

# **CAPE AGULHAS MUNICIPALITY AIR QUALITY MANAGEMENT PLAN**

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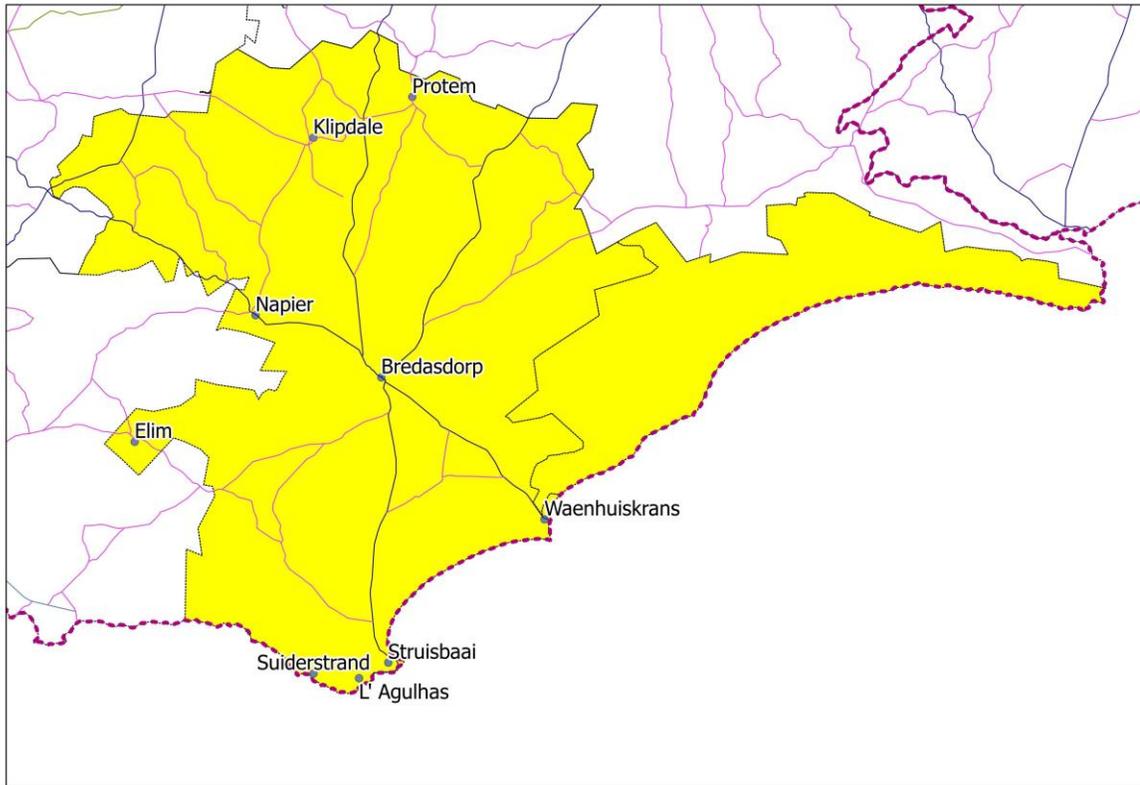
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## AIR QUALITY MANAGEMENT: CAPE AGULHAS MUNICIPALITY

### FOREWORD

Cape Agulhas Municipality situated in the Overberg is a district in South Africa to the east of Cape Town beyond the Hottentots – Holland Mountains. It lies along the Western Cape south coast between the Cape Peninsula and the region known as the Garden route to the east.



The landscape is dominated by gently to moderately undulating hills enclosed by mountains and the ocean. The flat and level coastal plain rises from sea level to 100m.

The area has a strong agricultural sector which comprises 11.6 per cent of all agricultural production in the Western Cape. Table 1 below illustrates the real and projected population growth in the district for the period 1996 to 2015.

