

**AGRICULTURE, CONSERVATION
ENVIRONMENT & LAND AFFAIRS**

**GAUTENG DRAFT INTEGRATED HEALTH CARE
WASTE MANAGEMENT STRATEGY AND ACTION
PLANS**

6 and 7 November 2003, World of Beer, Newtown, Johannesburg

**Stakeholder workshop on the Draft Integrated Health Care Risk
Waste Strategy and Action Plans**

Workshop Proceedings

**HOSTED BY
THE GAUTENG DEPARTMENT OF AGRICULTURE, CONSERVATION,
ENVIRONMENT AND LAND AFFAIRS.**

**SPONSORED BY
THE DANISH INTERNATIONAL DEVELOPMENT ASSISTANCE (DANIDA)**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
WORKSHOP DAY 1	4
1. OPENING	4
2. PROGRESS SINCE MARCH 2003	5
3. PRESENTATION OF THE DRAFT STRATEGY AND ACTION PLANS	7
4. BREAKAWAY GROUP DISCUSSION ON STRATEGY	17
5. PLENARY DISCUSSION ON STRATEGY AND ACTION PLANS	30
6. PRESENTATION ON STATUS AND EXPECTED AMENDMENTS BASED ON COMMENTS RECEIVED ON THE GAUTENG HCW AND WIS REGULATIONS.....	30
7. SUMMARY BY THE CHAIR AND WAY FORWARD	31
WORKSHOP DAY 2	33
8. WELCOME AND OVERVIEW OF PROJECT TO DATE FOR THE SAKE OF LOCAL AUTHORITIES NOT PREVIOUSLY INVOLVED	33
9. ROLES AND RESPONSIBILITIES OF PROVINCIAL AND LOCAL AUTHORITIES RELATED TO HCW MANAGEMENT	33
10. PRESENTATION ON PROPOSED HCRW MANAGEMENT AND WIS FOR SMALL GENERATORS.....	37
11. FORMULATION OF GAUTENG STRATEGY ON PROPOSED HCRW MANAGEMENT FOR SMALL GENERATORS	40
12. GROUP DISCUSSIONS ON GAUTENG STRATEGY ON PROPOSED HCRW MANAGEMENT FOR GENERATORS, ACTION PLANS AND SUPPORT REQUIRED BY LOCAL AUTHORITIES	40
13. PRESENTATION OF GROUP FINDINGS IN PLENARY	44
14. CONCLUSION AND WAY FORWARD.....	45
APPENDIX 1: INVITEES.....	46
APPENDIX 2: ATTENDEES DAY 1	54
APPENDIX 3: ATTENDEES DAY 2	57

EXECUTIVE SUMMARY

The workshop was held to provide an opportunity to reflect on progress to date and to obtain input on the draft Integrated Health Care Waste Management Strategy and Action Plans (S&AP) and the way forward. Feedback would also be given on comments received on the draft Health Care Waste Management Regulations, which were published for comment in September 2003. It is envisaged that the Regulations will be promulgated on 5 January 2004. With the promulgation of the Regulations, the process would move a step closer towards compliance being a legal requirement rather than simply voluntary cooperation.

A key focus of the workshop was also to begin looking at the smaller generators like NGOs and home based care-givers as well as general practitioners and similar. The workshop on the second day would look at how local government could benefit from what had been learned through the project and how local government could implement systems and services to manage health care risk waste from smaller generators in the communities.

Pilot projects were initiated at Leratong Hospital and Itireleng Clinic, using re-usable puncture resistant and leak resistant plastic containers. The cost of the containers was found to be slightly lower than the cardboard boxes previously used. At Leratong Hospital the wheelie bin system was found to be the most acceptable and helpful, while at Itireleng Clinic the 50 and 100 litre reusable boxes were successfully in use until September 2003 after which time 240 litre wheelie bins are being tested in stead. Also the 240 litre wheelie bins have been introduced and is working successfully. Since the introduction of these systems needle stick injuries have been significantly reduced.

Suggestions and comments made on the first day of the workshop included the following:

- The formation of a forum where discussion can take place on improving Health Care Waste (HCW) legislation, problem solving etc.
- Improved integration between different HCW structures, both private and government
- More funding for HCW management and safety at institutions
- A phased approach to implementing the new HCW management standards
- Training should include everyone from top management down
- Training programmes should cover the whole of the waste spectrum, not only HCW
- Expand the S&AP to cover issues like public participation found in NEMA
- Containers for sharps should be standardized, affordable and be readily obtainable from chemists, supermarkets etc.
- NGOs and CBOs should be involved in the implementation of the S&AP and not just be recipients of the plan
- Guidelines or minimum requirements for the different categories of small health care waste generators were suggested.
- Standardization of by-laws would be helpful.

Discussion on the second day centred on the development of local government guidelines and tender development, and the role of local authorities in the S&AP.

Suggestions and comments included the following:

- A Working Group for improved HCRW management should be set up to draw up guidelines for small generators, with representatives from the industry, provincial and local government

- A standard set of by-laws for the whole of Gauteng, not necessarily limited to HCW, would be more cost effective
- A national umbrella regulation was suggested to cover cross-border impacts of HCRW
- The pricing of sharps containers should not be beyond the means of disadvantaged communities
- Registration of generators with Health Professional Councils and local authorities
- The local authority to be responsible for determining collection points for small generators, fines for non-compliance and the development of support structures to aid the reporting of non-compliance, such as NGOs and CBOs

The way forward

A series of half day workshops was proposed during the first half of 2004, to look at representation on a HCW Strategy Working Group and Steering Committee, to begin to identify smaller generators and look at the composition of the waste stream from these generators.

WORKSHOP FOR INTEGRATED STRATEGY AND ACTION PLANS FOR SUSTAINABLE HEALTH CARE RISK WASTE MANAGEMENT IN GAUTENG

WORKSHOP DAY 1

1. OPENING

Dr Dhiraj Rama welcomed everyone present to the workshop and thanked them for attending. He conveyed the apologies of the Head of Department Ms Trish Hanekom who was unable to attend. Dr Rama then called on MEC Ms Mary Metcalfe to open the workshop.

MEC Metcalfe extended a warm welcome to all present, and thanked them for coming to the workshop. The development of the Gauteng Health Care Risk Waste Management Strategy had been a long process, beginning in May 2000. Since then there had been six workshops. MEC Metcalfe noted that it had been exciting to her that there had been a systematic achievement of the goals set within the process. A year after the project was initiated a workshop was held where the draft policy was discussed and this was later submitted to cabinet. Two pilot projects were then started where steady progress has been made. Earlier this year a workshop was held to discuss the draft Health Care Risk Waste Regulations, and these have subsequently gone through the necessary legal processes and been gazetted. In May this year a further workshop was held to discuss the Waste Information Reporting Regulations. The Conference in August 2003 was very positive in terms of information sharing, and was a good learning experience.

MEC Metcalfe extended special thanks to all who had been involved throughout the process and had made their expertise and critique available. It was good to see project goals being attained and the work taking shape. The workshop would provide an opportunity to reflect on progress to date and to obtain input on the draft Integrated Health Care Waste Management Strategy and Action Plans and the way forward. The challenge was to make the strategy useful to the whole spectrum of Health Care Risk Waste (HCRW) generators province wide and to see the project taken forward at a national level. The Province would need to budget carefully for Health Care Risk Waste management and work on increasing efficiency in this area. Of interest was that the South African Bureau of Standards is also in the process of producing standards for Health Care Risk Waste Management and the Gauteng project has provided significant input in this process.

Feedback would also be given on comments received on the draft Regulations, which were published for comment in September 2003. It is envisaged that the Regulations will be promulgated on 5 January 2004. With the promulgation of the Regulations, the process would move a step closer towards compliance being a legal requirement rather than simply voluntary cooperation.

An area that would soon be addressed was hazardous waste. MEC Metcalfe was heartened to note that a pilot project in the Eastern Cape was working towards making generators responsible for the full cost of rehabilitation when they have been responsible for polluting an area.

A key focus of the workshop was also to begin looking at the smaller generators like NGOs and home based care-givers. The following day's workshop would look at how local government could benefit from the learning experience gained through the project. DACEL has been fortunate to have funding from DANIDA and want to make this information available to others.

A wide range of partners had assisted in the process – Department of Health, local government, industry, unions, stakeholders, and NGO's had all provided very useful input. Recognition would be given to projects where excellent work had been done at the Premier's Service Excellence Award Gala Dinner that will be held that night. This project had been chosen as one of the finalists for the Premier's Service Excellence Award on 7 November 2003. (The Project was awarded the Gold Award for the Service Innovation Category and the overall Platinum Award as the best of all categories).

MEC Metcalfe also referred to the Khanyisa Award that is given by the Department of Health in recognition of service excellence. The Project's Pilot Study at Leratong Hospital was awarded the 3rd Khanyisa Prize and a monetary prize on 9 October 2003.

In closing, MEC Metcalfe wished delegates a happy and successful two day workshop. Comments received would be incorporated into the Strategy and Action Plan (S&AP) and the final version would be circulated. Thanks were extended to Leratong Hospital and Itireleng Clinic, the pilot projects, the Health Care Sector, National and Provincial Health Departments, the Department of Environmental Affairs and Tourism, DANIDA, and the project team for all they have achieved.

2. PROGRESS SINCE MARCH 2003

Dr. Dhiraj Rama presented a summary of the project to date.

Findings from 2000

- For the first time in South Africa HCRW was weighed at selected institutions
- All treatment plants were located, mapped and the technology evaluated
- 600 major and 9700 minor HCRW generators, producing 90% and 10% of the HCRW stream respectively
- 50% of waste comes from private health care facilities
- Approximately 1200 tons/month of HCRW is produced
- There were 70 incinerators at 58 sites (25 DEAT registered)
- There was poor performance with non-compliance
- Systems were not cost-efficient and cardboard boxes are costly
- Systems used were very manual system and unsafe, resulting in needle stick injuries
- There was poor segregation of HCRW from HC general waste

Pilot projects were initiated at Leratong Hospital and Itireleng Clinic, using re-usable non-puncturing plastic containers. The cost of the containers was found to be slightly lower than the cardboard boxes previously used. At Leratong Hospital the wheelie bin system was found to be the most acceptable and helpful, while at Itireleng Clinic the 100 and the 50 litre boxes are in use. Since the introduction of these systems needle stick injuries have been significantly reduced.

Produced and planned outputs (2001-2003)

- Health Care Waste Management Policy
- Feasibility Study
- Health Care Waste Management Guidelines
- Health Care Waste Management Regulations
- Waste Information System Regulations
- Draft Capacity Building Report (Pilots & Province)
- Non-burn Verification Protocol
- Study Tour Report
- Health Care Waste Information System Design
- DACEL Health Care Waste Treatment Manual
- Survey Report for Pilots
- Cost of compliance monitoring (Incineration)
- Health Care Waste Composition Study
- Final Capacity Building Plan
- Technical Specifications and Tender Documents
- **HCWM Strategy & Action Plans**
- 5-day training course (SETA approved)
- International HCW Conference 25-26th of August at Sandton Convention Centre
- **Local Government Guidelines**
- **Tender Roll-out Support**

Capacity Building at Facility Level (Hospitals & Clinics)

- Training should be multi-disciplinary training
- Cascade training
- Build on present knowledge levels
- Ward/Departmental settings
- Organized through in-service training/HCW officer
- Supported by print materials
- Targets all levels of workers and management
- Code of Practice / HCW Management Plan
- Capacity building at Gauteng Health was needed
- There should be performance monitoring/reporting
- Contract monitoring should also be carried out
- Interface with service provider
- HCW officers appointed in all health facilities
- Identify regional Environmental Health Professionals for audits
- Establish a 5 day HCWM training programme
- Appoint a Gauteng Department of Health (GDoH) Waste Specialist
- Formalise the role of the HCWM committee

Questions of Clarity on Progress

There were no questions on clarity.

3. PRESENTATION OF THE DRAFT STRATEGY AND ACTION PLANS

Mr Torben Kristiansen gave a background presentation on the Draft Health Care Waste Management Strategy and Action Plans.

Vision and immediate objectives

The Vision of the Gauteng Health Care Waste Management Strategy is, within the framework and principles of the National Waste Management Strategy, to facilitate the establishment of an integrated, environmentally sustainable, occupationally healthy and safe, financially viable, institutionally feasible and operationally practical, comprehensive “cradle-to-grave” management system for Health Care Waste (HCW) in Gauteng, covering HCW generators in the province, addressing the short, medium and long term needs.

The immediate objectives

1. To formulate an integrated Strategy for sustainable HCW management for Gauteng;
2. To define institutional arrangements required to render sustainable HCW Management in Gauteng;
3. To develop Action Plans for implementation of the Strategy;
4. To estimate financial and human resource requirements for implementation of the Action Plans;
5. To evaluate the impacts of implementing the Action Plans, including impacts on the environment, occupational health & safety, public health, employment, etc;
6. To put in place verification mechanisms.

Expected results

1. Reduced environmental impact resulting from HCRW, in particular from treatment and disposal of HCRW and its residues;
2. Improved occupational health and safety at all organisations involved in HCW management, with for instance a reduction in the number of needle stick injuries;
3. Effective cooperation between the various governing bodies as well as the various parties responsible for HCW management in both the public and private sector;
4. Sound and effective technical solutions to address the various shortcomings identified in the HCW management system;
5. Cost effectiveness and affordability of HCW treatment and disposal, through for instance improved HCW segregation as well as more efficient and safer handling of the HCW;
6. Legal mechanisms for promulgation of the required standards as well as effective enforcement of such standards;
7. A society that is well informed around the risks associated with HCW as well as staff that are well trained in effective HCW management.

Who will be impacted?

1. Large Scale Generators (> 10 kg/day) (150-450)
2. Small Scale Generators (< 10 kg/day) (9,500)
3. HCRW Service Providers (transport, treatment, disposal, equipment etc.) (8-45)
4. Provincial Departments (Health, Environment, Works) (3)
5. Local Authorities (3 Metros, 3 District Councils & 9 Local Councils = 15 total)

Phasing of the Strategy and Action Plan

1. Short term phase: Year 2003 and 2004
 2. Medium term phase: Year 2005, 2006 and 2007
 3. Long term phase: Year 2008 onwards.
- Much of the Strategy implementation has commenced already: (regulations, Gauteng Health Tender, etc.)
 - More is still to be achieved (solutions for smaller generators, registration of actors, upgrading of facilities etc.)

Policy, strategies, acts etc. influencing the Gauteng HCW Management Strategy

Policies, Acts, Strategies etc that have influenced the Gauteng HCW Management Strategy are presented in Figure 1 below:

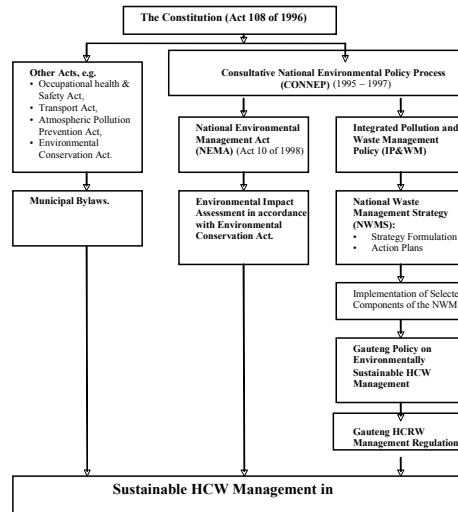


Figure 1: Policy, Strategies, Acts etc. influencing the Gauteng HCW Management Strategy

A summary of the problems

Current problems experienced in the HCW management field were summarized in Table 1 below.

Table 1: A summary of HCW management problems

	A. Provincial authorities.	B.	C. Health care facilities	D. Transport operators	E. Treatment operators	F.
1. Environmental problems.	-Air pollution ; -Soil pollution; -Water pollution	- Illegal disposal in environment; -Poorly / untreated HCRW on disposal sites; - Limited rules for liquid waste to sewer.	- Environmental aspects has low priority; - Spillage; - Liquid waste.	-Collection vehicle emissions; -HCW spillage; -Collection frequencies.	-Treatment plant emissions; - Poor plant performance; -Poor plant maintenance; -Residue disposal.	-Poorly / untreated HCRW on disposal sites; -Leachate.
2. Occupational health and safety problems.	-Insufficient enforcement of OHS legislation.	-Insufficient of OHS legislation.	- Risk of infection; -Risk of injuries; - Heavy lifts.	-Risk of infection; -Risk of injuries; -Heavy lifts; - Dust exposure.	-Risk of infection; -Risk of injuries; -Heavy lifts; -Heat stress; - Emissions; - Dust exposure.	- Risk of infection; -Risk of injuries; - Heavy lifts; - Dust exposure.
3. Institutional / Organisational problems.	-Lack of expertise & capacity; -Insufficient inter - departmental communication	-Lack of expertise & manpower; -Insufficient communication on government levels.	- No firm HCWM structures; -Lack of expertise & manpower; - Not registered as generators.	-Not registered as transporters; -No reporting.	-Not permitted for treatment; -No reporting.	-Not permitted for operation.
4. Technical problems.	-Lack of data and information for planning.	-Lack of data and information for planning.	-Inappropriate HCW management equipment.	-Inappropriate HCW transport equipment.	-Inefficient or no flue gas cleaning.	-Lack of appropriate disposal sites.
5. Financial shortcomings.	-Insufficient allocation of funds.	-Insufficient funds available.	-Inappropriate allocation of funds.	- Inappropriate costing at tender.	-Inappropriate costing at tender.	-Insufficient funds -Inappropriate costing at tender; -Land filling is cheapest option
6. Legal constraints	-Gaps in national environmental legislation; -Low level of environmental regulations; - Lack of cooperation between provinces; -Poor enforcement.	-Limited HCWM bylaws promulgated; -Poor enforcement.	-Lack of compliance with OHS Act, Gauteng Reg's.	-Lack of compliance with Road Ordinance, OHS Act, Gauteng Reg's.	-Lack of compliance with environmental legislation, OHS Act, Gauteng Reg's.	-Lack of compliance with Minimum Requirements and OHS Act.
7. Information and awareness problems	-Lack of training materials; -Lack of trainers	-Lack of training materials; Lack of trainers	-Insufficient awareness on handling of HCW.	-Insufficient awareness on handling and transport of HCW; -Not experienced in	-Insufficient awareness on handling and treatment of HCW; -Not experienced in	-Insufficient awareness on disposal of waste; Not experienced in waste disposal.

Environmental Strategic Target

1. Internationally recognised environmental standards in all provincial and local authority policies, legislation and guidelines
2. Planning, monitoring and enforcement of HCW Management prioritised by provincial and local authorities.
3. Provincial and local authorities taking the lead in capacity building and training initiatives

At Health Care Facilities (HCFs):

4. Internationally recognised standards for HCW containerisation, internal transport and storage
5. Effective HCW segregation to minimise HCRW that requires treatment
6. HCRW managed and treated in an environmentally sound manner, with the duty-of-care principle.
7. Environmental management systems implemented for green procurement, waste minimisation & recycling.

At transport operators:

8. Reduced environmental impact by HCW collection (logistical planning)
9. Reduced environmental impact by HCW collection (maintenance of vehicles).

At treatment plants:

10. Internationally recognised HCRW treatment efficiency standards met.
11. Internationally recognised emission standards met by HCRW treatment facilities.
12. Effective rotation of HCRW delivered for treatment to limit the storage time.

At the disposal facilities:

13. Waste disposal facilities used that are suitable for disposal of HCRW residues in accordance with Department of Water Affairs' (DWAF) Minimum Requirements.

Strategic target for Occupational Health and Safety

At provincial and local authorities:

14. Effective enforcement by provincial and local authorities of compliance with national and internationally recognised occupational health and safety standards at HCRW generators, transporters and treatment facilities.

At HCFs:

15. Effective HCW segregation that will prevent HCRW from being disposed of in HCGW containers, thus limiting the risk of infection and needle stick injuries.
16. Compliance with existing OHS legislation by HCFs to minimise the risk of infection, needle stick injuries, heavy lift injuries, etc.

At transport operators:

17. Compliance with existing OHS legislation by transporters to minimise the risk of infection, needle stick injuries, heavy lift injuries, exposure to dust, etc.

At treatment plants:

18. Compliance with existing OHS legislation by treatment facilities to minimise the risk of infection, needle stick injuries, heavy lift injuries, exposure before and during treatment processes, etc.

At disposal facilities:

19. Compliance with existing OHS legislation by waste disposal facilities to minimise the risk of infection, needle stick injuries, heavy lift injuries, exposure to poorly or untreated HCRW, etc.

Institutional / Organisational strategic target

20. Effective coordination between various stakeholders for environmentally sound, healthy and safe HCW management, facilitated by provincial and local authorities.
21. Sufficient and capable staff available from provincial and local government to support and monitor the health care sector for environmentally sound, healthy and safe HCW management.
22. Register for all HCW generators available at provincial authorities, allowing for effective monitoring whilst ensuring ongoing communication between the different stakeholders.

At HCFs:

23. Strong HCW management related organisational structures with clearly defined tasks, responsibilities and competences available at HCFs

At transport operators:

24. Strong organisational structures available at transport operators, enabling them to render effective HCW collection and transport services under normal & emergency conditions

At treatment plants:

25. Strong organisational structures available at treatment plants, enabling them to render effective HCRW treatment/disposal service under normal & emergency conditions.

