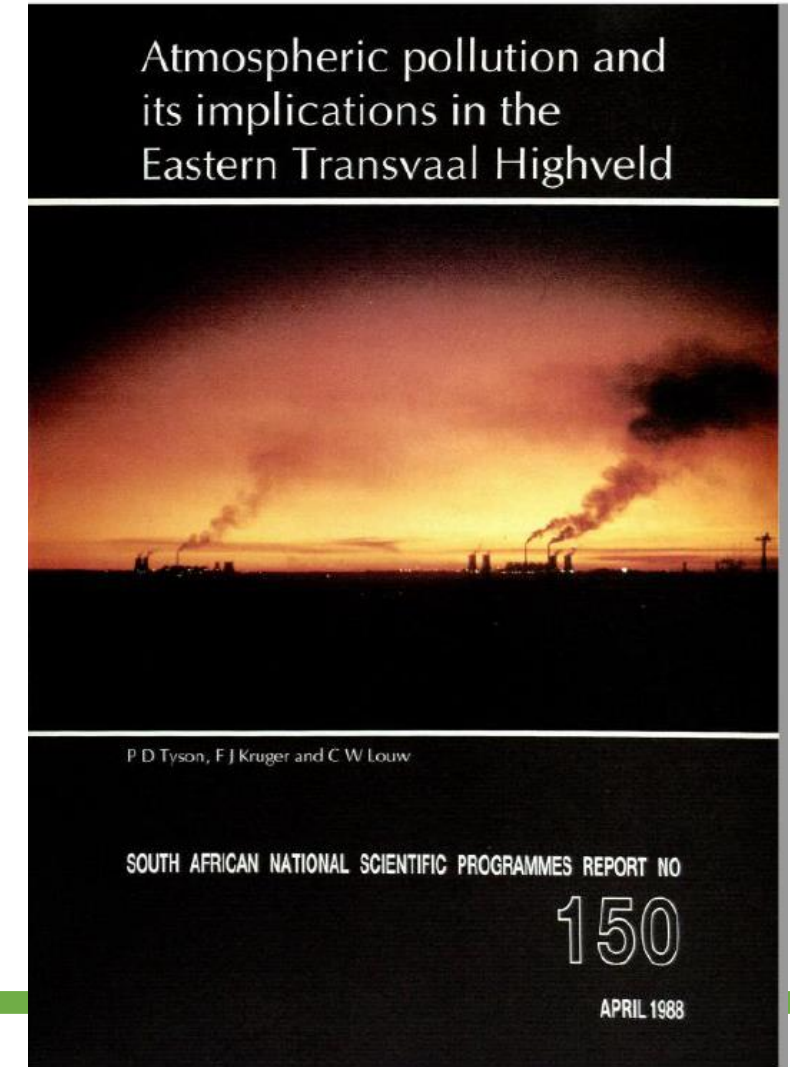


# Purpose of Presentation

- BUSA to take note of the second-generation Highveld Priority Area Air Quality Management Plan (HPA AQMP) development and the alignment with regulations for implementing and enforcing approved priority area plans

# Background

- Areas around Witbank and Middleburg –what was the **Eastern Transvaal Highveld**, has long been highly industrialized with several coal-fired power stations, burning coal dumps and heavy industries, residential, transport, biomass burning activities
- Air pollution challenges have been recognised for over 60 years
- Particulate matter and gaseous sulphurous pollutants
- **Earliest comprehensive review of air pollution in what was the ETH, 1988**
  - Pollution dispersion
  - Effects of more industrial developments
  - Impact of pollution on human health and environment

