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GENERAL MANAGEMENT ASSISTANCE CONTRACT (GMAC)

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**CLIN 3B: COURSE REPORT FOR THE AIR QUALITY MANAGEMENT
COURSE HELD IN MANGAUNG OVER PERIOD 14 - 17 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 President Hotel in Mangaung over the period 14 – 17 February 2006.

3. COURSE ADMINISTRATION

3.1 Invitations

Invitations were emailed to 35 delegates from a list of invitees supplied to Shikanda Event Management. The provincial department was invited to nominate two delegates to attend the course. Invitations were also extended to these delegates as well as delegates from Buffalo City.

3.2 Registrations

Registrations were done electronically and on registration, delegates received their confirmation of registration which included both directions to the venue and the provisional course programme. At close of registration, 36 delegates had registered to attend the course (see **Appendix A** for a list of delegates that registered to attend the course).

3.3 Final Attendance

The final attendance for the course was 34 delegates. Four (4) delegates that registered did not arrive and two (2) delegates that had not registered arrived and were permitted to attend the course. 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).

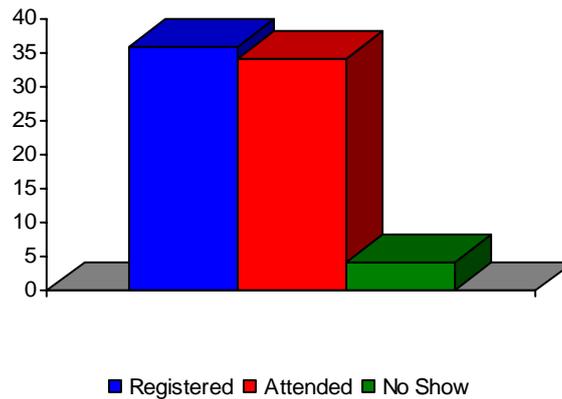


Figure 1: Summary of delegates that registered and attended the course

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.

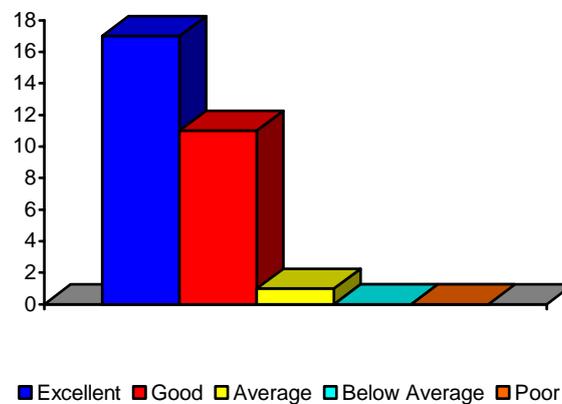


Figure 2: Delegate's impression of the pre-course administration and correspondence

4. COURSE BUDGET VERSUS COSTS

The budget for the Air Quality Management Course in Mangaung was R 65 725.00. After various amendments to the budget, the final cost of the Air Quality Management Course in Mangaung was R 82 552.00, and increase of R16 827.00 or 25.60%. The changes to the budget are depicted in Table 1 below.

Details	Original Budget	Final Costs
Full Day Conference Package	18 840	23 864
Invitations / RSVPs	900	1 200
Conference Material (files, paper, pens)	960	1 088
Course Material	0	3 880
Name Tags	240	304
Computer / Data Projector	3 200	3 200
Courier charges	0	1 200
Travel and Accommodation	28 585	34 816
Event Management Fee	13 000	13 000
TOTAL COURSE COSTS	65 725	82 552

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

A decision was made by USAID to sponsor the travel and accommodation of Greg Scott. No provision was made for this in the original budget.

5. COURSE LOGISTICS

Course material from EPA was received and produced for all delegates that attended the course. 40 files were produced. All the unused files were given to the instructors. 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.

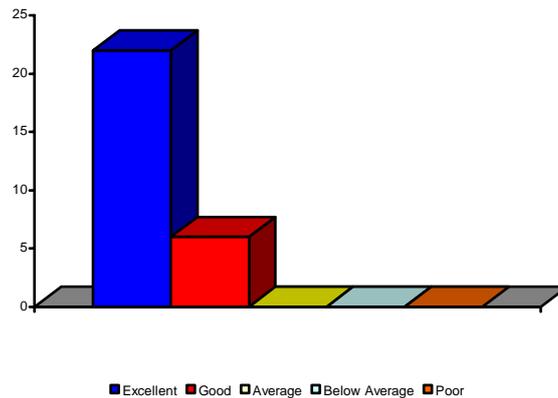


Figure 3: Delegate's course material and handouts

All delegates were requested to register 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.

