



**AGRICULTURE, CONSERVATION  
ENVIRONMENT & LAND AFFAIRS**

**GAUTENG DRAFT HEALTH CARE RISK WASTE  
REGULATIONS**

**27 March 2003, World of Beer, Newtown, Johannesburg**

**Stakeholder workshop on the Draft Health Care Risk Waste  
Regulations**

**Workshop Proceedings**

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

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# **GAUTENG DEPARTMENT OF AGRICULTURE, CONSERVATION, ENVIRONMENT AND LAND AFFAIRS**

**Stakeholder Workshop on the held on Thursday 27<sup>th</sup> March 2003 at the World of Beers,  
Newtown, Johannesburg**

## **EXECUTIVE SUMMARY**

The project was initiated in May 2000 with the formulation of the draft policy on Health Care Risk Waste (HCRW). The HCRW Management Policy was endorsed by the Provincial Legislature November 2001 and by September 2002 substantive progress had been made, with a study having been conducted into the composition of the health care waste stream and pilot studies at Itireleng Clinic and Leratong Hospital in progress. The HCRW Management Regulations are being developed to give effect to the Policy and provide a tool for ensuring that the goals set out in the Policy are being achieved.

Objectives of the present workshop included:

- Obtaining stakeholder input on the draft HCRW regulations that had been circulated to registered attendees prior to the workshop;
- Informing of progress made in the implementation of systems and technologies at the two pilot sites.

**Draft Health Care Risk Waste Regulations:** The Regulations are being developed in order to ensure ongoing improvement in HCRW management systems and to implement the findings of the strategy development process. There was also a need to set performance standards for thermal and non-thermal technologies, to ensure the duty of care of Health Care Institutions and provide for the registration of all major generators, transporters and treatment facilities.

Included in the Regulations are the following sections:

- Definitions;
- General Requirements - general prohibitions and minimum requirements associated with the management of HCRW;
- Requirements for HCRW generators;
- Requirements for Transporters;
- Requirements for Transfer Stations;
- Requirements for HCRW Treatment Plants;
- Waste Information System for HCRW and other waste streams, excluding radioactive and mining waste;
- Requirements for Waste Inspectors;
- The consequences of contravention.
- A series of Schedules that set specific requirements for various HCRW Management activities

Workshop participants provided comment and input on the draft regulations in breakaway groups. DACEL then decided on possible plans of action to address the comments, based on the practicality and feasibility of the suggestions. Comments and suggestions that were found to be practicable and feasible included:

- The definition of treatment technologies must be improved;
- The Regulations will clearly indicate that they are promulgated in terms of section 24 of the Environment Conservation Act;
- Storage timeframes will be changed to 6 months for sharps, 24 hours for pathological waste (unless stored at -2 degree C), 72 hours for general infectious waste from time of collection at the generator to treatment;
- The requirements for annual reports from treatment plants will be elaborated and strengthened;



- A certificate of Safe Disposal will be required for each batch of HCRW;
- The Regulations will clearly state the process for managing non-compliant treatment plants - upgrading or closure via the registration process;
- Dedicated green procurement procedures are not proposed, but the schedules limit the use of PVC and heavy metal containing products;
- Detailed specifications on the disinfection process will be included.

**Appendix 1:** Includes a summary of all the comments received and DACEL's decision for the possible inclusion of the comments received in the final version of the Regulations.

**Pilot projects:** Re-useable plastic containers and wheeled bins were introduced at Leratong Hospital while only the re-useable plastic containers were introduced at Itireleng Clinic.

- Training was conducted at all staff levels at both pilot sites;
- Both pilots found the containers system to be practical and of significance is that there have been no needle stick injuries since the introduction of the new systems.



## 1. OPENING AND INTRODUCTION:

Dr. Trish Hanekom welcomed everyone present and thanked them for attending. She apologised on behalf of MEC Metcalf who was unable to attend due to other commitments. Much progress had been made since 2000 when Gauteng was experiencing a crisis in Health Care Risk Waste (HCRW) disposal.

In May 2000 a first consultation was held on the draft policy for HCRW, which informed subsequent work with key stakeholders. Danish International Development Agency (DANIDA) funding has made the project possible, a key consideration being that there would be stakeholder participation throughout the project.

By September 2001 the feasibility study for Provincial Health Care Waste (HCW) Management Scenarios had been done, guidelines had been developed and the policy adopted by the Provincial Executive Council. This provided the mandate for the Department of Health and the Department of Agriculture, Conservation, Environment and Land (DACEL) to proceed with the implementation of the pilot studies to take the project forward.

In September 2002, MEC Metcalf reported that substantive progress had been made. A study into the composition of the health care waste stream had been conducted, pilot studies had been started and Gauteng has adequate capacity to meet HCRW disposal needs.

