



The National Association for Clean Air (NACA)

## NACA Air Quality Management Short Course

A 5-day course: 10 – 14 March 2014

- Dates:** 10 -14 March 2014, as per the attached schedule  
**Due date for submission of essays: Wednesday, 4 April 2014**
- Venue:** Shelanti Restaurant and Conference Centre, 263 Jean Avenue, Centurion, South Africa.  
Tel: (012) 663 3450, Website: [www.shelantigarden.co.za](http://www.shelantigarden.co.za)
- Times:** Daily 09:00 – 17:00
- Instructors:** (To be confirmed)  
Prof Harold J Annegarn (**HJA**), University of Johannesburg  
Prof Hannes Rautenbach (**HR**), University of Pretoria  
Dr Gerrit Kornelius (**GK**), Associate, Airshed Planning Professionals  
Benton Pillay (**BP**), Director, uMoya-NILU  
Nicolette von Reiche (**NvR**), Airshed Planning Professionals  
Dave Crosswaithe (**DC**), Clear Direction Environmental  
Dr Terri Bird (**TB**), Airshed Planning Professionals  
Hanlie Liebenberg-Enslin (**HLE**), Airshed Planning Professionals
- Who should attend:** Current or aspirant air quality practitioners in the public and private sector, specifically persons responsible for implementing aspects of the NEM: Air Quality Act. Intending participants should have knowledge of the basics of air quality with a bachelor's degree, a national diploma or several years of relevant experience.
- Participation:** A maximum of 25 participants will be accepted. The organisers reserve the right to select applications on the basis of an applicant's prior experience and qualifications.
- Certification:** A certificate of attendance and satisfactory completion will be issued by NACA. At present there is no provision within the National Qualifications Framework or the existing Sector Education and Training Authorities (SETAs) for certification of environmental courses.
- Registration:** Complete the form below and return to Bev Terry at [bev@naca.org.za](mailto:bev@naca.org.za)  
Participants will be notified by email of acceptance on the course.
- Closing date:** You are kindly requested to submit a completed application form to us by Friday, 28 February 2014. NACA reserves the right to cancel the course should fewer than 10 participants register.
- Costs:** **R9,800.00** (Excl. Vat) per participant. Repayment by EFT of official company purchase order must be submitted to Bev Terry before the commencement of the course. Substitutions will be permitted. Fee includes participation in the course, a full set of printed notes and CD disk and certificate. Morning and afternoon tea, and daily lunches will be provided.
- Payment:** Payment should be made to the National Association for Clean Air on receipt of invoice. Invoices will be issued by the National Association for Clean Air.
- Banking details:** National Association for Clean Air; ABSA Bank; Account Number: 1041470808; Branch Code: (Rosebank Central) 632005
- Cancellation:** Cancellations after 5 March 2014 will be liable for the full fee.
- Accommodation:** Assistance will be provided for out of town delegates who wish to stay in bed and breakfast

establishments in Centurion. Cost of accommodation and transport are not included in the course fee.

**Enquiries:** If you need more information, please do not hesitate to contact Bev Terry, Course Coordinator, at 071 683 9770 or [bev@naca.org.za](mailto:bev@naca.org.za)

**Course content:** See attached programme for programme of lectures and course content.

# Air Quality Management Short Course Registration Form

Shelanti Conference Centre, Lyttleton, 10 to 14 March 2014

Surname: .....

First Name:..... Title: .....

SA ID number or passport Number .....

Designation: .....

Company/Organisation: .....

Postal Address: .....

.....

..... Code: .....

Fax: ..... Tel: .....

Cell:..... E-mail:.....

Highest educational qualification: Matric ☐; BSc☐; BSc Hons ☐; MSc ☐; Other ☐ (specify):.....

Current job description:.....

Previous years and level of experience in air quality management or atmospheric sciences? .....

I wish to attend the Air Quality Management Short Course @ R9 800,00..... **R9 800.00 (Excluding VAT)**

Name of person or institution responsible for paying the account:

.....

I acknowledge that in submitting the above registration that I / (company named above) hold ourselves liable for the full fee for the course registration, if not cancelled before the specified date.

Please issue an official invoice to: .....

Signature..... Name (block letters).....

Date ..... Designation.....

An invoice will be issued by the National Association for Clean Air on request.

**Please return to: Bev Terry, Conference Coordinator, NACA,**

P O Box 8370, Halfway House, 1685 or email/FAX to

E-mail: [bev@naca.org.za](mailto:bev@naca.org.za) Cell: 071 683 9770.

# NACA Air Quality Management Short Course

## Provisional Programme and Course Content

Shelanti Conference Centre, Lyttleton, 10 to 14 March 2014

The course will comprise approximately 36 hours of lectures, including a half-day field trip. Students will be expected to spend time reading supplied course materials, as well as supplementary readings.

A comprehensive file of printed course materials will be supplied. A CD-ROM disk, containing the MS PowerPoint presentations of the presented lectures will be distributed during the course.

Students will be required to submit two written assignments (essays), each of approximately 3,500 words or 6 to 10 pages (1.5 line spacing, 12 pt Times New Roman font, 2.5 cm margins).

### COURSE SCHEDULE AND CURRICULUM

**Times:** 09:00 – 17:00

**Instructors:** TBA

	Component	Lecturer
DAY 1	<b>Introductions, objectives and expectations</b> <b>Course overview, discussion on essay topics</b>	
	<b>Component 1:</b> Introduction to air pollutants and their characteristics – includes classification of pollutants, sources and sinks and the chemistry of urban atmospheres	Harold Annegarn
	<b>Component 2:</b> Impacts of air pollutants on receiving environments – including the impact of common gaseous pollutants and particulate matter of various sizes on human health and well-being, visibility, vegetation and materials; encompasses the selection and application of dose-response thresholds for inhalation health risk assessment	Harold Annegarn
	<b>Component 3:</b> Air Pollution Meteorology – ranging from synoptic climatology to meso- and micro-scale meteorology with specific reference to the dispersion and removal of air pollutants	Hannes Rautenbach
DAY 2	<b>Component 4:</b> Legislative and regulatory context – overview of South African legislative environment with specific analysis of the Air Quality Act and its implementation.	Gerrit Kornelius
	<b>Component 5:</b> Sources of air pollution - identification, emission quantification, drawing up an emission inventory, emission inventory calculations. National Atmospheric Emission Inventory (NAIE)	Gerrit Kornelius
	<b>Component 6:</b> Section 21 regulations and control – description of S21 Listed Activities, AEL application	Gerrit Kornelius
DAY 3:	<b>Component 7:</b> Air quality and meteorological monitoring – provides overview of monitoring methodologies and available technologies in addition to the application of such to meet specific objectives and the design and implementation of monitoring networks.	Benton Pillay

	<b>Excursion: Details to be advised</b>	Benton Pillay
<b>DAY 4:</b>	<b>Component 8:</b> Air Pollution Modelling – gives an overview of types of models ranging from long-range trajectory models to street-scale traffic modelling, but focuses on urban airshed modelling and the application of meso-scale models; practical demonstration	Nicolette von Reiche
	<b>Component 9:</b> Mitigation of emissions: Description of air pollution control equipment.	Dave Crosswaithe
<b>DAY 5:</b>	<b>Component 10:</b> Air Quality Management Planning – integration of previous modules. Content of air quality management plans; challenges to implementation; examples for local authority and industry,	Hanlie Liebenberg-Enslin Dr Terri Bird
	<b>Course closure</b>	