



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

State of Air in 2009 and Proposed Method for Measuring and Reporting Future Air Pollution Trends in South Africa

**Lekgotla Session: 1.6, 11:00 – 11:30, Monday
12 October 2009**

**Emerald Casino - Vanderbijlpark
T.S. Mahema**

Objective of Presentation

- To provide an overview of the State of Air Quality in the Country in 2009, focusing on major metropolitan areas
- To table a proposal on a how to measure and report air quality future air pollution trends beginning in 2009
- To initiate a platform for debating the proposed approach



In the Past....

- The State of Air was based on, among others, an indicative list of Metropolitan and District Municipalities with air quality rated as being “Poor or Potentially Poor” as listed in Table 24 of the 2007 National Framework.



The Rationale Behind Table 24

- The recognition of the absence of a comprehensive national ambient air quality monitoring network.
- The assessment was based on readily available information to allow for an indicative assessment.
- However, strides are being made to expand the national ambient air quality monitoring network.
- This therefore places govt in a better position to accurately assess the air pollution status of each of the areas identified in the original indicative assessment, and beyond.



The Proposed Method

- Choose 2 stations per region across the country:
 - 1 Urban, 1 Background
- Monitoring PM₁₀ & SO₂ for at least 5 years:
 - Because these are the most common pollutants associated with bad air quality in South Africa
- Preferably govt-owned
- SANAS accredited
- Report Annual Averages of monitored parameters



The Proposed Centres

- Cape Town
- Johannesburg
- Tshwane
- eThekweni
- Nelson Mandela Metro
- The Vaal Priority Area
- The Highveld Priority Area