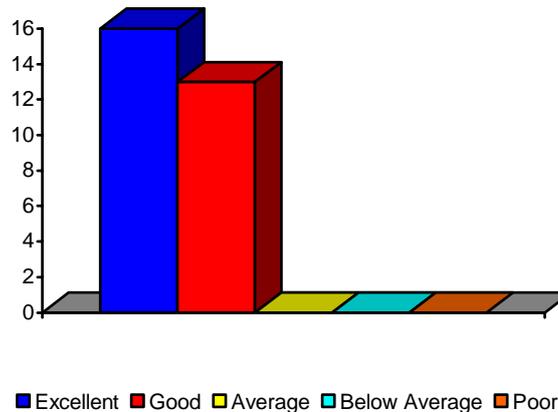


Figure 4: Delegate's impression of the registration process

The venue, which was at the President Hotel, was adequate and well equipped with all the appropriate equipment. The delegate's impression of the venue and its associated facilities is depicted in Figure 5 below.

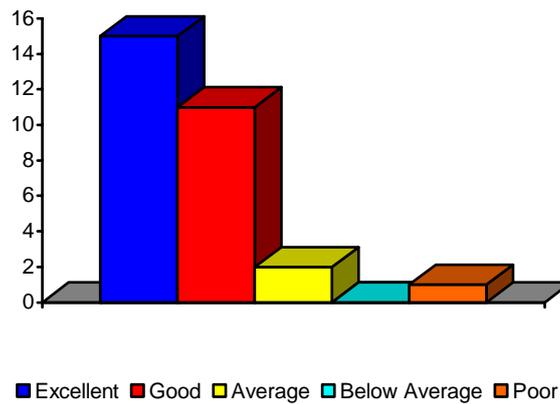


Figure 5: Delegate's impression of the venue and its associated facilities

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**.