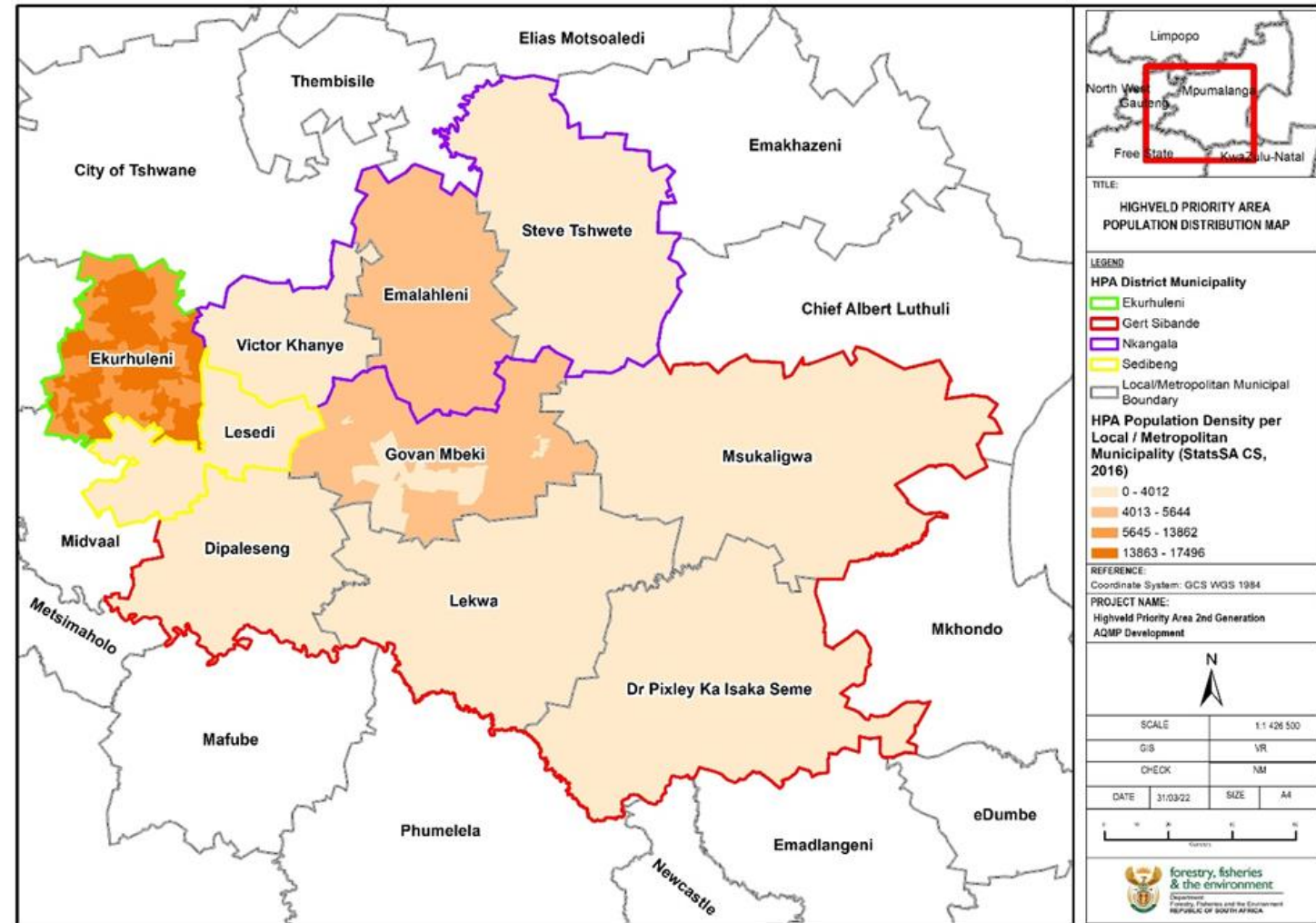


# Background – Highveld Priority Area

- On 23 November 2007, the Highveld Priority Area (HPA) was declared in terms of section 18(1)(a) and (b) of NEMAQA
- A 1<sup>st</sup>-generation Air Quality Management Plan (AQMP) was published in 2012 in term of sections 19 (1) (a) and (b)
- During 2021, the department initiated the review of the AQMP to inform the 2<sup>nd</sup>-generation
- 2<sup>nd</sup>-generation AQMP is aligned to the regulations for Implementing and Enforcing Priority Area Air Quality Management Plans

# Geographical Extend of HPA

- **Gauteng Province:**
  - City of Ekurhuleni
  - Lesedi Local Municipality situated within the Sedibeng District Municipality
- **Mpumalanga Province**
  - Victor Khanye, Steve Tshwete, and eMalahleni Local Municipalities in the Nkangala District Municipality
  - Govan Mbeki, Dipalaseng, Msukaligwa, Lekwa, and Pixley ka Seme Local Municipalities in Gert Sibande District Municipality
- HPA AQMP Project Steering Committee was constituted of provinces and HPA municipalities



# Scope and Objectives of 2<sup>nd</sup>-Generation HPA AQMP

The 2<sup>nd</sup>-Generation AQMP provides:

- A baseline of the state of air quality in a priority area and trends since 2007, quantifies pollution sources, evaluates the efficacy of the 1<sup>st</sup>-generation AQMP and identifies gaps
- Targeted measures aligned to the priority area regulations to be implemented towards compliance with air quality standards by 2030
- Monitoring and evaluation mechanisms to track implementation
- Access to these documents will be facilitated through publication on the DFFE and SAAQIS website

