



POLLUTION CONTROL AND RISK MANAGEMENT

To manage strategic planning, development, implementation, and monitoring of policies, programmes, projects, and overall coordination of Pollution Control and Risk Management (PCRM) to achieve the goals of National, Provincial and Local Government in terms of the provision of National, Provincial and Council policy, legislation, norms, and standards.

1. Air Quality Management

The Constitution of Republic of South Africa Act No. 108 of 1996 provides the legal basis for allocating powers to different spheres of government and thus, institutional regulation of pollution. Part B of Schedule 4 of the Constitution lists air pollution as a local government mandate to the extent set out in Section 155 (6) (a) and (7).

In terms of the National Environmental Management: Air Quality Act (Act No. 39 of 2004) herein referred "NEMAQA" each Municipality must include in its IDP contemplated in Chapter 5 of the Municipal Systems Act, an AQMP as well as describe how the relevant Municipality will implement the projects and programmes detailed in the Implementation Plan. Furthermore, Metropolitan Municipalities are mandated with implementing the atmospheric emissions licensing system referred to in Section 21 of the NEMAQA and must for this purpose perform the functions of Licensing Authority. In terms of Section 8 of the NEMAQA, the Municipalities are also mandated to monitor ambient air quality.

The objectives of the NEMAQA are to protect the environment by providing reasonable measures to protect air quality and to prevent air pollution, while giving effect to Section 24 (b) of the Constitution in a holistic approach to air quality management (**Figure 1**).



Figure 1: Air quality management structure.

1.1. Air Quality IDP Programme

Air Quality Management IDP Programme - Improve compliance monitoring of Air Quality Management programmes in accordance with the National Environmental Management: Air Quality Act.

- 4B.12 Total number of days in which air quality is deemed to be good (As measured at the NAQI stations) (during a calendar year).
- 4B.13 Percentage of Atmospheric Emissions Licence application received and issued within a 60 days legislative timeframe.
- 4B.14 Percentage of Air Quality monitoring stations providing adequate data over a reporting year (ENV1.12).

1.2. Air Quality Management Projects

1.2.1. Air Quality Management Planning

The eThekweni Metropolitan Municipality has been proactive in accepting these challenges and has since been actively engaged in various programs to manage air quality. One of these programmes has now culminated into the current AQMP for the City. During the process of drafting the AQMP, an extensive public participation process was followed. The inputs received from the various communities, organizations, industries, and authorities that have participated in the public consultation process has shaped and informed this plan.

The AQMP has been developed to comply with the NEMAQA and more specifically, to provide guidance on Air Quality Management (AQM) in the city. Air quality, for this purpose, is defined according to NEM: AQA to include odour and noise, and addresses all sources of air pollution i.e., point, area, and mobile sources. The AQMP addresses the gaps and needs identified in the baseline assessment and is regarded as the Multi-Point-Plan for AQM activities. This plan logically and holistically provides organisational direction and drive to communities, government, and industry about AQM in the eThekweni Municipality.

The following projects are administered in the Air Quality Management Planning section.

- Dust Management
- Odour Management
- C40 Air Quality Projects
- Air Quality Education and Awareness
- Environmental Impact Assessment
- Air Pollution Impacts Mitigation
- Air Quality Technical Support

1.2.2. Air Quality Authorization

The eThekweni Municipality has an obligation under NEMAQA for activities that result in atmospheric emissions which has a negative effect to the environment, listed in GN893 of November 22, 2013.

The Municipality is regarded as the Licensing Authority responsible for processing all atmospheric emission license (AEL) applications, renewals, variations, transfer, and review of AEL's. All applications as made on an online Portal called South African Atmospheric Emissions licensing and Inventory Portal (SAAELIP) at a prescribed fee, regulated by the regulations prescribing the AEL processing fee. The AEL fees are processed through the eThekweni Municipality' RMS.