Dr Hanekom reiterated DACEL's commitment to the project, including a commitment to subsequent phases - these included:

- effecting the implementation of the HCRW strategy through the regulations that would be discussed at the workshop;
- meeting the deadline of January 2004 for the closure of non-compliant treatment technologies.

The present workshop had two objectives:

- To look at progress made in the implementation of systems and technologies at the two pilot sites, Itireleng Clinic and Leratong Hospital;
- To obtain stakeholder input on the draft HCRW Regulations, which had been circulated to registered attendees prior to the workshop.

Dr Hanekom called on Ms Dee Fischer to give a report back on the project to date and to provide an introduction to the Health Care Risk Waste Regulations.

## 2. BACKGROUND OF THE PROJECT

Ms Fischer reported that the project was initiated in response to HCW problems experienced in the past e.g. illegal and undesirable disposal of untreated or poorly treated HCRW.

- The Project Design was initiated in 2000;
- DACEL published a Status Quo Study in November 2000;
- The current project commenced on 1 May 2002 and has been extended by 5 months until 30 September 2003;
- The Project Steering Committee (PSC) has had the participation of the Department of Environmental Affairs and Tourism (DEAT), National Department of Health (NDoH), Gauteng Department of Health (GDoH), Gauteng Department of Public Works, Gauteng Association of Local Authorities, Non Governmental Organisations, DACEL and the Danish Embassy;



- The Project Management Group included representatives of the GDoH, Public Works, GALA and DACEL.

Two pilot studies were launched in February 2002:

- The pilot studies involved the introduction of re-useable plastic containers for the storage of HCRW and the use of wheeled plastic bins and enclosed metal cages for the transporting of the re-useable containers.
- Both the re-useable plastic containers and wheeled bin systems were introduced at Leratong Hospital, while only the re-useable containers were piloted at Itireleng Clinic.
- Training was conducted at all staff levels from management down.
- Both pilots found the container system to be practical and of significance was that there had been no needle stick injuries since the introduction of the new systems.

### 3. INTRODUCTION TO THE GAUTENG DRAFT HEALTH CARE RISK WASTE REGULATIONS

The Regulations had been developed in order to ensure ongoing improvement in HCRW management systems and to implement the findings of the strategy development process. Section 24 of the Environment Conservation Act provides for making regulations with regard to waste management including classification of waste, handling, storage, transport and disposal.

#### The Principles

- To regulate a management system for HCRW in Gauteng;
- To recognise Occupational Health and Safety requirements and Minimum Requirements;
- To prohibit the disposal of HCRW with general waste;
- To facilitate third party protection;
- To ensure the duty of care of Health Care Institutions;
- To set performance standards for thermal and non-thermal treatment technologies;
- To introduce the requirement for treatment facilities and transporters to be authorized by DACEL to operate;
- To ensure that HCRW is only treated at compliant treatment plants, including waste generated in Gauteng and treated outside the province;
- To allow for the closure of non-compliant treatment plants through a regulated process
- To introduce the tracking of waste from major generators;
- To set minimum monitoring and reporting requirements to authorities and from authorities;
- To provide for the registration of major generators, all transporters, and treatment facilities;
- To provide for the management of the waste from minor generators including home based care givers through Local Government structures;
- To set time frames for the implementation of systems and compliance with systems;
- To provide enforcement tools, and set realistic expectations for enforcement.

#### Chapter One - Definitions

The chapter ensures that there is a common understanding of the language of the regulations. Gaps identified and areas for strengthening include:

- Any mention of animal carcasses is only intended to refer to laboratory animals and sharps from the treatment of animals.
- Additional definitions needed:
  - Sharps containers
  - Cleaning and disinfection plants
  - Consignment



- Liquid waste
- Specican
- Liner (leakproof)
- Zootonic

## **Chapter Two - General Requirements**

The chapter sets out the general prohibitions and minimum requirements associated with the management system for HCRW. Areas needing strengthening include:

- General prohibitions - the maximum manual lifting weights and transfer distance of containers over a certain weight.
- Packaging:
  - All containers for external transport must be leak proof and puncture proof (1 year time frame);
  - All containers must identify the registration number of a major generator, waste from minor generators must be identified as being such.
- Disposal:
  - Only a site which has staff to complete the manifest may be used for disposal of treated waste;
  - A maximum size for shredded material must be included.
- Health and Safety - A minimum standard and methodology to check disinfection of containers will be included in the schedules.
- Authorizations:
  - It is intended that a provision be made to allow the Department to apply a fee for authorization to allow for cost recovery.
  - Only authorized transporters and treatment plants will be allowed to operate in Gauteng.
  - Existing treatment plants must apply for registration within 60 days of publication of the regulations and authorizations will be subject to renewal within 3 to 5 years.
  - A process to ensure compliance to the minimum standards for all existing treatment plants will be outlined. The process will allow for the issuing of a temporary authorization certificate, after which the plant will submit a report detailing locality, technology information and environmental performance data. If the treatment technology does not comply, plans to reach compliance, including time frames, must be submitted. Based on the findings of the report DACEL will upgrade the authorization to permanent status or advise the proponent if the remedial plan and time frames would be acceptable to the Department.

