

National Toxicity Monitoring Programme

Phase 2 – Monitoring Systems Design and Development of an Implementation Plan

Background

The National Water Act specifically mandates the Minister to establish national monitoring systems that monitor, record, assess and disseminate information on water resources. To comply with this requirement of the Act and with Chapter 3 of the National Water Resources Strategy, DWAF is developing and implementing a series of national water quality monitoring programmes.

National Toxicity Monitoring Programme DWAF National Objectives

To measure, assess and report on a regular basis the status and trends of the nature and extent of,

first, potentially toxic substances in South African water resources (watercourses, groundwaters and estuaries), and, secondly, the potential for toxic effects to selected organisms

in a manner that will support strategic management decisions in the context of fitness for use of those water resources, be mindful of financial and capacity constraints, yet, be soundly scientific.

Contacts

Mr Lindela Tshwete and Dr Sebastian Jooste
Directorate: Resource Quality Services
Department of Water Affairs and Forestry
Private Bag X313
Pretoria 0001

Definitions

- *Toxicants* are chemical pollutants capable of exhibiting a toxic effect.
- A *toxic effect* manifests as an impairment of the activity of an organism or cellular or sub-cellular system.
- *Target organisms* potentially include humans, other mammals, fish, invertebrates and plants.

Study Team

Name	Task	Phone no	E-mail
Dr Ralph Heath	Project coordinator Leader of task 3	011 726 7027	ralphh@phd.co.za
Dr Kevin Murray	Leader of tasks 7, 8, 9 and 11	<u>012 998 4059</u>	kmurray@mweb.co.za
Laetitia Slabbert	Leader of tasks 6	<u>012 8413953</u>	LSlabber@csir.co.za
Petrus Matji	Leader of task 4		mpmatji@mweb.co.za
Bennie Haasbroek	Leader of tasks 2	<u>012 3368360</u>	haasbroekb@dwaf.gov.za
Ansie Burger	Leader of tasks 10	<u>027 4822246</u>	ansie_burger@hotmail.com
Carl Schoeman	Leader of tasks 5	016 421 5150	cschoema@randwater.co.za
Dr P Kempster	DWAF	012 808 0374	Kempsterp@dwaf.gov.za
Dr S Jooste	DWAF	012 808 0374	joosteS@dwaf.gov.za
Dr A Kuhn	DWAF	012 808 0374	kuhna@dwaf.gov.za
B.Madikizela	DWAF	012 808 0374	madikib@dwaf.gov.za
L Tshwete	DWAF	012 808 0374	tshwetel@dwaf.gov.za

Project deliverables

The ultimate aim of the project for which this proposal is submitted is to execute selected tasks required for the prototype design of the national toxicants monitoring programme. Each task will be executed in such a way that it complements the remaining design considerations to form a complete practical and cost-effective prototype monitoring design that can be tested in a series of pilot studies.

Specific objectives of these tasks addressed in this proposal are as follows:

No.	TASK
1	Project co-ordination
2	Overall design framework
3	Monitoring variable selection
4	Monitoring site selection
5	Data generation (WRC funded)
6	Sampling and analysis methodology
7	Data management
8	Data assessment and reporting protocols
9	Quality assurance and control
10	Capacity building plan (WRC funded)
11	Research report and prototype implementation manual

Work schedule

The project is scheduled to start in the last quarter of 2003 and to be completed in the third quarter of 2005.

Task	Quarter:	1	2	3	4	5	6	7	8
Project co-ordination									
Overall design framework									
Monitoring variable selection									
Monitoring site selection									
Sampling and analysis methodology									
Data management									
Data assessment and reporting protocols									
Quality assurance and control									
Research Report & implementation manual									

Dates of meetings:

The following are dates for Project Management meetings:

17 Sep 09h00 at RQS

18 Oct 09h00 at RQS

22 Nov 09h00 at RQS

Next project team workshop is 13 Sep 09h00 at RQS