1.2.3. Ambient Air Quality Monitoring and Information

In terms of Section 8 of the NEMAQA, the Municipalities are mandated to monitor ambient air quality. There are sixteen (16) ambient air quality monitoring stations in the eThekweni Metropolitan Municipality area which are operated and maintained by Health Unit.

The ambient air quality information component of South African Air Quality Information System (SAAQIS) is a dynamic online system with two main modules for managing ambient air quality stations, data and reporting of information to the public and a module for managing all assets procured by government for the purpose of effectively monitoring ambient air quality. All ambient monitoring data collected for the purpose of assessing compliance with the NEMAQA by national, provincial, district/metropolitan and local municipalities shall be made available to SAAQIS for dissemination to the public (<https://saaqis.environment.gov.za/>).

The SAAQIS provides tools for user to manage ambient monitoring data (importing, verifying, validating, analysing, exporting and reporting). The data management application provides users with ability to perform quality assurance and quality control (QA/QC), data storage and presentation/reporting routines online in order to meet monitoring and reporting requirements for ambient data. The asset management system allows for users to create and manage ambient

monitoring assets inventory (instruments and spares), as well as managing/reporting stations operations such as calendar of visits, activities during visits (instrument calibration and maintenance, repairs, and any other station operations). The SAAQIS ambient monitoring component is designed to meet requirements of ISO/IEC 17025 and is used by monitoring networks as part of the quality system for SANAS accreditation.

In order to ensure integrity, quality and representativity of the ambient monitoring data, ambient air quality monitoring for compliance purposes shall be conducted according to prescribed norms and standards.

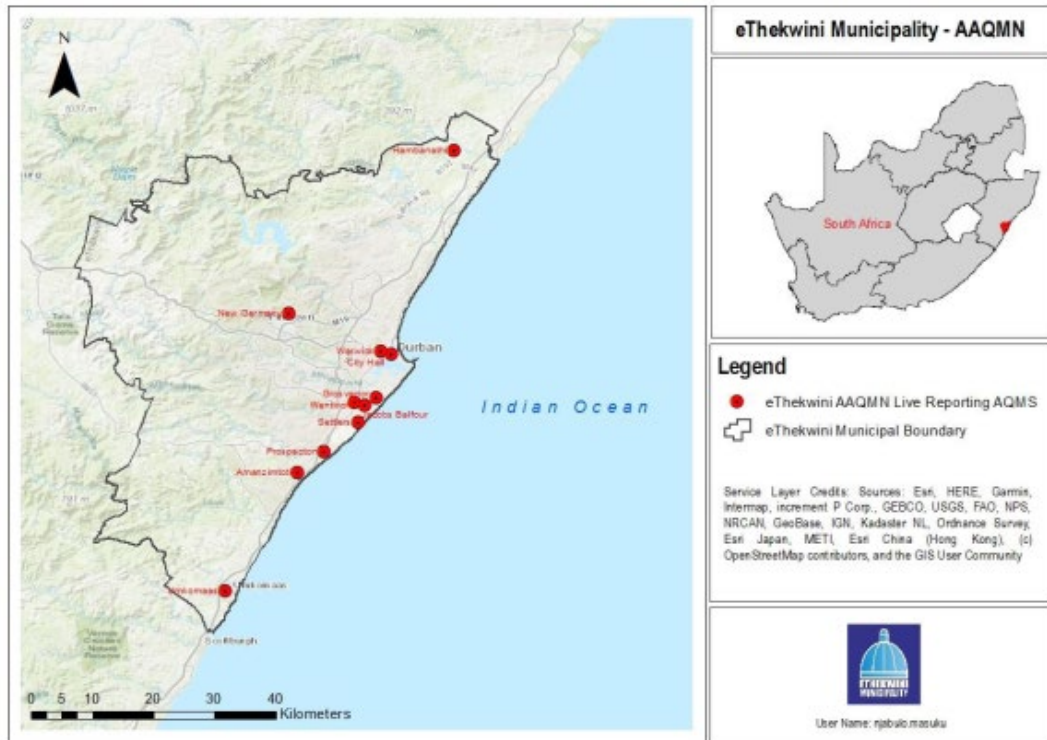


Figure 2: A map of continuous ambient air quality monitoring stations.