At disposal facilities:

26. Strong organisational structures available at disposal facilities, enabling them to handle residues from HCRW treatment facilities under all weather conditions, thus preventing a build-up of residues during rainy seasons.

Technical strategic targets

At provincial and local authorities:

27. High level of technical standards for HCW Management facilitated by provincial and local authorities through legislation, tender specifications and guidelines.
28. HCW Information System (HCWIS) implemented and maintained by provincial authorities for more effective planning and monitoring of HCW management activities.

At HCFs:

29. High standard of HCW management equipment and materials maintained at HCFs.
30. Effective HCW Management procedures introduced at HCFs.

At transport operators:

31. High standard of maintenance on HCW collection vehicles to allow for high service levels, good working conditions and limited environmental impacts.

At treatment plants:

32. Compliance by treatment operators with new environmental standards for efficient HCRW treatment with limited environmental impact.

At disposal facilities:

33. Waste disposal facilities conforming to DWAF's Minimum Requirements for Waste Disposal available for disposal of HCGW and residues from HCRW treatment facilities.
34. Effective control mechanisms introduced by disposal facilities to avoid disposal of untreated HCRW or treated HCRW residues, not being de-listed for such disposal, on general waste disposal sites.

Strategic Financial target

At provincial and local authorities:

35. Information on costs associated with HCW Management disseminated by provincial authorities to all affected parties for increased awareness on the financial implications
36. Sufficient funds for both capital and operational expenditure allocated by provincial and local authorities for any areas of HCW Management services that are under budgeted.

At HCFs:

37. HCW Management expenditure analysed by HCF's as part of a process of making HCW Management systems more cost-effective.
38. Sufficient funds for both capital and operational expenditure allocate by HCF's for any areas of HCW Management services that are under budgeted.

At transport operators:

39. Sufficient allowance made by transport operators during tender cost estimates and annual internal budgets to allow for the rendering of HCW management services that are environmentally sound, healthy and safe.

At treatment plants:

40. Sufficient allowance made by treatment plants during tender cost estimates and annual internal budgets to allow for the rendering of HCRW treatment services that are environmentally sound, healthy and safe.

At disposal facilities:

41. Sufficient allowance made by waste disposal facilities in internal annual budgets to allow for the disposal of HCGW and treated HCRW residues in an environmentally sound, healthy and safe manner.

Strategic Legal target

At provincial and local authorities:

42. Strict HCW management related legislation promulgated by provincial authorities, in particular controlling treatment efficiencies and emission standards
43. Strict legislation concerning disposal of residues from HCRW treatment processes promulgated by provincial authorities.
44. Strict and uniform HCW management legislation promulgated to ensure compliance throughout SA with international standards.
45. Effective enforcement by both provincial as well as local authorities of HCW Management related legislation.

At HCFs:

46. Compliance with all HCW Management legislation by HCFs, and in particular the Gauteng HCRW Management Regulations and the OHS Act
At transport operators:
47. Compliance with all relevant HCW management legislation by transport operators, and in particular the Gauteng HCRW Management Regulations, the OHS Act and the Road Ordinances, to ensure that all collection vehicles, equipment and procedures are OK

At treatment/disposal plants:

48. Compliance with all relevant HCRW management legislation by treatment facilities, and in particular the Gauteng HCRW Management Regulations and the OHS Act, to ensure that all plants, equipment and procedures meet the required standards.

Strategic Capacity Building target

At provincial and local authorities:

49. Training and awareness programmes developed by provincial and local authorities that will assist HCFs in training and informing employees on correct HCW Management procedures and practices.
50. Training and awareness materials that will assist HCFs in training and informing employees on correct HCW Management procedures and practices, printed and distributed by provincial and local authorities.

At HCFs:

51. Training courses presented and information campaigns conducted by HCFs to all employees involved in HCW Management, thereby improving the standard of HCW management.

At transport operators:

52. Training courses presented and information campaigns conducted by HCW transport operators to all employees involved in HCW Management, thereby improving the standard of HCW management.

At treatment/disposal plants:

53. Training courses presented and information campaigns conducted by operators of HCRW treatment facilities to all employees involved in HCW Management, thereby improving the standard of HCW management.

At disposal facilities:

54. Training courses presented and information campaigns conducted by operators of waste disposal facilities to all employees involved in HCW Management, thereby improving the standard of HCW management.

Financial Resources required

Table 2: Financial Resources Required

	Provincial Authorities		Local Authorities		Public Health Care Facilities.		Total	
	(DoH and DACEL)		(3 Metro and 3 District)		(Hospitals and Clinics)			
	Short	Medium	Short	Medium	Short	Medium	Short	Medium
Additional staff	R 1.454.500	R 1.202.000	R 330.000	R 205.000	R 600.000	R 500.000	R 2.384.500	R 1.907.000
Training of staff	R 80.000	R 0	R 60.000	R 0	R 433.100	R 802.500	R 573.100	R 802.500
Consultancy	R 300.000	R 340.000	R 160.000	R 0	R 580.000	R 600.000	R 1.040.000	R 940.000
Publishing	R 531.600	R 0	R 24.000	R 0	R 303.200	R 17.200	R 858.800	R 17.200
Equipment and materials	R 0	R 0	R 0	R 0	R 5.600.000	R 2.400.000	R 5.600.000	R 2.400.000
Total	2.366.100	1.542.000	574.000	205.000	7.516.300	4.319.700	10.456.400	6.066.700

Performance Indicators chosen

Table 3: Performance Indicators Chosen

Aspect of the Vision	Performance indicators chosen
Comprehensive and integrated HCW management systems.	<ul style="list-style-type: none"> • Number of HCFs where new HCW management systems have been introduced according to the standards • Number of Local Government plans for HCRW Management • Number of HCF that have produced a HCW Management Plan for their facility • Number of facilities registered with the WIS as per the Waste Reporting Regulation
Environmentally sustainable.	<ul style="list-style-type: none"> • Amount of HCRW generated. • Emission of air pollutants (Particulates, HCl, etc.) • Emission of global warming gasses (CO2 & HC4) • Green procurement procedures implemented.
Occupationally healthy and safe.	<ul style="list-style-type: none"> • Number of needle prick injuries reported. • Amount of HCRW lifted manually over distances in stead of wheeled or mechanical transfer. • Degree of correct segregation
Financially viable system.	<ul style="list-style-type: none"> • HCF's expenditures for HCW management. • Socio-economic effects.
Institutionally feasible.	<ul style="list-style-type: none"> • Number of staff trained and informed about the new HCW Management systems. • Number of HCW management officers appointed/replaced. • Number of HCW management teams established. • Participation in a HCW Management Interest Group and networking between HCW stakeholders.
Operationally practical.	<ul style="list-style-type: none"> • Efficiency of HCW segregation. • Reusable vs. disposable containers for HCRW.
“Cradle-to-grave”.	<ul style="list-style-type: none"> • Number of facilities reporting on the HCW information system implemented. • Number of facilities covered by HCRW tracking systems.

Mr Torben Kristiansen commented that the draft Strategy and Action plan in many ways incorporated all progress made since the beginning of the project, including capturing all the experience gained from the pilot projects. However, much input was still needed from stakeholders. Of importance would be to discuss, amongst other things, whether or not targets were realistic and roles correctly allocated.

Small HCRW generators are not required to register as yet, but this would be introduced in time. Although they only contribute 10% in terms of the volume of the waste stream, in terms of risk posed this figures is much larger.

Questions of Clarity on Strategy and Action Plans

- There was a query as to the duration and level of training. Mr Kristiansen replied that the training material is being developed by the group of consultants in coordination with Human Resources in the Department of Health and Wits Technikon. The training material is being developed so that it can be implemented in a wider context. It is directed towards helping people on the ground in health care institutions, like infection control nurses. Health Care Waste Officers do 5 days of training looking at all aspects of HCRW management.

- Mr Brian Thomson queried whether it was possible to calculate the destruction and removal efficiency (DRE) with the accuracy called for in the DEAT guidelines because of variations in medical waste. Mr Kristiansen replied that the maximum emission levels allowed by EU guidelines are quite strict, so the project team chose indicators from the DEAT guidelines, which are quite close to the EU requirements. Mr. Kristiansen further replied that even though point of departure for the Gauteng Regulations where the DEAT Emission Guidelines only the actual emission parameters and the set emission limits had been taken into the Regulations. Hence, there is no reference to DRE in the Regulations, but it may unintentionally be seen as an implied requirement because the DEAT Guidelines are being referenced. He stated that he personally do not think that a DRE requirement of 99.99% calculated on an input basis is practically possible because of the lack of homogeneity of the waste stream and the fact that this is a very dynamic process. Even if a DRE requirement of 99.99% was based on an output basis of CO, CO₂ and TOC this would result in an indirect CO requirement that would be stricter than the current EU Emission Directive. He informed that the written comments received from Brian Thomson in this regard certainly will be considered when doing the final brush of the Regulations.
- Ms Nhlapo from NEHAWU asked why NGOs and hospices were not included as volunteers helping the terminally ill are at risk. She also queried how training would be made available to these people as they often don't get subsidies from government. Mr Kristiansen replied that NGOs, clinics and hospices would be included in the workshop discussion. The training programme would be available to anybody, and would hopefully be SETA approved so as to carry weight. It would be good for at least one person from each facility to receive the training. Posters and information packages are also being developed so that people on the ground can use these to carry out the training themselves. Ms Dee Fischer suggested that it would be good to obtain input at the workshop the following day on how the department could help people obtain the capacity building they need and how it could be funded.
- There was a query as to whether doctors have been made aware of the new requirement with regard to segregation of HCRW. Mr Kristiansen replied that the information has been made available via the publication of the draft regulations in the Gauteng Provincial Gazette on 11 September 2003 for comment. Notices had also been sent to the major hospital groups and medical associations in order to give them the opportunity to comment, although not many comments were received.
- Mrs Ferreira queried whether the Department of Public Works should register as a generator and who would monitor them? Mr Kristiansen replied that they operate incinerators in some instances and would need to register in this case, but not as a waste generator. At present reporting is required from larger generators, domestic waste landfills and hazardous waste landfills – both regional and onsite. Transporters need to register if they take waste out of the province.
- The representative from Earthlife Africa queried whether the Department had looked at alternate technologies to incineration? Ms Fischer replied that any technology that complies with the requirements is acceptable – autoclave, microwave etc. The Department has no preference towards or against alternative technologies or incineration. The Feasibility Report contained an assessment of the impacts from different treatment technologies and it was clear that not one treatment technology can be said to be better than the other. They all pollute, but in different ways.
- The representative from KwaZulu Natal Province queried whether the other provinces were going to implement similar requirements in order to prevent generators from migrating waste to provinces with less stringent requirements. Mr Kristiansen replied

that if waste was transported out of the Gauteng Province, the transporter would need to document to Gauteng that the treatment facility in the other province was compliant to the Gauteng Requirements. The Gauteng project is a national pilot, so cooperative governance reporting will take place to ensure that results and findings are disseminated to the other provinces. Once the Gauteng regulations are in place the Department is confident the other provinces will adopt similar new practices. The National Waste Management Strategy is also moving towards the production of waste management plans.

- Were there any plans for training Environmental Health Officers who do the monitoring? Mr Kristiansen replied that at this stage the first three sessions of the 5 day training programme is targeted specifically at the facilities under the Gauteng Department of Health and that limited funds are available for that training within the project – only 90 people can be trained and there is a need to ensure that there is a trained person for each major hospital and clinic, and one for each cluster of small generators. Some of the people that will be trained are Environmental Health Officers, but they are not included to a large extent. Training will continue into the future to allow for EHOs to join the ranks. However, the course will also be made available to municipal and private health care providers as well as transporters and treatment plants. The registration fee for the 5 day training course has been kept at a minimum level of R2,500 including training material and meals.

4. BREAKAWAY GROUP DISCUSSION ON STRATEGY

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
GROUP 1 : AVAILABILITY OF RESOURCES (SKILLS, PEOPLE, FUNDS, TECHNOLOGY ETC) IN SUPPORT OF THE S & AP		
A: Is the S & AP viable in terms of the available resources vs the timing and ambitions of the strategy?		
1. It would be useful to have a forum where discussion can take place on improvement of legislation, problem solving etc	• Noted	• Agree. The formation of such a Forum will be included in the Final Version of the Strategy & Action Plan (S&AP). DACEL will engage with Gauteng Department of Health with a view to establish such a Forum. Also it is being discussed if a similar Forum could be established under the auspice of the DEAT Project component for Health Care Risk Waste Management once that project has commenced in the beginning of 2004.
2. There should be integration between the various structures – private, government etc.	• Noted	• Agree. DACEL is making various guidelines and information material available to other departments and levels of government. The S&AP will be reviewed for possible strengthening of this aspect.
3. More funding will be needed for health and safety at institutions to provide more trolleys, bins etc.	• Noted	• Agree. No action will be taken by DACEL in this regard.
4. Waste should be separated according to international standards	• Will be looked into	• Agree. This is however already included in the SABS Code 0248, the Gauteng HCW Guidelines, the Gauteng HCW Policy and the S&AP. There is no principle difference in international and South African segregation standards. However, in SA there appears to be insufficient compliance with these standards. No action will be taken in this regard in the review of the S&AP.

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
5. The new standards should be phased in before the regulations come into effect so that facilities can budget for the increased expenses	<ul style="list-style-type: none"> • A lengthy conversion period was envisaged so that facilities do not have a problem converting 	<ul style="list-style-type: none"> • Agree. The Draft Regulations stipulate the compliance process for existing non-compliant treatment plants already. No action will be taken in this regard in the review of the S&AP or the Regulations.
B. Who should be the key role players for the implementation of the S&AP?		
6. The CEO is responsible to ensure that the staff has the necessary skills to implement the S&AP. The CEO could be required to sign the Action Plan. If not signed it should be a criminal offence.	<ul style="list-style-type: none"> • Will be looked into 	<ul style="list-style-type: none"> • The CEO is held liable in terms of the HCW Regulations and must sign and submit the Health Care Waste management Plans as well as the Audit Report of the HCWM Plan to be submitted every second year. This is deemed sufficient and a suitable level of control that can be managed with acceptable resources by DACEL. No action will be taken in this regard in the review of the S&AP or the Regulations.
7. The strategy document has some similarities to ISO 14000	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Agree. No action will be taken in this regard in the review of the S&AP or the Regulations.
C. Need for training and capacity building		
8. Everyone from top management down should be included in training, also Unions. The CEO is ultimately responsible to ensure training.	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Agree. However, this is felt to be adequately covered in the Regulations as well as for example the Occupational Health and Safety Act. No action will be taken in this regard in the review of the S&AP or the Regulations.
9. The CEO should delegate the training function to the HCW officer to train the staff to segregate waste correctly	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Agree. However, it is felt that the Regulations should not be too prescriptive regarding how targets are met. The S&AP will be reviewed to strengthen the delegation of powers to relevant level while still keeping the CEO ultimately responsible.
10. Mount a national campaign to raise awareness	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • This is seen as a possible task for national departments. However, DACEL is considering the using of mass media awareness directed towards health care providers, service providers for HCW and the general public at the time of the promulgation of the Gauteng Regulations. No action will be taken in this regard in the review of the Regulations but the S&AP will be reviewed for possible strengthening of this aspect.
11. Set up a forum for post training support and implement enforcement	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Agree. Within the Dept. of Health a HCW Management Forum is planned to be formalised to carry out this role. The possible establishment of a province wide forum with wider stakeholder participation will be considered in cooperation with Dept of Health.
12. Include training in the induction programme	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • The HCW Guidelines recommend this. No action will be taken in this regard in the review of the S&AP or the Regulations.
13. Training programmes should cover the whole waste spectrum, not only health care risk waste	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or the Regulations.
14. Reach communities via a training campaign	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • It is the strategy that communities and lay people should not be in a position to become in contact with HCRW. Hence, such community wide awareness campaigns are not prioritised at this stage whereas it is considered important to

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
		build on relevant health related NGO's and other campaigns that address home based care and primary health care providers. No action will be taken in this regard in the review of the S&AP or the Regulations.
15. Training should be timeously introduced	• Agreed	• Agree. No action will be taken in this regard in the review of the S&AP or the Regulations.
16. Training is very important for the success of the S&AP	• Agreed	• Agree. The level of awareness activities and training aimed at at the moment is considered suitable given the capacity constraints. No action will be taken in this regard in the review of the S&AP or the Regulations.
17. Management is often not aware of waste management	• Noted	• Agree. The Regulations place responsibility with the CEO and provides a tool for staff to approach management as there is a requirement for certain procedures and actions for improved HCW Management. No action will be taken in this regard in the review of the S&AP or the Regulations.
18. Will the Department offer help with training awareness?	• Yes, a generic training plan is being prepared	• The Department will prepare a) Guidelines for Local Governments for introduction of HCW Management Plans and Systems, b) the HCW Management Guidelines are available, c) generic posters and training material is made available, d) training packs are made available to assist in the planning and implementation of awareness activities and e) the 5 day HCW Officer Training Course will be made available for all to participate in and the course will be made available to other training institutions in South Africa. No action will be taken in this regard in the review of the S&AP or the Regulations.
D. Enforcement and auditing		
19. Accreditation – external would aid compliance monitoring. Should accreditation be voluntary or regulated?	• Will be looked at	• Agree, but at this stage this must be voluntary as there is no resources for enforcement of any accreditation requirement. No action will be taken in this regard in the review of the Regulations but the S&AP will be reviewed to strengthen this aspect.
20. The provincial DoH should develop a rating system based on the HCWM system	• Will be looked at	• S&AP will be reviewed to possibly strengthen this aspect, but resource availability should be reviewed first.
21. Enforcement of the Regulations could be onerous and will result in a cost increase	• Noted	• The Regulations have been designed to minimise the administrative burden of DACEL. It is appreciated that this will result in a marginal increase in the need for resources for the Department. No action will be taken in this regard in the review of the S&AP or the Regulations.
22. The commitment of management is essential	• Agreed	• Agree. No action will be taken in this regard in the review of the S&AP or the Regulations.
23. Reporting to government department to follow up on complaints?	• Will be looked at	• In the review of the Regulations we will seek to allow local governments and EHO's to enforce the HCW Management regulations. Anybody will be able to report misconduct in terms of the Regulations to DACEL for subsequent action.

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
24. Risk management via incentives or penalties	<ul style="list-style-type: none"> Will be looked at 	<ul style="list-style-type: none"> Regulations provide for penalties to be applied. Also, the authorisation to operation as a service provider can be revoked based on poor performance. Incentives for compliance are not considered at this stage. However, Regulations allow for reduced monitoring frequencies (and costs) if compliance has been documented over a period of time.
25. What course should be followed when operators do not comply with the Regulations	<ul style="list-style-type: none"> Citizens can report a company in breach of the regulations 	<ul style="list-style-type: none"> Misconduct can be reported by anybody or enforcement officers. Regulations provide for penalties to be applied. Also, the authorisation to operation as a service provider can be revoked based on poor performance.
E. Cost and budgets		
26. A percentage of the budget must be allocated to HCW management	<ul style="list-style-type: none"> Agreed that dedicated budget allocations are imperative but specific percentages are not practical. 	<ul style="list-style-type: none"> Agree that dedicated budget allocation is essential. However, it can be counterproductive and impossible to specify specific allocations. This is clearly the task of the CEO and not a government function in general. The S&AP will be reviewed to possibly strengthen this aspect of dedicated budget planning for HCW Management.
27. The development of a S&AP will assist with budget estimation and allocation	<ul style="list-style-type: none"> Agreed 	<ul style="list-style-type: none"> Agree. This was one of the intentions of the S&AP. No action will be taken in this regard in the review of the S&AP.
28. There should be penalties for non-conformance and incentives for conformance	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> Regulations provide for penalties to be applied. Also, the authorisation to operation as a service provider can be revoked based on poor performance. Incentives for compliance are not considered at this stage. However, Regulations allow for reduced monitoring frequencies (and costs) if compliance has been documented over a period of time.
29. Compliance is the minimum requirement	<ul style="list-style-type: none"> Agreed 	<ul style="list-style-type: none"> Agree. This was one of the intentions of the S&AP. No action will be taken in this regard in the review of the S&AP or Regulations.
30. Polluter pays principle in operation – internalisation of pollution cleanup costs will reap long term benefits	<ul style="list-style-type: none"> Agreed 	<ul style="list-style-type: none"> Agree. This was one of the intentions of the S&AP. No action will be taken in this regard in the review of the S&AP or Regulations.
31. Compliance should be phased in over a period of time otherwise this will result in significant cost increases	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> Regulations already provide for a phased reaching of compliance. However in fairness to those who have invested in compliant technology such grace periods must be limited. No action will be taken in this regard in the review of the S&AP or Regulations.
32. Funding from: Government expenditure Institutional budgets	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> No action will be taken in this regard in the review of the S&AP or Regulations.
GROUP 2: ENVIRONMENTAL, HEALTH AND SAFETY CONSIDERATIONS		
A. Is the S&AP correctly balanced in achieving the adequately reduce environmental impact, improved OH&S and infection control?		
33. The S&AP is correctly balanced – there has been an improvement in HCRW management, but there are still gaps to be addressed	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> No action will be taken in this regard in the review of the S&AP or Regulations.
34. There was concern about the monitoring of treatment facilities and whether this would be effective	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> Existing treatment facilities will go through a controlled process and new treatment facilities will have such