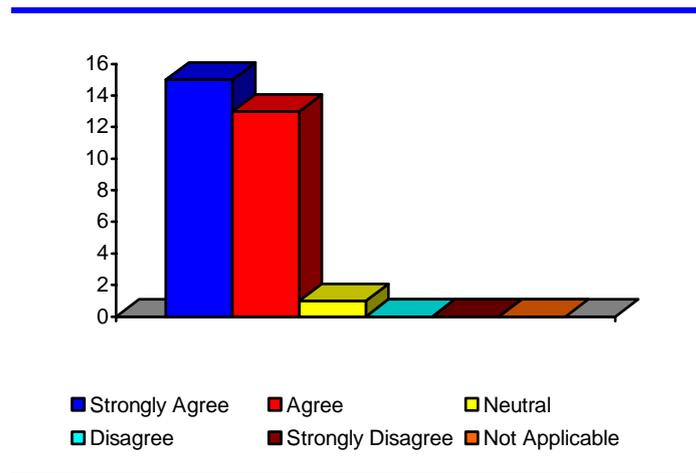


Figure 7: The purpose of the course project was clear

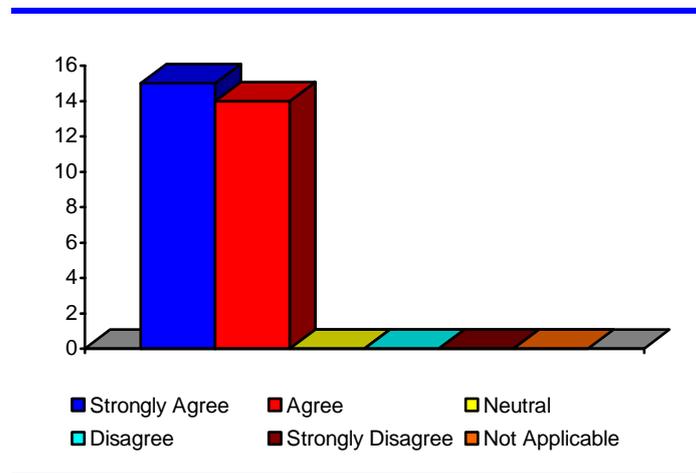


Figure 8: My interest in the subject was stimulated

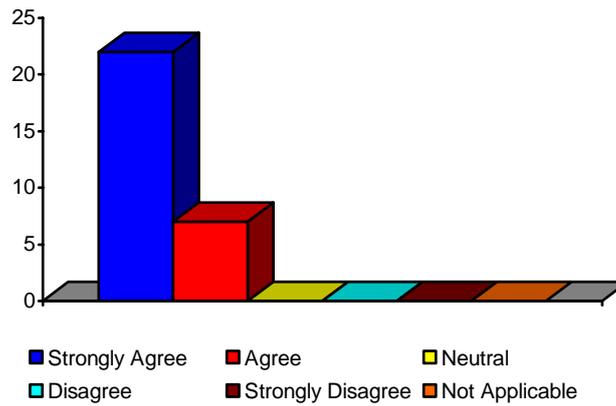


Figure 9: The lecturer(s) were always prepared for our sessions

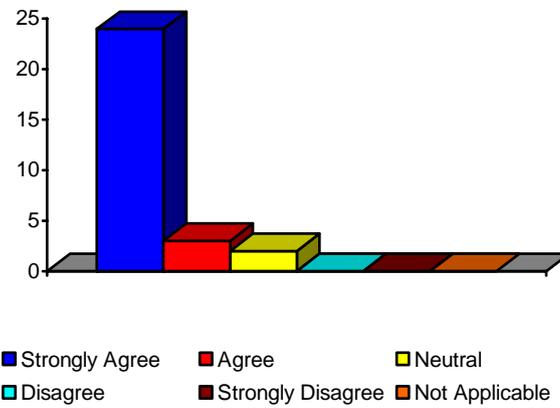


Figure 10: My / our participation was encouraged

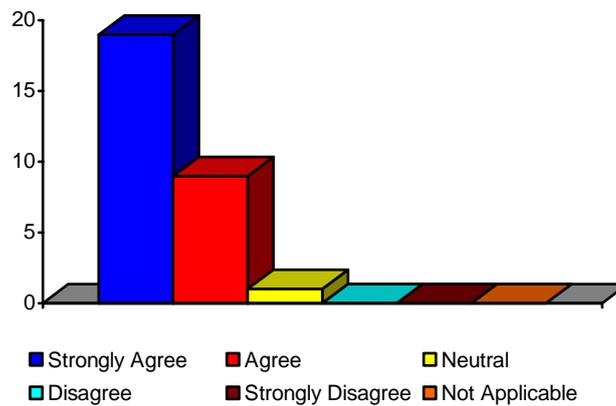


Figure 11: The lecturer(s) communicated effectively

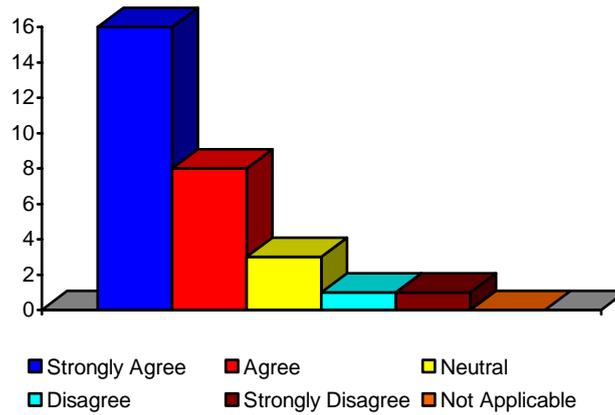


Figure 12: The lecturer(s) motivated me to read or do extra work related to the lectures

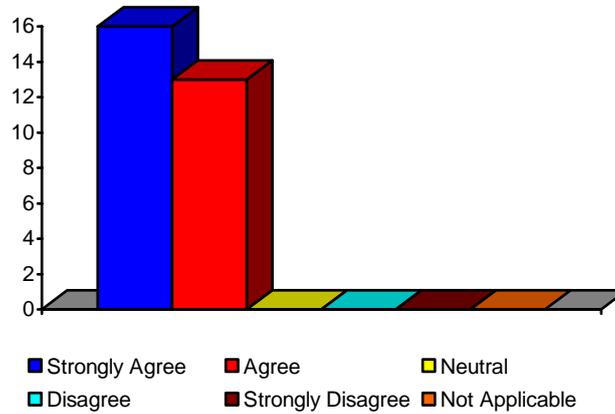


Figure 13: The methods used by the lecturer(s) were professional and helped me to learn