The State of Air

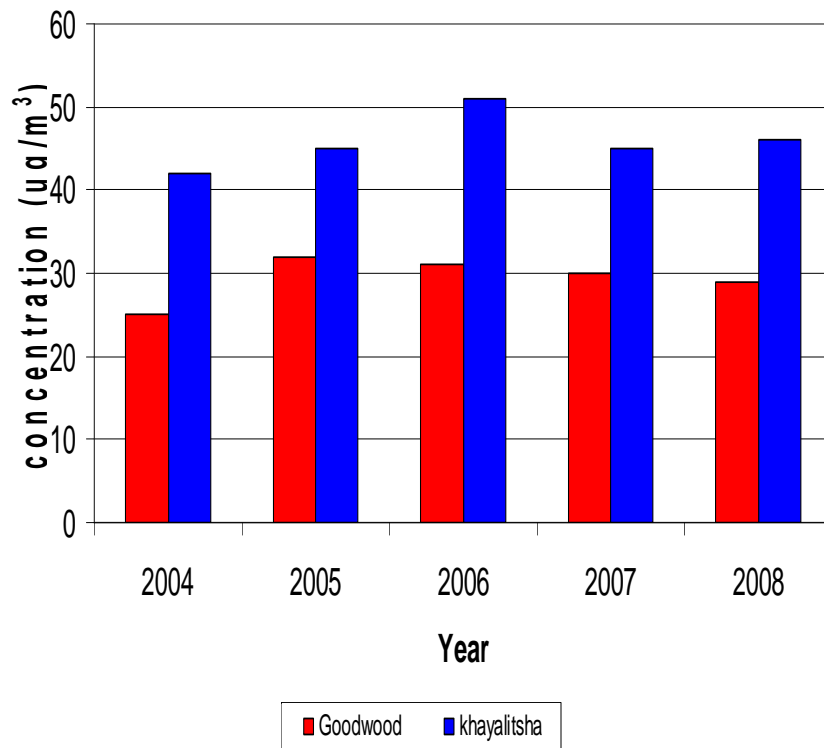


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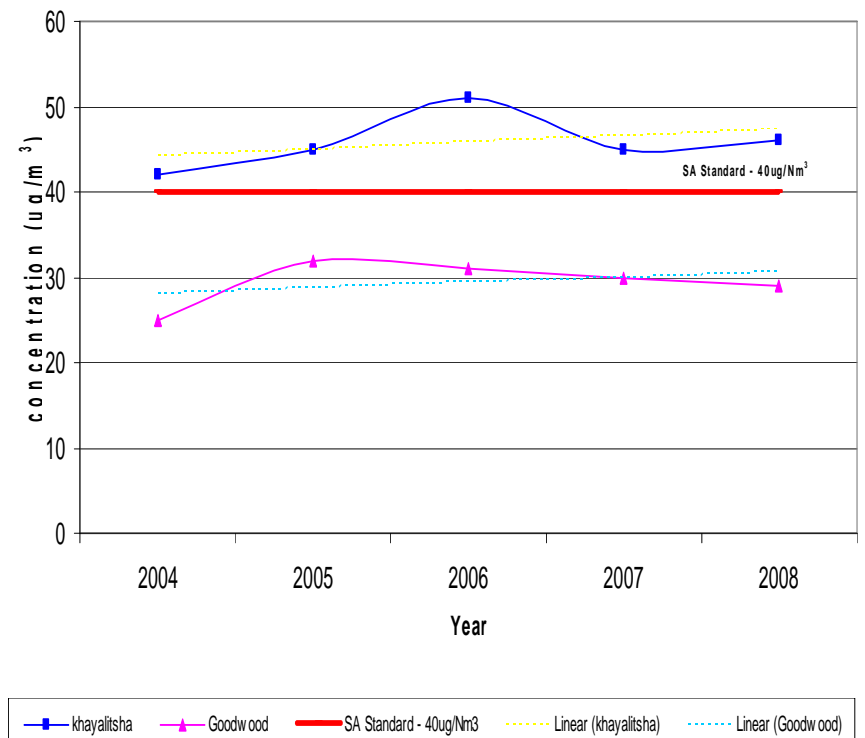
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Cape Town