Table 1: Population growth, 1996 – 2015

Area	1996	2001	Rate %	2007	Rate %	2015 Projection	Rate %
Overberg District Total	159 033	205 945	5,9	237 555	2,6	270 202	1,7
Cape Agulhas	22 011	26 715	4,3	30 231	2,2	33 897	1,5

1996 and 2001 Source: Statistic SA

2006 and 2010 Source: Centre for Actuarial Research, UCT

Provincial Treasury Socio- Economic Profile for Overberg District and Local Municipalities, 2007

## INTRODUCTION

### 1.1 PURPOSE OF THE PLAN

The Air Quality Management Plan for Cape Agulhas Municipality has been developed to comply with the National Environmental Management : Air Quality Act 39 of 2004 (AQA) requires Municipalities to introduce Air Quality Management Plans (AQMP) that set out what will be done to achieve the prescribed air quality standards. Municipalities are required to include an AQMP as part of its Integrated Development Plan. This plan provides a logical and holistic approach for communities, industry, government to manage air quality in the Cape Agulhas Municipal area.

As detailed in the AQA a local municipality has two primary statutory obligations with which it must comply and these obligations are:-

- designate an Air Quality Officer (AQO)
- incorporate an Air Quality Management Plan in its IDP

The Air Quality Management function within the Cape Agulhas Municipality resolves under the Building Control Section of the Community Services Department, with the Building Control Officer designated as the Air Quality Officer. Before the promulgation of the Air Quality Act 39 of 2004 permits used to be issued by the National Government in terms of the Atmospheric Pollution Prevention Act, 1965( Act 45 of 1965). The district and the local municipalities had little or no input in relation to the issuing of these permits. In the district and local municipalities air quality issues were restricted to the investigation of complaints and dealing with the complaints in terms of local by - laws and land – use planning. This resulted in a lack of skills in the field of air quality management at municipal level. The Air Quality Management Plan must acknowledge

these shortcomings and objectives, identified within the plan and will focus on addressing issues of capacity building

This Air Quality Management Plan for Cape Agulhas Municipality has thus been developed to comply with the National Environmental Management: Air Quality Act, 39 of 2004 and more specifically to provide guidance on Air Quality Management in the municipal area. Air quality is defined to include noise and odour and addresses all sources of air pollution, i.e. point, area and mobile sources.

## 1.2 THE AQMP DEVELOPMENT PROCESS

Public participation and cooperative governance is essential for the development of an AQMP development process. An AQF was established between the district municipality and the 4 local municipalities to provide technical guidance , management and administrative guidance, and to assessed the state of air quality and the institutional capacity for air quality management in Cape Agulhas.

## 2. VISION OF THE AIR QUALITY MANAGEMENT PLAN

To be a municipality where the constitutional right of all human beings to clean air is maintained to such a standard where economic and social development will flourish without jeopardizing the environment. "Clean and healthy air for all".

## 3. MISSION OF THE AIR QUALITY MANAGEMENT PLAN

"To ensure the effective and consistent implementation of sustainable air quality management practices, by to progressively achieve and efficiently maintain clean and healthy air in Cape Agulhas". The vision captures the focus of Cape Agulhas Municipality, the community and other stakeholders in the roll out of the AQMP, to ensure to be effective and maintain implementation of sustainable air quality management practices throughout Cape Agulhas and progressively achieve air quality goals.

## 4. GOALS OF THE VISION AND MISSION

The Four goals of the AQMP to support the vision and mission of Cape Agulhas Municipality, with each goal addressing the different aspects of the vision and are underlined by the objectives to achieve them.

1. To ensure effective and consistent air quality management.
2. To continually engage with stakeholders to raise awareness with respect to air quality.

3. To ensure effective and consistent compliance, monitoring and enforcement.
4. To support climate change protection programmes, including promoting the reduction of greenhouse gas emissions

## 5. SUMMARY OF STATUS QUO OF AIR QUALITY MANAGEMENT IN CAPE AGULHAS

### 5.1 Current institutional capacity of CAM

At Cape Agulhas Municipality the Building Control section situated within the Community Services Directorate will be responsible for air quality management.

Cape Agulhas Municipality has appointed an Air Quality Officer (Building Control Officer) , and one other member but has not appointed an air quality management committee. It is not foreseen that any additional staff structures will have to be established to implement this plan for the immediate future.