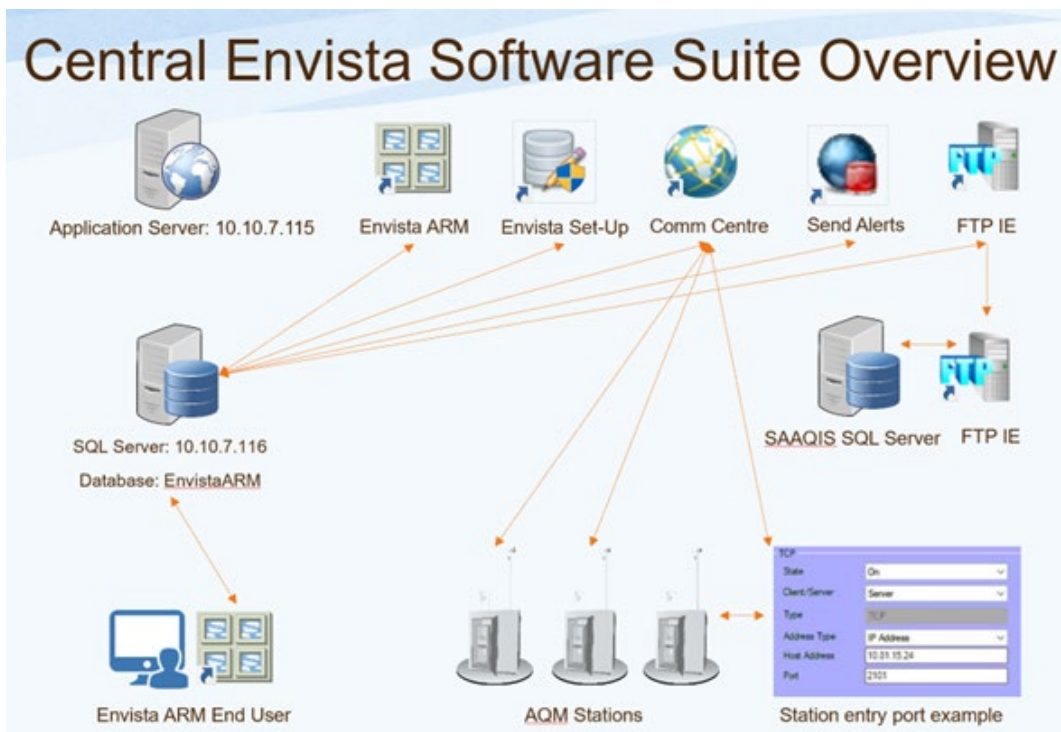


Figure 3: Schematic diagram of eThekweni Municipality real-time reporting into SAAQIS system.

The National Air Quality Indicator (NAQI)

There are four (4) NAQI stations in eThekweni Municipality, and these are City Hall – Durban, Ganges, Settlers and Wentworth. NAQI is a methodology for calculating and ascertaining an indicator to monitor the state and trend of air ambient quality in South Africa.

The NAQI is used by a range of stakeholders from air quality managers to the general public. The main purposes of a NAQI are to:

- Inform the objectives of the NEMAQA (enhancement, protection, governance).
- Monitor national progress in implementing NEMAQA policy targets – towards national compliance.
- Provide an overall picture on the efficacy of air quality interventions.
- Provide a monitoring tool to measure the effects of policy responses.
- Serve as an environmental air quality indicator to assess the condition and reflect air quality trends nationally.
- Provide a tool to support policy-makers in air quality management, policy development, prioritisation and evaluation; and
- Serve as a communication tool on air quality matters by simplifying complex atmospheric observations to plots and figures easily understood by the public.