PM₁₀ - 5 year trend

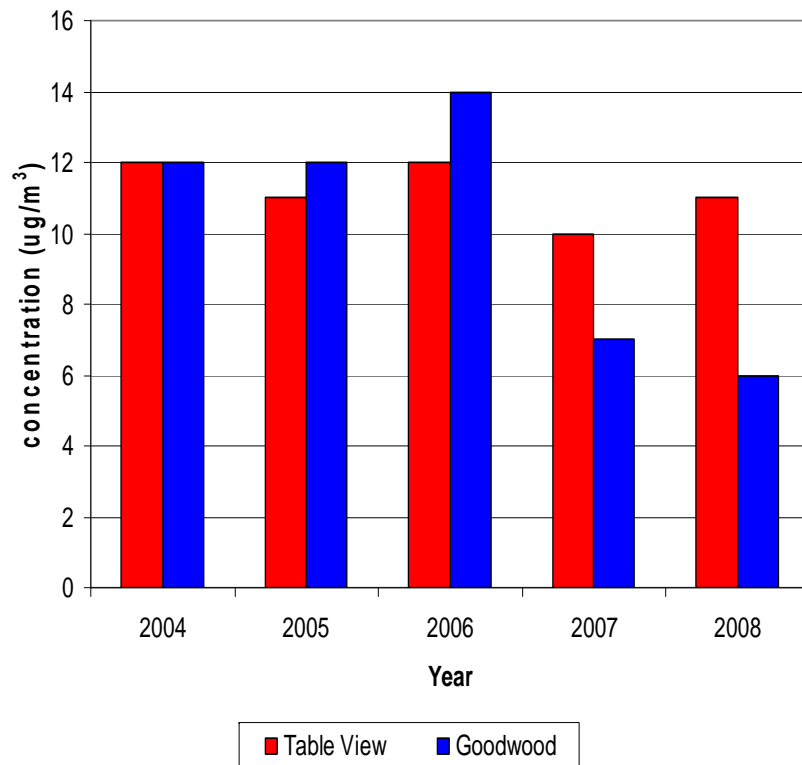


Annual PM₁₀ averages - Goodwood and Khayalitsha

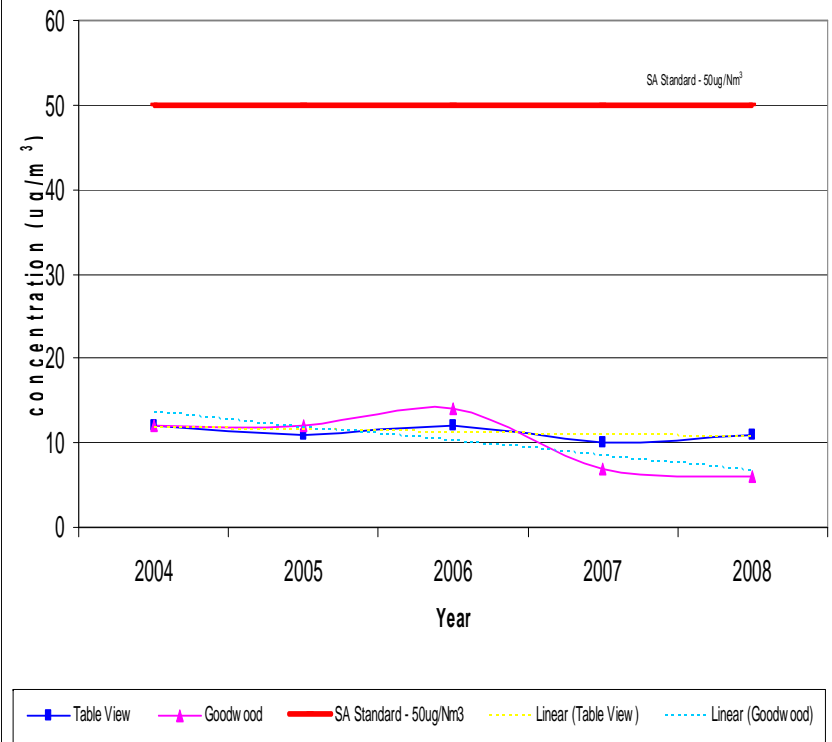


Cape Town

Sulphur Dioxide - 5 year trend



Annual SO_2 averages - Goodwood and Khayalitsha

