

THE 2007 NATIONAL FRAMEWORK FOR AIR QUALITY MANAGEMENT IN THE REPUBLIC OF SOUTH AFRICA

Table 23: Pollutants of Concern

Current Criteria Pollutants	Possible Future Pollutants	
	National Pollutants	Local Pollutants
Sulphur dioxide (SO ₂); Nitrogen dioxide (NO ₂); Ozone (O ₃); Carbon monoxide (CO); Lead (Pb); Particulate matter (PM ₁₀); Benzene (C ₆ H ₆).	Mercury (Hg); Particulate matter (PM _{2.5}); Dioxins; Furans; POPs; Other VOCs; Pollutants controlled by international conventions ratified by South Africa	Chrome (Cr ₆ ⁺); Fluoride (particulate and gas); Manganese (Mn).

In addition to the criteria pollutants discussed above, the four-band scale for dust deposition in residential and industrial areas is will be adopted (SANS 1929).

5.3.3 Identifying and prioritising emitters of concern

The following factors must be considered when identifying and prioritising emitters of concern:

- Emitters located in relatively close proximity to sensitive receptors, e.g. residential areas, schools, hospitals or sensitive ecological areas;
- Emitters of pollutants of concern based on volumes of emission and the nature of the pollutant, i.e. those identified in Table 23;
- Emitters that cannot, or do not, operate successfully within the conditions of their AEL;
- Emitters that are not regulated by an AEL, but emit pollutants identified to be of concern;
- Continuous emissions and accredited high emissions;
- Peak emissions in short time steps, and;
- Emitters of pollutants identified by multilateral environmental agreements that are ratified by South Africa.

5.3.4 Identifying and prioritising areas of concern

Air quality areas of concern are all areas where the ambient air quality does not comply with the national ambient air quality standards². In order to establish an indicative list of areas of concern, the national department has conducted an initial assessment of the current air quality status of the metropolitan and district municipalities in South Africa based on available information. Although current available information does not allow for a conclusive identification of areas of concern, Table 24 reflects the outcome of this initial assessment.

The municipalities have been rated as either:

- **Acceptable** – generally good air quality
- **Potentially Poor** – air quality may be poor at times or deteriorating
- **Poor** – ambient air quality standards regularly exceeded

The information used to rate the air quality status has been gathered from a number of different sources and include the following:

- The ambient air quality standards contained in Schedule 2 of the AQA;
- The draft State of Air Report (DEAT, 2007);
- NAQMP Phase II Project Report – Summary of Ambient Air Quality Monitoring in South Africa (DEAT, 2006);
- Discussions with national, provincial and municipal air quality officials;

² In terms of Section 63 of the AQA -Transitional provision regarding ambient air quality standards, until ambient air quality standards have been established in terms of section 9, 10 or 11, the ambient air quality standards contained in Schedule 2 apply.