



# Overview of the draft 2015 AQMP for eThekweni

9 November 2015: Westville Civic Centre

12 November 2012: Old Durban Int. Airport

17 November 2015: Tongaat Town Hall



# Getting the best from today

- Cell phones on silent and only for emergency
- Tea, coffee as needed
- Look forward – improve
- No
  - Hogging
  - Frogging
  - Bogging



# Objective of the meeting

- Overview of the draft 2015 AQMP
- Provide opportunity for comment and discussion
- Outline the way forward regarding the finalisation and adoption of the 2015 AQMP



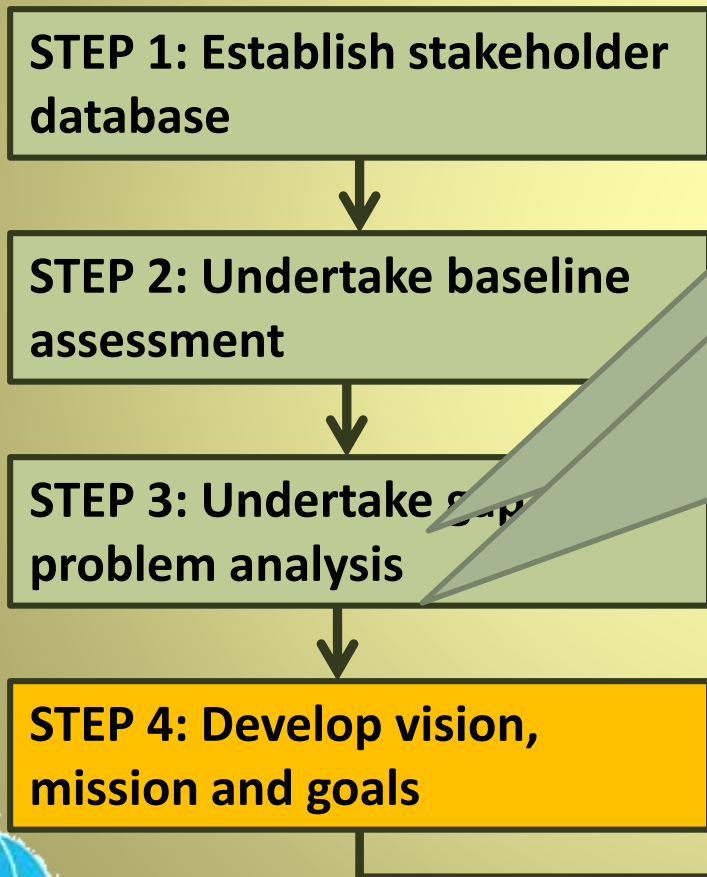
# Project background

uMoya-NILU Consulting (Pty) Ltd was appointed in July 2014 to review and update eThekweni's 2007 AQMP

- Phase 1: Status quo assessment
  - 11 months, planned completion end May 2015
- Phase 2: Revised AQMP
  - 6 months, start June 2015, completed Dec 2015



# The AQMP dev



- **Capacity challenges**
  - **Systems**
  - **Structure**
  - **Skills**
  - **Systems and tools**
  - **Incentives**
  - **Interrelationships**
- **Set the Overall Objective**
- **Draft goals and propose interventions**



# AQMP and Intervention Plan

A comprehensive 5-year plan for managing air quality in eThekweni Municipality, includes

- An assessment of the baseline situation wrt air quality and AQM capacity
- The identifications of gaps, issues and challenges
- An overall objective for the AQMP
- 8 goals to help achieve the overall objective
- An implementation plan that unpacks and actions the 8 goals
- Criteria for monitoring, evaluation and review of the AQMP



# Context of the Overall Objective

The following are recognised in the Overall Objective:

- i. AQM is a municipal responsibility and function
- ii. Effective AQM is underpinned by cooperative governance and stakeholder involvement
- iii. Ambient air quality is poor in some parts of the eThekweni Municipality and protection of air quality implies management to improve quality of life in these areas while maintaining the status quo in others



# Context of the Overall Objective

- iv. eThekweni is a key manufacturing hub that will continue to develop.
- v. AQM in the eThekweni Municipality is strategic with regards to future development.
- vi. There are co-benefits between AQM and Climate Change imperatives.





# Overall Objective of the 2015 AQMP

*22 July 2015*

*Ambient air quality in eThekweni is managed effectively and does not pose risks to human health*

*eThekweni Municipality manages ambient air quality to protect human and environmental health within a framework of sustainable development*



## Supporting definitions:

- *eThekweni Municipality* means the Health Unit's Pollution Control and Risk Management (PCRM) and supporting structures.
- *Manages* means carrying out all functions dictated by the National Framework for AQM (DEA, 2012a), the NEM: AQA and municipal air quality management bylaws through cooperative governance and active stakeholder engagement.
- *Ambient air* excludes air regulated by the Occupational Health and Safety Act (Act 85:1993).