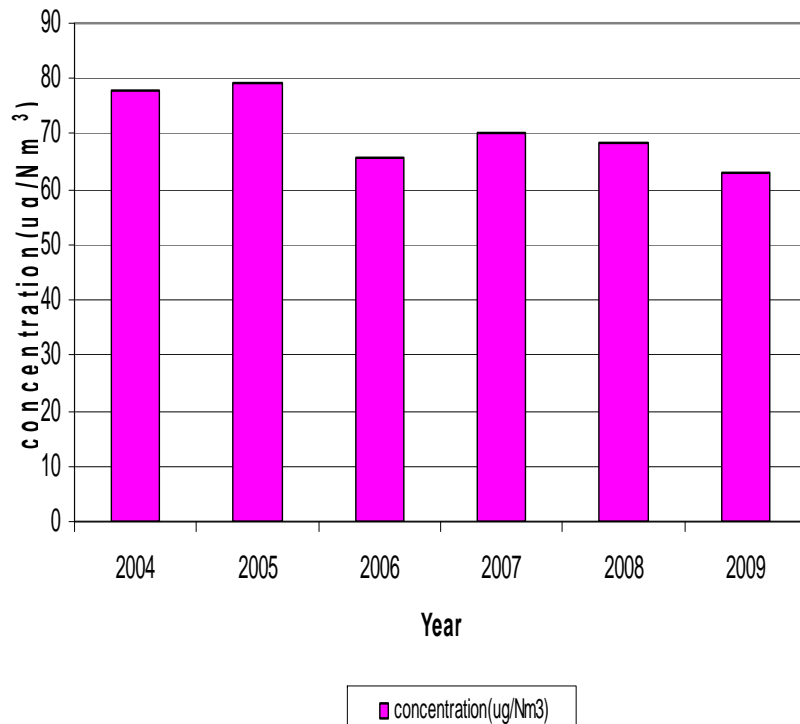


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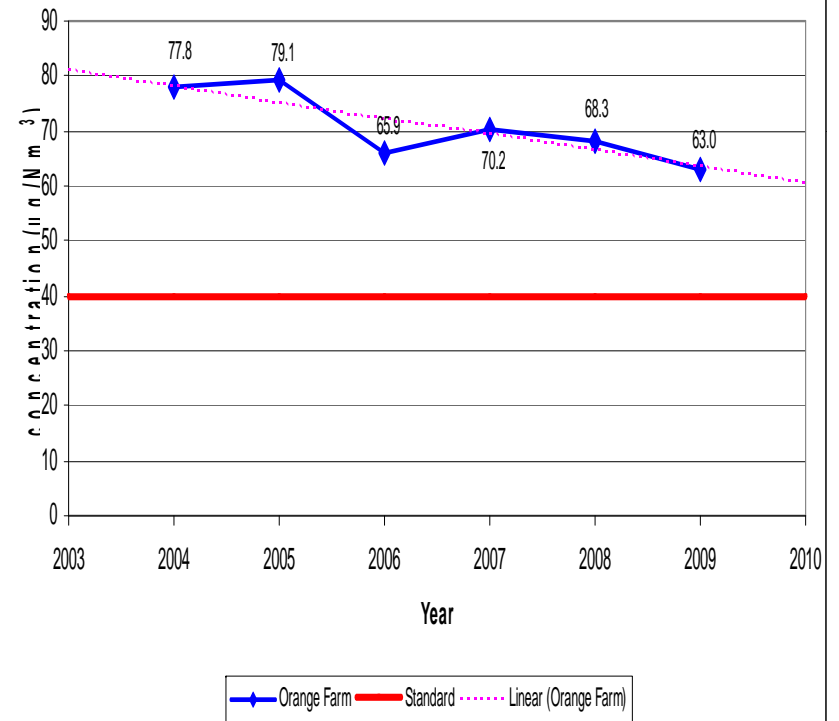
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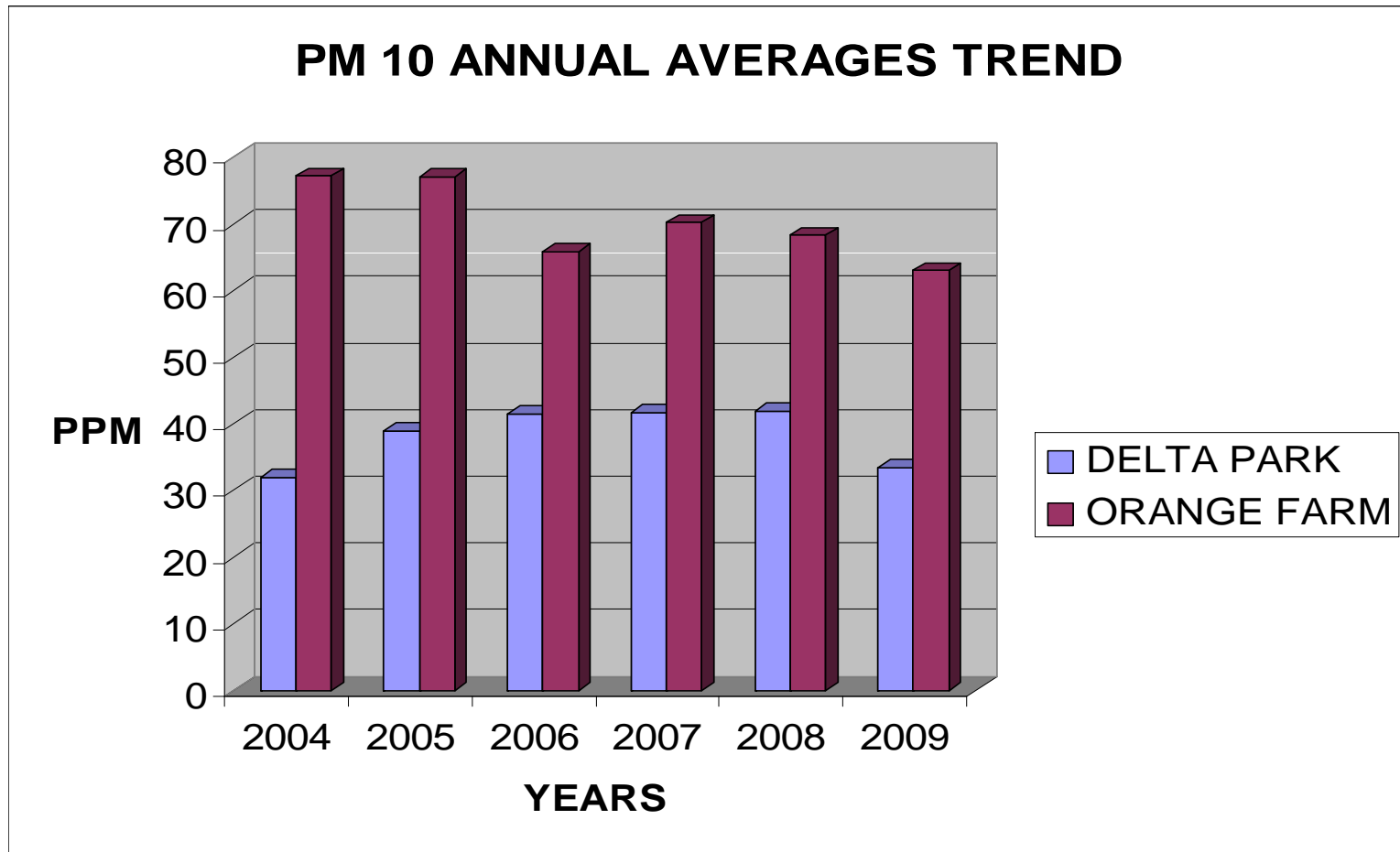
PM₁₀ - Orange Farm (5 year trend)