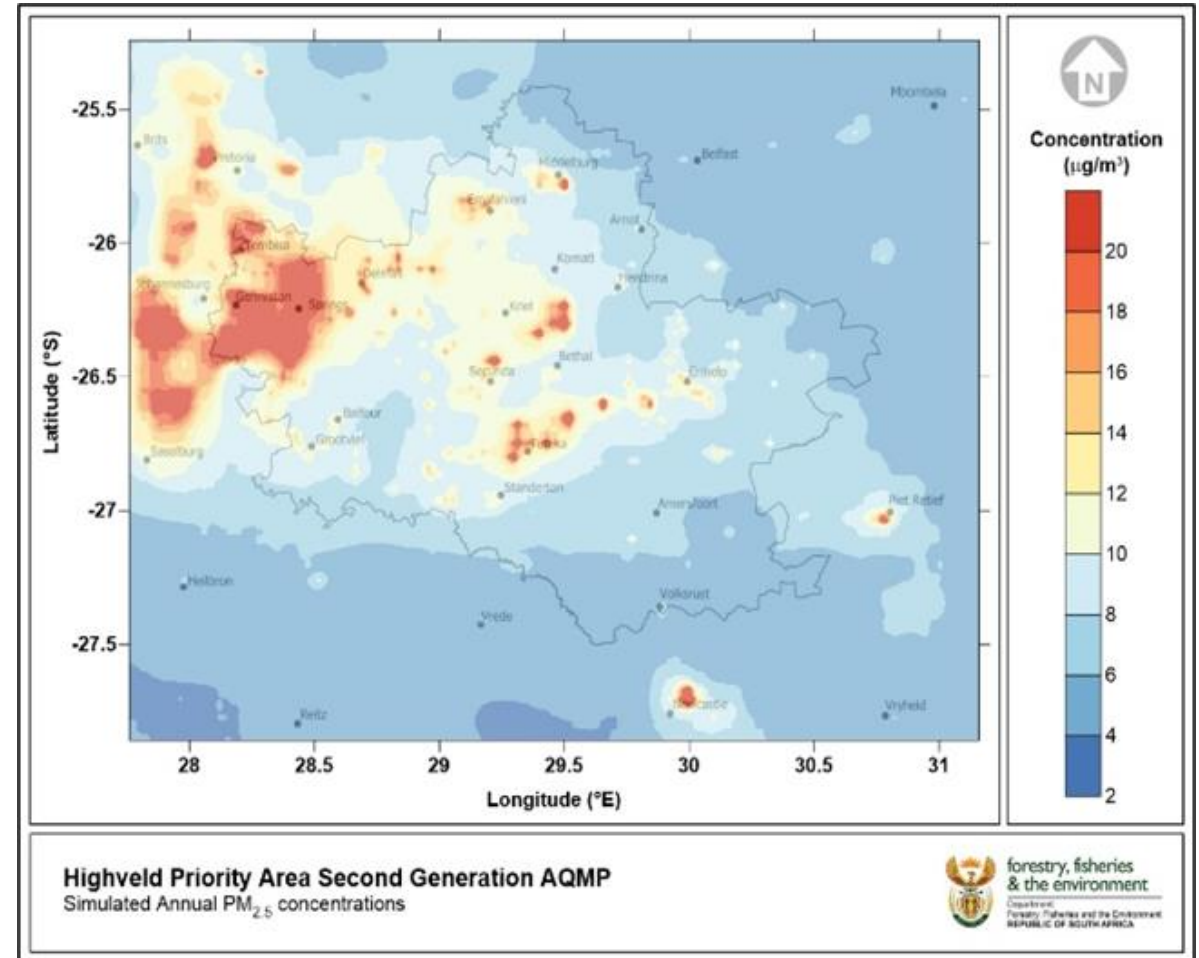
