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GENERAL MANAGEMENT ASSISTANCE CONTRACT (GMAC)

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**CLIN 3A: COURSE REPORT FOR THE AIR QUALITY MANAGEMENT
COURSE HELD IN PRETORIA OVER PERIOD 06 – 09 FEBRUARY 2006
IMPLEMENTED BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY
(EPA) IN SOUTH AFRICA**

20 FEBRUARY 2006

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Please direct all queries regarding this report to:

Mega-Tech/South Africa
Bank Forum Building
Lobby 1, Second Floor
337 Veale Street
New Muckleneuk
0181 Pretoria RSA
Tel. 012 452 0060
Fax 012 452 0070
Email megatech@intekom.co.za

Or

Mega-Tech, Inc.
180 South Washington Street, Suite 200
Falls Church, VA 22046
Tel. (703) 534-1629
Fax (703) 534-7208
Email info@mgtech-world.com

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1. INTRODUCTION

The Air Quality Management Course was designed to enable participants to gain broad competencies in the field of Air Quality Management. The course highlights key air quality management (AQM) components and addresses how each is connected within an AQM system. These components include: laws and regulations; sources of air pollution; emission inventories; air quality monitoring; air quality modelling; data analysis; public access to information; public participation; environmental justice; and control strategy development.

The course is highly interactive, using an assessment tool to assist course participants as they gather information, identify data gaps, and develop strategies to meet their unique needs. As each topic is covered, participants will add their own information to the assessment tool, with the goal of devising a personalised plan of action by the end of the four-day course. The format will be one of short lectures combined with case studies, small group activities, and participant interaction. The course was developed under the theory that people learn best by doing. The course expects participants to bring their knowledge into the classroom and willingly share their experiences with other participants. The course is designed to present the subjects of each module in a logical progression of information, with each module linked to the one before and the one following. At the end of the course, participants will not be experts in AQM, but will have a foundation of knowledge, tools, networks, and resources needed to take the appropriate next steps to support the development of an AQM program.

The course assumes participants will arrive with variable levels of air quality experience. The material will be accessible to those with little or no AQM experience, but will also be useful for those with more experience. The success of the participant discussions will depend in part on this variety of experience. The course was designed to be the first in a series of AQM related courses, with more detailed courses in Emission Inventory Development and Air Quality Monitoring potentially available for more advanced participants. Each participant will be provided with a notebook of all course materials with space

for notes. In addition, each participant will be provided a compact disc (Resource CD) with links to documents and resources for future use and reference.

2. AIM

The aim of this report is to give feedback on the Air Quality Management Course that was held at the SA Weather Services in Pretoria over the period 04 – 09 February 2006.

3. COURSE ADMINISTRATION

3.1 Invitations

Invitations were emailed to 21 delegates from a list of invitees supplied to Shikanda Event Management. Three municipalities were also invited to nominate delegates for the course. An additional eight (8) invitations were extended to these delegates. Six (6) delegates declined the invitation who were substituted by other delegates that had requested to attend the course.

3.2 Registration

Registrations were carried out electronically and on registration, delegates received their respective confirmation of registration which included both directions to the venue and the provisional course programme. At close of registration, 38 delegates had registered to attend the course (see **Appendix A** for a list of delegates that registered to attend the course).

Four (4) delegates that registered were NGOs and a request for sponsorship of their travel and accommodation was received. After approval was received, travel and accommodation bookings were made for these delegates. The additional costs for these delegates is discussed in paragraph 4 of this report. The delegates concerned are:

- Steven van Wyk South Durban Community Environmental Alliance
- Siziwe Khanyile GroundWork
- Caroline Ntaopane Vaal Environmental Justice Alliance

- Matshediso Tsotetsi Vaal Environmental Justice Alliance

3.3 Final Attendance

The final attendance for the course was 32 delegates. Of the 32 delegates, three (3) attended selected days. Six (6) delegates that registered did not arrive. Biographical forms were completed by all the delegates that attended the course (see the **Appendix B** for a complete list of delegates that attended the course and **Appendix C** for the completed biographical forms).