Orange Farm - PM₁₀

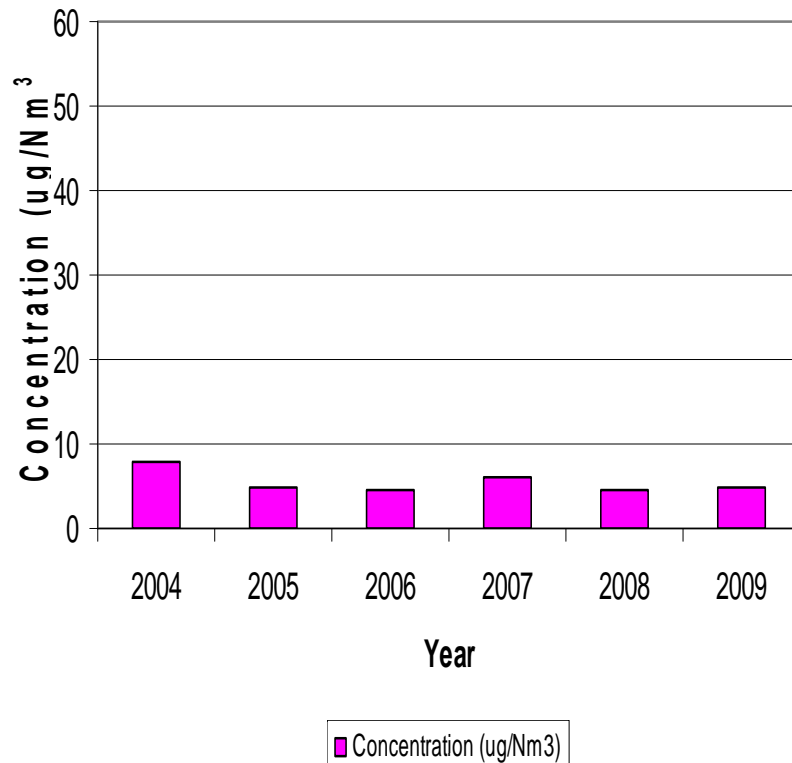


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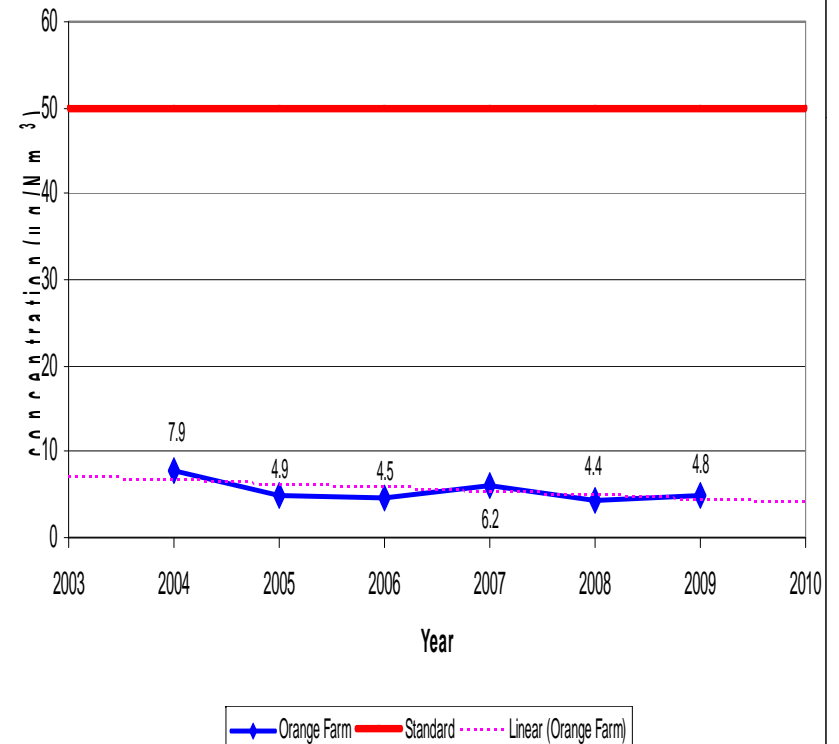


