

Date: 30 May 2008 (revised)
 Contact person: Dr. T. A Fasheun

PROVINCE OF KWAZULU NATAL

Dept of Agriculture and Environmental Affairs

Directorate: Environmental Planning and Coordination Services

Extract from Approved Business Plan to show DANIDA - Supported UEM
 Outputs and Budgets

1 APRIL 2008 TO 31 MARCH 2009

UEMP 2008 Budget Lines: (Approved PSC # 8)

AIR QUALITY: Norms and standards guidelines + legislative frameworks on burning of sugar cane in KZN	R 150 000
PLANNING: Development of EMF in Umhlathuze (2006 roll over)	R 490 000 (RO)
WASTE MAN: 7 district IWMPs (2006 roll over)	R 500 000 (RO)
WASTE MAN: Provincial HWMP	R 500 000
<u>ADDITIONAL AIR QUALITY: Conduct a health study in Umhlathuze (in principle approved PSC # 9)</u>	R 1 050 000
<u>TOTAL 2008 – 2009 including roll over (revised 080604)</u>	R 2 690 000

UEMP 2009 Budget lines: (not discussed / approved at PSC)

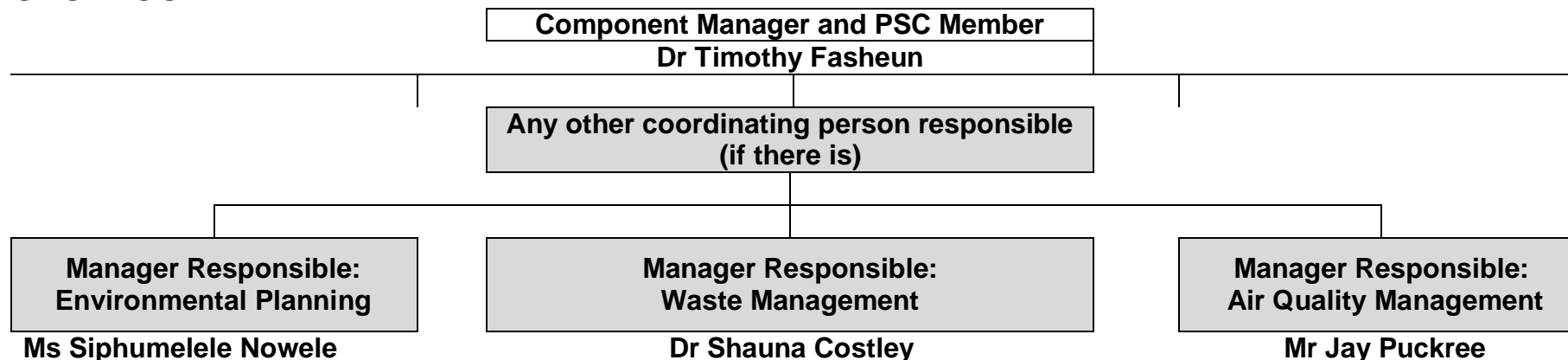
WASTE MANAGEMENT: **Provincial IWMP**

R 500 000

1. GENERAL DESCRIPTION

1.1 NAME OF DIRECTORATE / DEPARTMENT: Environmental Support Services

1.2 ORGANOGRAM



1.3 NAMES OF MANAGERS RESPONSIBLE FOR REPORTING AND SIGNING OFF ON UEM FUNDS

POST	NAME OF INCUMBENT	CONTACT DETAILS		
		Tel:	Mobile:	e-mail
Manager: Environmental Planning and Co-ordinating Services	Dr. Timothy Fasheun	033 3559621	082 446 7112	fasheunt@dae.kzntl.gov.za
Deputy Manager: Planning and Coordination	Ms Siphumelele Nowele	033 355 9689	082 4618810	Siphumelele.Nowele@dae.kzntl.gov.za
Deputy Manager: Waste and Chemicals Management	Dr. Shauna Costley	033 355 9419	082 806 2662	Shauna.Costley@dae.kzntl.gov.za
Deputy Manager: Air quality	Mr. Jay Puckree	033 355 9145	082 337 7326	puckee@dae.kzntl.gov.za

2. ACTIVITIES

Programme Development Objective is:

“Sustainable and poverty-oriented environmental management of urban areas in South Africa”.

Component One Development Objective is:

“National and provincial framework for pro-poor integrated urban environmental management operational.”

Component One Immediate Objective is:

“National and Provincial governance institutional capacity for Urban Environmental Management enhanced.”

The outputs identified to support the achievement of the above agreed objectives are as follows: (These eight outputs are taken from the Component Document - Choose the outputs relevant to your department and delete the rest):

- 1. Framework in place for integration of Urban Environmental Management in planning**
- 2. Integrated Urban Environmental Management implemented in KwaZulu-Natal province**

THEMATIC AREA: AIR QUALITY

UEM-2008 - 2009 BUDGET LINE:

Conduct a Health Risk Assessment in Richards Bay
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R 1 050 000,

