



ODOUR AND NOISE MANAGEMENT

Director : Atmospheric policy Regulations and Planning
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NOISE MANAGEMENT

- Odour management, development of a policy framework to manage odour as well as update from the H2S Task Team established during 2022
- The repeal of ECA will/renders the Noise Control Regulations invalid, leaving a void with regards to noise control.
- We are required to provide a way forward in the finalisation of the repeal of ECA: Noise
- Propose the development National Standards for Noise Control in terms of Section 34(1) on NEMAQA



NOISE MANAGEMENT

- National Noise Standards will provide guidance to the province and municipalities on how they should control noise within their jurisdictions
- We will also write Noise Control Guidance documents that will serve as guidance for the Local Government to develop regulation of noise through bylaws in the interim and beyond
- Consultation with relevant stakeholders should be made as soon as possible to introduce the National Noise Standards



ODOUR MANAGEMENT

- Section 35 of the National Environmental Management: Air Quality Act (Act No. 39 of 2004) (NEMAQA) empowers the Minister or the Member of Executive Committee (MEC) to prescribe measures for the control of offensive odours emanating from specified activities. The Act also instructs the occupier of any premises to take all reasonable steps to prevent the emission of any offensive odour caused by any activity on such premises.



ODOUR MANAGEMENT

- Guidance document to the regulated community, authorities and affected community on how to:
- Manage odour from odour-causing activities or facilities
- Manage an odour complaint
- Assess odour impact
- Measure odour



ODOUR MANAGEMENT

- The overall objectives in the management of potentially odorous activities are to:
- minimise odour emissions and their impacts;
- ensure that industry or a facility does not expose neighbouring land users to an unacceptable level of odorous emission;
- ensure that industry or a facility manages odour emissions within the accepted criteria (minimum negative impact to human beings); and
- apply ongoing risk evaluation and management principles that evolve as scientific understanding of odours and their potential health effects increases over time.



HYDROGEN SULPHIDE (ODOUR) 1/3

- Reduced sulphur compounds (RSC) are a complex family of substances. They are defined by the presence of sulphur in a reduced state and are generally characterized by strong odours at relatively low concentrations. One member of the family—hydrogen sulphide (H₂S)—is known to have highly toxic properties, and can cause negative health effects at low concentrations.
- Section 21: The primary anthropogenic sources include oil and gas processing facilities, Kraft pulp mills, chemical manufacturing plants, and livestock operations. **Definition for limits was considering health impact. The need to introduce another layer... While meeting the minimum emission standards what about odour management?**



HYDROGEN SULPHIDE (ODOUR)2/3

- Complaints raised through media platforms about H₂S/sulfur related stench experienced over parts of Gauteng and North West in June 2022 led to the establishment of a task team to investigate these complaints.
- The task team, comprising environmental and air quality officials from the Department of Forestry, Fisheries and the Environment and the provincial departments in Mpumalanga, Gauteng, North West and the Free State has started some work in this regard.
- The task team's interim internal report, reflects that the sulfur smell may have emanated from industry operations in the Secunda region and as a result of unusual air circulation patterns that saw the smell being blown over Gauteng and parts of the North West during the week of 5 to 12 June 2022.



HYDROGEN SULPHIDE (ODOUR)3/3

- Further work of the Task Team entailed engagement with industry operations in the Secunda and the Vaal regions in order to understand their compliance with AEL emission limits and ambient air quality standards, including their incidents management reporting
- Further work of the Team would involve an analysis of short-term, medium term and long-term emission reduction commitments from industry in these regions in order to address H₂S challenges
- However, there is a need for a long-term coordinated approach to address these challenges in particular, and odour and noise challenges in general.



IMPROVING H2S ENVIRONMENTAL IMPACT: SECTION 21 CATEGORY 3.6

- A need for policy intervention to further reduce hydrogen sulphide and address increasing concerns on the public safety, and long term effects of exposure to human health, especially in the local environments where large H2S sources are located
- Existing H2S plant standard – 3500mg/m³
- Propose a new H2S MES that is aligned to or better
- Example of the scale of SO₂ reduction
- SO₂ existing plant standard – 3500 mg/m³
- Moved to New plant standard – 500 mg/m³



WAY FORWARD NOISE



WAY FORWARD ODOUR

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WAY FORWARD H2S



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