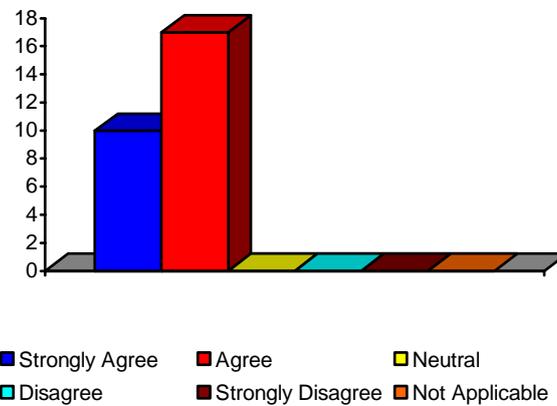


Figure 14: The course information was well organised

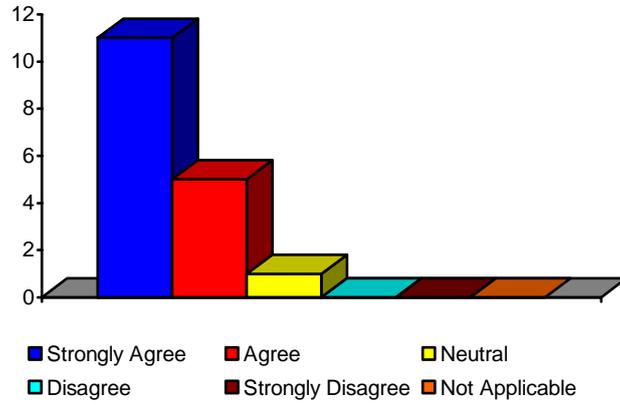


Figure 15: Reading material provided for the course was easily accessible and useful

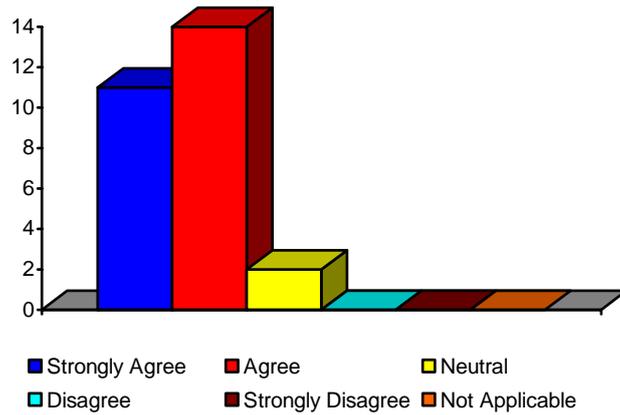


Figure 16: The course was pitched at an appropriate level

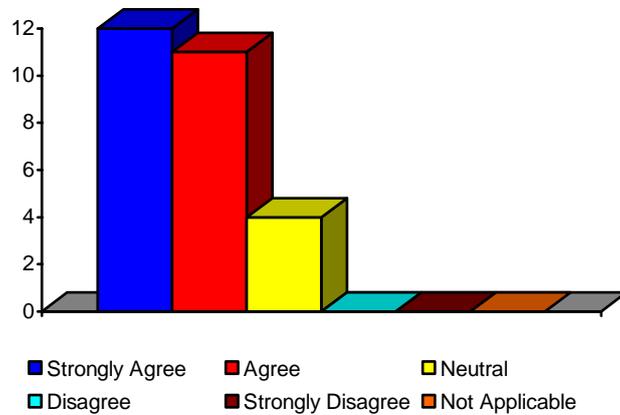


Figure 17: Time allocated to different sections of the course was reasonable

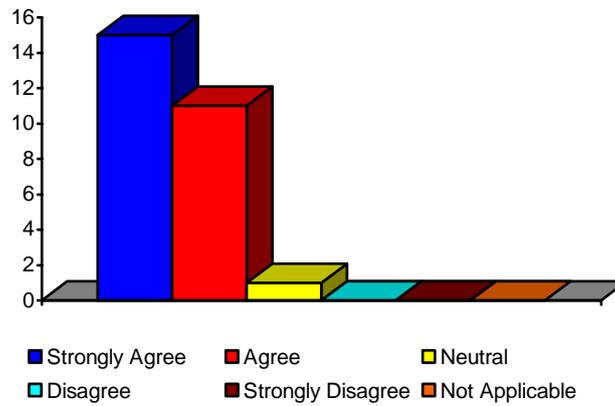


Figure 18: I gained a good understanding of concepts and principles in this field