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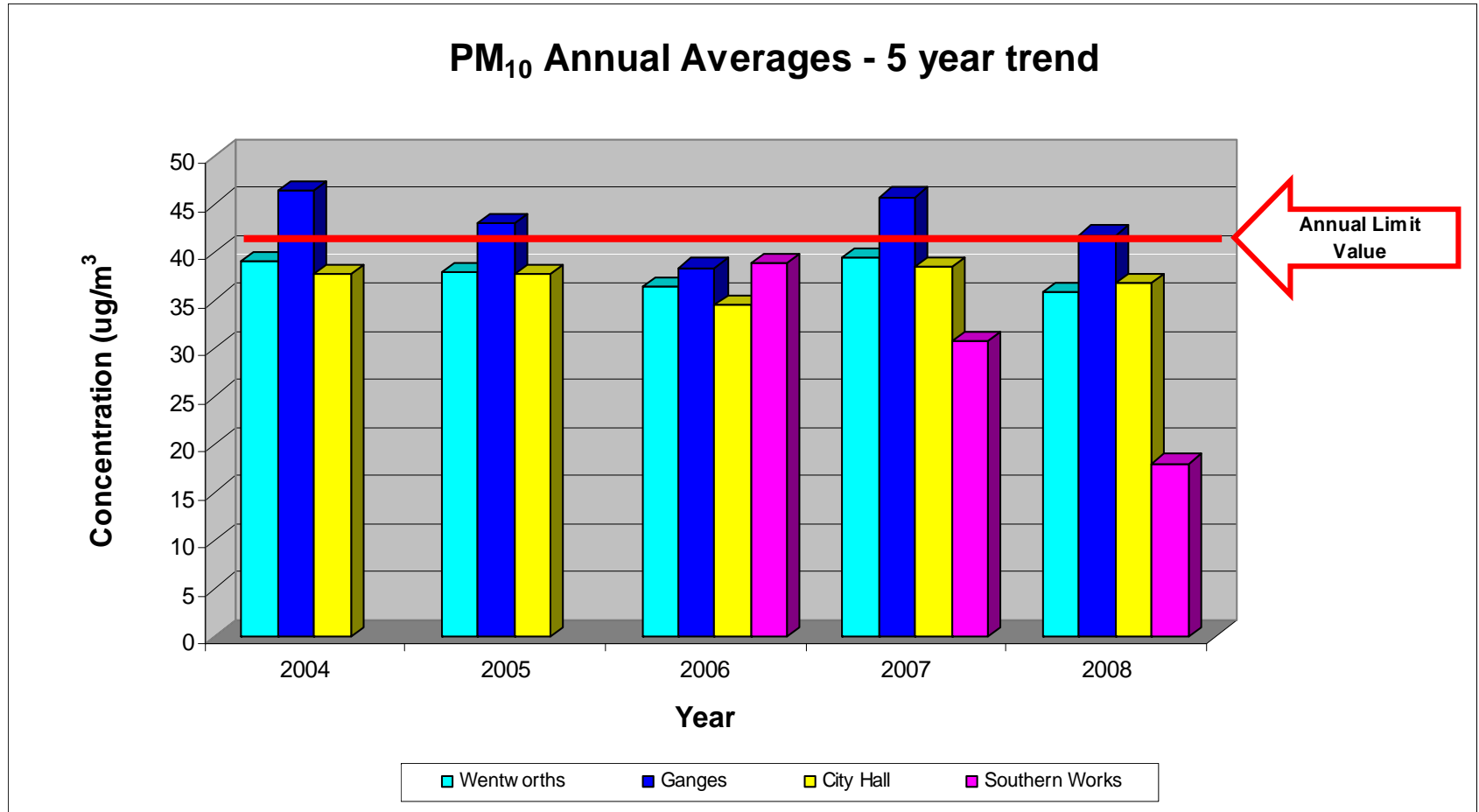
Sulphur Dioxide - Orange farm (5 year trend)