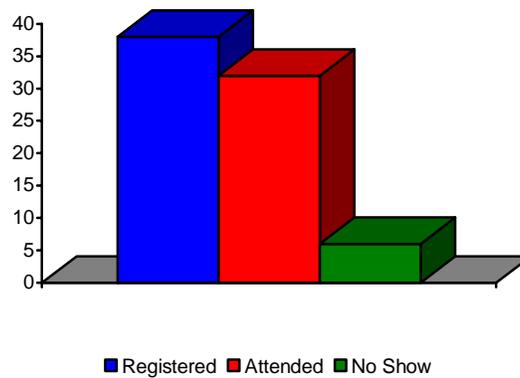


Figure 1: Summary of delegates that registered and attended the course

The delegate's impression of the pre-course administration and correspondence is depicted in figure 2 below. Generally speaking, delegates were impressed with their pre-course administration and correspondence. Some delegates, however, complained that they did not have internet access which made it difficult for them to register.

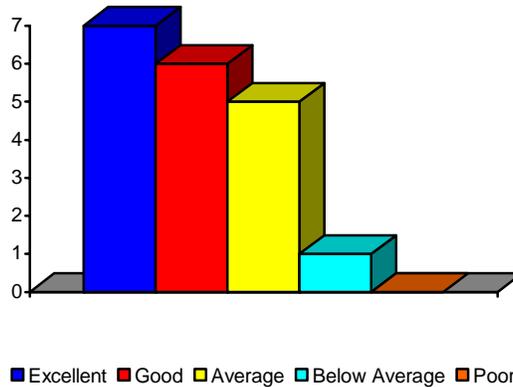


Figure 2: Delegate's impression of the pre-course administration and correspondence

4. COURSE BUDGET VERSUS COSTS

The budget for the Air Quality Management Course in Pretoria was originally R 37 020.00. After various amendments to the budget, the final cost of the Air Quality Management Course in Pretoria was R 58 640.00, and increase of R 21 620 or 58.40%. The changes to the budget are depicted in Table 1 below.

Details	Original Budget	Final Costs
Full Day Conference Package (36 delegates/instructors)	28 320	18 720
Invitations / RSVPs	900	900
Conference Material (files, paper, pens)	960	1 024
Course Material	0	3 686
Name Tags	240	304
Computer / Data Projector	3 200	3 200
Hire of three Flipcharts	0	300
Travel and Accommodation	0	27 106
Event Management Fee	3 400	3 400
TOTAL COURSE COSTS	37 020	58 640

Table 1: Budget versus actual costs for the Pretoria AQM Course

A decision was made by USAID to sponsor the travel and accommodation of four (4) NGOs. No provision was made for this in the original budget. The additional costs that were incurred for these delegates has been summarised in Table 2 below:

Name	Air Travel	Road Travel / Car Hire	Accom	Per Diem
S van Wyk	2 993 ¹	700	2 731 ²	280
S Khanyile	2 993 ¹	2 508	4 507 ³	280
C Ntaopane	0	290 ⁴	4 507 ³	280
M Tsotetsi	0	250 ⁵	4 507 ³	280
TOTAL COST	5 986	3 748	16 252	1 120

Table 2: Summary of the travel and accommodation costs

5. COURSE LOGISTICS

Course material from EPA was received and produced for all delegates that attended the course. 38 files were produced of which six (6) were unused and were couriered to Mangaung for the following course. The delegate's impression of the course material and handouts is depicted in figure 3 below. It is clearly evident that the delegates were impressed with their relevant handouts.

¹ Air Travel Dbn – Jhbg - Dbn

² Town Lodge Menlo Park

³ Holiday Inn Garden Court Hatfield

⁴ Travel by Road Sasolburg – Pretoria – Sasolburg

⁵ Travel by Road Vanderbijl Park – Pretoria – Vanderbijl Park

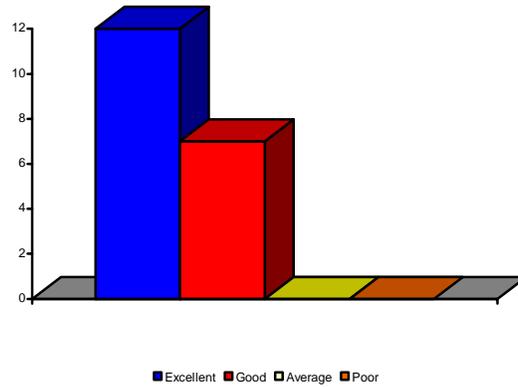


Figure 3: Delegate's course material and handouts

All delegates were required to register on arrival for the course. On registration, delegates were provided with their respective course material and course folder which included paper, pen and a course programme. Delegate's impression of the registration process is depicted in Figure 4 below.