## Supporting definitions (cont):

- *Protection of human and environmental health* refers to Section 24 (b) of the Constitution (Act No. 108 of 1998) that aims to enhance the quality of ambient air to secure an environment that is not harmful to the health and well-being of people.
- *Sustainable development* promotes justifiable economic and social development through the application of reasonable measures to reduce environmental degradation and pollution.



# Goals of the AQMP

- Goal 1 concerns compliance with the NAAQS
- Problem complexes: 22 July 2015:
- Goal 2 concerns the AQMP, inter-relationships strategy & planning

## ***Overall Objective***

*Thekwini Municipality manages ambient air quality to protect human and environmental health within a framework of sustainable development*

- Goal 8 addresses communication and awareness





# Goal 1: Ambient air quality is compliant with the NAAQS in eThekweni Municipality

*The focus is on appropriate interventions to achieve compliance with the NAAQS in areas where exceedances occur and to maintain the air quality status quo elsewhere, considering the principles of sustainable development.*

*Goal 1 also aims to answer questions on the impact of air pollution in eThekweni to inform decision making regarding current activities and proposed development projects*



## **Goal 2: The AQMP is incorporated municipal policy and planning**

*Recognition that political buy-in is important to the success of the plan and that the AQMP must be integrated into eThekweni Municipality's strategy and planning to ensure successful implementation*



# Goal 3: Municipal structure facilitates the implementation of the AQMP

*Recognition that the municipal structure and the structure of PCRMM, as well as roles, responsibilities and lines of communication need to be clearly defined for successful implementation of the AQMP*



# Goal 4: eThekweni Municipality has the necessary skills to implement the AQMP

*Goal 4 refers to the skills needed by incumbent staff to perform their mandated functions and addresses career development through training and other mechanisms*





# **Goal 5: eThekweni Municipality has the necessary incentives to implement the AQMP**

*Goal 5 concerns securing adequate funds for the function and incentivising staff through motivational policies at an organisational and individual level to achieve the overall objective of the AQMP*



# Goal 6: eThekweni Municipality has the necessary systems and tools to implement the AQMP

*Enhancement of existing systems and tools and developing others to achieve the overall objective of the AQMP.*

*Included are emission inventory, ambient monitoring, dispersion modelling, information management, compliance and enforcement and complaints management*



# **Goal 7: AQM in eThekweni Municipality is supported participatory decision making**

*Acknowledges that AQM is interdisciplinary and requires participatory decision making, which is dependent on the relationships within the municipality, other spheres of government and other stakeholders*



# Goal 8: Awareness of AQM in eThekweni Municipality is open and transparent

*Aims to update stakeholders on progress with AQMP implementation, to improve communication amongst stakeholders, and improve general understanding of air quality in the municipality*



# Implementation Plan

- Realisation of the *Overall Objective* of the AQMP over its 5-year lifespan is guided by the *Implementation Plan*.
- The *Implementation Plan* addresses each *Goal* by defining outcomes-based *Objectives* and the *Activities*.
- The *Implementation Plan* provides strategic and structured input to the annual business and operational planning.
- SMART principles apply, i.e. Specific, **M**easureable, **A**ssignable, **R**ealistic, **T**ime related



# Implementation Plan

- Each goal comprises an Implementation Table, i.e.:

Objectives	Activities	Responsibility	Timeframe	Indicators	Cost
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Each goal comprises SMART objectives from all aspects

Each objective should be understood

Responsible work

Indicative cost for each activity provide guidance to annual planning for operational and capital budgets

- No additional cost: Budgeted OPEX & CAPEX
- No cost because of AQMP as legislated requirement
- Additional cost, i.e. over budgeted OPEX & CAPEX

- Year specific, e.g. Year 1
- Routine (daily, monthly, annual etc)



# Implementation Plan

Goal	Objectives	Activities
1	10	51
2	4	11
3	2	5
4	8	33
5	2	10
6	7	29
7	3	12
8	2	11
	<b>38</b>	<b>162</b>



