



# AQUATIC TOXICITY TESTING PRACTICAL COURSE

## Aim of Course

To introduce aquatic toxicity tests as acceptable tools for the management of complex industrial wastewater discharges in accordance with the "Direct Estimation of Ecological Effect Potential (DEEEP)" approach by DWA, 2003.

## Course Overview

The course content will comprise 80% practical and 20% theoretical facets. Practical training will be based on the requirements for laboratory accreditation (ISO 17025:2005) as set out by the South African National Accreditation System (SANAS). It will include the following:

- Introduction to the "Direct Estimation of Ecological Effect Potential (DEEEP)" approach by DWA, 2003
- Quality Control and Assurance practices
- Sampling and preparation of samples
- Performance of physical and chemical parameters (including calibration, maintenance and verification of equipment)
- *Vibrio fischeri* bioluminescent test
- *Selenastrum capricornutum* growth inhibition test
- *Daphnia* acute toxicity test
- *Poecilia reticulata* acute toxicity test
- Documentation of results and information obtained during analysis
- Verification procedures including control charts and Proficiency Testing results
- Reporting and discussion of results
- Interpretation of results such as the use of Hazardous Classification Systems

## Who should attend?

Scientists, environmental officers, technicians, analysts, laboratory assistants (toxicity related) consultants, managers and decision makers active in:

industry, wastewater treatment companies, water boards, municipalities, government departments, catchment management agencies, consulting engineering and environmental groups, the scientific community and research.

## Course Duration

2 Days

## Evaluation

Attendance of the course and the passing of a final examination are required (counting typically 30% for Daily tests and 70% for the Final Exam) in order to successfully complete this course.

The examination will be written approximately two weeks after the completion of the course.

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