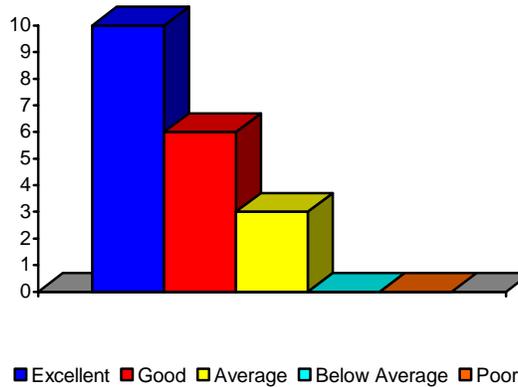


Figure 4: Delegate's impression of the registration process

The venue, which was at the SA Weather Services, was adequate and well equipped excepted for the seating. The seating was typical school benches with a desk and this was not well liked by most delegates. The delegate's impression of the venue and its associated facilities is depicted in Figure 5 below.

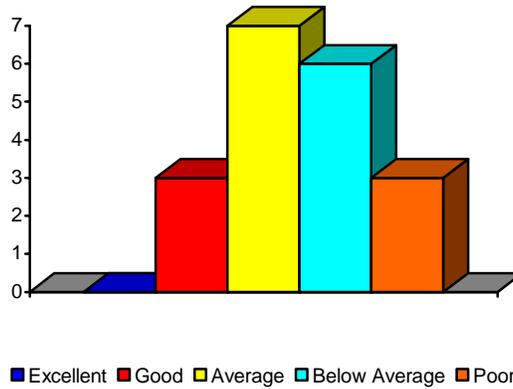


Figure 5: Delegate's impression of the venue and its associated facilities

All delegates were provided with refreshments on a daily basis. Refreshments were served as follows:

08h00 – 08h30	Early morning tea/coffee with snacks
10h45 – 11h00	Mid-morning tea/coffee with snacks
11h45 – 12h45	Lunch and fresh fruit juice
15h00 – 15h15	Afternoon tea/coffee with biscuits

Delegate's impression of the refreshments and meals is depicted in Figure 6 below. Generally speaking the delegates were more than impressed with the refreshments and meals provided during the course.

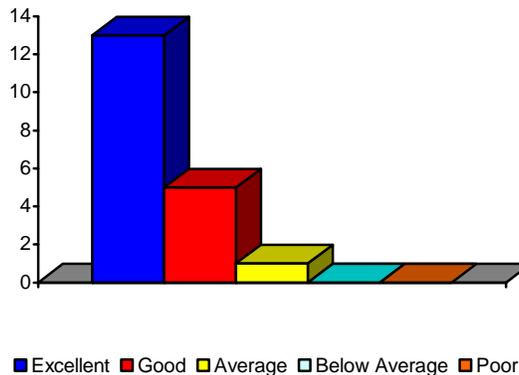


Figure 6: Delegate's impression of the refreshments and meals.

6. SUMMARY OF COURSE EVALUATION

On completion of the course, the delegates were requested to complete a course evaluation form as supplied. The results of the evaluation forms are depicted below. The completed evaluation forms have been attached to the report as **Appendix D**.