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
whether this would be effective		treatment facilities will have such requirements build into their Record of Decision in terms of the EIA. The reporting requirement, as specified in the regulations are designed to allow for cost-effective monitoring of facilities. No action will be taken in this regard in the review of the S&AP or Regulations.
35. Was it possible to move towards centralized treatment facilities eg. Regional?	<ul style="list-style-type: none"> The Department is moving towards regional facilities as small facilities are too costly to run and monitor 	<ul style="list-style-type: none"> The Policy stated that regionalisation of the treatment was a preference. The requirements of the Regulations will make on-site treatment, in particular incineration, very costly to the extent that such plants might become impractical to establish and operate. No action will be taken in this regard in the review of the S&AP or Regulations.
36. The S&AP needs to be expanded to include a link between health and safety and legal provisions so that monitoring can be enforced. Possibly link prophylactic measure and compensation	<ul style="list-style-type: none"> The minimum requirements in terms of OH&S and exposure are mandatory In terms of the OHSAS, the head of the institution is the responsible person 	<ul style="list-style-type: none"> Do not agree. Those aspects are covered by other acts and regulations. No action will be taken in this regard in the review of the S&AP or Regulations.
37. According to the new Municipalities Act most environmental health functions will be devolved to municipalities. In this case local authorities might be the best vehicle to streamline registration. As from July 2004 hospitals will be monitored by local authorities	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> Noted. But the requirement to register and report to Province is maintained and deemed the most cost-effective way to regulate this. Co-governance will ensure that data is made available to other levels of government.
38. Is the quality of residue after treatment covered by the Regulations?	<ul style="list-style-type: none"> Yes – the particle size in non thermal treatment is specified and the limit of unburned carbon is specified for thermal treatment 	<ul style="list-style-type: none"> No action will be taken in this regard in the review of the S&AP or Regulations.
39. Are disposal sites covered by the Regulations?	<ul style="list-style-type: none"> The Regulations do not cover the disposal sites – this is the job of DWAF. A permitted site must be used. The responsibility lies with the person accepting the waste. 	<ul style="list-style-type: none"> No action will be taken in this regard in the review of the S&AP or Regulations.
40. Should the S&AP not include issues like public participation in NEMA section 24(7)	<ul style="list-style-type: none"> Will be looked at 	<ul style="list-style-type: none"> Agree. The S&AP will be reviewed to ensure that public participation and consultation is adequately covered. From the onset of this project transparency and widespread consultations has been an integral part of the process.
41. There was a query on who is responsible if a spill occurs while HCRW is being transported – needs clarification	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> Once such a spill occurs it is the responsibility of the judicial person in whose custody the waste is. This is to a large extent covered by the Roads and Transportation Act and similar regulations. There may obviously be a opportunity for compensation from the generator in case the spill was caused by non-compliant or faulty containerisation. No action will be taken in this regard in the review of the S&AP or Regulations.
42. How will safety and health controls be enforced among small generators?	<ul style="list-style-type: none"> Stable and robust systems are needed – possibly need to adapt the Regulations The Regulations cover the whole spectrum of HCW – certain schedules apply to large generators and schedules can be added that apply to small generators. 	<ul style="list-style-type: none"> The Regulations cover all generators. The further improvement of possible health and safety controls for smaller generators are proposed to be part of the process that should commence with the participation of Local Government and DACEL. Schedules to the Regulations can be amended to include improved controls in this regard. No action will be taken in this regards in the review of the S&AP or Regulations.

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
B. Who should enforce the environmental, health, safety and infection control standards, and how should non-compliance be handled and reported?		
43. If the Municipalities Act is passed, from July 2004 local government will be responsible for enforcement	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • See earlier replies regarding enforcement. Regulations will be reviewed to assess the possible delegation of enforcement powers to other levels of government.
44. Provincial Health will be responsible to ensure that all aspects are in place at health care facilities	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
45. Risk assessments are done by the Provincial Dept of Health at present and the Dept of Labour is responsible for overall Occupational Health	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
46. OHS Act covers all members of society but the employer has a duty to ensure that staff responsibilities are correctly carried out	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
47. The CEO should delegate implementation of the S&AP to an infection control nurse or facility manager reporting directly to the CEO	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
48. At the Sandton Clinic, the CEO is responsible for implementing the OHS Act, but delegates functions to infection control nurses and health and safety officers. Records are checked by the Dept of Health and Dept of Labour provides an external cross-check	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
49. The OHS Act makes provision for an OHS committee and how it should be constituted. The committee can define issues in the workplace to be looked at. Does the S&AP include a similar provision?	<ul style="list-style-type: none"> • The HCWM plan must be audited every 2 years and this will include looking at the system. It could include checking of compliance to OHS issues as a cross check 	<ul style="list-style-type: none"> • The S&AP will be reviewed to possibly strengthen this aspect in the functions of the committees planning and monitoring for HCW Management.
50. Of concern was how the use of the proper containers for HCRW can be enforced	<ul style="list-style-type: none"> • It's illegal to use a container that can perforate to transport HCRW. Needs further discussion 	<ul style="list-style-type: none"> • At this stage no further enforcement tools are deemed relevant, among others due to resource considerations. However, the Regulations set clear requirements that will allow and motivate service providers to refuse carrying unsafe containers. No action will be taken in this regard in the review of the S&AP or Regulations.
C. How can improved segregation of HCRW be achieved?		
51. Training is vital but it needs to be ongoing, otherwise problems recur	<ul style="list-style-type: none"> • Counteract problems recurring through disciplinary measures, management of the process, legality – it is now illegal to mix HCRW with general waste • Ensure continuous reinforcement of the requirement through top-down involvement and commitment • Ensure accountability through signing off of processes 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
52. Include training as a requirement in the tender document to ensure staff get ongoing training	<ul style="list-style-type: none"> • Training is included in the tender document • Possibly need to look at tightening tenders in private institutions • The Gauteng tender document will be available to other provinces 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
53. A problem identified was doctors attached to hospitals but not accountable to the hospital and not included in training schemes etc. They often fail to segregate their waste properly and the hospital is liable.	<ul style="list-style-type: none"> • Incentivize • Provide the correct containers and remove them; bill them for costs – make it easy for them to do the right thing • Doctors sign an agreement to comply with the waste management programme 	<ul style="list-style-type: none"> • No action will be taken in this regards in the review of the S&AP or Regulations, but DACEL will seek to include relevant stakeholders, hospital groups, professional councils/associations in the implementation of better procedures and accountability by waste generators etc

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
	<ul style="list-style-type: none"> • Medical and Dental Council must come on board • MEDUNSA – include HCRW in the programme so that it is part of their training from an early stage 	
54. Training must take place from the top down	<ul style="list-style-type: none"> • Agreed 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
55. Improved segregation of HCW can be achieved, but it won't happen overnight	<ul style="list-style-type: none"> • Agreed 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
56. Budgetary constraints mean that medical waste will be the first to experience budget cuts – the WM budget needs to be ring-fenced	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • The S&AP will be reviewed for possible strengthening of this aspect.
57. Make different sizes of containers for sharps could easily be obtainable – eg. from chemists, supermarkets. Chemists could act as a drop-off point as well.	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations, but this suggestion is to be considered in the ongoing interaction with local governments for the identification of a plan and possible service options for smaller generators of HCW.
D. How should the occupational health and safety conditions be improved?		
58. Fines on the CEO for non-compliance with the Health and Safety Officer doing checks	<ul style="list-style-type: none"> • Will be looked at 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
59. Institute a disciplinary process with the threat of closure of the facility	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
60. Doctors belong to a professional body that can revoke their licence to practise	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regards in the review of the S&AP or Regulations, but this could be addressed in negotiations with relevant professional bodies..
61. Clinics should communicate with one another to ensure that they all have the same standards	<ul style="list-style-type: none"> • Agreed 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
62. Wherever possible negative behaviour should be handled in a positive, helpful way – off to supply training, literature etc.	<ul style="list-style-type: none"> • Agreed 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
63. Environmental Health Officers are the law enforcement officers	<ul style="list-style-type: none"> • Will be looked at 	<ul style="list-style-type: none"> • As above. The Regulations will be reviewed having this in mind.
GROUP 3: AFFORDABILITY AND TIMING OF THE S&AP? (QUESTION DISCUSSED IN GROUP 2)		
D. How can training be provided in the most affordable, yet cost effective manner?		
64. Informal training as part of the internal skills development plan is very effective	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
65. Stipulate that the HCW Officer must become a master trainer and include the training of x no of people per month in their job description	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
66. Doctors and health workers should also be required to receive training. Include in the Health Professionals Council, SMA and SASOM conferences for discussion	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
67. Include articles in medical journals to raise levels of awareness amongst health professionals	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
68. Simplify the contents of the course for home based caregivers who may not have a high level of education. Include in the Home Based Care	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
Training Module already available		
69. Use of posters with pictures e.g right vs wrong way is helpful in health care institutions	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
GROUP 4: ROLES AND RESPONSIBILITIES OF THE GOVERNMENT DEPARTMENTS AND DIFFERENT TIERS OF GOVERNMENT		
A. Are the roles and responsibilities as described in the S&AP suitable and feasible?		
70. Bylaws will need to be reviewed by all local authorities to make sure they are in line with the Strategy and Regulations	<ul style="list-style-type: none"> • Include the health institutions and local authority in the process • SABS 0248 was input made 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
71. Minimum requirements are needed for the different industries that produce HCRW	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
72. Aim for uniformity through national standards	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
73. Enforcement should be the responsibility of the local authority	<ul style="list-style-type: none"> • 1.1.4 Local authority • 1.1.5 DoH • 1.1.6 LA • 1.2.2 SP • 1.2.3 SP • 1.3.1 LA • 1.4.1 LA, SP • 1.4.3 LA, SP • 1.4.4 LA, SP 	<ul style="list-style-type: none"> • As above. The Regulations will be reviewed having this in mind.
74. Monitoring staff to receive more training	<ul style="list-style-type: none"> • 1.7.1 LA • 1.7.2 LA, Environmental • 1.7.3 LA, SP • 1.7.4 LA, SP • 1.7.5 LA, SP • 1.7.6 LA, SP 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
75. Table 2	<ul style="list-style-type: none"> • 2.1.1 DACEL • 2.1.3 Bold DACEL • 2.2.1 Bold DoH • 2.3.1 Funding to be raised • 2.4.2 SP • 2.5.1 Bold GdoH, DACEL, DPLG • 2.6.1 Bold DoH 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
B. What should be the key role of the National Departments in terms of improved HCW management?		
76. Legislation and policy directive development	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
77. Monitoring by the Dept. of Labour	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
78. Roles and responsibilities clearly defined	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
C. What should the key role of the Provincial Departments in terms of improved HCW management be?		
79. Provide funding	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • The applied principle is internalisation of real costs and that the waste generators must carry the full cost of waste removal.
80. Provide guidelines	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Agree. No action will be taken in this regard in the review of the S&AP or Regulations.
81. Coordination of waste management	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Agree. No action will be taken in this regard in the review of the S&AP or Regulations.

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
		Regulations.
82. Compliance monitoring	• Noted	• Agree. No action will be taken in this regard in the review of the S&AP or Regulations.
83. Coordinate data received on a local level	• Noted	• Agree. No action will be taken in this regards in the review of the S&AP or Regulations.
D. What should be the key role of the Local Governments for improved HCW management?		
84. Implementation of the S&AP	• Noted	• No action will be taken in this regard in the review of the S&AP or Regulations.
85. Development of bylaws for small generators	• Noted	• No action will be taken in this regard in the review of the S&AP or Regulations.
86. Enforcements at local level	• Noted	• No action will be taken in this regard in the review of the S&AP or Regulations.
87. Monitoring	• Noted	• No action will be taken in this regard in the review of the S&AP or Regulations.
88. Data collection	• Noted	• No action will be taken in this regard in the review of the S&AP or Regulations.
89. Development of plans (IDP)	• Noted	• No action will be taken in this regard in the review of the S&AP or Regulations.
90. Need in-house training together with NGOs	• Will be looked at	• No action will be taken in this regard in the review of the S&AP or Regulations. But will be included in the further preparation for solutions for smaller generators.
91. LG as the vehicle for identification of small generators	<ul style="list-style-type: none"> • Undertakers need to register in terms of the Health Act • Mortuaries – don't need to register as yet • Traditional healers, initiations schools – register with the local council • Diabetics, drug abusers – common contact point is the doctor. Pharmaceutical companies (Eli Lilly and Novo Nordisk) provide diabetics with support • Vets – veterinary council 	• No action will be taken in this regard in the review of the S&AP or Regulations. But will be included in the further preparation for solutions for smaller generators.
92. Identification of sources of sponsorship and funding specifically for HCRW disposal	<ul style="list-style-type: none"> • Buy-back centres • Sponsorship to promote corporate responsibility image 	• No action will be taken in this regard in the review of the S&AP or Regulations. But will be included in the further preparation for solutions for smaller generators.
E. What is the role of industry?		
93. Compliance with regulations	• Noted	• No action will be taken in this regard in the review of the S&AP or Regulations.
94. Research and development	• Noted	• No action will be taken in this regard in the review of the S&AP or Regulations.
95. Partnerships	• Noted	• No action will be taken in this regard in the review of the S&AP or Regulations.
F. What is the role of public and private generators?		
96. Compliance with regulations	• Noted	• No action will be taken in this regard in the review of the S&AP or Regulations.
97. Waste minimization and green procurement	• Noted	• No action will be taken in this regard in the review of the S&AP or Regulations.

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
98. Duty of care	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
G. Who is responsible for correct management of HCRW?		
99. All parties are responsible for an integrated approach.	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
100. Polluter Pays Principle should be better implemented	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
GROUP 5: PROBLEM IDENTIFICATION, REQUIRED ACTIVITIES & HOW TO DEAL WITH SMALLER GENERATORS OF HCRW		
A: Does the S&AP correctly identify the needs, problems and required activities?		
101. Categories to be included	<ul style="list-style-type: none"> • Emergency services – each vehicle should be provided with containers • Medical professionals • Private services 	<ul style="list-style-type: none"> • Agree. The S&AP will be reviewed for possible strengthening of this aspect.
102. 2 categories of small generator	<ul style="list-style-type: none"> • Small generators linked to a hospital • Small generators not linked to any hospital e.g. out in the country, tattoo artists, vets, Old Age Homes 	<ul style="list-style-type: none"> • Noted. No action will be taken in this regard in the review of the S&AP or Regulations.
103. Transport from outlying areas is not cost effective	<ul style="list-style-type: none"> • Posting via a sealed system • Transport in sealed containers to a central point • Central collection/drop-off points established by the Local Authority 	<ul style="list-style-type: none"> • Noted. No action will be taken in this regard in the review of the S&AP or Regulations.
104. Apathy amongst small generators – GP's etc	<ul style="list-style-type: none"> • Introduce a permitting process for new businesses – with Local Authority • Provide amnesty for existing businesses • LA's don't have the capacity to manage a registration process – guidance and capacity would be needed 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed for possible strengthening of this aspect.
105. Transport vehicles – would there be different requirements for transporters of waste from minor generators?	<ul style="list-style-type: none"> • Signage • Quantity of waste • SABS 0228 • Legislation - Dangerous goods 	<ul style="list-style-type: none"> • Noted. No action will be taken in this regard in the review of the S&AP or Regulations.
106. Regulation of regional incinerators or on-site treatment?	<ul style="list-style-type: none"> • Collection/disposal on-site in outlying areas • Include diabetics, sanitary pads and disposable nappies under HCRW (under domestic waste at present) 	<ul style="list-style-type: none"> • Noted. No action will be taken in this regard in the review of the S&AP or Regulations.
107. Different industries need different rules	<ul style="list-style-type: none"> • Guideline document on OH&S rules in different industries • Minimum requirements for different industries e.g. PPE 	<ul style="list-style-type: none"> • Noted. No action will be taken in this regard in the review of the S&AP or Regulations.
108. GP's services by Pathology Departments is not regulated – tracking waste problems	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed for possible strengthening of this aspect.
109. Technical problems not regulated	<ul style="list-style-type: none"> • Appropriate containers • Needle incinerators 	<ul style="list-style-type: none"> • Noted. No action will be taken in this regard in the review of the S&AP or Regulations.
110. Financial shortcomings	<ul style="list-style-type: none"> • NGOs need to be aware of increased future costs • Funds needed for awareness campaigns 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed for possible strengthening of this aspect.
111. Legal issues	<ul style="list-style-type: none"> • Need a standardized set of by-laws 	<ul style="list-style-type: none"> • Agree to principle, but it is a local government responsibility. The S&AP will be reviewed for possible strengthening of this aspect.
112. Overcoming apathy	<ul style="list-style-type: none"> • Information and awareness campaigns • Training at Technikon/University level • Short courses – e-learning • CPD point system for learning 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed for possible strengthening of this aspect.

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
B. Are the problems and constraints the same for all types of public, private small and large health care activities?		
113. Public/private differences	<ul style="list-style-type: none"> • Finances • Different systems for different minor generators 	<ul style="list-style-type: none"> • Noted. No action will be taken in this regard in the review of the S&AP or Regulations.
114. Different disposal/treatment technologies for different needs	<ul style="list-style-type: none"> • Vets – rabies • Mortuaries – religious issues • Minimum requirements for different categories of small generators 	<ul style="list-style-type: none"> • Noted. No action will be taken in this regard in the review of the S&AP or Regulations.
C. What are the key problems in terms of HCRW management for different generators?		
115. Most problems were identified under the previous question	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
116. Event management – how are events regulated?	<ul style="list-style-type: none"> • E.g. tattoo artists at concerts 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed for possible strengthening of this aspect.
117. Manufacturers should be responsible for green procurement	<ul style="list-style-type: none"> • Insufficient resources are a problem 	<ul style="list-style-type: none"> • Noted, but not seen as a task for provincial government. No action will be taken in this regard in the review of the S&AP or Regulations.
D: How should liquid infectious waste be handled?		
118. What are the requirements?	<ul style="list-style-type: none"> • Sewer • Roadside • French Drains and pits • Sewage plant monitoring • Chemical/pharmaceuticals – product stewardship • Require a product to gel and contain the liquid • On-site treatment or off-site treatment – to be investigated 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
E: Role of Local Government and Province for smaller generators		
119. Roles of Local Government	<ul style="list-style-type: none"> • Registration – systems to be established • Re-visits by-laws and penalties • Inspections, enforcement, monitoring • Forum for Service Providers and Generators • Provide information on services and products • Provide a central storage area with refrigeration • Awareness programmes • Reporting of quantities from small generators • Enforce standards at generators – generator to cover costs 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed for possible strengthening of this aspect.
120. Roles of Provincial Government	<ul style="list-style-type: none"> • Finance – systems • Minimum standards developed • Quality assurance of requirements • Driving force in development of educational material • Monitor Local Authorities • Analyse the waste statistics 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed for possible strengthening of this aspect.
F: What kind of systems and services should be offered/ made compulsory for smaller generators and how should they be financed?		
121. Containers – minimum specifications	<ul style="list-style-type: none"> • Rigid, lined container 	<ul style="list-style-type: none"> • Agree. Already included. No action will be taken in this regard in the review of the S&AP or Regulations.

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
122. Collection areas	<ul style="list-style-type: none"> Local clinic 	<ul style="list-style-type: none">
123. Minimum standards for transportation to central area	<ul style="list-style-type: none"> Existing transporters 	<ul style="list-style-type: none">
124. Cut-off minimum weight	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> A maximum weight is set now. No action will be taken in this regard in the review of the S&AP or Regulations.
125. Regulation of amounts to sewer	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> Already regulated by local governments. National or Provincial guidance could be considered The S&AP will be reviewed for possible strengthening of this aspect.
126. Regulation for on-site disposal	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> On-site disposal not allowed. On site treatment will be allowed if compliant only. No action will be taken in this regard in the review of the S&AP or Regulations.
127. Auditing by Local Authorities	<ul style="list-style-type: none"> Registration certificate – OHSAS 18000 	<ul style="list-style-type: none"> Noted. The S&AP will be reviewed for possible strengthening of this aspect.
128. Tracing	<ul style="list-style-type: none"> Bar codes etc. 	<ul style="list-style-type: none"> This is already covered by the Waste Reporting Regulations. No action will be taken in this regard in the review of the S&AP or Regulations.
ADDITIONAL ISSUES IDENTIFIED DURING THE PLENARY SESSION		
129. Threshold limit for transporters and generators of 5 and 10 kg may need to be revisited because the limits may need to be increased	<ul style="list-style-type: none"> Will be looked at 	<ul style="list-style-type: none"> Agree. These limits will be increased to: 20 kg/day for generators (= approx. 2 full HCRW boxes) for generators and 10 kg/day (= approx. 2 full sharps containers) for transporters
130. E-training for info dissemination and registration purposes	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> No action will be taken in this regard in the review of the S&AP or Regulations. But will be included in the further preparation for solutions for smaller generators.
131. Issue of green procurement in terms of pharmaceuticals	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> No action will be taken in this regard in the review of the S&AP or Regulations. But will be included in the further preparation for solutions for smaller generators.
132. Concern that NGOs should be involved in implementation of plans – and not just as recipients	<ul style="list-style-type: none"> Noted 	<ul style="list-style-type: none"> No action will be taken in this regard in the review of the S&AP or Regulations. But will be included in the further preparation for solutions for smaller generators.
133. There was a query as to the duration and level of training.	<ul style="list-style-type: none"> Training material is being developed by the group of consultants with Department of Health and Wits Technikon. The training material is being developed so that it can be implemented in a wider context. 	<ul style="list-style-type: none"> No action will be taken in this regard in the review of the S&AP or Regulations.
134. Mr Brian Thomson queried whether it was possible to calculate the destruction and removal efficiency (DRE) with the accuracy called for in the DEAT guidelines because of variations in medical waste.	<ul style="list-style-type: none"> Even though point of departure for the Gauteng Regulations where the DEAT Emission Guidelines only the actual emission parameters and the set emission limits had been taken into the Regulations. A DRE requirement of 99.99% calculated on an input basis is not practically possible because of the inhomogeneity of the waste stream and the fact that this is a very dynamic process. Even if a DRE requirement of 99.99% was based on an output basis of CO, CO₂ and TOC this would result in an indirect CO requirement that would be stricter than the current EU Emission Directive. 	<ul style="list-style-type: none"> Regulations will be amended to clearly reflect that incinerators must meet the following requirements: a) the maximum daily average emission levels as indicated in the current draft, b) min. 2 sec. retention time in the secondary combustion chamber, c) minimum temperatures in the primary and secondary combustion chamber as indicated in the DEAT Guidelines, d) maximum ignition loss of 5% (m/m) of the bottom ash, and no other requirements from the DEAT Guidelines shall apply.