## **Chapter Three - Requirements for HCRW generators**

This Chapter sets out the requirements for HCRW generators:

- Registration requirements applicable to major generators;
- Minor generators will be required to register with their Local Government within an agreed time;
- Local Government will be entitled to charge a registration fee;
- Major generators need to identify their waste by including their registration number on their waste;
- The need for DACEL to review HCRW plans and reports will be considered;
- The need to review registration will also be considered.

## **Chapter Four - Requirements for Transporters**

Requirements for transporters are set out in this Chapter:



- Transporters must register and their registration details will be published in the Gazette;
- Renewal of registration will take place over a period of 90 days every 3 to 5 years;
- HCRW transporters will need to store, move and report on HCRW according to Minimum Requirements;
- A tracking system needs to be put in place and report according to a schedule.

#### **Chapter Five - Requirements for Transfer Stations**

- The Chapter sets out the requirements for a transfer station, both in terms of registration as well as operation and reporting;
- All transfer stations will need to register within 90 days of the publication of the regulations.

#### **Chapter Six - Requirements for Treatment Facilities**

- The requirements for the registration of a HCRW treatment plant is set out;
- The need to produce a HCRW treatment management plan is identified;
- The need for HCRW treatment plants to report to DACEL needs to be looked at;
- The need to produce a HCRW treatment plan needs review, as this would be the same as an operating plan.

#### **Chapter Seven - HCW Information Systems**

The Chapter will be significantly modified.

- At present it deals only with HCRW, but will be expanded to cover all waste streams;
- A framework regulation for reporting on all waste streams excluding radioactive and mining waste will be included;
- Other waste streams will be added through publishing in the Government Gazette.

#### **Chapter Eight - Enforcement**

- The Chapter deals with the need to allow entry for a waste inspector to inspect and undertake investigative work;
- The need for co-operation;
- The Inspector will be empowered to determine impacts or to cease operations.

#### **Chapter Nine - Offences and Penalties**

- The Chapter deals with the consequences of contravention - fine or imprisonment or both;
- There will be the possibility of liability for damages - Chief Executive Officers (CEOs) or Directors;
- The MEC can take actions and recoup costs;
- There will be a process for appeal;
- The proposed date of promulgation is the Government Gazette of August 2003.

#### **Stakeholder comments and queries**

- There was a suggestion that thermal treatment and accepted technologies for thermal treatment should be defined. Move towards compliance to EU standards. Dr Hanekom requested that the issue be discussed in the breakaway groups.
- There was a query as to whether the authorization/Record of Decision (RoD) was the same as that currently required in section 22(1) of the Environment Conservation Act? Ms Fischer replied that it was not the same.





- The concern was raised that the waste management process up to the treatment process was well defined, but after treatment it is not well covered.  
Mr Otto replied that the process is already well defined in the Minimum Requirements (MRs) and was therefore not repeated.
- The view was expressed that there is a need for improvement in the technology used in the final testing of thermally treated waste and that an EIA may be required.  
Ms Fischer replied that the process would be streamlined, but that all issues would be considered.

#### 4. WORKSHOP GROUP DISCUSSION

The following items were for discussion in the breakaway groups at the workshop:

- Definitions;
- Schedules;
- Timeframes;
- The need for DACEL to review HCRW plans;
- Timeframes attached to final authorisation;
- Timeframes for renewal.

**Table 1: Breakaway Group 1**

GROUP 1	FACILITATOR: D.RAMA
ISSUE OR COMMENT	SUGGESTED IMPROVEMENT
General comments: 1. An issue was the potential for conflict with other regulations or by-laws	<ul style="list-style-type: none"> <li>• Identify potential conflict areas</li> <li>• Cross reference other applicable regulations</li> <li>• Produce a HCRW management guideline document to assist with implementation</li> </ul>
2. Role of registration fees	<ul style="list-style-type: none"> <li>• Use the fees to assist in enforcement of the regulations</li> </ul>
3. How would the regulations fit into the broader national waste management strategy?	<ul style="list-style-type: none"> <li>• Consider the overall framework including national legislation and make sure the regulations are in line with these</li> </ul>
4. How do the regulations relate to SABS 0248?	<ul style="list-style-type: none"> <li>• The regulations must feed into the SABS process</li> </ul>
5. Transport across provincial borders	<ul style="list-style-type: none"> <li>• Transport companies must be registered and compliant</li> <li>• Responsibility for authorisation of cross border transport providers needs clarification</li> </ul>
6. Storage - facilities and timeframes	<ul style="list-style-type: none"> <li>• A 72 hours storage time was felt to be too short - the costs of collection from small generators would be too high</li> <li>• Include the need for adequate storage - e.g. freezers so that less frequent collection would be possible</li> <li>• Transfer facilities must also be included</li> </ul>
7. National implementation	<ul style="list-style-type: none"> <li>• There is a need for the project to be implemented in the other provinces as soon as possible with regional modification where necessary</li> </ul>
8. Space for re-useable containers	<ul style="list-style-type: none"> <li>• Include ideas on how to store the containers efficiently</li> </ul>
9. Quality of the refuse bags and pigments	<ul style="list-style-type: none"> <li>• Include the standards for the refuse bags in the tender document and also specify which pigments are environmentally friendly</li> <li>• Spot checks for control purposes</li> <li>• Bags are not suitable for carrying sharps to the sluice area</li> </ul>