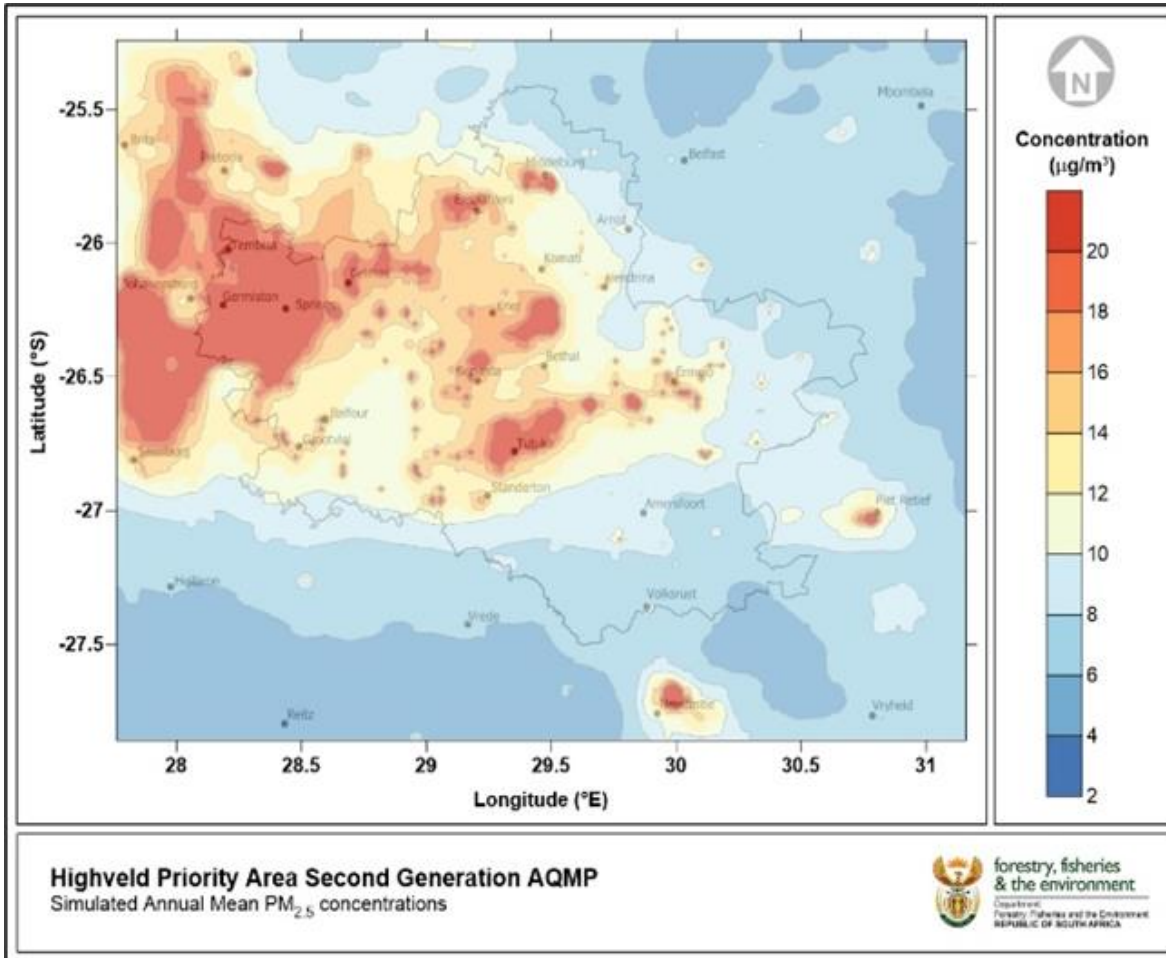
# Stakeholder Consultation Process