ISSUE OR COMMENT	RESPONSE & SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS IN THE FINAL STRATEGY & ACTION PLAN OR HCWM REGULATIONS
135. Ms Nhlapo from NEHAWU asked why NGOs and hospices were not included as volunteers helping the terminally ill are at risk. She also queried how training would be made available to these people as they often don't get subsidies from government.	<ul style="list-style-type: none"> • NGOs, clinics and hospices would be included in the workshop discussion. The Course will be SETA approved. Best if at least one person from each facility to receive the training. Posters and information packages are also being developed for facilities own implementation, so that people on the ground can use these to carry out the training themselves. 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations. But will be included in the further preparation for solutions for smaller generators.
136. There was a query as to whether doctors have been made aware of the new requirement with regard to segregation of HCRW.	<ul style="list-style-type: none"> • Information made available via the gazetting of the draft regulations 2003-09-11. Notices had also been sent to the major hospital groups and medical associations in order to give them the opportunity to comment, although not many comments were received. 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations. But will be included in the further preparation for solutions for smaller generators.
137. Mrs Ferreira queried whether the Department of Public Works should register as a generator and who would monitor them	<ul style="list-style-type: none"> • Works operate incinerators and would need to register as treater. At present reporting is required from larger generators, domestic waste landfills and hazardous waste landfills – both regional and onsite. Transporters need to register if they take waste out of the province. 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
138. Earthlife Africa queried whether the Department had looked at alternate technologies to incineration?	<ul style="list-style-type: none"> • Any technology that complies with the requirements is acceptable – autoclave, microwave etc. No preference towards or against alternative technologies or incineration. The Feasibility Report contained an assessment of the impacts from different treatment technologies and it was clear that not one treatment technology can be said to be better than the other. They all pollute, but in different ways. 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
139. KZN province queried whether the other provinces were going to implement similar requirements in order to prevent generators from migrating waste to provinces with less stringent requirements.	<ul style="list-style-type: none"> • If waste was transported out of the Gauteng Province, the transporter would need to document to Gauteng that the treatment facility in the other province was compliant to the Gauteng Requirements. The Gauteng project is a national pilot, so cooperative governance in reporting will take place to ensure that results and findings are disseminated to the other provinces. 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
140. Were there any plans for training Environmental Health Officers who do the monitoring	<ul style="list-style-type: none"> • The first three sessions of the 5 day training programme are targeted specifically at the facilities under the Gauteng Department of Health for 90 people as there must be one trained person for each major hospital and clinic, and one for each cluster of small generators. Some of these will be Environmental Health Officers. Training will continue into the future to allow for EHOs to join the ranks. 	<ul style="list-style-type: none"> • DACEL will work towards ensuring that the HCW Training Course can be made available via several training institutions throughout SA and be guaranteed via a respected NGO such as the Institute for Waste Management of Southern Africa. Also, Gauteng Department of Health has been requested to commit to continuing training HCW Officers and replacing HCW Officers

5. PLENARY DISCUSSION ON STRATEGY AND ACTION PLANS

Joanne Yawitch chaired the session. Rapporteurs from the breakaway groups were asked to report back on discussion that took place in their groups.

COMMENT

- E-training for info dissemination and registration purposes.
- Issue of green procurement in terms of pharmaceuticals
- Concern was expressed that NGOs should be involved in the implementation of plans – and not just as recipients
- Threshold limit for transporters – 5 and 10 kg – may need to revisit because the limits may need to be increased

All comments received would be written up and inputs will be taken into account. Ms Yawitch thanked participants for their valuable input.

6. PRESENTATION ON STATUS AND EXPECTED AMENDMENTS BASED ON COMMENTS RECEIVED ON THE GAUTENG HCW AND WIS REGULATIONS

The draft Regulations had been published on the 11th of September and the 30 day comment period was already over. However, Ms Fischer requested that any further comments be directed to the Department in writing before 12:00 on 9 November. Comments would be tabulated and an indication of how they have been included would be given.

Questions of Clarity on Gauteng Regulations

Questions around the process:

- There was a query as to whether a deadline of 12 November gave sufficient time for comment? Ms Fischer pointed out that the draft Regulations were published for comment on 11 September for 30 days and that the formal time for comments was now closed. Some useful comments had been received and had been incorporated in the re-drafting of the Regulations.

Comments on regulations:

- There was a query as to the applicability of the NEMA section 27, particularly treatment facilities and the requirement for public participation to take place. It was felt that the NEMA requirement would apply and that this should be referenced in the Regulations. Ms Fischer replied that the suggestion would be considered. However, the intention was not to widen the process to the same extent as EIA.
- A concern was raised about the standards of compliance for burn technology – the DEAT guidelines are raised to the level of standards and when EU standards come into effect, treatment facilities will again need to upgrade their technology. It was suggested that a specific date for implementation of EU standards should be given. Mr Kristiansen replied that EU Standards and the DEAT requirements are not that different, but the issue would be looked at in more detail.

- Also of concern was that the present Standards only cover emissions and that this should be expanded to include operating standards. Mr Kristiansen agreed that this would be considered.
- Regarding the cut-off date for compliance with reports – it was not clear whether there is a cut-off date for facilities to be in compliance with the plans they have generated. Mr Kristiansen replied that an absolute cutoff date has not been allowed for and may not be possible. However, the ability to extend the temporary authorization needed to be looked into.
- There was a query about the definition of an enforcement officer- does the definition include Environmental Health Practitioners? The definition was intended to refer to the staff of environment, but this would be looked at.
- Under Section 19 – general transportation requirements – who would the competent authority be if the same requirements are not implemented in other provinces? Mr Kristiansen replied that this would be the MEC of Environment in Gauteng.
- Did the Regulations make provision for the transport of waste through Gauteng to other provinces? Mr Kristiansen replied that there are requirements in terms of the vehicle and spill kit that are covered by the Transport Act. Unless the load is unloaded in Gauteng it won't be affected by Gauteng requirements. If unloaded, the containerization requirement would apply.
- The concern was expressed that the Regulations should not be rushed at the end. This was noted.
- There was a query as to the possibility of providing training at a local authority level.
- The definition of *health care risk waste transporter* and *health care waste transporter* are different in the two sets of Regulations; and also the threshold limit. This would be looked at.
- Ms Rossouw was concerned that although her organization had submitted an 8 page comment document, no changes had been incorporated. Mr Kristiansen replied that the process is not yet complete and that comments would still be incorporated.

7. SUMMARY BY THE CHAIR AND WAY FORWARD

Ms Fischer presented a proposal for the way forward based on the suggestions that had come out of the breakaway groups. Half-day workshops were envisaged – for Industry and Local Councils.

INDUSTRY WORKSHOP: Chair – Chief Director DoPH, Chief Director DACEL Invitations through identified CEOs	
Objectives	Delegates List
Understand the profile of the drug stream	Blood transfusion
Presentation of the new pharmaceutical act, and medical aid act	Pharmaceutical council
How to spread the net to identify small generator groupings, identify institutions	Pharmacy groups
Discuss representation on project steering committee and project working group	Doctors who dispense
Problem analysis	HPCSA
	Supermarket outlets
	Mining industry
	Medical Aids
	Private hospitals and clinics
	Traditional healers council

LOCAL COUNCIL WORKSHOP: Metropolitan Municipalities, District Councils Chair – Chief Director DoPH, Chief Director DACEL Invitations through Municipal Managers and District Councils	
Objectives	Delegates List
Determine the profile of the drug stream	Clinics (dispensing)
Presentation of the new pharmaceutical act, and medical aid act	Provincial hospitals (dispensing)
Identify representatives for the project steering committee	Provincial Health Department
How to spread the net to identify small generator groupings, identify institutions	Local Municipalities (solid waste, environmental health, district health services)
Discuss representation on project steering committee and project working group	Metropolitan municipalities, District Councils
Problem identification	SALGA
Discussion of present services offered	NGO's and CBO's

Dr Rama summarized the day's proceedings. Positive input had been received in terms of the work ahead. Delegates had heard earlier of progress made and of the Draft Strategy and Action Plan. There had been a range of discussions in the working groups – good discussion points were raised around occupational health and safety issues, roles and responsibilities and how to deal with small scale generators. The Department looked forward to receiving additional comments by 12 November so that the promulgation of the Regulations could go forward.

Dr Rama expressed gratitude on behalf of the Department for the comments. All relevant comments would be incorporate into the document. In closing Dr Rama thanked delegates for attending and said that he looked forward to seeing many of them at the next workshop.

WORKSHOP DAY 2

8. WELCOME AND OVERVIEW OF PROJECT TO DATE FOR THE SAKE OF LOCAL AUTHORITIES NOT PREVIOUSLY INVOLVED

Dr Rama welcomed all present to the second day of the workshop. A productive programme lay ahead for the day. He gave a brief overview of the strategy and action plans in view for the benefit of delegates who had not attended the previous day's proceedings. Staff at the Pilot project sites had been integrally involved in the development of the new system for storage and transport of HCRW and the new system had generally been well received at these sites.

The discussion for the day would centre around the development of local government guidelines and tender development.

9. ROLES AND RESPONSIBILITIES OF PROVINCIAL AND LOCAL AUTHORITIES RELATED TO HCW MANAGEMENT

Dr Rama called on Mr Malcolm Mogotsi, Environmental Officer in DACEL, to do the presentation.

Mr Mogotsi gave a brief background of the HCRW strategy, the action plan vision and objectives, and the legal framework applicable to the roll-out of the plan.

Applicable legislation fell under the three tiers:

National Legislation

- The Constitution of the Republic of South Africa, Act 108 of 1996
- Atmospheric Pollution Prevention Act 45 of 1965
- Common Law of Nuisance
- Environment Conservation Act 73 of 1989
- Hazardous Substances Act 15 of 1973
- Health Act 63 of 1977
- Human Tissues Act 65 of 1983
- Medicines and Related Substances Control Act 101 of 1965
- National Environmental Management Act 107 of 1998 (NEMA)
- National Nuclear Regulator Act 47 of 1999
- National Road Traffic Act 93 of 1996
- National Water Act 36 of 1998
- Nuclear Energy Act 46 of 1999
- Occupational Health and Safety Act 85 of 1993
- Local Government Municipal Systems Act 32 of 2000

Provincial Legislation

- Local Government Ordinance
- Gauteng Health Care Risk Waste Management Regulations
- Gauteng Waste Information Regulations

Local Government By-laws

- Johannesburg Metropolitan Municipality Solid Waste By-laws

- City of Tshwane Metropolitan Municipality Solid Waste By-laws

Background of HCW management

The development of the Strategy and Action Plan was taking place against the background of:

- Increased environmental awareness in South Africa
- A lack of awareness and capacity within health care facilities resulting in safe, health and environmentally sound HCW management practices being neglected
- Untreated HCRW, as well as poorly incinerated HCRW ash, is often disposed of uncontrolled waste disposal sites

Categories of HCRW

- Infectious waste, which may contain pathogenic micro-organisms
- Sharps, including sharp and pricking objects that may cause injury as well as infection
- Pathological waste, that includes parts that are sectioned from a body
- Chemical waste, consisting of all kinds of discarded chemicals, including pharmaceuticals, that pose a special risk to human health and the environment
- Health care liquid waste

Who would be affected?

- Large generators of HCW such as provincial and private hospitals and clinics
- Small generators of HCW:
 - Pharmacies
 - General practitioners
 - Home based care
 - Abattoirs
 - Veterinary clinics
 - Tattoo artists

Anticipated roles of Provincial and Local Authorities

Provincial Authority

- **Environmental**
 - The DoH and DACEL to prioritise planning, monitoring and enforcement of matters related to HCW Management
 - DOH and DACEL to make more resources available for monitoring and enforcement of legislation related to HCW management
 - DACEL to ensure implementation of a HCRW tracking system for large generators
- **Occupational Health and Safety**
 - DOH, in cooperation with Department of Labour (DOL), to ensure enforcement of OHS standards for HCFs and other parties involved in HCW Management, with the aim of meeting internationally recognised standards
 - DoH, in cooperation with local authorities and HCFs, to develop HCW management plans that are appropriate for each of the respective facilities
 - DoH, in cooperation with local authorities and HCFs, to review and update HCW management plans developed and implemented for each of the respective facilities

- **Institutional matters**
 - DoH and DACEL to allocate the necessary human resources for implementation of this Strategy by appropriately trained staff
 - DoH, in cooperation with DACEL, to establish a forum for coordination of activities aimed at improving HCW Management, including implementation of this Strategy
 - DoH to enter into a Memorandum of Understanding (MoU) to inspect HCFs and enforce the OHS Act

- **Technical**
 - DACEL, in cooperation with DoH, to design a HCW Information System (HCWIS) for capturing of data relevant to HCW Management
 - DACEL and DoH to implement the HCWIS to enable improved monitoring and planning of HCW Management activities in Gauteng
 - The DoH and DACEL to investigate the market for equipment for internal collection, transport and storing of HCRW. DoH and DACEL to investigate possible ways of HCRW minimisation
 - The DoH, in cooperation with the local authorities and HCFs, to develop and implement HCRW generator registration system
 - DACEL, in cooperation with the service providers, to develop and implement service provider registration system

- **Financial**
 - DOH and DACEL to allocate sufficient funds for implementation of this Strategy, whilst also encouraging other stakeholders involved in HCW Management in Gauteng to follow provincial government's example

- **Information and training**
 - DOH, in cooperation with DACEL, to prepare training materials (manuals, guidelines, etc.) suitable for use by provincial HCFs as well as other institutions involved in HCW management
 - DOH, in cooperation with DACEL, to prepare information materials (posters, pamphlets, etc.) suitable for use by provincial HCFs as well as other institutions involved in HCW Management
 - DOH, in cooperation with HCFs, to implement ongoing training programmes
 - DOH, in cooperation with HCFs, to review and update training programmes

Roles of Local Authorities

- **Environment**
 - Local authorities to prioritise enforcement of legislation related to HCW Management, e.g. by discussing new initiatives in relevant forums
 - Local authorities to effectively monitor disposal of hazardous waste by landfill (avoiding illegal disposal or dumping of untreated HCRW and residues from HCRW treatment)
 - Local authorities to prepare common rules for discharge of liquid waste from HCFs to sewer
 - Local authorities to effectively monitor discharge of liquid waste from HCFs to sewer

- Local authorities to ensure implementation of a HCRW tracking system for small generators
- **Occupational Health and Safety**
 - Effective enforcement of OHS Act and Gauteng HCRW Management Regulations
- **Institutional matters**
 - Local authorities to allocate the necessary human resources for effective monitoring
- **Technical**
 - Introduce a registration system for small generators
 - Introduce HCRW collection / drop-off system for small generators
 - Local authorities, in cooperation with DoH and HCFs, to develop tender specifications for outsourcing of HCRW management services to clinics
- **Financial**
 - Local authorities to allocate sufficient funds for establishing / upgrading of HCW Management systems in its area of jurisdiction
- **Legal**
 - Local authorities to issue circular/order on correct HCW management procedures and monitor compliance therewith
 - Local authorities to issue circular/order on correct discharge of liquid waste from HCFs to sewer and monitor compliance therewith
 - Local Authorities to develop and promulgate bylaws that are in adherence with provincial and national legislation
- **Information and training**
 - Local authorities to ensure that staff is appropriately trained to monitor landfill operations and discharge of liquid waste from HCFs to sewer

Questions of Clarity on Roles and Responsibilities of Provincial and Local Authorities

- Grace was concerned that the department would be responsible law enforcement. This was important for ensuring the success of the programme. Discussion is needed on the issue – eg. Environmental health and the environment are treated separately at a local government level.
- There is no mention of any service agreements in the Regulations or who will be responsible for what at local government (LG) level. Ms Fischer replied that province doesn't intend to take on the waste management role but rather to work with LG on a guideline for management of HCRW at a LG level. The legal framework is there and the plan was to assist in preparing guidelines.
- How will relations between LG and DACEL be managed – this needs to be legislated. Ms Fischer acknowledged that this was a valid point. A start has been made on LG HCRW systems, and now there is a need to broaden the definition of the enforcement officer to include LG before the Regulations are finalized. Mr Albert commented that

services will be devolved to a local authority level. Waste management will be sole responsibility of municipalities and this would include HCRW.

- In local municipalities there is one department dealing with waste and another dealing with environmental health – this will cause a problem in dealing with HCRW. Ms Fischer acknowledged that this would need to be looked into.
- Municipality health services clearly include waste management - the different departments will manage the issue differently. The solid waste section will be responsible for collection and disposal and will be custodian of the by-laws and regulations. Ms Fischer commented that the environmental health officers would ensure continuous improvement from within the institutions. Solid waste should ensure that training is taking place in institutions. They would also need to provide training on the management of the solid waste stream.
- Ms Mzimba from Mogale City commented that there was a need to work out a management plan. Dr Rama replied that it was important to look at the scope of work and decide who will do what.
- There was a query as to whether environmental health practice audits could be done by the Auditor General. Dr Rama replied that the auditor general's current role was to audit all national and provincial departments, but not at a project level – this would therefore not be feasible. LG could request that the National Department of Health conduct an audit. Province had also gazetted Environmental Management Plans and these included Health Care Waste management plans.
- The representative from Diepkloof community expressed a concern around the legal framework for municipalities for managing HCRW and whether this included community participation and public participation in environmental management. Ms Fischer replied that the NGOs were the people liaised with the communities, and they had been included in the process.
- There was a suggestion regarding LG Industrial Development Plans – clusters of LGs could work together in drafting the outcomes to make sure things are done in a coordinated way.

10. PRESENTATION ON PROPOSED HCRW MANAGEMENT AND WIS FOR SMALL GENERATORS

Paul Furniss gave a presentation on the formulation of HCRW systems for small generators. He commented that the title of the presentation was misleading, as there is no system as yet. The idea was to get input at the workshop and begin to develop a system. The presentation was meant to stimulate discussion.

Defining minor generators

- A minor generator was defined as a health care risk waste generator that generates up to 10 (ten) kilograms per day of health care risk waste calculated as a monthly average, but does not include a domestic health care risk waste generator
- Domestic health care risk waste generators are defined as a household or other facility generating reasonably minimal quantities of HCRW.
 - This does not include households generating sharps waste or where there is one or more chronically ill persons requiring the use of equipment such as a dialysis machine

Minor generator status quo

- There are approximately 9700 minor generators in the Gauteng, and they contribute 10 % of the HCRW stream
- These include laboratories, the pharmaceutical industry, health care practitioners (doctors, dentists, specialists etc.), veterinary services, specialised institutions (hospice) and private homes
- The minor generators were excluded from the feasibility study because of their relatively small contribution to the total health care waste production.
- Some are serviced by the health care waste transport companies who transport their HCW to treatment facilities
- Others dispose of their HCW predominantly into the general waste or this is disposed of on-site (burial or open burning)

What the regulations currently say about minor generators and government

The Draft Gauteng Health Care Waste Management Regulations (September 2003) state that minor generators are required to:

- Segregate HCRW from HCGW at source
- Minimise the generation of waste at source
- Package HCRW in accordance with the regulations (e.g. sharps waste must be in a sharps container)
- Store HCRW in accordance with the regulations
- Treat and dispose of waste in accordance with the regulations
- Register with the local government on a date to be fixed by the Provincial Gazette
- Ensure that a HCRW transporter transports their waste to a permitted HCRW treatment facility

Local government is required to:

- Provide a service for the safe collection and treatment of HCRW
- Before 1 March 2005, prepare Local Government Health Care Risk Waste Management Plans to achieve and implement the service (in accordance with Schedule 6 of the Regulations)
 - Objectives of the plan
 - A status quo report
 - An investigation of the needs and options for HCRW management within the local municipality
 - Details regarding target setting
- By implication, have a system for registering minor generators

Provincial government (DACEL) is required to:

- Support local government in complying with the preparation of the Local Government Health Care Risk Waste Management Plans
 - This may include the production of a guideline document to guide local government in the development of the plans

Ideas on formulation of a HCRW system

- Institutional arrangements and co-operative governance

- HCRW management plan to be included as a chapter within the Local Municipality Integrated Waste Management plan
- The establishment of a forum or Project Steering Committee to run the process of guideline development
- Implementation of workshops to communicate progress throughout the development process
- Suitably affordable HCRW management systems
 - Development of specific container systems for the different generators eg. Mortuaries, home based care, veterinary clinics etc.
 - Establishment of “drop-off” centres e.g. pharmacies, local clinics – where empty containers can be collected and full containers delivered – possibly a return/refund system
 - Establishment of collection services for frequent generators of minor amounts of HCRW – could be combined with the collection of general waste and a fee charged
- Current and required legal tools
 - Development of generic by-laws to prevent inconsistencies and confusion
 - Development of generic HCRW and treatment tender specifications
 - Registration of minor generators – possibly on-line to minimise the workload and the process could be outsourced

QUESTIONS OF CLARITY ON PROPOSED HCRW MANAGEMENT AND WIS FOR SMALL GENERATORS

- There was a query regarding minimization of waste at source and how it was envisaged that this would occur? Mr Furniss replied that a focus of the present project is the segregation of waste at health care facilities to minimize amount of HCRW to be treated. Ideas are needed on how to bring manufacturers on board and encourage green procurement. Dr Rama answered that on the issue of green procurement it was important to note that operating procedures simply minimized the hazardous waste stream, so there is some minimization already happening. There are certain clinical procedures internationally where waste streams are being reduced – these need to be adapted to the South African context.
- There was a request for the details of the contact person for the planned workshops. Mr Furniss indicated that the workshops would be for discussion in the breakaway groups. No formal plans are yet in place.
- How will domestic generators be located? Mr Furniss answered that ideas on this issue would be sought in the discussion groups.
- There was a comment regarding home based care as a generator and that there is a whole range of categories under this broad category. Ms Fischer replied that there was a need to be careful of expectations – this was more a national function, but this project could make suggestions and requests at a national level.
- There was a query as to how to distinguish between drop-off points and transfer stations. Mr Kristiansen replied that a drop-off point did not refer to a transfer station, it was simply a central area e.g. a clinic that was easily accessible
- There was a query as to whether the forums were to be at a LG level or broader? At present there is a LG forum but it is not formalized. Mr Kristiansen replied that the present thinking is that there is a need for a dedicated LG forum.
- The comment was made that SALGA represents LGs at a national level and that there is a Gauteng branch to assist in establishing the forum. Mr Kristiansen replied that

this would be put forward as a recommendation. Dr Rama felt that a model with more LG representation was needed.