10. Colour coding	<ul style="list-style-type: none"> <li>• Look at using yellow bags instead of red because of the impacts of red pigments</li> </ul>
11. Occupational Health Clinics	<ul style="list-style-type: none"> <li>• Classify as minor generators</li> </ul>
12. Registration and compliance	<ul style="list-style-type: none"> <li>• Do in phases rather than all at once</li> <li>• Take into account the capacity of Local Governments</li> </ul>
<b>Chapter 1</b>	
13. Definitions needed	<ul style="list-style-type: none"> <li>• HCW inspector or enforcement officer - who, competences needed</li> <li>• Management plan</li> <li>• Record of Decision</li> <li>• Responsible Person</li> <li>• Transfer Facility</li> </ul>
<b>Chapter 2</b>	
14. Maximum permissible mass for manual lifting	<ul style="list-style-type: none"> <li>• Was 15 kg the maximum mass permissible?</li> </ul>
15. Storage facilities for anatomical and pathological waste	<ul style="list-style-type: none"> <li>• There is a move towards cold storage / refrigeration / freezing facilities for storage purposes, making less frequent (weekly) collection possible</li> </ul>
16. Specifications for the flooring of storage facilities	<ul style="list-style-type: none"> <li>• Impervious concrete flooring should be specified</li> </ul>
17. Labelling of HCRW containers	<ul style="list-style-type: none"> <li>• There should be a starting date and a date of sealing</li> <li>• Labelling should specify when anatomical or pathological waste is present</li> </ul>
18. Alternative treatments to incineration	<ul style="list-style-type: none"> <li>• Schedules must clearly define the protocols - number of tests, when done etc.</li> <li>• Treatment of liquid wastes need to be specified</li> </ul>
19. Control of sharps going into sanitary waste bins e.g. at airports	<ul style="list-style-type: none"> <li>• Classify as minor generators?</li> </ul>
<b>Chapter 3</b>	
20. Control of HCRW from home based care	<ul style="list-style-type: none"> <li>• HCRW from home-based care will be addressed at a later stage. The intention is to make minor generators the responsibility of Local Authorities</li> </ul>
21. The status of Local Authorities	<ul style="list-style-type: none"> <li>• Will Local Authorities be classed as major generators and need to register?</li> </ul>
22. Requirements for generators outside Gauteng	<ul style="list-style-type: none"> <li>• Will generators from outside Gauteng be required to register?</li> </ul>
<b>Chapter 4</b>	
23. Washing and disinfection of vehicles carrying HCRW	<ul style="list-style-type: none"> <li>• Specifications must cover all vehicles used to carry HCRW - motorbikes for Lab Services etc.</li> <li>• Links with the Transport Act - transport of dangerous goods.</li> </ul>
24. Signage on vehicles	<ul style="list-style-type: none"> <li>• Vehicles should have a sticker or some form of identification to show that they are a certified HCRW transporter</li> </ul>
25. Duty of Care Principle	<ul style="list-style-type: none"> <li>• Because a transporter is accredited, this doesn't exonerate the generator - he is still responsible</li> </ul>
<b>Chapter 5</b>	
26. Transfer stations	<ul style="list-style-type: none"> <li>• Will they be included in the WIS?</li> <li>• Include regulations for transfer stations</li> <li>• Disaster management for transfer stations</li> </ul>
<b>Chapter 6</b>	
27. Validity period of registration: 3 - 5 years	<ul style="list-style-type: none"> <li>• Needs to be more congruence between the different time frames</li> </ul>
28. Auditing time frames	<ul style="list-style-type: none"> <li>• There is a need for an annual audit despite the 5 year registration period</li> </ul>
29. Who is ultimately responsible - the CEO or the company?	<ul style="list-style-type: none"> <li>• The name and contact details of the responsible person should appear on the registration form</li> </ul>