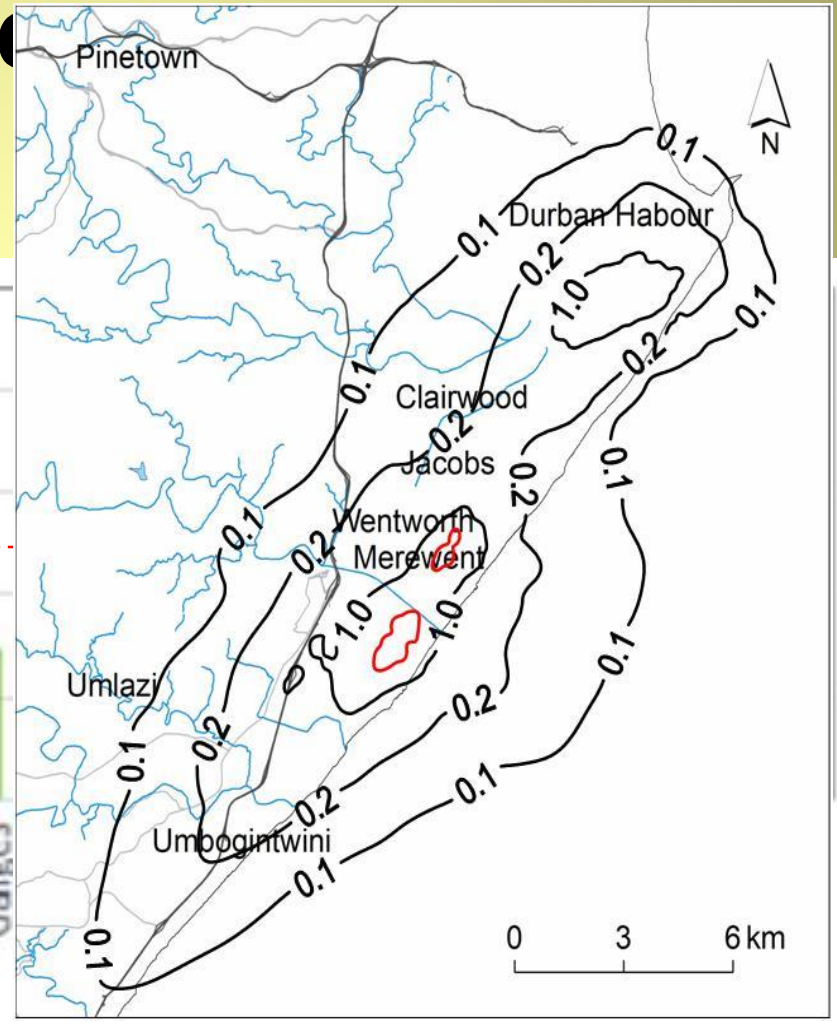
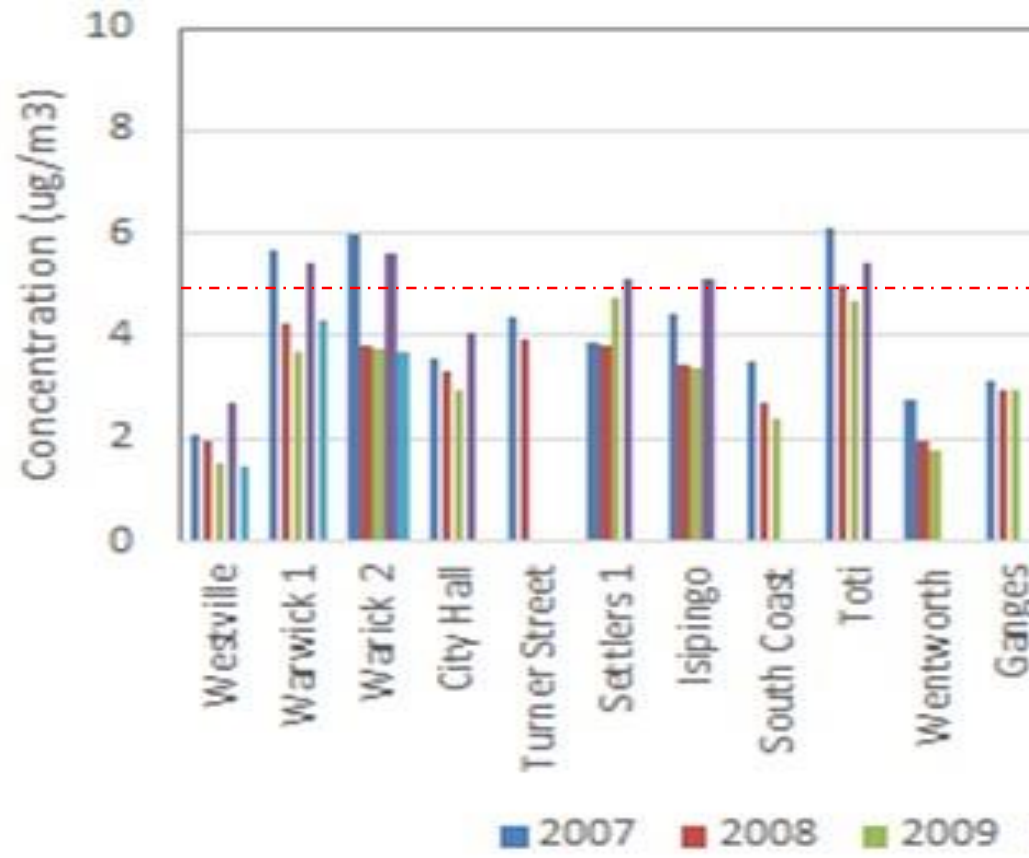
# Goal 1: Ambient air quality complies with the NAAQS