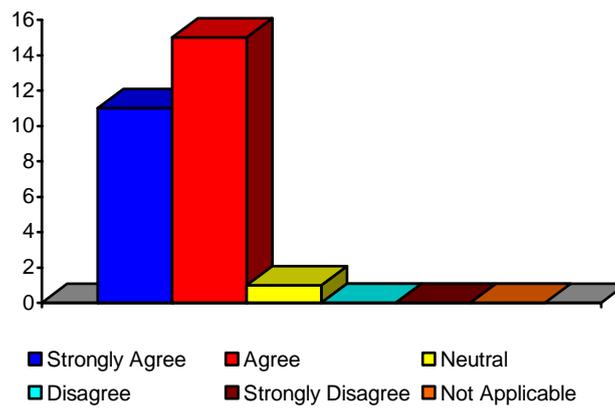


Figure 19: My existing knowledge was challenged in a constructive way

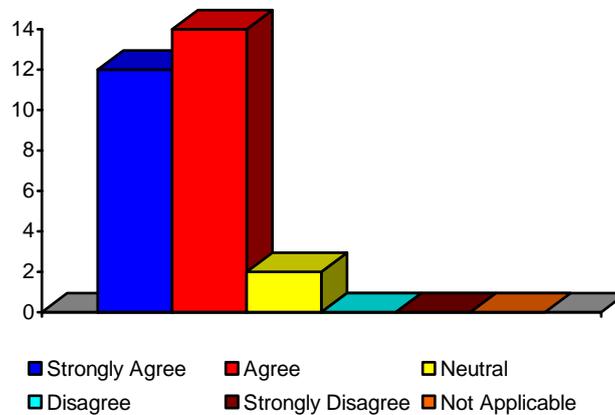


Figure 20: The content was what I expected it to be from the brochures and outlines

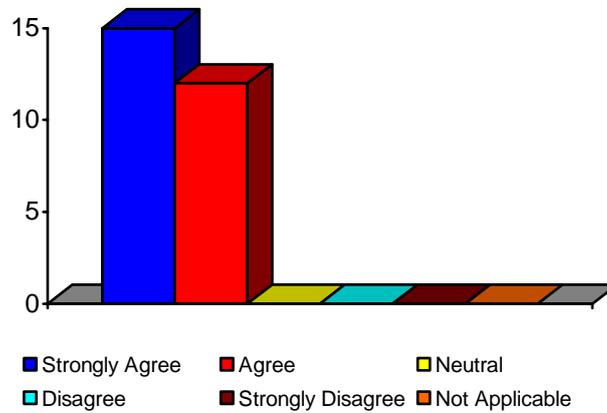


Figure 21: I think that my participation in this training event was worthwhile

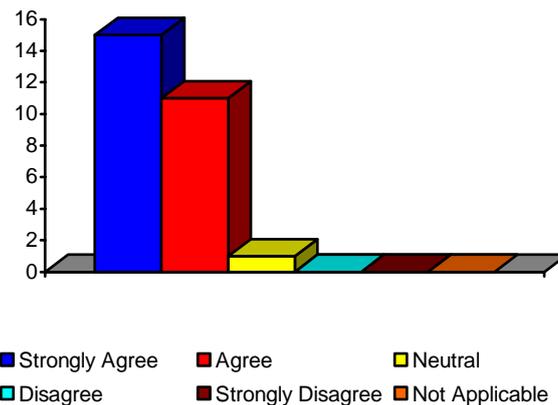


Figure 22: I was happy with the logistical arrangements around this activity

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 No	Name	Position	Organisation	Acceptance
AMQ02-001	David Oliver	Regional Air Quality Practitioner	City of Cape Town	Yes
AMQ02-002	Bethwell Mbetse	Air Quality Practitioner	City of Cape Town	Yes
AMQ02-003	David Arnott	Senior Air Quality Officer	City of Cape Town	Yes
AMQ02-004	Peter Harmse	Senior Air Quality Officer	City of Cape Town	Yes
AMQ02-005	Sally Benson	Technician	City of Cape Town (Scientific Services)	Yes
AMQ02-006	P vd Don		Iscor Klip & Vereeniging	No
AMQ02-007	D. Jacobs		Vereeniging Abbatoir	No
AMQ02-008	A Storr		Vereeniging Refractories	No