<b>Chapter 7</b>	
30. Potential to bring in other waste streams to the WIS	<ul style="list-style-type: none"> <li>• Make clear that the WIS doesn't only cover HCW</li> <li>• Include a reference to the Access to Information Act</li> </ul>
<b>Chapter 8</b>	
31. Who is regarded as an independent inspector?	<ul style="list-style-type: none"> <li>• SANAS is envisaged as the accreditation body</li> </ul>
32. Prosecution of offenders needs to be speedy	<ul style="list-style-type: none"> <li>• Prosecution of offenders should be via an Environmental Court as the judicial system is too slow</li> </ul>
<b>Chapter 9</b>	
33. Who is responsible in terms of enforcement	<ul style="list-style-type: none"> <li>• The CEO / MD is responsible - what is the implication for government hospitals? Look at the wording of Section 39.</li> </ul>
34. Reporting of contraventions	<ul style="list-style-type: none"> <li>• Facilitate the reporting of contraventions by the inclusion of a form to be filled in and DACEL contact details</li> <li>• Include an emergency number for medical waste disposal contraventions</li> <li>• Look at the wording of Section 3(1) and (2) to see if "whistle blowing" is adequately covered</li> </ul>
35. Section 42 - appeal on Records of Decision (RoD)	<ul style="list-style-type: none"> <li>• Include the option of appeal on any decision, whether positive or negative</li> </ul>
36. Section 41 - ceased operations	<ul style="list-style-type: none"> <li>• A contingency plan for dealing with waste from ceased activities needs to be included</li> <li>• Provision in the form of environmental insurance for if the company ceases to operate.</li> </ul>
37. Issuing of a safe disposal certificate	<ul style="list-style-type: none"> <li>• Only once waste has been treated according to the standards laid down including: Duty of Care; online monitoring; completed manifest</li> </ul>
38. Provision for breakdowns	<ul style="list-style-type: none"> <li>• Include a provision for breakdowns in the RoD</li> </ul>
<b>Schedules</b>	
39. Schedule 2 and 4	<ul style="list-style-type: none"> <li>• Validation vs monitoring - unpack these schedules to provide greater clarity</li> <li>• Continuous monitoring vs batch sampling - needs clarification</li> </ul>

**Table 2: Breakaway Group 2**

GROUP 2	FACILITATOR: D FISCHER
ISSUE OR COMMENT	SUGGESTED IMPROVEMENT
<b>General comments</b>	
40. A concern expressed was that some contractors would only collect the waste that they could fit in the truck - the leftover waste would then only be collect the next day, leading to odours	
41. Conflict with local By-laws and other related Acts	<ul style="list-style-type: none"> <li>• Ensure synergy with By-laws and other related Acts e.g Road Traffic Act</li> </ul>
42. Consider formidable epidemic diseases (Congo Fever)	<ul style="list-style-type: none"> <li>• Re-usable containers would not be ideal in this case</li> </ul>
43. A lack of clarity between authorization in terms of section 22 of the ECA and section 24 of the ECA	<ul style="list-style-type: none"> <li>• Provide clarification in the definition of "authorisation" - as per section 24</li> </ul>
44. Would minimum requirements with respect to thermal processes include incinerators treating e.g. carcasses from the zoo, cremators?	<ul style="list-style-type: none"> <li>• Clarification is needed and timeframes for compliance</li> </ul>
45. A distinction is made between major and minor generators, but no distinction is made with regards to the relative risk of waste from different generators	<ul style="list-style-type: none"> <li>• Make a distinction between high risk generators e.g. labs that perform dangerous diagnoses</li> </ul>