- Would evaluation and monitoring be included? Nothing was yet spelt out for minor generators. Mr Kristiansen replied that it was envisaged that LG would cover the issue and would also give training. Dr Rama said that some monitoring would take place through the WIS.
- There was a comment on the use of acronyms – they need explaining as not everyone knows what they stand for. This was noted.

11. FORMULATION OF GAUTENG STRATEGY ON PROPOSED HCRW MANAGEMENT FOR SMALL GENERATORS

Dr Rama gave a brief introduction to the process. The two breakaway groups would discuss the different aspects of the formulation of a provincial strategy for HCRW management for small generators as set out in the workshop handout.

12. GROUP DISCUSSIONS ON GAUTENG STRATEGY ON PROPOSED HCRW MANAGEMENT FOR GENERATORS, ACTION PLANS AND SUPPORT REQUIRED BY LOCAL AUTHORITIES

ISSUE OR COMMENT	RESPONSE OR SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS
GROUP 1: INSTITUTIONAL ARRANGEMENTS AND COOPERATION BETWEEN TIERS OF GOVERNMENT		
A. What should be the composition and representation in a Working Group for improved HCWM in communities and from smaller generators?		
1. Strategic work belongs to the Metro, but input and legal framework must come from the local level.	<ul style="list-style-type: none"> • 3 A municipalities in Gauteng (Metros) • 3 C municipalities or District Municipalities • 9 B municipalities or local municipalities 	<ul style="list-style-type: none"> • Noted. No action will be taken in this regard in the review of the S&AP or Regulations.
2. Does local government have the financial capacity to run such a structure?	<ul style="list-style-type: none"> • Implementation of the new system will be gradual and will involve the allocation of funds to HCW management and the training of personnel to fulfil the roles 	<ul style="list-style-type: none"> •
3. There should be provincial as well as local representation	<ul style="list-style-type: none"> • Planning and local government • Environment and Health Depts • Public works • Dept of Labour • Crematoria, mortuaries • Institute of Waste Management • Institute of Environmental Health • Health Professionals Council (1 person from each Board) • Universities, Technikons • Emergency services • NGOs, CBOs – home based care • Hospices, Old age homes • Trade Unions • Politicians • Technicians • Professionals • People on the ground 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed to take cognisance of the suggested list of stakeholders.
4. Need also to look at the second level of the Working Group structure – how will it devolve responsibilities and functions	<ul style="list-style-type: none"> • Develop Terms of Reference for the Working Group 	<ul style="list-style-type: none"> • The S&AP will be reviewed to provide more guidance in this regard.
5. There is a forum already set up for the larger generators within the Gauteng Department of Health	<ul style="list-style-type: none"> • The forum was set up for interested stakeholders – Dept of Health, infection control, Health and Safety, SALGA – 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed to provide more guidance in this regard.

ISSUE OR COMMENT	RESPONSE OR SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS
	about 30 people	
B. Is a Working Group the right forum to achieve this?		
6. A Working Group would be a start as not much is yet known about smaller generators	<ul style="list-style-type: none"> • It would be a diverse group – this would be positive in terms of spreading the message about HCRW • Future initiatives would be easier because of greater awareness 	<ul style="list-style-type: none"> • Noted. No action will be taken in this regard in the review of the S&AP or Regulations.
C. Who should chair and convene the meetings?		
7. Convenor – should be DACEL or Gauteng SALGA Chair – to be decided by the group	<ul style="list-style-type: none"> • Suggestion was that Chair should rotate on an annual basis to promote ownership of the forum 	<ul style="list-style-type: none"> • Noted. No action will be taken in this regard in the review of the S&AP or Regulations.
D. Terms of Reference for the Working Group?		
8. Included in the Terms of Reference	<ul style="list-style-type: none"> • Set objectives for the design and implementation of a system of HCWM for small generators • Ensure standardization and sustainability amongst small HCRW generators • Chair rotates on an annual basis, chosen by the Working Group • Number of representatives (around 30) • Frequency of meetings • Dispute resolution mechanism • Term of the Working Group – will the group be maintained as is in the long term or will it be maintained in a different form • How the Working Group will devolve responsibilities on the ground 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed to provide more guidance in this regard.
E. Profile of representatives of the Working Group (politicians, technicians etc)		
9. Representation as in point 2 above	<ul style="list-style-type: none"> • Representation should be broad, and those chosen should be representative in their sphere 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed to provide more guidance in this regard.
F. What role should Gauteng SALGA and other organisations at a municipal level play?		
10. Discussed under A above	•	•
GROUP 3: CURRENT LEGAL TOOLS IN USE AND OPPORTUNITIES FOR DEVELOPING LEGAL TOOLS (DISCUSSED BY GROUP 1)		
A. Development and use of bylaws (generic for the province)		
11. A standard set of by-laws for the whole of Gauteng would be more cost-effective	<ul style="list-style-type: none"> • A process would need to be set up to develop them 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed to provide more guidance in this regard.
12. By-laws are easier to enforce at a local authority level – they cover the gaps not covered by the Regulations	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Agree. No action will be taken in this regard in the review of the S&AP or Regulations.
13. Query as to whether the by-laws should be limited to HCW? Some municipalities don't have any by-laws for solid waste	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Noted. The S&AP will be reviewed to provide more guidance in this regard.
14. Small generators should be included in the Regulations	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • It is felt that the development of solutions and enforcement of requirements for smaller generators should be a local government matter. Hence, the regulations will not be amended to address smaller generators any further than already the case at this stage. However, once the process with local

ISSUE OR COMMENT	RESPONSE OR SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS
		governments has produced clear recommendations and service solution this could, if applicable be incorporated in subsequent revisions of the regulations.
15. The Working Group could identify gaps not covered by the Regulations and decide if by-laws are needed	• Noted	• Noted. The S&AP will be reviewed to provide more guidance in this regard.
B. Potential for cross-border impacts between local governments in case of differences in approach and due to location of regional treatment facilities		
16. A national umbrella Regulation would cover this issue	• Noted	• This would be a national initiative. Hence, the Provincial S&AP will include this as an opportunity.
GROUP 2: PRELIMINARY DISCUSSION AND SUGGESTION OF SUITABLE AFFORDABLE HCRW SYSTEMS TO BE DEVELOPED FOR SMALLER GENERATORS		
A. Types of containerisation		
17. Sharp containers to be standardized – 500ml or 1 litre	• Noted	• Disagree. A range of sharps containers etc. should be made available to allow for best possible application and cost-effectiveness in use.
18. Containers should carry SABS approval	• Noted	• Agree that there is a need to achieve criterion for acceptability of sharps containers.. S&AP will be reviewed to provide more detail in this regard.
19. Containers to carry the word “Danger” in red	• Noted	• The revised SABS code 0248 (SANS 00248) will cover this. Hence, it is decided that the SANS Code 00248 should set the criterion.
20. Red bag for non-sharps HCRW – standardized. Standard labels.	• Noted	• A requirement of labelling of individual bags will not be included in the Regulations or S&AP as this could increase costs. It is considered that colour coding is sufficient, as the liners would be placed in puncture and leak resistant containers before off site removal.
B. Transportation – collection, drop-off		
21. Collection point would need to be determined, depending on the services rendered	• Will be looked into	• Agree. No action will be taken in this regard in the review of the S&AP or Regulations.
22. Local authority should facilitate/be responsible for providing collection and transportation	• Will be looked into	• This is addressed by the requirement in the regulations that local government must develop plans for servicing the smaller generators. No action will be taken in this regard in the review of the S&AP or Regulations.
23. Doctors to register with the local authority to ensure collection and safe disposal of medical waste	• Will be looked into	• No action will be taken in this regard in the review of the S&AP or Regulations.
C. Return/refund systems		
24. The price of containers should not be beyond the means of disadvantaged communities	• Noted	• Agree. Pricing and financing of the services provided for smaller generators needs to be addressed in the coming process with local governments. No action will be taken in this regard in the review of the S&AP or Regulations.
25. Put incentives in place for pharmaceutical companies and generators	• Will be looked into	• This is seen as a possible national initiative that would be unsuitable for provincial intervention. No action will be taken in this regard in the review of the S&AP or Regulations.
26. Government should consider subsidizing the sharps containers	• Will be looked into	• Pricing and financing of the services provided for smaller generators needs to be addressed in the coming process with

ISSUE OR COMMENT	RESPONSE OR SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS
		local governments. No action will be taken in this regard in the review of the S&AP or Regulations.
27. Industry (i.e. supplier) to pay for the service (flat rate recommended)	<ul style="list-style-type: none"> • Will be looked into 	<ul style="list-style-type: none"> • Pricing and financing of the services provided for smaller generators needs to be addressed in the coming process with local governments. No action will be taken in this regard in the review of the S&AP or Regulations.
28. Doctors to enter into a service agreement with the supplier	<ul style="list-style-type: none"> • Will be looked into 	<ul style="list-style-type: none"> • Pricing and financing of the services provided for smaller generators needs to be addressed in the coming process with local governments. No action will be taken in this regard in the review of the S&AP or Regulations.
G. Use of in-house systems or out-sourcing		
29. Registration of the end-user	<ul style="list-style-type: none"> • Will be looked into 	<ul style="list-style-type: none"> • No action will be taken in this regard in the review of the S&AP or Regulations.
GROUP 3: CURRENT LEGAL TOOLS IN USE AND OPPORTUNITIES FOR DEVELOPING LEGAL TOOLS – DISCUSSED BY GROUP 2		
C. Possibility for identifying and registering all relevant activities (GPs, home based care, diabetics, home dialysis, drug addicts etc		
30. Registration of users with Health Professional Council of SA	<ul style="list-style-type: none"> • Undertakers – registered with the LA • Home based care – DoH ensure safe disposal • Small generators registered and trained by the Provincial Government • Road-shows undertaken to broaden awareness 	<ul style="list-style-type: none"> • Noted. S&AP will be reviewed to provide more detail in this regard.
General		
31. Provide education at schools on separation and disposal of waste	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Induction at medical schools, nursing colleges, lab technicians and other relevant educations is supported but seen as a national function. However, this will be brought forward to relevant departments. However, training about HCW segregation etc. at general schools etc. is not deemed effective.
32. Train/teach people to self-administer	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Noted. S&AP will be reviewed to provide more detail in this regard.
33. Suppliers of sharp utensils to ensure proper warning labels – similar to cigarette warning	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • This is seen as a possible national initiative that cannot be introduced provincially only.
34. Flyers to be distributed/included in the medicine/syringe containers	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • This is seen as a possible national initiative that cannot be introduced provincially only.
35. The Act states how medicines are to be disposed of therefore the onus is on suppliers to include the information in the leaflet	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • This is seen as a possible national initiative that cannot be introduced provincially only.
36. A properly designed system is needed to ensure that HCRW is properly disposed of	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Agree. No action will be taken in this regard in the review of the S&AP or Regulations.
37. Clarity is needed on what constitutes medical waste e.g. pads, condoms – are they included?	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • The Department clearly supports the international practice of NOT classifying any potentially infectious wastes generated as part of everyday life in homes and similar as HCRW. Hence, wastes such as band-aid, used sanitary pads and condoms etc. can be disposed as general waste. The S&AP will highlight this opinion.

ISSUE OR COMMENT	RESPONSE OR SUGGESTIONS DURING THE WORKSHOP	DACEL'S DECISION ON POSSIBLE INCLUSION OF COMMENTS
38. Emphasis must be placed on training on proper handling of medical waste	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Agree. No further action will be taken in this regards in the review of the S&AP or Regulations.
39. The media should be used to educate – TV, adverts	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • It is suggested that this be considered on a case-by-case basis while carefully considering the messaging and target groups. No further action will be taken in this regards in the review of the S&AP or Regulations.
40. Roles of local authority	<ul style="list-style-type: none"> • Determine collection points and collection day • NGOs could assist the local authority • Produce pamphlets, posters etc • Responsible for correct disposal of HCRW • Responsible for fines – set a reasonable amount for small generators • Develop reporting structures to LA to allow small generators to report criminality on the part of GPs 	<ul style="list-style-type: none"> • Agree. S&AP will be reviewed to provide more detail in this regard.
41. Page 16, Box 2.3 & 2.4 – Gazette – is not specific enough	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Noted. S&AP will be reviewed to provide more detail in this regard.
42. Page 87 – Gazette – should allow for other people to enforce, not only the LA	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Noted. The Regulations will be reviewed to allow for better enforcement of various levels of government.
43. Two types of enforcement are needed – one for small generators and one for suppliers and bigger generators (industry)	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • Noted. S&AP and regulations will be reviewed to provide more detail in this regard.
44. National legislation and Regulations need to be considered, as well as the Constitution	<ul style="list-style-type: none"> • Noted 	<ul style="list-style-type: none"> • This has been considered carefully. No further action will be taken in this regard in the review of the S&AP or Regulations.

13. PRESENTATION OF GROUP FINDINGS IN PLENARY

COMMENTS

- Service providers should be invited to forums and meetings as they ultimately provide the safe disposal of the waste.
- Gala is now called Gauteng SALGA.
- The Local Authority should be responsible for enforcement.
- There is a body representing occupational health nurses and infection control nurses – it would be good to invite them to participate in the process.
- With regard to the Bylaws – would the fines be the same for all generators? Fines for large generators and smaller generators would not be the same.
- A concern regarding registration of generators was raised – it would be a huge exercise and would need careful planning. Dr Rama replied that registration and finance needed careful consideration.
- Containers for HCW needed to be non-leaking, and preferably biodegradable.
- It was very important to recognize the role of CBO's in helping local government to roll out the registration process.
- The community profile would help in the registration of generators as this would help identify how many doctors etc. were present.

14. CONCLUSION AND WAY FORWARD

Dee Fischer presented a proposal for the way forward for discussion. Ideas on how to get the Working Groups constituted were needed. To achieve this, three workshops were envisaged – industry, local council and a specific workshop for district local councils – for all municipalities. DACEL would bear the costs for the workshops, but further work would require a new business plan.

COMMENTS

- The environmental management unit responsible for the Waste Management Plan and also service providers responsible for the waste management contracts should be included. Dr Rama replied that list of invitees would be reviewed to avoid any exclusions.
- It was pointed out that CBOs include 2 main sectors – HIV/AIDS CBOs, especially home based outreach could be involved in workshops for industry; while environmental CBOs could be involved in the local council workshops where they could provide the necessary feedback and carry-over of training and enforcement. Dr Rama replied that the two sectors would be invited and would have the opportunity to attend either of the workshops.
- The comment was made that there is potential for confusion in the sending out of invitations as there was a distinction between local municipal managers and district municipal managers. Dr Rama agreed that there was a need to define the objectives and scope of the workshop carefully so as not to confuse who should attend.

Dr Rama proposed that DACEL move forward within the framework presented at the workshop. This was agreed. Feedback would be given and the first of the workshops would probably be held in the 1st quarter of 2004.

The workshops over the past two days had been very productive and in closing Dr Rama thanked participants for attending. The Department looked forward to seeing many of the participants at the workshops in 2004.

APPENDIX 1: INVITEES

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Ackerman Herman		Microwave	(011) 444-7177	(011) 444-7578	082 554-8049	herman@sawaste.co.za
Addo-Obiri NK, Dr		DoH	(011) 355-3163	(011) 355-3154	082 414 6792	AddoO@qpg.gov.za
Amis John, Mr		Chamber of Mines	(011) 637-6378	(011) 637-6665	082 451 1362	jamis@anglogold.com
Andreou S		Vet Services	083 377 9218	(011) 821 7759	083 377 9218	soteriosA@qpg.gov.za
Balchin, Clive, Mr		Waste Management & Cleaner Technology	(0110 301-0279	(011) 301-0558		cbalchin@ho.netcare.co.za
Baldwing Dave		ECC	(011) 792-1052	(011) 791-4222	082 820 1691	ecconsultants@mweb.co.za
Bartholomey Ingrid, Ms	Marketing Manager	The Waste Group	(012) 562-0330/4	(012) 562-0335		Waste.group@pixie.co.za
Bekker S A	Manager (OHS)	Netcare	(012) 677 8158	(012) 677 8123	082 332 0795	jackieb@unitas.netcare.co.za
Bertin Laureen	SANGOCO		(011) 403-7746	(011) 403-8703		Laureen@sangoco.org.za
Beukes D, Mr		PIKITUP	(011) 712-5438	(011) 712-5322	083 855 9288	dawiebeukes@pikitung.co.za
Borland Julie, Ms		Wiechers Environmental Consultancy CC	(011) 886-5709	(011) 787-6853		borlandj@mweb.co.za
Botes Dani, Mr		Execu-Med	(011) 472-9800	(011) 472-9799		
Botha I		Kungwini Local Municip	(013) 932 6200	(013) 932 4091	-	masina@kungwini.com
Bouwer J, Dr	Chairperson	SA Medical Association	(011) 420-3088	(011) 420-3099		jibouwer@mweb.co.za
Bowman Kevin W, Mr	-	CLINX	(011) 902 9700	(011) 902 9700	083 400 1044	-
Bredenham Leon, Mr	Deputy Director	DWAF	(012) 336-7552	(012) 323-0321	082 808-0502	tea@dwaf.pwv.gov.za
Brian Gore		Eskom	(011) 629-5706	(011) 629-5291		bie@tri.eskom.co.za
Brink Neil, Mr	Depot Manager	Enviroserve (Sanumed)	(011) 472-8005	(011) 472-8006	082 802-1572	neilb@enviroserv.co.za
Brits P J, Mr		Department of Provincial Health, Occupational Health	(011) 355-3829	(011) 355-3381	082 774-2919	paulb@qpg.gov.za
Brown L, Ms		Wildlife & Environmental Society	(011) 486-0938	(011) 486-3369		
Bruant J		SASOHN	(011) 894 1263	(011) 894 1263	-	marian.bryant@eject.co.za
Buchanan J	Marketing	EMWO	(011) 613 8115	(011) 613 8182	083 600 4229	sdicillo@evertrade.co.za
Budnik-Lees Zoe, Ms	Executive Director	IEF	(011) 800-4362/5401	(011) 800-4360	082 601-1155	zoe.budnik-lees@eskom.co.za
Buthelezi Themba, Mr	Director	Buhle Waste	(011) 909-7025	(011) 909-7025	083 525-2435	
Buy's Flip, Mr	Chairman Northern Branch	National Association for Clean Air	(011) 972-6344	(011) 972-6344	083 694-5220	pibuys@acenet.co.za
ClassensA, Mr	Sales Manager	Skip waste	(011) 794-2465	(011) 794-3451	082 856-5592	
Clements, John, Mr		SA DACEL Consultant	(011) 706-8899	(011) 706-0101		johnc@eff.co.za
Coetzer E, Mr	Managing Director	Pharmaceutical Association of SA	(012) 301-0820	(012) 301-0836		
Coetzer, Johann, Mr	Senior Manager Professional Board Environmental Health	Health Professions Council of SA	(012) 338-9335	(012) 328-4862	083 626 2893	johannc@hpcsa.co.za
Coulsen Nancy, Ms		SA – DACEL Consultant	(011) 486-3483	(011) 646-1611	082 289-7335	ncoulson@icon.co.za
Daniel N, Ms	Environmental Officer	Hazard Management & Pollutants Information	(012) 310-3790	(012) 320-1167	082 899-9319	ndaniel@ozone.pwv.gov.za
Dave Harris	General Manager	Pikitung	(011) 712 5299	-	082 855 9275	daveharris@Pikitung.com
David Mnisi	Secretary	ANC Ward 85	082 6783 974			
Dawn Marole (Deputy CEO)		Foundation for African Business & Consumer Services (FABCOS)	(011) 333-3701	(011) 333-1009		dawn@fabcos.co.za
De Beer Stef, Mr	Marketing Director	Aid Safe Waste	(011) 422-4092	(011) 421-8300		
de Brut Eugeni	Theatre	Germiston Hospital	(011) 345 1213	(011) 825 5425	-	-
de Jager L	Manager (UM)	Netcare	(012) 328 3838	(012) 326 2945	082 8233273	welmauj@netcare.co.za
De Kock, Paul, Mr		Metago Environmental Engineers	(011) 789-8786	(011) 789-8788	082 569-2911	pauldek@mweb.co.za
Di Cillo S	Marketing	EMWO	(011) 613-8115	(011) 613 8182	083 603 1502	sdicillo@evertrade.co.za
Dimati MN, Mr	Environmental Health Officer	Western Gauteng Services Council	(011) 411-5132	(011) 412-3663	082 682-3292	wqxc@netline.co.za
Dittke Susanne, Ms		EnviroSense CC	(021) 487-2472	(021) 487-2476	082 830 6065	sdittke@cmc.gov.za