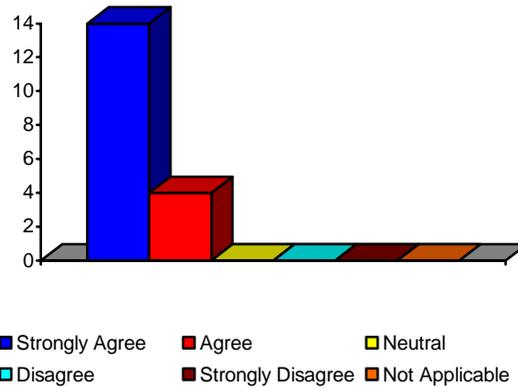


Figure 7: The purpose of the course project was clear

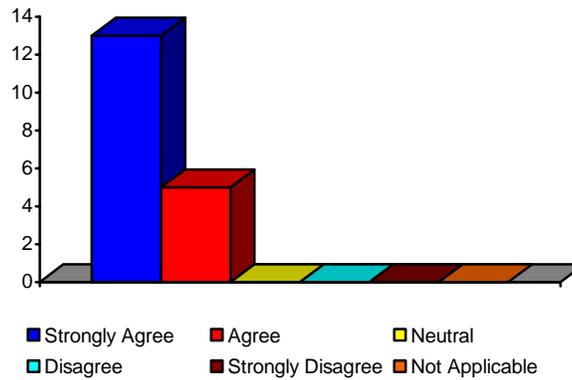


Figure 8: My interest in the subject was stimulated

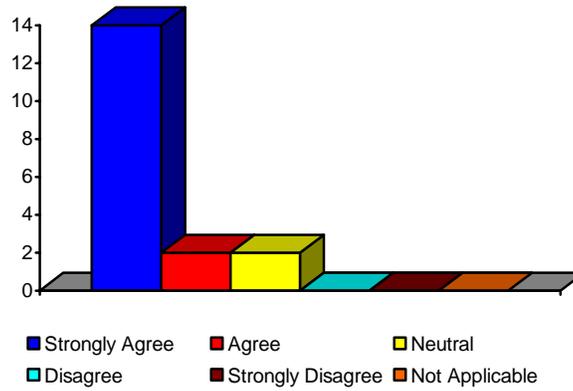


Figure 9: The lecturer(s) were always prepared for our sessions

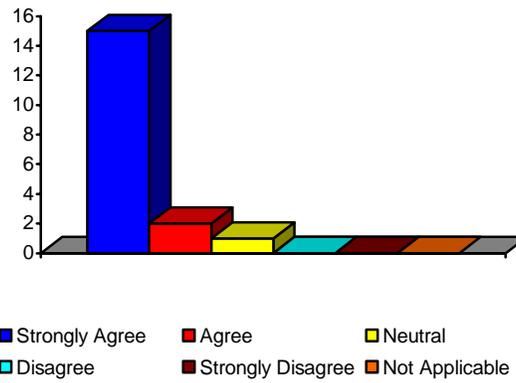


Figure 10: My / our participation was encouraged

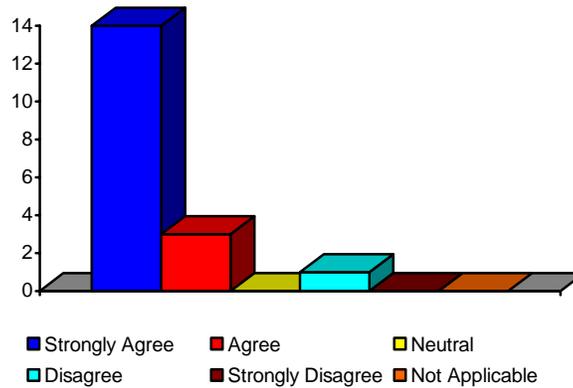


Figure 11: The lecturer(s) communicated effectively

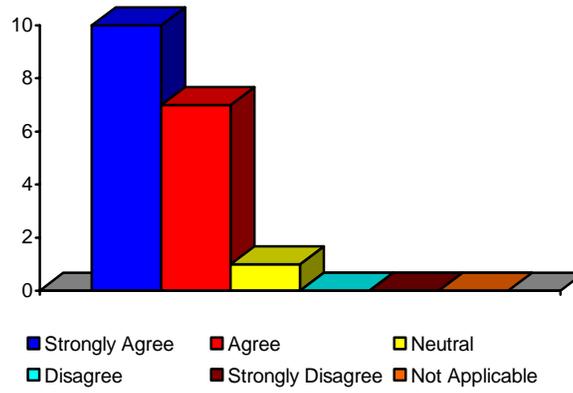


Figure 12: The lecturer(s) motivated me to read or do extra work related to the lectures

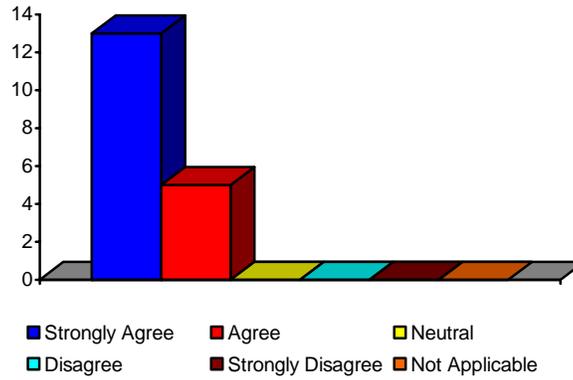


Figure 13: The methods used by the lecturer(s) were professional and helped me to learn