### 5.2 Air pollution sources in the Overberg

- Industrial operations especially clay brick manufacturing
- Agricultural activities such as crop burning and spraying
- Biomass burning (veld fires)
- Domestic fuel burning (wood and paraffin)
- Vehicle emissions
- Waste treatment and disposal
- Dust from unpaved roads
- Other fugitive dust sources such as wind erosion of exposed areas
- Lime dust

There are few sources of air pollutants in Cape Agulhas. The ambient air quality is generally good. However, emissions from industrial boilers are likely to result in local areas of elevated concentrations of air pollutants. Ambient particulate concentrations are likely to be high in low – income residential areas where wood is used as primary fuel source and activities such as refuse burning occur and Pesticide spraying of crops. Motor vehicle congestion in holiday towns and results in elevated ambient concentrations of particulates and NO<sub>x</sub> (Nitrogen Oxides) at times. Seasonable agricultural and Biomass burning also occur and had a low impact on air quality.

### 5.3 Air quality monitoring

Air quality monitoring was up to date addressed by Province and the District Municipality. An overall perspective of the sample analysis indicated that the pollution

levels are low within Cape Agulhas, and that they will handle it in accordance to the AQMP.

## 6. GAPS AND PROBLEMS

- The divisions of roles and responsibilities between local and district municipalities are not clearly understood or have not been accepted by certain local municipalities and this hampers cooperative governance and the implementation of the function.
- Until consensus has not been reach regarding the abovementioned, the ODM will accept responsibility for the licensing of listed activities and the enforcement of legislation will be the local municipality's responsibilities.
- Not all local municipalities have appointed Air Quality Officers and this hampers communication and accountability.
- Air quality management requires cooperation from various disciplines within local government which includes amongst others traffic, municipal health, fire and rescue, town planning, engineering, building control etc. The successful implementation of air quality management is thus strongly dependant upon cooperation and communication among all sectors and all local governments within the district.
- Inadequate financial provision specifically earmarked for air quality management by all municipalities within the district.
- The availability of suitably skilled human resources also remains a challenge.
- The idea or perception "Cape Agulhas's air is clean, so why is air quality management necessary" makes it difficult to gain the attention of decision makers as well as the general public.
- No Air Quality by-law has been promulgated. (in progress)
- Personnel capacity building (EMI course)
- Town planning and road planning do not always consider the impact of developments on air quality.

## 7. GOALS

- Effective and consistent air quality management
- Promote communication in relation to air quality management
- Effective and consistent compliance monitoring and enforcement
- Develop and maintain institutional arrangement between the district and the local municipalities that support air quality management.
- Achieve and sustain acceptable air quality levels throughout the area

- Minimize the negative impact on human health and well – being and on the environment

## 8. OBJECTIVES

### 8.1 EFFECTIVE AIR QUALITY MANAGEMENT

- Build capacity in air quality management within Cape Agulhas Municipality
- To strengthen and build capacity in air quality management
- To promote cooperation amongst all spheres of government, business, industry and civil society
- To ensure adequate funding for the implementation of the AQMP
- To develop comprehensive education and communication mechanisms, strategies and programmes with respect to air quality
- Develop, implement and maintain an Air Quality Management System
- Establish an annual AQMP review process
- To promote environmental best practices and cleaner development technologies amongst all stakeholders
- To improve compliance monitoring and enforcement
- To promote continuous improvement with respect to compliance
- To ensure that health-based air quality standards are attained and continually met
- To reduce ozone depleting substances and greenhouse gas emissions, in line with national and international requirements
- Established an Emission Reduction Strategy
- To develop and implement an effective Atmospheric Emissions Licensing System (will be done by ODM).

### 8.2 PROMOTE COMMUNICATION IN RELATION TO AIR QUALITY MANAGEMENT

- Establish an Air Quality Forum in order to ensure proper communication between the District municipality, local municipalities, provincial government, business and industry as well as interested and affected parties in Cape Agulhas municipality.

### 8.3 COMPLIANCE MONITORING

- Establish a compliance monitoring system within the Cape Agulhas municipality.
- Ensure continuous compliance with the Atmospheric Licensing Conditions.(ODM)
- Promulgation of Air Quality by-law. ( in progress)

## 9. MONITORING

Monitoring and reporting on progress with regard to the implementation of the AQMP is a key factor in maintaining momentum for the roll – out of interventions as well as providing a way to update key stakeholders.