46. Annual audits	<ul style="list-style-type: none"> <li>Annual audits for both transporters and treatment facilities need to be articulated</li> </ul>
<b>Chapter 1</b>	
47. Definitions needed	<ul style="list-style-type: none"> <li>Thermal and non-thermal treatment. The suggestion was to define thermal and all other treatments would be classified non-thermal</li> <li>The "statutory law" included in the definition of HCRW was not acceptable. The definition should be included or the law identified</li> </ul>
<b>Chapter 2</b>	
48. Authorisation - section 4(b) requires DACEL to consider if the proponent can comply now or in the future	<ul style="list-style-type: none"> <li>Consider whether this is practical or not</li> </ul>
49. The process for the closure of non-compliant technology is lacking	<ul style="list-style-type: none"> <li>Include guidelines for the process to be followed in closing non-compliant facilities</li> </ul>
50. Withdrawal of authorization	<ul style="list-style-type: none"> <li>Ensure that there is a mechanism whereby authorisation can be withdrawn if there is non-compliance</li> </ul>
<b>Chapter 3</b>	
51. HCRW plans and guidelines	<ul style="list-style-type: none"> <li>It was agreed that generators should produce HCRW plans and that a guideline should be provided</li> <li>DACEL did not need to review the plans - reviewing the reports annually would be acceptable</li> </ul>
52. Forum for review of HCRW plans	<ul style="list-style-type: none"> <li>Provide a forum for the review of HCRW plans so that information sharing and general improvement could take place</li> </ul>
53. Inspection of the HCRW plans - undertaken by the enforcement inspectors or by the EHO's?	<ul style="list-style-type: none"> <li>There should be provision made for the inspection of the entire system</li> </ul>
<b>Chapter 4</b>	
54. Would the minimum requirements be applied to waste coming into the province from other provinces (specifically to the containerization)?	<ul style="list-style-type: none"> <li>Clarification is needed</li> </ul>
55. The need for reporting	<ul style="list-style-type: none"> <li>It was agreed that there was a need to report and that what was required could be achieved</li> </ul>
<b>Chapter 7</b>	
56. Amendments proposed for the WIS	<ul style="list-style-type: none"> <li>There was general agreement on the proposed WIS</li> <li>A phased approach to information collection and reporting was agreed on</li> </ul>
<b>Chapter 8</b>	
57. The difference between inspection and auditing was not clearly stated	<ul style="list-style-type: none"> <li>Clearly differentiate between these two terms and make the differences plain</li> </ul>
58. There was not sufficient clarity for the term "MEC"	<ul style="list-style-type: none"> <li>Make clear when the MEC of Health or the MEC for Environment was referred to</li> </ul>
<b>Schedules</b>	
59. There is a discrepancy in the requirements for thermal and non-thermal disposal	<ul style="list-style-type: none"> <li>There should be congruency between the two</li> </ul>
60. Schedule 3 - requires DEAT guidelines to be met	<ul style="list-style-type: none"> <li>It was suggested that there be a move towards EU standards and timeframes for these to be met.</li> </ul>
61. Of concern was that monitoring frequency would be reduced if compliance was demonstrated over a period of time	<ul style="list-style-type: none"> <li>Needs consideration</li> </ul>
62. Timeframes for reporting	<ul style="list-style-type: none"> <li>Include in the schedules</li> </ul>

**Table 3: Breakaway Group 3**

GROUP 3	FACILITATOR: S NKOSI
ISSUE OR COMMENT	SUGGESTED IMPROVEMENT
<p><b>General comments</b></p> <p>63. Some of the current schedules in the regulations only apply to incineration and not thermal processes</p>	<ul style="list-style-type: none"> <li>• Define thermal treatment</li> </ul>
<p>64. The processes of EIA and authorisation differ</p>	<ul style="list-style-type: none"> <li>• The processes need clarification</li> <li>• A streamlined EIA process is envisaged for the upgrading of existing plants e.g. the addition of scrubbers</li> </ul>
<p>65. What about the processes for disposal after treatment?</p>	<ul style="list-style-type: none"> <li>• DWAF's minimum requirements cover most of this and only aspects not included in the minimum requirements will be included e.g. combustion efficiency</li> </ul>
<p>66. Pre-treatment of HCRW prior to transporting would reduce some of the risk</p>	<ul style="list-style-type: none"> <li>• Needs consideration</li> </ul>
<p>67. Of concern was that DACEL / local authorities may not have the resources to handle all of the registrations and applications causing a delay in implementing the Regulations</p>	<ul style="list-style-type: none"> <li>• Additional resources should be brought into DACEL</li> </ul>
<p>68. The Regulations do not address the need for green procurements by health care facilities leading to PVC containing items being disposed of</p>	<ul style="list-style-type: none"> <li>• Needs to be addressed</li> </ul>
<p>69. The Regulations were felt to be meeting the requirements of the health care industry, subject to some amendments and were fully supported by the group</p>	
<p><b>Chapter 1</b></p> <p>70. Labelling and tracking of waste - will there be a particular place on the bins for an identification label for tracking purposes?</p>	<ul style="list-style-type: none"> <li>• A tracking system will be required, but the type of system will be left to the industry</li> <li>• In the tender specifications for the outsourcing of HCRW management to provincial hospitals, a specific system may be required</li> </ul>
<p><b>Chapter 2</b></p> <p>71. Transition from cardboard boxes to re-useable containers</p>	<ul style="list-style-type: none"> <li>• 12 months was felt to be reasonable</li> </ul>
<p>72. A lack of information on what constitutes HCRW and Health Care General Waste</p>	<ul style="list-style-type: none"> <li>• Reference was made to the Guidelines, which list the typical items</li> </ul>
<p>73. There is a lack of detailed specification on the disinfection process and materials to be used</p>	<ul style="list-style-type: none"> <li>• Brand names of disinfectants would not be used, but SABS approved disinfectants would be called for</li> </ul>
<p><b>Chapter 3</b></p> <p>74. Who is responsible for the registration process and have they the capacity to handle the process?</p>	<ul style="list-style-type: none"> <li>• Whoever is required to receive and process the required registrations (provincial and local) must urgently be capacitated to handle the registrations</li> <li>• All forms etc must be ready by the time registration commences to eliminate frustration at a process that can't be handled effectively by the authorities.</li> <li>• DACEL will embark on an awareness programme informing generators of the need to register and how to go about it.</li> </ul>
<p><b>Chapter 4</b></p> <p>75. There is a need for uniform standards for the authorisation process across Gauteng</p>	<ul style="list-style-type: none"> <li>• Integrate the authorisation process on a local and a provincial level so that a uniform process can be achieved.</li> <li>• Registration on a provincial level will ensure that all transporters in Gauteng are registered and authorised to operate, even where this is not required by local By-laws</li> </ul>
<p>76. What about waste transporters from outside Gauteng that bring waste into the province?</p>	<ul style="list-style-type: none"> <li>• Waste transporters from outside Gauteng will also be required to register to be able to operate within Gauteng. All the regulations will also apply to them as far as it will impact on transport and treatment operations undertaken within Gauteng.</li> </ul>