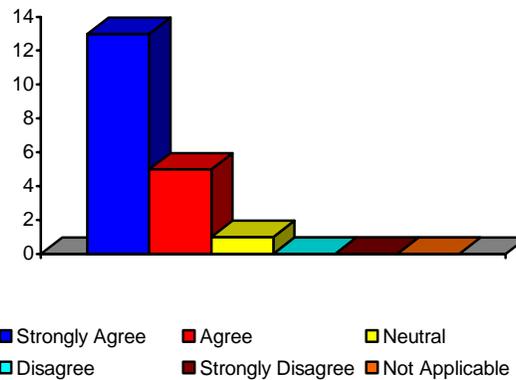


Figure 14: The course information was well organised

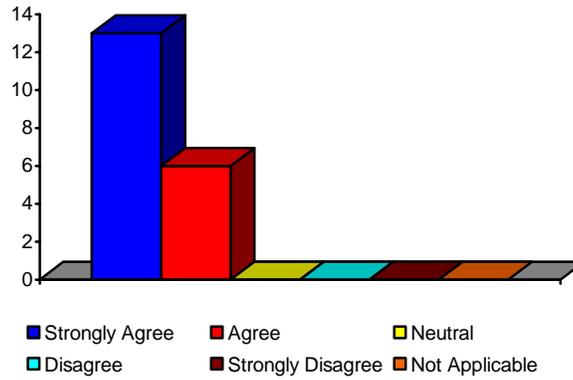


Figure 15: Reading material provided for the course was easily accessible and useful

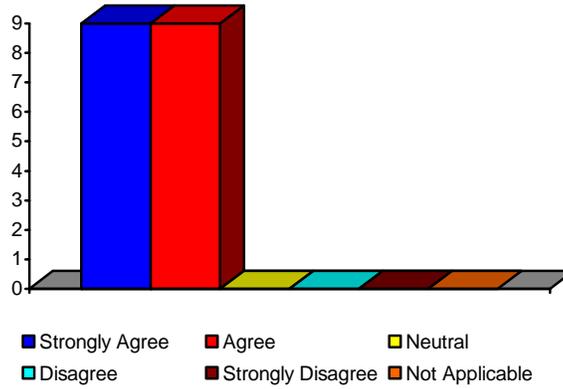


Figure 16: The course was pitched at an appropriate level

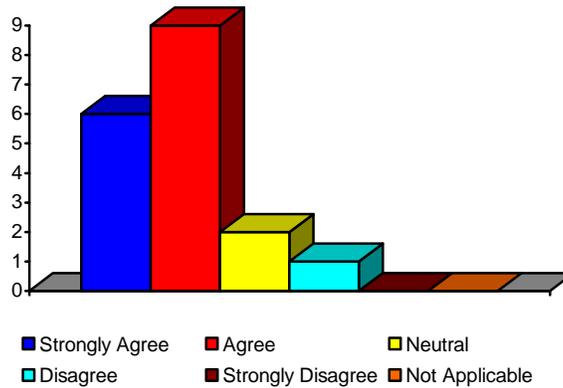


Figure 17: Time allocated to different sections of the course was reasonable

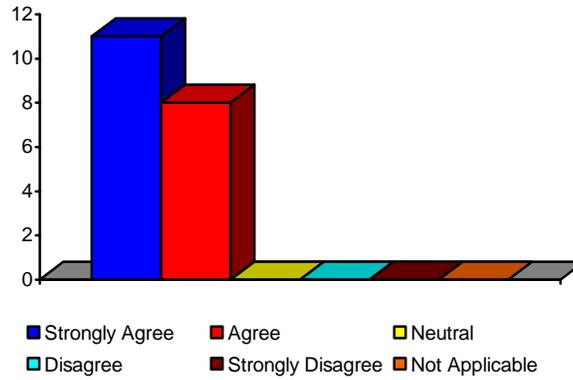


Figure 18: I gained a good understanding of concepts and principles in this field