## 10. EVALUATION

Continuous evaluation is an essential element of the AQMP implementation as it allows for a thorough assessment of the AQMP including the shortcomings and strength evident in implementation. Evaluation is an internal mechanism to measure the performance with regard to the implementation of the AQMP. The evaluation process will assess the AQMP implementation outcomes, which are based on the AQMP indicators. Annual evaluation of the AQMP implementation will be conducted. Monitoring and evaluation will be the responsibility of the Air Quality Management Committee.

## 11. REVIEW

The AQMP review comprises a review of the AQMP and the implementation and addresses further developments in the science, as well as the management of air quality. The review period will be every five years. The definition of the review period is subject to funding and political cycles, as well as implementation outcomes. Therefore, an element of elastic is necessary. The internal revision is communicated to stakeholders through a limited public participation process, followed by a further iteration and publication.

## 12. IMPLEMENTATION PLAN

Timeframes: Short-term (6-12 months); Medium-term (1-2 years); Long-term (3-5 years)				
GOALS	OBJECTIVES	TARGETS	ACTIVITIES	TIMEFRAMES
<b>Effective Air Quality Management</b>	Effective Air Quality Management	Build capacity in air quality management within the Building control section	With continuous training and development in air quality management in the Building control section	Continuous
	Develop, implement and maintain an Air Quality Management System	Compilation of a emissions inventory for CAM	Compile an emission inventory of all line sources	Medium
			Compile an emission inventory of all area sources	Medium
			Compile an emission inventory of all industrial sources	Short
		Air Quality monitoring agreement with Province	Engagements with Province to assist with air quality monitoring within the district	Short – Long
	Establish an annual AQMP review process	Review systems, structures and processes to review progress in relation to the AQMP.	Establish a committee to review the AQMP	Short – Medium
			Establish a comprehensive complaints register.	Short
	Establish an emission	Industries	Electronic database of all small industries to be regularly updated	Short – Medium

	reduction strategy.		Create awareness campaigns around the negative health impacts of domestic fuel burning	Continuous
			Encourage the distribution of alternative forms of domestic energy such as LPG, LSF, gas, methanol, etc	Continuous
		Traffic	Review vehicle emissions database with updated traffic count data as these become available	Medium – Long
			Promote comprehensive vehicle emissions monitoring and diesel vehicle testing programmes in congested areas	Continuous
			Compile a detailed assessment of the vehicle fleet in CAM including information on vehicle numbers, type, age and fuel usage.	Long
		Agriculture	Obtain information on the quantity of pesticides used in the District	Continuous
			Promote the safe and responsible use of pesticides throughout the district.	Medium – Long
			Promote safe and responsible agricultural burning practices.	Short – Medium
		Biomass Burning	Liaise with fire services to assist in air pollution control	Short – Medium
			Obtain information from local Fire Departments to maintain and update a database of the locations of veld fires and the extent of the areas burnt	Short – Medium
			Maintain a database for regional scheduled burn areas that are published for agricultural and management fires	Short – Medium
		Waste Treatment and Disposal	Develop an emissions inventory of waste burning sources (incinerators, sewage and waste water treatment works)	Short – Medium
			Ensure all operating incinerators are permitted	Continuous
			Maintain a current database of permitted and non-permitted landfill sites	Continuous

<b>Promote communication in relation to Air Quality Management</b>	Establish an air quality forum in order to ensure proper communication between the Overberg district, Local municipalities, Provincial government, business and industry as well as interested and affected parties in the 4 sub-district of the Overberg district municipality.	A committee/forum at a sub-district level representing all interested and affected parties.	Establishment and management of an Air Quality Officers Committee/ Forum	Short-term
		Clearing up the division of functions between the 4 B municipalities and District Municipality	Discussions on the division of functions between the 4 B municipalities and the Overberg district municipality	Short – Medium
		Regular reporting and discussions on issues of AQM.	Compile a annual state of air report for the district	Annually
<b>Compliance monitoring</b>				
	Develop an Air Quality by-law	Build capacity to ensure Air Quality compliance in the Overberg	Allow EHP's to investigate and maintain a good Air Quality standard	Medium - Long