<b>Chapter 6</b>	
77. What about other treatment facilities e.g. crematoria?	<ul style="list-style-type: none"> <li>• Crematoria will not be included in these regulations, with the understanding that no HCRW (pathological waste) may be treated at a facility that does not comply with the standards. This then excludes crematoria for the treatment of HCRW unless they comply with the incinerator standards in the Regulations.</li> </ul>
78. What about veterinary waste?	<ul style="list-style-type: none"> <li>• This is different from HCRW and will be dealt with in a separate process</li> </ul>
79. The combustion efficiencies required are specified to very accurate levels, whereas there are a number of less accurate assumptions that will serve as input into the calculation	<ul style="list-style-type: none"> <li>• The accuracy required should be compatible with the accuracy of the information used to determine the efficiencies.</li> </ul>
<b>Chapter 7</b>	
80. How public will the test results e.g. of emissions be?	<ul style="list-style-type: none"> <li>• Test results should be available to the public (Duty of Care Principle) unless proven to be commercially important.</li> </ul>
<b>Chapter 8</b>	
81. Regulation effectiveness is only as effective as the enforcement	<ul style="list-style-type: none"> <li>• Effective enforcement of the regulations is vital</li> </ul>
82. Full time inspectors will not be possible due to resource constraints in authorities.	<ul style="list-style-type: none"> <li>• Encourage industries to comply voluntarily</li> <li>• Have spot checks by authorities</li> </ul>
83. Operations between 0:00 and 5:00 are less likely to comply with the required standards due to less monitoring and human nature	<ul style="list-style-type: none"> <li>• Limit operations during these periods and only when special permission is granted</li> <li>• Longer hours do allow a facility to be more cost effective.</li> </ul>
84. Identification of inspectors	<ul style="list-style-type: none"> <li>• Inspectors should carry the required identification to prevent unauthorised entry by outsiders</li> </ul>
<b>Chapter 9</b>	
85. Contravention of Regulations	<ul style="list-style-type: none"> <li>• Ongoing contravention of the Regulations should result in the cancellation of Authorisation, which will prevent such a party from operating in Gauteng.</li> </ul>

A record of decisions taken by DACEL on actions for possible inclusion in the Regulations of those suggestions that were found to be practical and feasible is included in Appendix 1.

## 5. PLENARY REPORT BACK

Dr Rama summarized the issues discussed in **Group 1** as follows:

- HCRW management guidelines are needed;
- There is a need for cost recovery through the charging of fees;
- Conflict with other regulations and SABS guidelines should be minimised;
- Clarity is needed on the registration requirements for cross-border transporting of HCRW;
- Storage - should the storage temperature be lowered so that waste needs collecting less often?
- What is meant by a transfer facility?
- Compliance should be described in terms of the duty of care of the generator.

Ms Fischer reported back on issues discussed in **Group 2** as follows:

- It was important to obtain integration between by-laws and the regulations - align closely with the Road Traffic Act;
- The issue of significant epidemical diseases and the re-useable containers needs to be covered;
- Define the authorization needed in terms of Section 24 of the Environment Protection Act;
- Would crematoria and other thermal facilities be included under the regulations?
- Would the standards for thermal and non-thermal treatment be the DEAT or the EU standards?



- Of concern was the statement that monitoring could be reduced if compliance was demonstrated over a period of time;
- Start-up, shut-down and upset conditions need to be covered;
- The Department of Health has a role to play in facilitating the sharing of good management plans between institutions;
- The role and authority of the Environmental Health Officer in hospitals needs to be clarified;
- Transporters need annual auditing;
- Define inspection and auditing;
- Does the MEC have the right to amend schedules, and if so, in consultation with whom?