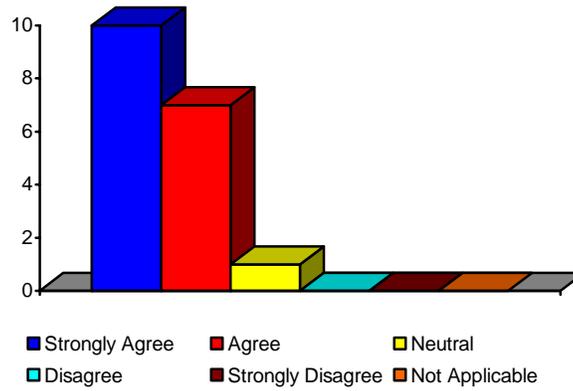


Figure 19: My existing knowledge was challenged in a constructive way

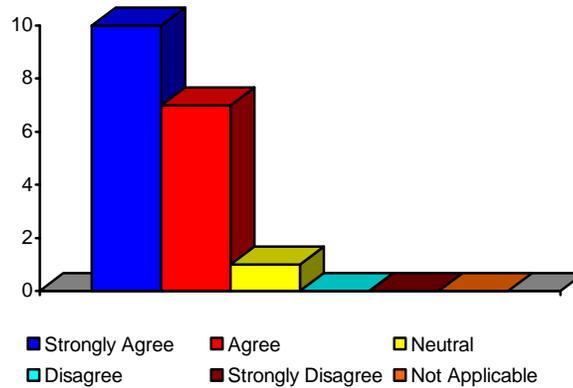


Figure 20: The content was what I expected it to be from the brochures and outlines

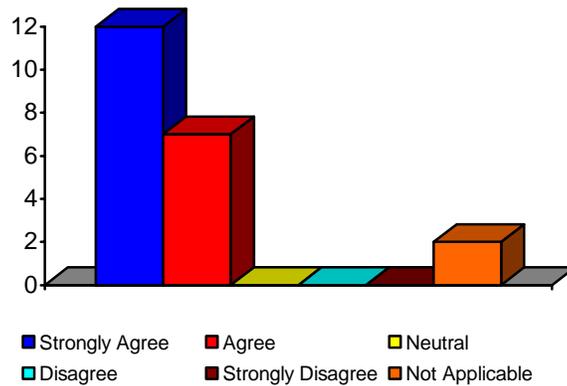


Figure 21: I think that my participation in this training event was worthwhile

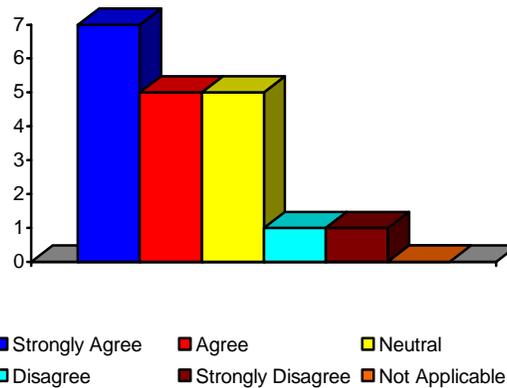


Figure 22: I was happy with the logistical arrangements around this activity

Generally speaking, delegates found the course extremely informative and gained insights into Air Quality management that they were lacking. Apart from the seating arrangements, no real negative aspects were reported. Most delegates felt that the course should be structured over a longer period of time which would allow time for more case studies and practical exercises. This would ultimately help delegates obtain a better feel and understanding of each of the course's respective modules.

Some delegates also suggested that a mentorship programme be introduced for delegates that attended the course.

7. CONCLUSION

The Air Quality Management Course was well presented and enjoyed by all those delegates that attended. Delegates all agreed that they had obtained the building blocks to understand and approach the solving of air quality problems.

APPENDIX A

LIST OF DELEGATES THAT REGISTERED FOR THE AIR QUALITY MANAGEMENT COURSE

Serial Number	Delegate's Name	Designation	Organisation	Acceptance
AQM01-001	Nishi Ahripursad	Air Quality Officer	City of uMhlatuze	No
AQM01-002	Gottlieb Arendse	Director Pollution and Waste Management	Environmental Affairs and Development Planning	Yes
AQM01-003	Malusi Buthelezi	Principal Environmental Officer	Gauteng Department of Agriculture, Conservation and Environment	Yes
AQM01-004	Chris Du Plooy	Air Pollution Control Officer	Department of Environmental Affairs and Tourism	No
AQM01-005	Steven van Wyk	Air Quality Assistant	South Durban Community Environmental Alliance	Yes
AQM01-006	Piet Fabracious		Saldanha Bay Municipality	No
AQM01-007	Mellissa Fourie	Director: Enforcement	Department of Environmental Affairs and Tourism	Yes
AQM01-008	Ryan Groenewald		Saldanha Bay Municipality	No
AQM01-009	Winifred Jordaan	Manager: Scientific Training	South African Weather Services	Yes
AQM01-010	Thea Jordan	Deputy Director IDP: Environmental Planning	City of uMhlatuze	No
AQM01-011	Peter Leah	Chairperson	Richard's Bay Clean Air Association	No