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Dunkley W, Mr	Business Manager	Waste by Raid, Spoornet	(011) 774-3744	(011) 774-3553		
Durrheim Clifford, Mr		AID Safe	(011) 422-4092	(011) 421-8300	082 649-6182	binbeez@worldonline.co.za
Edmonds J		SASOHN	(011) 824 2710	(011) 824 2720	-	jennye@gwbase.co.za
Eksteen Michiel		GPG TPW	(011) 355-2733	(011) 355-2727	082 887-0003	Michiele@gpg.gov.za
Eleftheriades Christos		Coal + Waste Util	083 267 5185	(011) 485 1070	-	ceenviro@icon.co.za
Espey Q, Dr		Group for Environmental Monitoring	(011) 403-7666	(011) 403-7563		
Etukudo A Mr	Admin Officer	World Health Organization	(012) 354-8580	(012) 354-8551		aetukudo.un@org.za
Ferreira L, Ms	1.	Dept of Health	(011) 355-3442	(011) 355-3446		
Fischer, Dee, Ms		DACEL Project Director	(011) 355 1956	(011) 355 1937	082 7729837	deef@gpg.gov.za
Fourie Daleen		SABS	(012) 428-7070	(012) 428-6869	082926 8129	fouriem@sabs.co.za
Furniss Paul	PEO	G DACEL	(011) 355 1671	(011) 337 2292	083 592 7076	paulp@gpg.gov.za
Gardiner Ms	Assistant Secretary General	Business SA	(011) 784-8004	(011) 784-8000		
Geyer N, Ms	Deputy Director	Democratic Nursing Organization of SA	(012) 343-2315	(012) 344-0750		
Gibson Brian, Mr		Brian Gibson	(011) 880-1510	(011) 880-1392	083 253-5988	herman@sawaste.co.za
Godfrey Linda, Ms	CSIR	-	(012) 841 3675	(012) 842 7687	082 339 0871	lqodfrey@csir.co.za
Gombault Esme, Ms		Enviroserve	(011) 456-5400	(011) 453-7583	083 253-9682	esmeq@enviroserve.co.za
Govender U	AD	G DACEL	(011) 355 1925	(011) 337 2292	083 564 4545	urishanieq@gpg.gov.za
Grieve Graham Dr.		Cement Industry	(011) 315-0300			graham@cnci.org.za
Hammond Ian, Mr		Waste Resources	(011) 441-1223	(011) 441-1287/86		
Hanre Crous	Acting Deputy Director	DACEL	X 21933	(011) 337 2292	082 446 6414	hanrec@gpg.gov.za
Hattingh, Chrisma, Ms		ICASA, Arwyp Hospital	(011)922-1019	(011) 922-6288	833018242	Arwyp@icon.co.za
Heiman Bob		TAPPSA	(011) 360-7000			bheimann@kc.co.za
Henson Di, Mrs	Infection Control Sister	Medi-Clinic Corporation	(011) 709-2285	(011) 706-5991		
Hill Lorna		Icando	(011) 726 5896	(011) 482 4201	082 667 4073	jonahill@vebo.co.za
Holloway D, Mr	Manager	Industrial Finance	(011) 269-3000	(011) 269-3124		
Hopewell I	EIMS		082 443 7517	(011) 787 3059	-	ian@eims.co.za
Hopkins Tolmay	DWAF		(012) 336-7553	(012) 323-0321		Tek@dwaf.pwv.gov.za
Hughes Bridgette	Environmental Officer	Business Development – NOSA	(011) 608-0018	(011) 608-0059		
Iler C E	ASD	PAH-OHS	(012) 354 1596	(012) 354 2201	-	catherinek@gpg.gov.za
Jacobs J	Chief Nursing Services Man	Protector Group Medical Services	016-950-8271	016-950-8294	082-854-6324	
James Linda	Infection Control	Germiston Hospital	(011) 345 1200	(011) 825 5425	-	-
Johnson Peter, Mr		Johnson Incinerators	(011) 430-9340	(011) 342--7620	083 375-5152	
Kahanovitz Paul, Mr		Medicare Hospital Equipment	(011) 448-2580	(011) 448-1505		paul@medicare-hosquip.co.za
Kenoshi Dr	Superintendent	Pretoria Academic Hospital	(012) 354-1000	(012) 354-1702/1548		ernestke@gpg.gov.za
Kerr – Matron, Ms		Pretoria Academic Hospital				
Kgole M M	EHP	Mogale City	(001) 410 7711	(011) 410 4593	-	-
Khoza Reginald		Coronation Hospital	(011) 470 9177	(011) 477 4117	-	-
Kirby M, Mr	Chief Safety Officer	S.A.I.M.R	(011) 489-9048	(011) 489-9051	082 809-5992	mikek@mial.saimr.wits.ac.za
Kneale Liz		Institute of Waste Management	(011) 793-6911	(011) 793-3639		lizcomm@netactive.co.za
Kobese Muriel	CEO	Chris Hani Baragwanath Hosp	(011) 933 8741	(011) 933 3135	-	emilymahlanqu@hotmail.com
Kristiansen, Torben, Mr	CTA	DACEL CTA	(011) 355 1664	(011) 355 1663	082 3323720	torbenk@gpg.gov.za
Kruger Ms	The Registrar	South African Veterinary Council	(012) 324-2392	(012) 324-2394		
Lacey Bill		SA Chamber of Business (SACOB)	(011) 446-3800	(011) 446-3849		bill@sacob.co.za
Leamy, Warren	Michells Incinerators		(011) 972-4111	(011) 391-1157		mitchellpty@mweb.co.za
Legadima J, Ms		Brakpan TLC	(011) 741-2254	(011) 741-2267/2		
Lemmer Alpha, Mr		Transpharm	(012) 377-3441	(012) 377-0929	082 801-2009	
Lessing L	Marketing	Edenvale	(011) 321 6142	(011) 443 6162	-	-
Letsosa N T	DWAF (SWPCO)	DWAF	(012) 392 1356	(012) 392 1359	082 805 4183	letsost@dwaf.gov.za

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Lewis E J	SPN (Infection Control)	PAH Inf. Control	(012) 354 1207	-	083 514 0250	-
Liebenberg Kerry	-	Bowman Gil Cillon	(011) 290 5566	(011) 883 4505	082 925 3007	lc.liebenberg@bowmen.co.za
Loftuw John		CWM Clinical waste management	(011) 789-1777	(011) 885-5168	083 257-1693	wastemng@mweb.co.za
Lombaard Margaret, Ms		SA Waste (Pty) Ltd	(011) 886-4841	(011) 886-8649	083 564-8988	
Lombard June, Ms		The Institute of Waste Management	(031) 763-3222	(031) 763-3041		iwmsa@iafrica.com
Lombard Ray		National Recycling Forum	(031) 763-3222	(031) 763-3041		ray@rlombard.co.za
Loomes Jean, Ms	Occupational Health Consultant	NOSA	(011) 608-0018	(011) 608-80058	083 256-1233	Gtaudir@nosa.co.za
Loots Pierre, Mr		Sasol	(011) 441-3509	(011) 441-3415	082 654 8545	Pierre.loots@sasol.com
Lotter L Dr		CAIA	(011) 482-1671	(011) 726-8310		caiainfo@iafrica.com
Louro J		Vet Services	(011) 355 1986	-	082 447 3212	sorel@qpg.gov.za
Loykisoonal, Ramsook Mr	EHO	DoH	(012) 303 9195	(012) 303 9196	-	-
Lunelle Serobatse		DACEL	X 21947	(011) 355 1147	-	lunelles@qpg.gov.za
Mabiyela M	Prof. Nurse	Infection Control	(011) 318 6865	(011) 373 4710	082 434 0383	-
Maduna, David Mr		SANGOCO	(011) 403-7746	(011) 403-8703		-
Magner Janet, Ms		SA – DACEL Consultant	(012) 653-1331	(012) 653-7683	082 702-7885	Janet@Magallanrisk.co.za
Mahlangu Lucas, Mr		DEAT	(012) 310-3536	(012) 320-1167	082 656 6652	lmahlangu@ozone.pwv.gov.za
Maila Obed, Mr	CEO	Metsweding District Council	(013) 932-6200	(013) 932-0641	083 766-1886	Impheko@metsweding.co.za
Majila J Dr	Pollution & Waste	DEAT	(012) 310-3416	(012) 320-0615		squmed@ozone.pwv.gov.za
Makhoba J, Mr		Kalafong	(012) 318 6515	(012) 373 9654/4710	-	-
Malefane IP, Mr	Chairperson of the Standing Committee	Agriculture, Conservation & Environment – ANC	(011) 498-5555	(011) 498-5719		pmalefane@gautengleg.gov.za
Malemela Jameson Dr		SASOM	(016) 592-2753	(016) 592-1507	082 447 8593	jamesonk@iafrica.com
Malmdorf Mr		DANCED	(012) 322-0595	(012) 3220596	082 568 0230	tormal@um.dk
Manager : Human Resources		Jhb Western MSS	(011) 472-1400	(011) 672-1829		loveyn@joburg.org.za
Marumo, Albert, Mr		GDoH	(011) 355-3478	(011) 355-3481	082 448 3151	albertm@qpg.gov.za
Maseko Nomsa		GALA	(011) 820-4096	(011) 820-4010		renell@egsc.co.za
Masanya, Francis, Mr		GPG Health	(011) 355-3479	(011) 355-3481	082 950-6067	Francism@qpg.gov.za
Mashigo, Conny, Ms		SANCO	(011) 738-5441	(011) 738-3205		
Masilo N Ms	Customer Manager					
Mathijs Frayne	Director	NPPHCN-SANGOCO	(011) 403 4647	(011) 403 2517	082 492 1398	pnhcdir@wn.apc.org
Mavuso Ntombi, Ms		Randfontein Local Municipality	(011) 411-0000	(011) 693-1736	082 398-3661	
Mekgwe Nongezo, Mrs		DoH West Rand Region	(011) 953-2152		082 452-3494	nongezom@qpg.gov.za
Michler Tony	Consultant	Micro-Waste	(011) 880-1510	(011) 880-1392		tjm@icon.co.za
Mkaza T L Mr		Sedibeng City Council	(016) 427-1016/7	(016) 427-1014		thomas@lekoa.co.za
Mnguni A C	EHP	Health				agnesmn@mweb.co.za
Moatshe R, Mr	Deputy Director	DEAT	(012) 310-3815	(012) 320-1167	083 279 3882	moatshe@ozone.pwv.gov.za
Modebedi Patricia	RM	Dr. Yusuf Dadoo	(011) 951 6161	(011) 953 2250	073 152 6139	-
Modisakeng Busi, Ms	CEO	Lesedi Local Council	(016) 341-6458	(016) 341-3111	073 142-8057	-
Modisha M S	Chief Prof. Nurse	Kalafong	(012) 318 6603	(012) 373 4710	-	-
Moeketsi Thabo	Manager	Buhle Waste	(011) 866-2316	(011) 866 2321	073 212 1710	ibuhle@iafrica.com
Mogale Annah, Ms		Nokeng Tsa Taemane	(012) 734-4501	(012) 734-5832	082 290-4089	-
Mogotsi Malcolm L Mr	PEO	DACEL	(011) 644-9586	(011) 337-2292		malcolmm@qpg.gov.za
Mokebe Robert	CEO	Ekurhuleni Metropolitan Council	(011) 961-9900		082 338-3190	robertm@ekurhuleni.com
Mokgatle Letswe, Mr		Mogale City Council	(011) 951-2000	(011) 953-6139	083 288-7311	letswem@mogalecity.gov.za
Mokoena Morakane	Assistant Director	Department of Environmental Affairs & Tourism		(015) 403-3024		-
Molefe M W	OHS Officer	Dr. Y. Dadoo	(011) 951 6108	(011) 953 2250	-	-
Moloi Maggy	DO	DACEL	X 21680	-	073 159 4616	mangakam@qpg.gov.za

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Moloi Vuyo Mr	CRO	Lenmed Clinic	(011) 213 2002	(011) 854 1002	083 547 2381	vuyom@lenmed.co.za
Montshonyane L W	Assistant Manager			(011) 815-3026	082 469-6242	-
Morutla Julia	Prof. Nurse	Casualty		(011) 373 4102	-	-
Mosimane Jerry M	Assistant Director	Department of Health	(011) 953 4515	(011) 953 5400	082 857 1915	-
Mpele Nobantu	WMO	Leratong Hospital	(011) 411 3615	(011) 410 8421	083 362 9213	-
Mphale Patrick		NPPHCN /SANGOCO	(011) 403-4641/7	(011) 403-2517		patrickmphale@hotmail.com
Ms Mothupi	Deputy Director	Infection Control	(011) 933-9339	(011) 938-8161		-
Mthetwa Theo, Mr	Marketing Director	Promex – Sekunjalo Medical Manufacturing	(012) 677-6644	(012) 677-6633		theo@sekmed.co.za
Munnik Riana		DWAF Regional	(012) 392-1346	(012) 392-1359	082 809-2341	munnikr@dwaf.gov.za thya@dwaf.gov.za
Mutloane, Dr	Superintendent	Helen Joseph Hospital	(011) 489-0340	(011) 725-5425/726-5425		infect@mweb.co.za
Mzimba W B	EHO	Mogale City	(011) 951 2231	(011) 6601507	-	-
Ncube, Bernard Ms	Mayor	Westrand District Council	(011) 411-5000	(011) 693-7833	083 260-6935	pkgatlhanye@wrdrn.gov.za
Nesidoni John	CD	DACEL	082 414 5266	(011) 355 6062	082 414 5266	johnn@gpg.gov.za
Ngcwensa Qaphile		National Dept. Of Health	(012) 312-0503	(012) 323-0796		ntseleg@health.gov.za
Ngobeni J	Matron	Medicross Health Care Group		(011) 673-4168		-
Ngobeni Khethani		Gauteng Health	(012) 303 9193	(011) 303 9196	-	-
Nkabinde Alfred, Mr	Councillor	Kungwini Local Council	(013) 932-6200	(013) 932-0641	082 903-0641	morare@kungwinimun.co.za
Nkosi Duma, Mr	Mayor	Ekurhuleni Metropolitan Council	(011) 871-7433	(011) 871-7819	083 284-7115	diadla@ekurhuleni.com
Nkosi R,	Executive Director	Phambili Services	(011) 681-7800	(011) 681-7820/1	082 562 8384	reggie@phambiliwasteman.co.za
Norton Simon		Rose Foundation	(021) 448-7492	(021) 448-7563		homeward@iafrica.com
Ntsele Q, Ms		NDoH	(012) 312-0597	(012) 323-0796	072 297 3349	ntseleg@health.gov.za
Nyandeni, Nomvula Ms		Gauteng Health	(011) 355-3444	(011) 355-3338		nomvulan@gpg.gov.za
Odendaal Piet, Mr		National Association of Clean Air	(012) 543-0151	(012) 543-0151		naca@mweb.co.za
Olivier V	Manager	SA Furn Co	(011) 803 0331	(011) 803 0333	083 659 0012	-
Otto, Kobus		KO & Ass.	(011) 391-5665	(011) 391-5666	823769673	ibotto@global.co.za
Parbhu Dilip	Director	CWM	(011) 832 8853	-	083 603 3673	dilip@cwm.co.za
Pather Thya		DWAF	(012) 392-1380	(012) 392-1359	082 809 5729	thya@dwaf.gov.za
Peek Bobby	Director	Groundwork	(033) 342-5662	(033) 342-5665	082 464 1383	bobby@groundwork.org.za
Penzhorn, Prof.	President	South African Veterinary Association	(012) 346-1150	(012) 346-2929		banie.penzhorn@up.ac.za
Phashe R, Mr		Tender Board	(011) 355-8023	(011) 355-8025		-
Pietersen H B		Midrand MLC	(011) 237-8050	(011) 237-8040		harryp@joburg.org.za
Piper Phillip		Groundworks	(011) 670-8222	(011) 670-8223		admin@groundworks.co.za
Pirie Graham		SAACE (SA Ass of Consulting Eng)	(011) 463-2022	(011) 888-5528		jeans@saace.co.za
Poggenpoel B, Mr	CEO	Midvaal Local Council	(016) 360-7400	(016) 362-3786	082 565-1923	janetta@midvaal.gov.za
Potgieter S Mr	Manager (OHS)	Netcare		(012) 331 2558	082 321 1408	potgiethi@mweb.co.za
Potgieter Willie	Consultant	Ecopot cc	(011) 726 7933	(011) 482 5500	082 577 1827	ecopot@pixie.co.za
Pringle P Mr		LRC Legal Resource Centre	(011) 836 9831	-	-	patrick@lrc.org.za
Prinsloo S. Ms		Medicross	(012) 804-7355	(012) 804-7355	082 785-3198	-
Prudhoe Andrew		Miracle Medical	(011) 483-1606	(011) 483-1759	083 258-1364	jennieg@global.co.za
Ralasogo K M	M.E.H.P.	Community Services	(011) 410 7711	(011) 410 4593	-	-
Rama D	D	DACEL	(011) 355 1903	(011) 355 1903	082 373 7706	dirair@gpg.gov.za
Rampete P Ms	Provincial Secretary	NEHAWU		(011) 331-5128	083 600-7095	-
Ramukunba, Albert	CEO	Hospital Association of SA	(011) 478-0156	(011) 478-0410		info@hosa.co.za
Raubenheimer Ticky		Pharmaceutical Association			082 575 2222	htr@pharmail.co.za
Rautenbach, A Ms		Gauteng Health	(011) 355-3203	(011) 355-3154		-
Richard Sibanyoni	District Council	ANC	082 887 3656			