1.2.4. Compliance and Enforcement

Manage compliance and enforcement with the following Acts:

- National Environmental Management Act 107 of 1998

- National Environmental Management: Air Quality Act 39 of 2004
- National Environmental Management: Waste Act 59 of 2008
- EtheKwini Air Quality Management By-Law 2018

Objective

- Industrial Compliance and Enforcement.
- Pro-active Compliance Inspections/Enforcement Action.
- Provide technical comments on Environmental Impact Assessment (EIA).

2. Food Safety Support

For the effective management and administration of processes to ensure the provision and maintenance of a high-quality food safety management system across the eThekweni Municipality including the provision of food safety management support service in the sub districts in accordance with relevant legislation and departmental policy.

3. Monitoring and Evaluation

To design, manage and control quality management systems pertaining to PCRM including Environmental Health in the eThekweni Municipality.

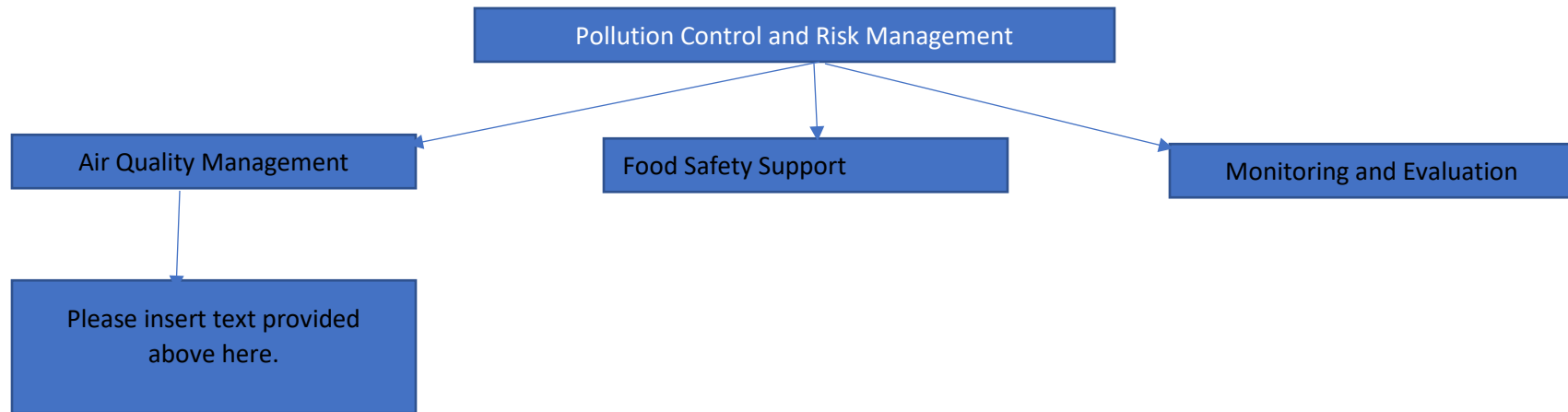
The Environmental Health Monitoring and Evaluation section plays a pivotal role in assessing and ensuring the overall health of the environment in a specific jurisdiction or area. It involves systematic collection, analysis, and interpretation of data related to environmental factors affecting public health. The section collaborates Pollution Control and Risk management in clouding Environmental Health in the identification of potential environmental hazards, monitors the impact of human activities on environmental quality, and evaluates the effectiveness of policies and interventions aimed at mitigating environmental health risks. By providing crucial information and insights, it guides strategic decision-making and policy formulation for improved environmental management and public health outcomes.

Air Quality Officer: Phathutshedzo Raphalalani

Contact Number:0313113575/0825408294

e-mail: phathu.raphalalani@durban.gov.za

Page Layout



NB.

- Pollution Control and Risk Management is an Icon under Health.
- Air Quality Management, Food Safety Support and Monitoring and Evaluation also three different icons under Pollution Control and Risk Management.