- The draft AQMP was extensively consulted with industries, civil society, the public and government
  - Multistakeholder workshop on the 23 February 2022.
  - Multistakeholder workshop on the 7 and 18 August 2022 in Witbank, Mpumalanga Province.
  - Multistakeholder workshop on 01 November 2022 in a form of hybrid (virtual and at the venue at A New hotel in Witbank).
  - Sector departments government workshops on 21 June, 05 July and 07 September 2023
  - Multistakeholder workshop on 28 September 2023 in a form of hybrid (virtual and at the venue at Ekurhuleni Council Chamber in Boksburg)
  - Mintech WG10- Environmental Policy and Law Reform on 24 October 2023 and 15 May 2024 for recommendation to Mintech.
  - Mintech WG2 Air Quality Management on 13 October 2023 and 16 May 2024 for recommendation to Mintech.

# Summary of 2<sup>nd</sup> –generation AQMP Emission Reduction Targets from 2019 Baseline

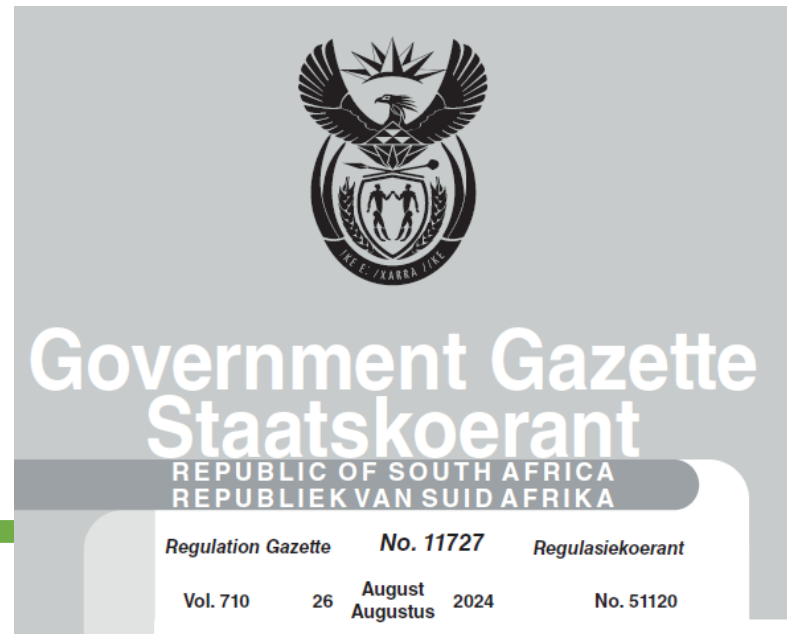
| Sector                                                              | Reductions by 2030 | Principal Implementation Tools (policies, strategies etc)                                      |
|---------------------------------------------------------------------|--------------------|------------------------------------------------------------------------------------------------|
| 1. Industrial sources with atmospheric emission licenses            | <b>40%</b>         | Priority area regulations, AEL compliance, National Dust Control Regulations                   |
| 2. Mining operations                                                | <b>40%</b>         | National Dust Control Regulations                                                              |
| 3. Residential fuel burning                                         | <b>30%</b>         | DHS, DoH cleaner residential fuel related programmes, air quality offset programs              |
| 4. Residential waste burning                                        | <b>100%</b>        | National Waste Management Strategy and the Industry Waste Management Plan, municipal by-laws   |
| 5. On-road vehicles                                                 | <b>30%</b>         | Green Transport Strategy for South Africa, Clean Fuel Standards                                |
| 6. Forestry and veld fire burning                                   | <b>30%</b>         | National Veld and Forest Fire Act, municipal by-laws                                           |
| 7. Agricultural activities                                          | <b>20%</b>         | 2019 Actionable Guidelines for the Implementation of Climate Smart Agriculture in South Africa |
| 8. Windblown dust emissions from residential areas                  | <b>40%</b>         | Municipality programmes to pave roads, tree planting initiatives                               |
| 9. Reclamation activities (historical mine dump related operations) | <b>40%</b>         | National Dust Control Regulations                                                              |

# Improvements in HPA Air Quality Between Baseline in 2019 and 2030: Particulate Matter



# Draft HPA AQMP Status

- Draft HPA AQMP published for comment in terms of sections 57 of the NEMAQA, gazette public comments



- Regulations for implementing and enforcing priority area air quality management plans

# PA Regulations Identified Stakeholders

These SOP shall apply to and be implemented by stakeholders identified in Regulation 3(1) (a) - (e), including:

- (a) Any person conducting a **listed activity**;
- (b) Any person operating a **controlled emitter**;
- (c) Any holder of a right or permit related to a **prospecting** operation, **exploration** operation, **mining** operation, or production operation as defined in section 1 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)
- (d) any person conducting **reclamation**; and
- (e) any **department of state** or administration in the national, provincial or local sphere of government.

# Establishing Credible Baseline – Industrial and Mining Operations

- Engagement with individual facilities to:
  - Assess the quality, consistency, representativeness of NAEIS emissions reports submitted since 2015
  - Verify 2019 baseline (separate process emission from fugitive emissions etc.
  - Assess facility existing measures towards emission reduction (e.g., compliance postponement roadmaps, GHG pollution prevention plans/emission reduction energy efficiency, etc.)
  - Identify co-benefits from existing emission reduction measures
  - Establish emission reduction potential for facilities within each priority area

# Looking Ahead – Role of BUSA

- HPA AQMP undergoing public comment – request from BUSA and CER for period to be extended from 05 September 2024
- Support on the implementation of enhanced measures to improve air quality in the HPA
- Advocacy for clean technologies, green economy, and how industries may be supported to improve environmental footprint
- Recognition of the co-benefits realised from the decarbonisation measures (carbon tax incentives, carbon budget etc.)
- 2024 Priority Area Summit during October 2024

# Looking Ahead – Role of Government

- Recognise that air pollution as a leading national environmental human health risk, particularly in all metropolitans and the priority areas – Burden of Disease Report from Medical Research Council, 2022
- Effective implementation including strengthening of:
  - Provincial and municipal structures and resources of AQM functions to ensure effective implementation of legislation, especially atmospheric emission licenses, by-laws and air quality management plans
  - Compliance monitoring and enforcement capacity and activities
- Improving synergises between AQM and other environmental sector efforts such as transport, waste, and climate change mitigation, etc.

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Thank You