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Rob S	Environmental Specialist	DBSA	(011) 313-3275	(011) 313-3416		robs@dbsa.org.za
Roberts, Sue		ICASA, Helen Joseph Hospital	(011) 489-0340	(011) 489-0883	082 8571333	inflect@mweb.co.za
Rogers Dave, Dr		CSIR	(012) 841-2911	(012) 841-2135		drogers@csir.co.za
Ross Mary, Prof.		SASOM	(011) 358-9183	(011) 403-1821	082 889-4048/9	mross@simpross.co.za
Ruiter J, Mr		Afrox Health Care	(011) 470-7799	(011) 470-7799		ltcru@ifrica.co.za
Ryder Hilton		Health Professions Council	(033) 395-1324	(033) 395-1505		pmbaqf@mweb.co.za
Salojee Ram, Dr	Gauteng Legislature	ANC Chairperson	(011) 498-55555	(011) 498-5501	083 301 8242	rsalojee@gautengleg.gov.za
Scallan Phil	Manager	Sanumed	(011) 456 5400	(011) 453 2241	082 654 6854	phils@millennium-waste.co.za
Sedibe Norman	EHO	Mogale City	(011) 951 2231	(011) 660 1507	073 272 1716	-
Seepane J J P Dr		Emfuleni City Council	(016) 988-1064	(016) 988-1531		-
Segone Joshua	-	CWM	(011) 832 8858	-	083 603 3656	josh@cwmm.co.za
Serero Lorretta	Emergency & Disaster Manager	West Rand District Municipality	(011) 411-5002	(011) 4110-5261	082 789-9396	ops@qnet.co.za
Sesese Monica		Chris Hanani Baragwanath Hospital	(011) 933-9141	(011) 933-8322		baraspeechtherapy@webmail.co.za
Shai Pat	Infection Control	Coronation Hospital	(011) 470 9177	(011) 477 4117	-	-
Shelby Michelle Ms	Secretary	South African Society of Occupational Medicine	(012) 667-5161	(012) 667-5160		sasomdm@iafrica.com
Shole Moira	Director	DS Environmental Services		(018) 381-1408		-
Skosana Peter, Mr	Mayor	Sedibeng District Council	(016) 450-3911	(016) 450-3058/9	082 905-2493	peters@sedibeng.gov.za
Smith H, Mr	Regional Director	Gauteng Department of Water Affairs & Forestry	(012) 482-3000	(012) 672-2884		herbert.smith@sita.co.za
Sommons Jessica		IEF	(011) 880-0077			bcstd@ief.co.za
Steyn Niel, Mr	Research & Development	Hospital Association of SA	(011) 478-0159	(011) 478-0410		info@hosa.co.za
Steyn Piet		Oilkol	(011) 762-5506	(011) 762-4830		pieter@oilkol.co.za
Thabane John, Mr	Mayor	Emfuleni Local Municipality	(016) 950-5000	(016) 950-5001	082 450 5160	sibongil@lekoa.co.za
Thawa Sinalswa	Chief Professional Nurse	Chris Hanani Baragwanath Hosp	(011) 933 9339	(011) 933 9795	083 943 5554	sindiswe84@yahoo.com
Thekiso, TP Ms		Brakpan TLC	(011) 741-2254-6	(011) 738-3205		thekisot@ekurhuleni.com
Theron Chris		Tshwane Metro Council	(012) 308-0550	(012) 308-0501		martiec@tshwane.gov.za
Thieme Peter		SAFURNCO	(011) 803-0331	(011) 803-0333	082 458-7609	peter@safurnco.co.za
Thomson Brian		Macrotech Incinerator	(011) 433-2017	(011) 433-2013	083 409-7925	macrotech@global.co.za
Thorsten Aab	Senior Water Pollution Control Officer	Depart. Of Water Affairs & Forestry	(012) 336-7563	(012) 323-0321		Teg@dwaf.pwv.gov.za
Tiler GT		Evertrade Medical Waste	(011) 609-2155	(011) 452-3311		dequity@iafrica.com
Tlokotsi, Mackie Mr		NEHAWU	(011) 336-1508	(011) 333-1696	822557046	nehawugp@nehawu.org.za
Torsten Malmendorf		DANIDA	(012) 430-9349/0	(012) 322-0596	082 568 0230	tormal@um.dk
Trim B Mr	Strategic Planning Manager	Greater Jhb	(011) 688-1400	(011) 403-2332		brim@iwater.co.za
Tsoku Aaron	PEO	GDACEL	(011) 355 1746	(011) 337 2292	083 928 2983	aaront@gpg.gov.za
Twalo L, Mr	The Manager	Buhle Waste	(011) 909-7025	(011) 909-7025	082 459 4895	ibuhle@iafrica.com
V/d Westhuizen, Naomi (Sister)		Netcare Hospital	(011) 861-3061	(011) 861-3002		naomivdw@netcare.co.za
Van den Bon P A		Iscor Vanderbijlpark	(016) 889-4597	(016) 889-2058		Belinda.pepler@iscor.com
Van der Merwe Peter, Mr		Rock Environmental Consulting	(012) 997-0346	(012) 997-0346		rockec@qantic.net
Van der Merwe Rodney	Consultant	CLINX	(011) 902 9700	(011) 902 9700	083 396 9366	-
Van Dyk, Phillip		Poltech (Pty) Ltd	(011) 663-7007	(011) 663-8429		philip@poltech.co.za
Van Rooy, J Mr	Manager	Environmental Management Assessment Services	(012) 428-7911	(012) 428-6840		-
Van Rooyen Desmond Mayor	Mayor	Merafong City Council	(018) 788-9500	(018) 786-1105/788-3727		execmayor@merafong.co.za
van Schalkwyk Esther		Coronation Hospital	(011) 470 9046	(011) 477-4117	-	-
van Wyk Audrey		Arwyp	(011) 922-1019	(011) 922-6288		infection@arwyp.com
Van Wyk Ms		Chamber of Mines	(011) 498-7214	(011) 834-1884		jhofsaje@bullion.org.za
Van Zyl J A	Manager Health	Sedibeng D.C.	(016) 450 3098	-	082 374 6753	ziesvz@lekoa.co.za

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Vijoen Gawie	Head: Health Dept.	Westernaria TLC	(011) 753-1121	(011) 754-1150		westonlc@mweb.co.za
Visagie Marba		DTI	(012) 310-9822	(012) 320-1414		marba@dti.pwv.gov.za
Visser Councillor		GALA	(011) 339-1605	(011) 403-3636	083 381-0551 (Jacob)	-
Vusi Tgconse	Director	OFE0	082 226 6883	-	-	-
Wiechers Herman		Wiechers Environmental Consultancy	(011) 886-5709	(011) 787-6853	083 453-6327	wieenv@mweb.co.za
Wilson Mark	CEO	Ekurhuleni Metropolitan Council	(011) 899-4020	(011) 917-6112	082 465-2917	lizandac@ekurhuleni.com
Wood Andrew, Dr		SRK Consulting	(011) 441-1287	(011) 441-1237		awood@srk.co.za
Worthington Richard		Earthlife Africa	(011) 339-3662	(011) 339-3270		richardw@earthlife.org.za
Yawich Joanne		DACEL	(011) 355-1440	(011) 333-0667	082 571 5337	joannev@gpg.gov.za
Yousefi Vali		NCOH, DoH	(011) 720-0209	(011) 725-5324		yousev@health.gov.za
Zincume Zama		NDoH	(012) 312-0503	(012) 323-0796	082 634 0652	Zincum@health.gov.za
						-

INTERGOVERNMENTAL FORUM (IGF)

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Mokgawa Refiloe Clr	CLR	Metsweding District Council	013-932-6239	013-932-4035	082-332-3776	
Makhubo An Clr	CLR	Sedibeng District Council	011-450-3018	011-422-6939	082 905 2490	
Nkosi S E Clr	CLR	JHB City Council	011- 407- 6361	011-403-3397	082 855 7842	
Madoda Sambatha Clr	CLR	West Rand District Municipality	011-4115201	011-411-6388	083 279 0746	-
Mapekula Vulindlela Clr	CLR	Ekurhuleni Metropolitan Council	011-820-4243	011-820-4229	083 326 8417	
Ditshoke Absalom Clr	CLR	Tshwane Metropolitan Council			083 390 7142	-
Benson FG Dr.	Region B (CD)	Germiston Region	011-878-8565	011-878-8587	082 372 4199	
Mitchell R Dr.	Acting Director	Regopp B (Sedibeng)			082 372 5550	
Makhundu D Mr	Region B Director	Ekurhuleni	011-876-1816	011-876-1758	082 413 7688	-
Gaelejwe S Dr.	Director	Region A (Central Wits)	011-481-5262	011-481-5263	082-857-6119	

SOCIAL SERVICES INSTITUTIONS

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Matsimela S R Matsimela		Jabulani Welfare Complex	012-790-2301	012-790-2308	083 469 0431	-
Pretorius E Ms		Norman House Childrens Home	011-453-7803	011-453-9685	082-469-0390	
Zulu Mpho Ms		Van Rhyn Place of Safety	011-421-5675	011-421-7630	082-469-0380	
Wiggins Peter G Mr.		House Tini Vorster	011-734-2143	011-734-3696	082-469-0585	
Ntsamai Mpume Ms		Walter Sisulu Children's Home	011-935-5505	011-935-5263	082-469-0582	
Kempen R Ms		Tutela Place of Safety	012-546-0640/44	012-565-4754	082-469-0375	
Louw A Ms		Jubileum Childrens Home	011-917-9574	011-917-3406	082-469-0391	
Mokoena Lucia Ms		Magaliesoord Treatment Centre	012-734-1027	012-734-1801		

EMERGENCY SERVICES - AMBULANCE DEPOTS

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Dludlu Themba	Assistant Director	Ekurhuleni			082 904 9926	thembadludlu@webmail.co.za
Theu Charles	Assistant Director	West Rand			082 561 3821	charlestheu@hotmail.com
Kekana Cyril	Assistant Director	Central Office			082 807 6870	kekanacy@telkomsa.net
Pretorius Rudi	Assistant Director	Tshwane			082 807 6876	gemshrc@mweb.co.za
Jackson Shaughan	Assistant Director	Central Office			082 807 6873	jackson@hixnet.co.za
Davis Rhett	Assistant Director	Sedibeng			082 452 1541	medic@icon.co.za

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Meyer Johan	Assistant Director	Johannesburg			082 774 2464	vwessels@mweb.co.za
Wessels V Dr.		Emergency Medical Services	011-655-6734	011-655-6717	082-807-6872	vwessels@mweb.co.za

HOSPITALS

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Gagushe T S Professor	CEO	Medunsa	012- 521-4800/1	012-521-4102		
Motaung T M Mr	CEO	Carletonville Hospital	018-787-2111	018-788-4120		
Broekmann Reg Dr.	CEO	Chris Hani Baragwanath	011-933-8145	011-938-1005		
Jordaan S Mrs	CEO	Coronation Hospital	011-470-9034	011-673-5658		
Lombard A D Dr	CEO	Cullinan Care & Rehabilitation Hospital	012-734-1038/9	012-734-1040		
Kernes N Dr.	CEO	Edenvale Hospital	011-321-6001	011-882-0644		
Pretorius L Dr	CEO	Far East Rand Hospital	011-817-1426	011-813-1411		
Shembe P Dr.	CEO	Ga-Rankuwa Hospital	012-529-3203	012-560-0009		
Lordanov V Dr	CEO	Germiston Hospital	011-345-1267	011-825-5425		
Momberg C C Dr	CEO	Heidelberg Hospital	016-349-5259/341-2171	016-349-5239		-
Manning A Dr	CEO	Helen Joseph Hospital	011-489-0306	011-726-5424		
Pillay S Mr	CEO	Johannesburg Hospital	011-488-3792	011-488-3861		
Daffel H Dr	CEO	Kalafong Hospital	012-373-8844/318-6502	012-318-6690/373-4790		-
Tshababalala M R Dr	CEO	Kopanong Hospital	016-428-1133	016-428-1148		-
Wojtowicz B J Dr.	CEO	Leratong Hospital	011-411-3531	011-410-8421		
Hlwe K M Dr	CEO	Mamelodi Hospital	012-841-8302	012-841-8384		
George V Dr	CEO	Natalspruit	011-389-0512	011-909-1707/3015		
Evan B Professor	Dean	Oral and Dental - JHB	011-647-2139			
Van den Heever C Dr	CEO	Pholosong Hospital	011-738-3202	011-738-3000		-
Van der Walt A P Dr	CEO	Pretoria Academic Hospital	012-354-2336/2525/2222	012-354-1548		
Lighthaim A J Professor	Dean	PTA Oral and Dental	012-386-5111	012-326-2508		
Bam W J Professor	CEO	PTA West Hospital	012-386-3123	012-386-3720		
Zungu S Dr	CEO	Sebokeng Hospital	016-988-3300/03/06	016-988-2804		
Van Staden E Mrs	CEO	Sizwe Hospital	011-882-9834	011-882-9992		
Kalu Dr	CEO	South Rand Hospital	011-681-2002	011-435-0038		-
Siwisa N C Ms	CEO	Sterkfontein Hospital	011-951-8376/13	011-956-6907/39		
Kapp P Dr	CEO	Tambo Memeorial Hospital	011-898-8312/7	011-917-3970		
Bondareko E Dr	CEO	Tara Hospital	011-535-3005	011-884-3066		
Mtenyana S Dr	CEO	Tembisa Hospital	011-926-2722	011-926-2719		-
Gouche L Dr.	CEO	Weskoppies Hospital	012-319-9800	012-327-7076		
Zambo E M Dr	CEO	Yusuf Daddoo Hospital	011-951-6000	011-953-4726		

LABORATORIES

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
		S A Blood Transfusion Service	011-720-5300/2020	011-725-4626		
Cole Dr		Lancet Laboratories	011-358-0878			teqnerw@lancet.co.za

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
----------------	----------	---------	--------	--------	---------	--------

WASTE FORUM MEMBERS

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Pieterse T	Solid Waste Manager	Ekurhuleni Metro	(011) 899-4111	(011) 892-4502	082 774 5567	msmith@ekurhuleni.com
Figgin T Mr.	Deputy Municipality Manager	Emfuleni Municipality Council	016-950-5421	016-950-5030	082-771-8912	tommyf@lekoa.co.za
Dube Sylvester, Mr	Assistant Manager	Lekoa Vaal Metro	(016) 427-1015	(016) 427-1014	082 901-6847	sylvesterd@lekoa.co.za
Stoffberg Susan		Westrand District	011-411-5000/3663			wqsc@netline.co.za
Dave Harris	General Manager	Pikitup	(011) 712 5299	-	082 855 9275	daveharris@Pikitup.com

APPENDIX 2: ATTENDEES DAY 1

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Balchin, Clive, Mr		Waste Management & Cleaner Technology	(0110 301-0279	(011) 301-0558		cbalchin@ho.netcare.co.za
Baldwin David A Dr.		ECC	(011) 792-1052	(011) 791-4222	082 820 1691	ecconsultants@mweb.co.za
Bodibe R	Chief Environmental Health	Department of Health	(011) 355-3498	(011) 355-3499		-
Boswell Jenny	Environmental Health Practitioner	Midvaal Local Municipality	016-360-7668	016-590-1009	082 871 6152	jennyb@midvaal.gov.za
Bowman Kevin W, Mr	-	CLINX	(011) 902 9700	(011) 902 9700	083 400 1044	-
Brink Neil, Mr	Depot Manager	Enviroserve (Sanumed)	(011) 472-8005	(011) 472-8006	082 802-1572	neilb@enviroserve.co.za
Buthelezi Themba	Director	Buhle Waste	(011) 866-2316	(011) 866-2316	083 325 2435	info@buhlewaste.co.za
Campbell Bernie	CRO	Lenmed Clinic	(011) 213 2002	(011) 854 1002	083 547 2381	berniec@lenmed.co.za
Coetzer W Mr	Head: of Cleaning Department	Pretoria West Hospital	(012) 380-1282	(012) 380-1349		vuyom@lenmed.co.za
da Cruz Tony	Metallurgical Engineer-Field Service	Anglogold SA Region Metallurgy	(011) 637-6759	(011) 637-6665	083 557 4679	m.viljoen@bowman.co.za
Danster Magda		Germiston Hospital	(011) 345-1207	(011) 825-5425	082 404 6303	
Dave Harris	General Manager	Pikitung	(011) 712 5299	-	082 855 9275	opsdacruz@anglogold.com
Davis Rhett	Assistant Director	Sedibeng			082 452 1541	daveharris@Pikitung.com
Dimati MN, Mr	Environmental Health Officer	Western Gauteng Services Council	(011) 411-5132	(011) 412-3663	082 682-3292	medic@icon.co.za
Diamlenze T P Mrs	Healthcare Waste Officer	TARA Hospital	(011) 535-3058	(011) 535-3026	082 641 8299	-
Durrheim Clifford, Mr		AID Safe	(011) 792-2431	(011) 792-7930	082 649-6182	phils@millennium-waste.co.za
Eksteen Michiel		Department of Public Transport, Roads & Works	(011) 355-2733	(011) 355-2774	082 887 0003	michiele@gpg.gov.za
Eleftheriades Christos		Coal + Waste Util	083 267 5185	(011) 485 1070	-	ceenviro@icon.co.za
Ferreira L, Ms		Dept of Health	(011) 355-3442	(011) 355-3446	082 335 2812	
Fischer, Dee, Ms		DACEL Project Director	(011) 355 1956	(011) 355 1937	082 7729837	deef@gpg.gov.za
Furniss Paul	PEO	G DACEL	(011) 355 1671	(011) 337 2292	083 592 7076	paulp@gpg.gov.za
Govender Neville	Project Manager	LED Ekurhuleni	(011) 741-2011	(011) 741-2049	082 378 8441	urishanieg@gpg.gov.za
Govender U	AD	G DACEL	(011) 355 1925	(011) 337 2292	083 564 4545	hanrec@gpg.gov.za
Harding G W	Operations Manager	City of Johannesburg Environmental Health R7	(011) 531-5564	(012) 660-2692	082 467 9588	-
Harris Dave		Pikitung Johannesburg (Pty) Ltd	(011) 712-5258	(011) 712-5322	082 855 9275	
Hewson Di	Infection Control	Sandton Medi Clinic				-
Hyser Hester Mrs	Assistant Supervisor	Dr. Yusuf Dadoo Hospital	(011) 951-6161	(011) 951-2250	072 675 2968	jackson@hixnet.co.za
Jackson Shaughan	Assistant Director	Central Office	(011) -655-6704	(011) 315-8133	082 807 6873	jackson@hixnet.co.za
Jones David	Environmental Health Manager	City of Johannesburg Environmental Health R4	(011) 474-6703	(011) 474-6707	082 464 9550	kekanacy@telkomsa.net
Kawe Goodman	Portfolio Head: Health & Environment	Merafong City Council	(018) 788-9801	(018) 788-9853	827883923	cwaniewoudt@merafong.co.za
Kekana Cyril	Assistant Director	Central Office			082 807 6870	
Kekana Pamela		Dept of Health	(011) 355-3442	(011) 355-3446	082 354 3000	catherinek@gpg.gov.za
Kerr – Matron, Ms		Pretoria Academic Hospital	(012) 354-1596	(012) 354-2201	082 417 7879	
Khatazile Sambo		DOH	(011) 876-1813	(011) 825-2219	082 688 6883	
Kirby M Mr	Chief Safety Officer	National Health Laboratory	(011) 386-6150	(011) 386-6295	082 809 5992	mike.kirby@nhls.ac.za
Kluzanie Desire	Environmental Health Practitioner	Community Service	(011) 951-2037	(011) 665-1781	083 528 0560	torbenk@gpg.gov.za
Kristiansen, Torben, Mr	CTA	DACEL CTA	(011) 355 1664	(011) 355 1663	082 3323720	lc.liebenberg@bowmen.co.za
Kruger Sr.	Professional Nurse	Coronation Hospital	(011) 470-9127	(011) 477-4117		
Langa Nelson Mr	Environmental Health Practitioner	Midvaal Local Municipality	016-360-7668	016-590-1009	082 871 6152	
Liknethe L J Mrs	CPN HCWO	Sebokeng Hospital	(016) 930-3371	(016) 988-2804	083 703 6342	
Lorna Hill	Icando	(011) 726-5896	(011) 482-4201	082 667 4073	082 667 4073	jonahill@vebo.co.za
Loykisoonalal Ramsook		Dept of Health	(011) 355-3442	(011) 355-3446	084 782 3665	
Magabane Louis	Acting Assistant Director	DOH	(011) 481-5327	(011) 481-5329	082 926 0219	
Magner Janet, Ms		SA – DACEL Consultant	(012) 653-1331	(012) 653-7683	083 702 7885	malemela@motswedipharm.co.za
Mahlatjé Daphney	Professional Nurse	Germiston Hospital	(011) 345-1225	(011) 825-5425		
Malemela K J Dr.	CEO	SASOM	(011) 608-1600	(011) 608 1599	082 447 8593	jamesonK@jfrica.com



Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Maloisane Kenewang	CPN HCWO	Carletonville Hospital	(018) 787-2111	(018) 788-4120		albertm@gpg.gov.za
Manamela K E	Healthcare Waste Officer	Tembisa Hospital	(011) 923-2188	(011) 926-2719	082 704 3968	ibotto@global.co.za
Marumo, Albert, Mr	Acting Deputy Director	GDoH	(011) 355-3478	(011) 355-3481	082 448 3151	
Maseko Nomsa	Chairperson: Social Services W/Group	SAFOA Gauteng	(011) 820-4306	(011) 820-4011	082 454 6796	
Mashinini Lettie	Infection Control Nurse	South Rand Hospital	(011) 681-2034	(011) 435-0038		
Matosi M Mrs	HCW Officer	Kopanong Hospital	(016) 428-7140	(016) 428-1148	082 366 9548	eurelm@gpg.gov.za
Maunattala M D	Environmentl Health Officer	DOH	(011) 481-5327	(011) 481-5329	073 223 5762	agnesmn@mweb.co.za
Metcalf Mary	MEC	DACEL				
Metja Maubane	Environmental Health Offcer	DOH	(011) 481-5327	(011) 481-5329	(082 472 2086	DesireC@joburg.org.za
Mhlanga Eukel	Senior Clerk	DOH	(011) 355-3490	(011) 355-3499		ibuhle@iafrica.com
Mnguni Agnes	National Clinical Services CoOrdinator	Marie Stopes South Africa	(011) 838-3721/2	(011) 838-3278		malcolmm@gpg.gov.za
Mnguni Desire	Environmental Health Practitioners	Joburg Region 9	(011) 681-8053/8	(011) 681-8211		zini@ananzi.co.za
Modise Joels Sr.	Profesional Nurse	Coronation Hospital	(011) 470-9127	(011) 477-4117	082-701-2234	
Modubu Grace		Kungwini Local Council	(013) 932-6302	(013) 932-4091	083 346 0711	mayet@kungwinimun.co.za
Moeketsi Thabo	Manager	Buhle Waste	(011) 866-2316	(011) 866 2321	073 212 1710	edwardmolepo@joburg.org.za
Mogotsi Malcolm L Mr	PEO	DACEL	(011) 644-9586	(011) 337-2292		mangakam@gpg.gov.za
Mokhine Zini	Acting Co-Ordinator	Earthlife Africa-JHB	(011) 339-3662	(011) 339-3270		
Molefe M W	OHN/HCW Officer	Dr. Yusuf Dadoo Hospital	(011) 951-6161	(011) 951-2250	072 675 2968	frantm@gpg.gov.za
Molefe Sharon	Enviornmental Officer	Department of Environmental Affairs & Tourism	(012) 310-3949	(012) 320-0024	082 881 1454	smolefe@deat.gov.za
Mpele Nobantu	WMO	Leratong Hospital	(011) 411 3615	(011) 410 8421	083 362 9213	
Mpongwana Bongi	Environmental Health Practitioners	Joburg Region 9	(011) 681-8053/8	(011) 681-8211		
Msiza Susan	Infection Control Registered Nurse	Pholosong Hospital	(011) 812-5046	(011) 738-3000	083 990 0935	ntseleg@health.gov.za
Mthethwa Dr.	Group for Environmental Monitoring		(011) 403-7666	(011) 403-7563		dmthethwa@gem.org.za
Mvuka Mathews M	Procurement Assistant Manager	Dr. Yusuf Dadoo Hospital	(011) 951-6161	(011) 951-2250		
Mzimba W B	EHO	Mogale City	(011) 951 2231	(011) 660-1507	083 490 6768	
Ndlovu L E	Senior Administrator Officer Logistics	Carletonville Hospital	(018) 787-2111	(018) 788-4120	083 376 3132	dnteo@twr.ac.za
Ngobeni Khethani		Gauteng Health	(012) 303 9193	(011) 303 9196	-	
Nhlapo Julie	Provincial Occupational Health and Safety Co-ordinator	NEHAWU	(011) 336-1508	(011) 333-1696	083 693 5176	
Nhlapo Mthandeni	EHO	City of JHB - Environmental Health	(011) 213-0137	(011) 213-0030	082 407 9232	thya@dwaf.gov.za
Nieuwoudt C W A Mr.	Strategiv Executive	Merafong City Council	(018) 788-9801	(018) 788-9853	082 920 5222	cwanieuwoudt@merafong.co.za
Nkosi Ntombifuthi	EHO	City of JHB - Environmental Health	(011) 213-0137	(011) 213-0030	082 407 9232	msmith@ekurhuleni.com
Nteo Dorah	Lecturer - Environmental Health	Witwatersrand Technikon	(011) 406-2806	(011) 406-8456	082 728 5706	hplomp@angloqold.com
Otto, Kobus		Kobus Otto & Associates	(011) 391-5665	(011) 391-5666	823769673	willie@potgieter.co.za
Papiso O Mrs	Environmentl Health Officer	DOH	(011) 674-1200	(011) 472-4880		gemshrc@mweb.co.za
Parbhu D Mr	CEO	Clinical Waste Management	(011) 837-8838	(011) 839-3854	083 603 3673	patrick@lrc.org.za
Pather Thya		DWAF	(012) 392-1380	(012) 392-1359	082 809 5729	sharmainer@gpg.gov.za
Pieterse Tony/Martin Horton	Executive Manager	Ekurhuleni Metropolitan municipality	(011) 899-4111	(011) 892-4502	082 774 5567	
Plomp A J	Environmental Co-Ordinator	Anglo gold	(018) 478 6290	(018) 478-6223	083 308 8003	ramroops@durban.gov.za
Potgieter Willie	Director		(011) 726-7933	(011) 482-5500	082 577 1827	leonv@gpg.gov.za
Pretorius Rudi	Assistant Director	Tshwane			082 807 6876	infect@mweb.co.za
Pringle P Mr	Attorney	LRC Legal Resource Centre	(011) 836 9831	(011) 836-8680	-	grossouw@evertrade.co.za
Rama Dhiraj	Director	DACEL				
Ramathar S	Project Assistant	DACEL	(011) 644-9401	(011) 644-9339		seqnemedi@worldonline.oc.za
Ramroop Shaun	Environmental Health Manager	Ethekwini Health	(031) 762-1224	(031) 762-1224/300-3030	083 378 8748	janetts@sedibeng.gov.za

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Roberts, Sue		ICASA, Helen Joseph Hospital	(011) 489-0340	(011) 489-0883	082 8571333	matsietsis@gpg.gov.za
Rossouw G M	Management	EMWO	(011) 613-3115	(011) 613-8181	082 607 3286	grossouw@evertrade.co.za
Sekwibidu P Mr	Waste Management - Co-Ordinator	Pretoria West Hospital	(012) 380-1282	(012) 380-1349		-
Sennelo N C	CPN HCWO	Sterfontein Hospital	(011) 951 8260	(011) 951 8331	072 639 2007	compass@compass.za.net
Senokoane-Malay Janette	Assistant Manager-Waste Management	Sedibeng District Municipality	(016) 427-1015	(016) 427-1014	072 312 6005	isoeter@netcare.co.za
Shaw John	Director	Howden	(011) 240-4000	(011) 493-3861	082 888 1-04	
Sibondana Matsietsi	PEO	DACEL	(011) 644-9308	(011) 644-9339	082 588 9252	charlestheu@hotmail.com
Smith Ron	Gauteng Reg Manager	Compass Waste Services	(031) 700-5655	(031) 700-5663	082 800 5029	sales@safic.co.za
Smith Ron (other)	Gauteng Reg Manager	Compass Waste Services	(013) 700-5655	(013) 700-5663		grossouw@evertrade.co.za
Soeter Jane	National Infection Control Co-ordinator	Netcare	(011) 489-1205	(011) 489-1205	082 285 6110	francoisvanaswegen@pikitup.co.za
Steyn Robert	Legal Consultant	NOSH Legal Services	(012) 3030-9717	(012) 303-9860	082 880-5604	hermien@nbi.org.za
Tsebe Naomi		DWAF	(012) 336-7560	(012) 323-0321	072 434 1952	naomi@dwaf.gov.za
Tshabalala Refilwe Mrs	Environmental Health Practitioner	Gauteng Health Sedibeng	(016) 950-6118	(016) 950-6034/16	082 457 6039	phils@millennium-waste.co.za
Tshepiso Bapela	Project Administrator	IHUA Environement	(011) 985-0112			-
Twala Hazel	Infection Control Specialist	SAFIC (PTY) LTD Health and Safety	(011) 907-2860	(011) 907-3498	082 482 3820	ziesvz@sedibeng.gov.za
Van Aswegen	Director Business Development	Pikitup Johannesburg (Pty) Ltd	(011) 712-5258	(011) 712-5322	082 494 9528	sales@safic.co.za
Van Breda Lauren	Safety Manager	Affrox Healthcare	(011) 740-9026	(011) 450 3530	083 2319390	lauren.vanbreda@afrox.boc.com
Van der Merwe Rothney Mr					083 396 9366	ops@gnet.co.za
Van der Walt Hermien	Research & Resource Co-ordinator	NBI/BCSD	(011) 842-5100	(011) 482-5507	072 697 7735	vwessels@mweb.co.za
Van Niekerk J P	Ass Director Environmental Health	City of JHB Policy Unit	(011) 407-6798	(011) 403-1616	082 464 9548	-
Van Staden Glen		Sanumed	(011) 456) 5400	(011) 453 2241	083 675 1616	
Van Zyl L	Assistant Director - Environmental Health	Health Ekurhuleni	(011) 876-1820	(011) 873-8891	072 671 0358	nomsam@ekurhuleni.com
Venter Phillip		Compass Waste Services	(031) 700-5655	(031) 700-5663		
Yawich Joanne	HOD	DACEL				

APPENDIX 3: ATTENDEES DAY 2

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Balchin, Clive, Mr		Waste Management & Cleaner Technology	(0110 301-0279)	(011) 301-0558		cbalchin@ho.netcare.co.za
Baldwin David A Dr.		ECC	(011) 792-1052	(011) 791-4222	082 820 1691	ecconsultants@mweb.co.za
Barnard Hester		Edenvale Hospital	(011) 321-6008	(011) 443-6162		
Bentley Henry		COJ - Reg 5	(011) 761-0206	(011) 761-0205	082 464 9383	henryb@joburg.org.za
Berger David	Director	Basisa Technical Waste Solutions	(012) 771-9760		082 771 9760	david.berger@absamail.co.za
Beukes D, Mr		PIKITUP	(011) 712-5438	(011) 712-5322	083 855 9288	dawiebeukes@pikitup.co.za
Bodibe R	Chief Environmental Health	Department of Health	(011) 355-3498	(011) 355-3499		-
Boswell Jenny	Environmental Health Practitioner	Midvaal Local Municipality	016-360-7668	016-590-1009	082 871 6152	jennyb@midvaal.gov.za
Bowman Kevin W, Mr	-	CLINX	(011) 902 9700	(011) 902 9700	083 400 1044	-
Brink Neil, Mr	Depot Manager	Enviroserve (Sanumed)	(011) 472-8005	(011) 472-8006	082 802-1572	neilb@enviroserv.co.za
Campbell Bernie	CRO	Lenmed Clinic	(011) 213 2002	(011) 854 1002	083 547 2381	berniec@lenmed.co.za
Cronje Francis		DACEL	(011) 355-1616			
Danster Magda		Germiston Hospital	(011) 345-1207	(011) 825-5425	082 404 6303	
Dave Harris	General Manager	Pikitup	(011) 712 5299	-	082 855 9275	opsdacruz@anglogold.com
Davis Rhett	Assistant Director	Sedibeng			082 452 1541	daveharris@Pikitup.com
Dimati MN, Mr	Environmental Health Officer	Western Gauteng Services Council	(011) 411-5132	(011) 412-3663	082 682-3292	medic@icon.co.za
Dlamlenze T P Mrs	Healthcare Waste Officer	TARA Hospital	(011) 535-3058	(011) 535-3026	082 641 8299	-
Dube Sylvester	Assistant Manager-Waste Management	Sedibeng District Municipality	(016) 427-1015	(016) 427-1014	082 901 6847	thembadludu@webmail.co.za
Duka Khanyi		Sanumed	(011) 456) 5400	(011) 453 2241		peggym@sedibeng.gov.za
Durrheim Clifford, Mr		AID Safe	(011) 792-2431	(011) 792-7930	082 649-6182	phils@millennium-waste.co.za
Eksteen Michiel		Department of Public Transport, Roads & Works	(011) 355-2733	(011) 355-2774	082 887 0003	michiele@gpg.gov.za
Eleftheriades Christos		Coal + Waste Util	083 267 5185	(011) 485 1070	-	ceenviro@icon.co.za
Ferreira L, Ms		Dept of Health	(011) 355-3442	(011) 355-3446	082 335 2812	
Fischer, Dee, Ms		DACEL Project Director	(011) 355 1956	(011) 355 1937	082 7729837	deef@gpg.gov.za
Furniss Paul	PEO	G DACEL	(011) 355 1671	(011) 337 2292	083 592 7076	paulp@gpg.gov.za
Govender Neville	Project Manager	LED Ekurhuleni	(011) 741-2011	(011) 741-2049	082 378 8441	urishanieq@gpg.gov.za
Hanre Crous	Acting Deputy Director	DACEL	X 21933	(011) 337 2292	082 446 6414	georgeha@joburg.org.za
Harding G W	Operations Manager	City of Johannesburg Environmental Health R7	(011) 531-5564	(012) 660-2692	082 467 9588	-
Harris Dave		Pikitup Johannesburg (Pty) Ltd	(011) 712-5258	(011) 712-5322	082 855 9275	
Hill Lorna		Icando	(011) 726-5896	(011) 482-4201	082 667 4073	jonahill@yebco.co.za
Hoffman I Mr	Assistant Director - Environmental Health	Gauteng Health Sedibeng	(016) 950-6000	(016) 950-6016/34	072 429 8367	-
Hyser Hester Mrs	Assistant Supervisor	Dr. Yusuf Dadoo Hospital	(011) 951-6161	(011) 951-2250	072 675 2968	jackson@hixnet.co.za
Jones David	Environmental Health Manager	City of Johannesburg Environmental Health R4	(011) 474-6703	(011) 474-6707	082 464 9550	kekanacy@telkomsa.net
Kekana Pamela		Dept of Health	(011) 355-3442	(011) 355-3446	082 354 3000	catherinek@gpg.gov.za
Kerr – Matron, Ms		Pretoria Academic Hospital	(012) 354-1596	(012) 354-2201	082 417 7879	

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Khatazile Sambo		DOH	(011) 876-1813	(011) 825-2219	082 688 6883	
Kirby M Mr	Chief Safety Officer	National Health Laboratory	(011) 386-6150	(011) 386-6295	082 809 5992	mike.kirby@nhls.ac.za
Klizanie Desire	Environmental Health Practitioner	Community Service	(011) 951-2037	(011) 665-1781	083 528 0560	torbenk@gpg.gov.za
Kristiansen, Torben, Mr	CTA	DACEL CTA	(011) 355 1664	(011) 355 1663	082 3323720	lc.liebenberg@bowmen.co.za
Langa Nelson Mr	Environmental Health Practitioner	Midvaal Local Municipality	016-360-7668	016-590-1009	082 871 6152	-
Liknethe L J Mrs	CPN HCWO	Sebokeng Hospital	(016) 930-3371	(016) 988-2804	083 703 6342	
Magabane Louis	Acting Assistant Director	DOH	(011) 481-5327	(011) 481-5329	082 926 0219	-
Loykisoonal Ramsook		Dept of Health	(011) 355-3442	(011) 355-3446	084 782 3665	
Magner Janet, Ms		SA – DACEL Consultant	(012) 653-1331	(012) 653-7683	083 702 7885	malemela@motswedipharm.co.za
Mahlatjhe Daphney	Professional Nurse	Germiston Hospital	(011) 345-1225	(011) 825-5425		-
Maloisane Kenewang	CPN HCWO	Carletonville Hospital	(018) 787-2111	(018) 788-4120		albertm@gpg.gov.za
Manamela K E	Healthcare Waste Officer	Tembisa Hospital	(011) 923-2188	(011) 926-2719	082 704 3968	jbotto@global.co.za
Marumo, Albert, Mr	Acting Deputy Director	GDoH	(011) 355-3478	(011) 355-3481	082 448 3151	
Mashinini Lettie	Infection Control Nurse	South Rand Hospital	(011) 681-2034	(011) 435-0038		
Metja Maubane	Environmental Health Officer	DOH	(011) 481-5327	(011) 481-5329	(082 472 2086)	DesireC@joburg.org.za
Mhlanga Eukel	Senior Clerk	DOH	(011) 355-3490	(011) 355-3499		ibuhle@iafrica.com
Mnguni Agnes	National Clinical Services CoOrdinator	Marie Stopes South Africa	(011) 838-3721/2	(011) 838-3278		malcolmm@gpg.gov.za
Mnguni Desire	Environmental Health Practitioners	Joburg Region 9	(011) 681-8053/8	(011) 681-8211		zini@ananzi.co.za
Modise Joels Sr.	Professional Nurse	Coronation Hospital	(011) 470-9127	(011) 477-4117	082-701-2234	
Modubu Grace		Kungwini Local Council	(013) 932-6302	(013) 932-4091	083 346 0711	mavet@kungwinimun.co.za
Moduro Grace	Environmental Health Practitioner	Kungwini Local Council	(013) 932-6302	(013) 932-4091	083 346 0711	-
Moeketsi Thabo	Manager	Buhle Waste	(011) 866-2316	(011) 866 2321	073 212 1710	edwardmolepo@joburg.org.za
Mogotsi Malcolm L Mr	PEO	DACEL	(011) 644-9586	(011) 337-2292		mangakam@gpg.gov.za
Molefe M W	OHN/HCW Officer	Dr. Yusuf Dadoo Hospital	(011) 951-6161	(011) 951-2250	072 675 2968	frantm@gpg.gov.za
Molefe Sharon	Environmental Officer	Department of Environmental Affairs & Tourism	(012) 310-3949	(012) 320-0024	082 881 1454	smolefe@deat.gov.za
Motalaote Seteng	Executive Chairman	Wave Sanitation Services (PTY) Ltd	09267 3931928	09267 3931928	09267 3931928	dmthethwa@gem.org.za
Movare Michael		Pretoria West Hospital	(012) 380-1392	(012) 386-3123	072 343 7083	-
Mpongwana Bongsi	Environmental Health Practitioners	Joburg Region 9	(011) 681-8053/8	(011) 681-8211		-
Msiza Susan	Infection Control Registered Nurse	Pholosong Hospital	(011) 812-5046	(011) 738-3000	083 990 0935	ntseleg@health.gov.za
Mvuka Mathews M	Procurement Assistant Manager	Dr. Yusuf Dadoo Hospital	(011) 951-6161	(011) 951-2250		-
Mzimba W B	EHO	Mogale City	(011) 951 2231	(011) 660-1507	083 490 6768	-
Ndlovu L E	Senior Administrator Officer Logistics	Carletonville Hospital	(018) 787-2111	(018) 788-4120	083 376 3132	dnteo@twr.ac.za
Ngobeni Khethani		Gauteng Health	(012) 303 9193	(011) 303 9196	-	
Nhlapo Julie	Provincial Occupational Health and Safety Co-ordinator	NEHAWU	(011) 336-1508	(011) 333-1696	083 693 5176	
Nhlapo Mthandeni	EHO	City of JHB - Environmental Health	(011) 213-0137	(011) 213-0030	082 407 9232	thya@dwaf.gov.za
Nieuwoudt C W A Mr.	Strategiv Executive	Merafong City Council	(018) 788-9801	(018) 788-9853	082 920 5222	cwanieuwoudt@merafong.co.za
Nkosi Ntombifuthi	EHO	City of JHB - Environmental Health	(011) 213-0137	(011) 213-0030	082 407 9232	msmith@ekurhuleni.com
Nozipho Cebeكيلu			(011) 528-0656		083 336 5605	
Nsibande Nomasondi	Environmental Health Officer	City of JHB Environmental Health	(0110 933-2422/5	(0110 989-8213/933-2426	082 695 2825	
Nteo Dorah	Lecturer - Environmental Health	Witwatersrand Technikon	(011) 406-2806	(011) 406-8456	082 728 5706	hplomp@anglogold.com

Contact Person	Position	Company	Tel No	Fax No	Cell No	E-mail
Otto, Kobus		Kobus Otto & Associates	(011) 391-5665	(011) 391-5666	823769673	wille@potgieter.co.za
Papiso O Mrs	Environmental Health Officer	DOH	(011) 674-1200	(011) 472-4880		gemshrc@mweb.co.za
Pretorius Rudi	Assistant Director	Tshwane			082 807 6876	infect@mweb.co.za
Pringle P Mr	Attorney	LRC Legal Resource Centre	(011) 836 9831	(011) 836-8680	-	grossouw@evertrade.co.za
Rama Dhiraj	Director	DACEL				
Ramathar S	Project Assistant	DACEL	(011) 644-9401	(011) 644-9339		segnemedi@worldonline.oc.za
Ramroop Shaun	Environmental Health Manager	Ethekwini Health	(031) 762-1224	(031) 762-1224/300-3030	083 378 8748	janetts@sedibeng.gov.za
Roberts, Sue		ICASA, Helen Joseph Hospital	(011) 489-0340	(011) 489-0883	082 8571333	matsietsis@gpg.gov.za
Rossouw G M	Management	EMWO	(011) 613-3115	(011) 613-8181	082 607 3286	grossouw@evertrade.co.za
Sekwibidu P Mr	Waste Management - Co-Ordinator	Pretoria West Hospital	(012) 380-1282	(012) 380-1349		-
Sennelo N C	CPN HCWO	Sterfontein Hospital	(011) 951 8260	(011) 951 8331	072 639 2007	compass@compass.za.net
Sibondana Matsietsi	PEO	DACEL	(011) 644-9308	(011) 644-9339	082 588 9252	charlestheu@hotmail.com
Smith Ron	Gauteng Reg Manager	Compass Waste Services	(031) 700-5655	(031) 700-5663	082 800 5029	sales@safic.co.za
Smith Ron (other)	Gauteng Reg Manager	Compass Waste Services	(013) 700-5655	(013) 700-5663		grossouw@evertrade.co.za
Stevens Charles		Randfontein Local Municipality	(011) 411-0164	(011) 412-4117		renegordon@randfontein.org.za
Steyn Robert	Legal Consultant	NOSH Legal Services	(012) 3030-9717	(012) 303-9860	082 880-5604	hermien@nbi.org.za
Tsebe Naomi		DWAF	(012) 336-7560	(012) 323-0321	072 434 1952	naomi@dwaf.gov.za
Tshabalala Refilwe Mrs	Environmental Health Practitioner	Gauteng Health Sedibeng	(016) 950-6118	(016) 950-6034/16	082 457 6039	phils@millennium-waste.co.za
Tshepiso Bapela	Project Administrator	IHUA Environement	(011) 985-0112			-
Twala Hazel	Infection Control Specialist	SAFIC (PTY) LTD Health and Safety	(011) 907-2860	(011) 907-3498	082 482 3820	ziesvz@sedibeng.gov.za
Van Breda Lauren	Safety Manager	Affrox Healthcare	(011) 740-9026	(011) 450 3530	083 2319390	lauren.vanbreda@afrox.boc.com
Van der Merwe Rothney Mr					083 396 9366	ops@gnet.co.za
Van Niekerk J P	Ass Director Environmental Health	City of JHB Policy Unit	(011) 407-6798	(011) 403-1616	082 464 9548	-
Van Zyl L	Assistant Director - Environmental Health	Health Ekurhuleni	(011) 876-1820	(011) 873-8891	072 671 0358	nomsam@ekurhuleni.com
Venter Phillip		Compass Waste Services	(031) 700-5655	(031) 700-5663		
Vermaak J S Mr	Snr Environmental Health Officer	Merafong City Council	(018) 788-9801	(018) 788-9853	082 577 5903	cwanieuwoudt@merafong.co.za