Key Performance Area	Key Performance Indicators	Targets for 2008/2009	Key activities	Time Frames for delivery in 2008/2009	Department Budget R 600 000	Danida Budget
Conduct a Health Study in Richards Bay	Devise Terms of Reference for the Health Study Initiate tender process	Draft study at the end of July 2009	Draft TOR for AQ consultant Setting up of Task Team (Gov + Ngo) + Submission Advertise Tenders: 1) AQ monitoring system equipment + training 2) AQ consultant	June 2008 July 2008		R 50,000
	Health Study indicators					
	Outcomes of Health Study	First draft study on <i>Health Risk Assessment</i> end of July 2009	Tender board evaluation: 2) AQ monitoring system equipment + training 3) AQ consultant	Aug / Sept 2008	Departmental Resources	
	Identify Project Team Appointment of service providers	<i>Final study</i> Nov 2009	Purchase of a mounted mobile air quality monitoring system + training (<i>This will include supply; delivery; installation and monitoring for a period of one year. Preferred equipment the street and e-samplers</i>)	Sept 2008		R 750,000
Health Study concluded + Air Quality Management plan developed and			This budget was approved in principle, but the following considerations should first be addressed 1) Proof of budget to maintain the AQMS in the long term 2) Has the renting from SABS (which has a far less cost than purchasing) of an AQMS			

Key Performance Area	Key Performance Indicators	Targets for 2008/2009	Key activities	Time Frames for delivery in 2008/2009	Department Budget R 600 000	Danida Budget
	reviewed		been considered, 3) has the shared use of the AQMS of eThekwini been considered ?			
			Data collection and preliminary assessment from health care centres in the catchments area	February 2009		R 250,000
			Data analysis by AQ consultant	April 2009	R 100, 000	
			First draft Report : Health Risk Assessment	July 2009	R 50,000	
			First Draft to be reviewed by Task Team: Final document submitted Development of appropriate Air Quality Management Plan for the catchments area	Nov 2009/ Dec 2009	R 450,000	

3 SIX-MONTHLY REPORTING AND MONITORING GUIDELINE TABLE

KEY RESULT AREA	KEY ACTIVITIES / OUTPUTS	PERFORMANCE MEASURES		PROGRESS / STATUS	EXPENDITURE	
		TARGET DATE	INDICATOR		Department Budget	Danida UEM Budget

PROJECT BACKGROUND: CONCEPTUAL DESIGN OF A HEALTH RISK ASSESSMENT IN RICHARDS BAY

BACKGROUND

The Richard's Bay area is considered a heavily polluted area and there are concerns from the public that the prevalence of respiratory symptoms is excessive and related to the industrial emissions in the area. In addition, during the TATA Steel EIA Appeal process in 2006, the MEC at the time, Prof Gabriel Ndabandaba stated that DAEA would embark on a form of Health Study in the Richards Bay area. The study area will be defined in partnership with the uMhlathuze Municipality, the Richards Bay Clean Air Association and other Interested and Affected Parties.

PROBLEM STATEMENT

- *To describe the range of ambient exposures and to assess the potential risks posed by such exposures to the health of the community in the Richards Bay ("the health risk assessment")*

PURPOSE OF THE STUDY

- To establish that the health status of children and adults living in the Richards Bay area and also evaluating the health status of the communities in the north part of the uMhlathuze Municipality, the latter being the controlled area.
- To determine the relationships between outdoor air pollution, these health outcomes and the quality of life within these communities;
- To identify the sources of pollutant precursors to respiratory problems in the study area

OBJECTIVES OF THE STUDY

1. Conduct a health risk assessment and identify the relationships between air pollutants and health effects in the study area
2. Identify and develop indicators that effectively communicate outcomes;
3. Assess the policy and decision making framework that can be used to guide development in a sustainable manner and ultimately to improve health outcomes and environment

AIMS OF THE STUDY

The primary end points are to define:

- Prevalence of Asthma
- Prevalence of respiratory symptoms.

- Major focus on respiratory outcomes related to air pollutants.
- Primary school children and adults from their households, representative of their communities will be invited to participate.
- Extra members of the sensitive subpopulations (children with asthma, the elderly) will also invited to participate.
- Regarding the” health risk assessment “to describe the range of outdoor pollutant exposures and to assess any risks posed by such exposures to the health of these communities.

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PROJECT TEAM

This will be comprise of persons from civil society; medical fraternity; epidemiologist and officials from the uMhlathuze Municipality; Etekwini Municipality, DAEA and DEAT and from the University of Zululand. The Project Manager shall be an official from DAEA.

The detailed Terms of Reference will be devised by the Project Team and the study design parameters will be conveyed to the Bidders at the Tender Briefing Process

METHODOLOGY

- The methodology will be determined by the institution tendering and a broad outline provided in the tender document.
- The people tendering for this trail will need to determine the size of the trial to give us a good chance in determining a significant difference between populations. In the tender document these calculations will need to be shown. The references for basic data used must be shown eg Assumed prevalence of Asthma in population of school children in RSA.
- An outline of the time and resources needed to complete the trial should be included;

Health Risk Assessment

1. To assess long term exposures to major air toxic pollutants, including volatile organics, trace metals, polycyclic aromatic hydrocarbons, dioxin/furans, polychlorinated biphenyls, and other pollutants in Richards Bay and a non-industrial comparison area.
2. To estimate risks of cancer outcomes and other systemic diseases that is attributable to ambient air pollutant exposures using modeling or mass balance.
3. To develop recommendations for the amelioration of any adverse health effects of environmental pollution within the Richards Bay community and elsewhere in the study area.

Environmental Monitoring

1. On-going monitoring of pollutants at various sites. Sites will be determined by the Project Team.
2. PM10, PM2.5, SO2, CO and (SO2, NO2 Passive Sampling) shall be monitored
3. VOC's, metals, carbon and dioxins monitored at selected sites
4. Any other pollutants as determined by the Project Team

TENDER PROCESS

- The institutions tendering for this study must have the necessary expertise and track record in conducting these trials. They must be independent of corporate or other influences
- A tender briefing session will be held to ensure that the Bidders are fully conversant with the goals and objectives of the study
- The Tender will be advertised in the news media and presentations will be made by Bidders to select the proffered service providers.