Serial Number	Delegate's Name	Designation	Organisation	Acceptance
AQM01-012	Tsietsi Mahema	Deputy Director: Air Quality Management	Department of Environmental Affairs and Tourism	No
AQM01-013	Jan Marais	Air Pollution Control Officer	Department of Environmental Affairs and Tourism	Yes
AQM01-014	Maggy Moloji	Senior Environment Officer	Gauteng Department of Agriculture, Conservation and Environment	Yes
AQM01-015	Juan Mostert	Chief: Air Quality Manager	Tshwane Municipality	Yes
AQM01-016	Metli Motepe	Air Pollution Control Officer	Department of Environmental Affairs and Tourism	Yes
AQM01-017	Ntokozo Nkosi		KwaZulu Natal Department of Agriculture and Environmental Affairs	No
AQM01-018	Siziwe Khanyile	Air Project Quality Coordinator	GroundWork	Yes
AQM01-019	Greg Scott	Atmospheric Scientist: Water, Environment and Forest Technology	CSIR	Yes
AQM01-020	Templeton Titima	Assistant Manager Air Pollution Control	Nelson Mandela Metro	Yes
AQM01-021	Julius van Graan	Air Pollution Control	Department of Environmental Affairs and Tourism	No
AQM01-022	Gideon Slabbert	Specialist Officer: Air Quality	City of Johannesburg	Yes
AQM01-023	Marguerite Richardson	Snr Atmospheric Scientist	City of Johannesburg	Yes
AQM01-024	Abel Sakhau		City of Johannesburg	No

Serial Number	Delegate's Name	Designation	Organisation	Acceptance
AQM01-025	Thandi Radebe	Executive Manager: Environmental Quality Control and Law Enforcement	Ekurhuleni Municipality	Yes
AQM01-026	Jacob Legadima	Manager: IPC	Ekurhuleni Municipality	Yes
AQM01-027	Rufus Sebati	Quality Control and Law Enforcement	Ekurhuleni Municipality	Yes
AQM01-028	Lenny Narainsamy	Administrator: Health Unit	Ethekwini Municipality	Yes
AQM01-029	Sthembiso Ngidi	Senior Instrument Technician: Health Unit	Ethekwini Municipality	Yes
AQM01-030	Nozipho Maduse	Senior Specialist: Environmental Impact Management	City of Johannesburg	Yes
AQM01-031	Caroline Ntaopane	Coordinator	Vaal Environmental Justice Alliance	Yes
AQM01-032	Lebogang Molefe	Asst Director: Regulatory Services	City of Joburg Metropolitan Local Council	Yes
AQM01-033	John Makwela	Environmental Planning EIA Section	City of Joburg Metropolitan Local Council	Yes
AQM01-034	Etienne Allers	Senior Specialist: Environmental Impact Management	Johannesburg Metropolitan Local Council	Yes
AQM01-035	Matshediso Tsotetsi	General Secretary	Vaal Environmental Justice Alliance	Yes
AQM01-036	Dr Jonas Mphepya	General Manager	SA Weather Services	Yes
AQM01-037	Gladness Chadi	Senior Specialist: Impact Management	City of Joburg Metropolitan Local Council	Yes

Serial Number	Delegate's Name	Designation	Organisation	Acceptance
AQM01-038	Zanele Phoku	Senior Specialist: Impact Management	City of Joburg Metropolitan Local Council	Yes
AQM01-039	Kobus Marais	Environmental Health Practitioner	Swartland Municipality	Yes
AQM01-040	Russel Mehl	Principal Environment Officer	Department of Environmental Affairs	Yes
AQM01-041	Keith Stuurman	Manager Facilities and Environment	Witzenberg Municipality	Yes
AQM01-042	Jacobus Slabbert	Senior Environmental Health Practitioner	Nelson Mandela Metropolitan Municipality	Yes
AQM01-043	Jane Eagle	Asst Director: Environmental Monitoring & Compliance	City of Johannesburg	Yes
AQM01-044	Flip Visser	Assistant Chief Environmental Health Practitioner	Ekurhuleni Municipality	Yes
AQM01-045	Dominicus Groenewald	Regional Environmental Health Practitioner	Emfuleni Local Municipality	Yes
AQM01-046	Nkosi Ndlovu		USAID	Yes
AQM01-047	Sarah Wines		USAID	Yes
AQM01-048	Johan Venter	Chief Environmental Health Officer	Midvaal Local Municipality	Yes
AQM01-049	Tabby Resane	Assistant Director	DEAT	Yes