Serial No	Name	Position	Organisation	Acceptance
AMQ02-009	Roger Naidoo	General Manager	Mangaung Local Municipality	Yes
AMQ02-010	Tumelo Shakwane	Environmental Manager	Mangaung Local Municipality	Yes
AMQ02-011	Vivian Seekoe	Manager: Environmental Policy & Coordination	Mangaung Local Municipality	Yes
AMQ02-012	Sonja Freemantle	Environmental Impact Assessment Officer	Mangaung Local Municipality	Yes
AMQ02-013	Daniel Mosia	Environmental Education Officer	Mangaung Local Municipality	Yes
AMQ02-014	Rehilwe Tshikare	Environmental Health Officer	Mangaung Local Municipality	Yes
AMQ02-015	Nkope Noe	Environmental Health Officer	Mangaung Local Municipality	Yes
AMQ02-016	Elize Lourens	Environmental Health Practitioner	Mangaung Local Municipality	Yes
AMQ02-017	Molefi Nong	Divisional Environmental Health Practitioner	Mangaung Local Municipality	Yes

Serial No	Name	Position	Organisation	Acceptance
AMQ02-018	Johan Gelderblom	Environmental Health Practitioner	Mangaung Local Municipality	Yes
AMQ02-019	Josua van der Merwe	Environmental Health Officer	Mangaung Local Municipality	Yes
AMQ02-020	Lebohang Kolobe	Environmental Health Officer	Mangaung Local Municipality	Yes
AMQ02-021	Celmarie Louw	Environmntal Health Practitioner	Mangaung Local Municipality	Yes
AMQ02-022	Jaco Lamprecht	Environmental Health Officer	Mangaung Local Municipality	Yes
AMQ02-023	Leatsile Kwekwe	Environmental Health Officer	Mangaung Local Municipality	Yes
AMQ02-024	Lehlohonolo Mohapi	Environmental Health Practitioner	Naledi Local Municipality	Yes
AMQ02-025	Ndoda Mgudlwa	Senior Environmental Health Pratitioner	Naledi Local Municipality	Yes
AMQ02-026	Mmakabelo Khitsane	Environmental Health Officer	Mantsopa Local Municipality	Yes
AMQ02-027	Paul Pool	Environmental Health Practitioner	Mantsopa Local Municipality	No

Serial No	Name	Position	Organisation	Acceptance
AMQ02-028	Thabang Nkate	Environmental Health Practitioner	Mohokare Municipality	Yes
AMQ02-029	Moses Mthombeni	Environmental Health Practitioner	Matjhabeng Municipality	No
AMQ02-030	Kobus de Laquerre	Environmental Health Practitioner	Matjhabeng Municipality	No
AMQ02-031	Ivy Magire	Environmental Health Practitioner	Motheo Municipality	Yes
AMQ02-032	Collins Ramavhona	Senior Environmental Officer	Dept of Tourism, Environmental & Economic Affairs	Yes
AMQ02-033	Alfred Lepaku		Dept of Tourism, Environmental & Economic Affairs	Yes
AMQ02-034	Thomas Tshukudu	Manager	Mangaung Local Municipality	Yes
AQM02-035	Musa Mahlatji	Environmental Officer	Ekurhuleni Municipality	Yes
AQM02-036	Zies van Zyl	Asst Manager: Environmental Health Services	Sedibeng Municipality	Yes

Serial No	Name	Position	Organisation	Acceptance
AQM02-037	Andile Falati	Chief Environmental Health Practitioner	Buffalo City Municipality	
AQM02-038	S. Shwababa	Environmental Health Practitioner	Buffalo City Municipality	Yes
AQM02-039	Hugo Stephan	Senior Environmental Health Practitioner	Buffalo City Municipality	Yes
AQM02-040	Lyndon Mardon	Environmental Pollution Officer	Buffalo City Municipality	Yes
AQM02-041	Greg Scott	Atmospheric Scientist: Water, Environment and Forest Technology	CSIR	Yes