Orange Farm - Sulphur Dioxide

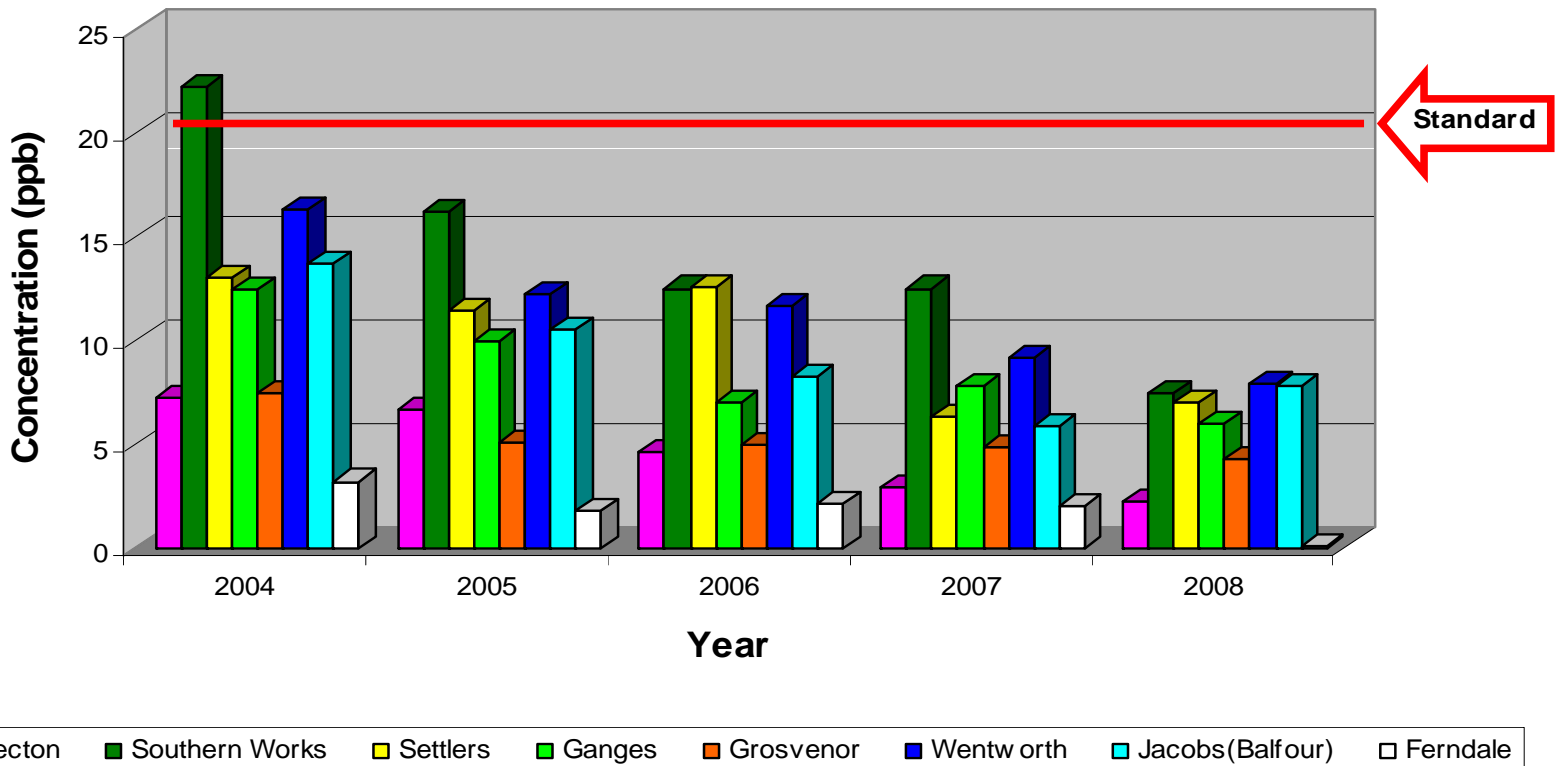


Ethekwini



Ethekwini

Sulphur Dioxide Averages - 5 year trend



Way forward

- Report trends annually
- Consider adding more stations
- Consider reporting on non-govt stations

Thank you



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