APPENDIX B

LIST OF DELEGATES THAT ATTENDED THE AIR QUALITY MANAGEMENT COURSE

No	Serial Number	Delegate's Name	Designation	Organisation
1	AQM01-002	Gottlieb Arendse	Director Pollution and Waste Management	Environmental Affairs and Development Planning
2	AQM01-005	Steven van Wyk	Air Quality Assistant	South Durban Community Environmental Alliance
3	AQM01-009	Winifred Jordaan		South African Weather Services
4	AQM01-012	Tsietsi Mahema	Deputy Director: Air Quality Management	Department of Environmental Affairs and Tourism
5	AQM01-013	Jan Marais	Air Pollution Control Officer	Department of Environmental Affairs and Tourism
6	AQM01-015	Juan Mostert	Chief: Air Quality Manager	Tshwane Municipality
7	AQM01-018	Siziwe Khanyile	Air Project Quality Coordinator	GroundWork
8	AQM01-019	Greg Scott	Atmospheric Scientist: Water, Environment and Forest Technology	CSIR

No	Serial Number	Delegate's Name	Designation	Organisation
9	AQM01-020	Templeton Titima	Assistant Manager Air Pollution Control	Nelson Mandela Metro
10	AQM01-022	Gideon Slabbert	Specialist Officer: Air Quality	City of Johannesburg
11	AQM01-023	Marguerite Richardson	Snr Atmospheric Scientist	City of Johannesburg
12	AQM01-025	Thandi Radebe	Executive Manager: Environmental Quality Control and Law Enforcement	Ekurhuleni Municipality
13	AQM01-028	Lenny Narainsamy	Administrator: Health Unit	Ethekwini Municipality
14	AQM01-029	Sthembiso Ngidi	Senior Instrument Technician: Health Unit	Ethekwini Municipality
15	AQM01-030	Nozipho Maduse	Senior Specialist: Environmental Impact Management	City of Johannesburg
16	AQM01-031	Caroline Ntaopane	Coordinator	Vaal Environmental Justice Alliance
17	AQM01-032	Lebogang Molefe	Asst Director: Regulatory Services	City of Joburg Metropolitan Local Council
18	AQM01-033	John Makwela	Environmental Planning EIA Section	City of Joburg Metropolitan Local Council
19	AQM01-034	Etienne Allers	Senior Specialist: Environmental Impact Management	Johannesburg Metropolitan Local Council

No	Serial Number	Delegate's Name	Designation	Organisation
20	AQM01-035	Matshediso Tsotetsi	General Secretary	Vaal Environmental Justice Alliance
21	AQM01-036	Dr Jonas Mphepya		SA Weather Services
22	AQM01-037	Gladness Chadi	Senior Specialist: Impact Management	City of Joburg Metropolitan Local Council
23	AQM01-038	Zanele Phoku	Senior Specialist: Impact Management	City of Joburg Metropolitan Local Council
24	AQM01-040	Russel Mehl	Principal Environment Officer	Department of Environmental Affairs
25	AQM01-041	Keith Stuurman	Manager Facilities and Environment	Witzenberg Municipality
26	AQM01-042	Jacobus Slabbert	Senior Environmental Health Practitioner	Nelson Mandela Metropolitan Municipality
27	AQM01-044	Flip Visser	Assistant Chief Environmental Health Practitioner	Ekurhuleni Municipality
28	AQM01-045	Dominicus Groenewald	Regional Environmental Health Practitioner	Emfuleni Local Municipality
29	AQM01-046	Nkosi Ndlovu		USAID
30	AQM01-047	Sarah Wines		USAID
31	AQM01-048	Johan Venter	Chief Environmental Health Officer	Midvaal Local Municipality
32	AQM01-049	Tabby Resane	Assistant Director	DEAT

APPENDIX C

Biographical Forms

(Attached in a separate file)

Course Evaluation Forms

(Attached in a separate file)