- i. Ambient concentrations of air pollutants comply with NAAQS in Umkomaas
- ii. Ambient benzene concentrations comply with the NAAQS
- iii. Ambient benzene concentrations comply with the NAAQS in the refinery corridor
- iv. Dustfall at Coedmore complies with dustfall limits for residential areas
- v. Impacts of sugarcane burning on ambient air quality are reduced
- vi. Impacts of odour are reduced in Thekwini
- vii. The health baseline in the Southern Basin is confirmed
- viii. Traffic emissions are mitigated through sustainable interventions
- ix. Background concentrations of pollutants in Thekwini are understood
- x. Potential impacts of development on ambient air quality are mitigated





# Monitored annual background concentrations



0 3 6 km



# Obj: Ambient benzene concentrations in Jacobs comply with the NAAQS

Activity	Responsibility	Time frame	Indicator	Cost
1.2.1 Verify that the latest emission reduction measures at industries in Jacobs result in compliance with the NAAQS	AQO, AEL TL, Industry representative	Year 1	Verification reports	Legislative requirement
1.2.2 Monitor implementation of the emission reduction measures through AEL compliance monitoring	AQO, AEL TL	On-going	Compliance monitoring reports	Legislative requirement



# Obj: Ambient benzene concentrations comply in the refinery corridor

Activity	Responsibility	Time frame	Indicator	Cost
1.3.1 Augment existing information on benzene emissions from the Petrochemical Industry in the emission inventory	PCRM Emission TL, Industry representatives	Year 1	Emission inventory complete	Operational budget
1.3.2 Estimate emissions of benzene from the Southern Treatment Works	PCRM Emission TL, EWT	Year 2	Emission inventory complete	Operational budget
1.3.3 Use the dispersion model to apportion ambient benzene concentrations from contributing sources	AQO, Industry representatives, PCRM Modelling TL	Year 2	Source apportionment report	Operational budget



# Obj: Ambient benzene concentrations comply in the refinery corridor

Activity	Responsibility	Time frame	Indicator	Cost
1.3.4 Identify interventions to reduce benzene emissions from the Petrochemical Industry	AQO, Industry representatives, PCRM Emission TL, DCMR cooperation	Year 2	Peer reviewed intervention report	Operational budget
1.3.5 Identify interventions to reduce benzene emissions from the Southern Treatment Works	AQO, EWS	Year 2	Peer reviewed intervention report	Operational budget
1.3.6 Enforce mechanisms to implement interventions for the Petrochemical Industry through the AEL	AQO, AEL TL Leader, Industry representatives	Year 2	Amended AEL	Legislative requirement



# Obj: Ambient benzene concentrations comply in the refinery corridor

Activity	Responsibility	Time frame	Indicator	Cost
1.3.7 Monitor implementation of those interventions for the petrochemical industry through AEL compliance monitoring	AQO, Permitting officer	Ongoing	Compliance monitoring reports	Legislative requirement
1.3.8 Recommend implementation of findings of intervention report at Southern Treatment Works	AQO, EWS	Year 3	Action of intervention report recommendations	Operational budget
1.3.9 Monitor progress with implementation of interventions at Southern Treatment Works	AQO, EWS	Ongoing from Year 3	Progress report	Operational budget



# AQMP monitoring, evaluation & review

- Monitoring progress with implementation of the AQMP is an on-going process
- Evaluation is annual and aims to measure the success of implementation of the AQMP that consists of two assessments
- Review is after 5-years and assesses any change in the baseline , validation of the overall objective and goals



# Discussion on the draft 2015 AQMP



# Way forward

- Draft AQMP report will be available from 18 November 2015
- Available for download: [www.projects.co.za/aqmp](http://www.projects.co.za/aqmp)
- Comment period to Wednesday 9 December 2015
- Comments and response report will follow comment closure
- Finalise the 2015 AQMP and submit to eThekweni for adoption by Council





**Thanks for your on-going  
contribution**