APPENDIX B

LIST OF DELEGATES THAT ATTENDED THE AIR QUALITY MANAGEMENT COURSE

No	Serial Number	Delegate's Name	Designation	Organisation
1	AMQ02-001	David Oliver	Regional Air Quality Practitioner	City of Cape Town
2	AMQ02-002	Bethwell Mbetse	Air Quality Practitioner	City of Cape Town
3	AMQ02-003	David Arnott	Senior Air Quality Officer	City of Cape Town
4	AMQ02-004	Peter Harmse	Senior Air Quality Officer	City of Cape Town
5	AMQ02-005	Sally Benson	Technician	City of Cape Town (Scientific Services)
6	AMQ02-009	Roger Naidoo	General Manager	Mangaung Local Municipality
7	AMQ02-010	Tumelo Shakwane	Environmental Manager	Mangaung Local Municipality
8	AMQ02-011	Vivian Seekoe	Manager: Environmental Policy & Coordination	Mangaung Local Municipality

No	Serial Number	Delegate's Name	Designation	Organisation
9	AMQ02-012	Sonja Freemantle	Environmental Impact Assessment Officer	Mangaung Local Municipality
10	AMQ02-013	Daniel Mosia	Environmental Education Officer	Mangaung Local Municipality
11	AMQ02-014	Rehilwe Tshikare	Environmental Health Officer	Mangaung Local Municipality
12	AMQ02-015	Nkope Noe	Environmental Health Officer	Mangaung Local Municipality
13	AMQ02-016	Elize Lourens	Environmental Health Practitioner	Mangaung Local Municipality
14	AMQ02-017	Molefi Nong	Divisional Environmental Health Practitioner	Mangaung Local Municipality
15	AMQ02-018	Johan Gelderblom	Environmental Health Practitioner	Mangaung Local Municipality
16	AMQ02-019	Josua van der Merwe	Environmental Health Officer	Mangaung Local Municipality
17	AMQ02-020	Lebohang Kolobe	Environmental Health Officer	Mangaung Local Municipality
18	AMQ02-021	Celmarie Louw	Environmental Health Practitioner	Mangaung Local Municipality

No	Serial Number	Delegate's Name	Designation	Organisation
19	AMQ02-022	Jaco Lamprecht	Environmental Health Officer	Mangaung Local Municipality
20	AMQ02-023	Leatile Koekoe	Environmental Health Officer	Mangaung Local Municipality
21	AMQ02-026	Mmakabelo Khitsane	Environmental Health Officer	Mantsopa Local Municipality
22	AMQ02-028	Thabang Nkate	Environmental Health Practitioner	Mohokare Municipality
23	AMQ02-032	Collins Ramavhona	Senior Environmental Officer	Dept of Tourism, Environmental & Economic Affairs
24	AMQ02-034	Thomas Tshukudu	Manager	Mangaung Local Municipality
25	AQM02-035	Musa Mahlatji	Environmental Officer	Ekurhuleni Municipality
26	AQM02-036	Zies van Zyl	Asst Manager: Environmental Health Services	Sedibeng Municipality
27	AQM02-037	Andile Falati	Chief Environmental Health Practitioner	Buffalo City Municipality

No	Serial Number	Delegate's Name	Designation	Organisation
28	AQM02-038	S. Shwababa	Environmental Health Practitioner	Buffalo City Municipality
29	AQM02-039	Hugo Stephan	Senior Environmental Health Practitioner	Buffalo City Municipality
30	AQM02-040	Lyndon Mardon	Environmental Pollution Officer	Buffalo City Municipality
31	AQM02-041	Greg Scott	Atmospheric Scientist: Water, Environment and Forest Technology	CSIR
32	AQM02-042	Lindiwe Khumalo	Technician	Ecoserv
33	AQM02-043	Melissa Knight	Deputy LGS Team	USAID
34	AQM02-044	Ernest Tapile	Manager: Environmental Health	Buffalo City Municipality

APPENDIX C

Biographical Forms

(Attached in a separate file)

APPENDIX D

Course Evaluation Forms

(Attached in a separate file)