Issues discussed in **Group 3** were as follows:

- Different options for the tracking of HCRW need to be considered;
- Specifications for the disinfection of containers are needed;
- DACEL must mount a campaign to clarify the registration process;
- Accuracy required for reporting must be in line with the accuracy of the assumptions made;
- Crematoria also need regulations;
- Workshops are needed for veterinary regulations;
- Who will have access to the data from treatment plants?
- It was not felt to be sufficient for inspectors to only visit plants from time to time - however, the practicality of compliance monitoring needs to be considered;
- No distinction is made between the relative risk of generators.

## 6. CLOSURE AND WAY FORWARD

Dr Hanekom encouraged stakeholders to submit written comments with suggested wording as this is always useful.

- Comments would need to be submitted by 8 April 2003;
- The proceedings would be circulated in two weeks;
- July 2003 - adoption by Legislature;
- August 2003 - promulgation in the Government Gazette;
- September 2003 - implementation of the regulations.

In closing, Dr Hanekom thanked stakeholders for their attendance and input which was critical to the process as laid down by DACEL. Further comments and suggestions would be welcome. DACEL looked forward to working together with stakeholders so ensure that the regulations have an impact in Gauteng.



**APPENDIX 1 : DECISION ON INCLUSION OF COMMENTS RECEIVED DURING THE WORKSHOP**

No written comments were received by DACEL the end of the deadline on 2003-04-08. Enclosed please find the table of comments received and the DACEL's decision on inclusion of comments.

<b>COMMENTS</b>	<b>REPLY DURING WORKSHOP</b>	<b>ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS</b>
<b>GENERAL COMMENTS RECEIVED FROM ATTENDEES</b>		
1. There was a suggestion that thermal treatment and accepted technologies for thermal treatment should be defined. Move towards compliance to EU standards.	Dr Hanekom requested that the issue be discussed in the breakaway groups.	Definition of treatment technologies to be improved. Maintain DEAT Guidelines at this stage rather than EU requirements.
2. There was a query as to whether the authorization/Record of Decision (RoD) was the same as that currently required in Section 22(1) of the Environment Conservation Act?	Ms Fischer replied that it was not the same.	Use of the term RoD in the Regulations to be made clearer. Please refer to 47 below. The different acts under which each authorization is to be granted will be included. The Minimum requirements for disposal of waste to land will apply and will be included in the preamble
3. The concern was raised that the waste management process up to the treatment process was well defined, but after treatment it is not well covered.	Mr Otto replied that the process of classification and disposal is already well defined in DWAF's Minimum Requirements and was therefore not repeated.	The disposal of Residues after treatment is seen as being well regulated and will not be included further in the Regulations
4. The view was expressed that there is a need for improvement in the technology used in the final testing of thermally treated waste and that an EIA may be required.	Ms Fischer replied that the process would be streamlined, but that all issues would be considered.	No further changes to be made in this regard but the view is noted.
<b>GROUP 1</b>	<b>FACILITATOR: D.RAMA</b>	
General comments: 5. An issue was the potential for conflict with other regulations or by-laws	Identify potential conflict areas Cross reference other applicable regulations Produce a HCRW management guideline document to assist with	Agree, but will be separate guidance documents and not form part of the Regulations





<b>COMMENTS</b>	<b>REPLY DURING WORKSHOP</b>	<b>ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS</b>
	implementation	
6. Role of registration fees	Use the fees to assist in enforcement of the regulations	Provision for collection of registration fees will be included that shall reflect actual costs of administration only. Implementation of fees to be at a later stage and not at the time of promulgation of the Regulations
7. How would the regulations fit into the broader national waste management strategy?	Consider the overall framework including national legislation and make sure the regulations are in line with these	No action required at this stage in relation to the wording of the Regulation
8. How do the regulations relate to SABS 0248?	The regulations must feed into the SABS process	No action required at this stage in relation to the wording of the Regulation. However SABS part of the Project's Steering Committee and well informed of the process. Statement that these Regulations do not have preference over existing acts or regulations.
9. Transport across provincial borders	Transport companies must be registered and compliant Responsibility for authorisation of cross border transport providers needs clarification	Agree, but no action required at this stage in relation to the wording of the Regulation as it is included already. The schedules will include exactly what is required in terms of reporting.
10. Storage - facilities and timeframes	A 72 hours storage time was felt to be too short - the costs of collection from small generators would be too high Include the need for adequate storage - e.g. freezers so that less frequent collection would be possible Transfer facilities must also be included	Agree, Storage time frames will be changed as follows: Sharps: 6 months Pathological waste: max 24 hours from generation to treatment unless refrigerated at -2 degree C or below General infections waste: max 72 hours from time of collection at the generator to the treatment at the treatment plant Storage on site of generators: not regulated here other than requirement to avoid odour problems.
11. National implementation	There is a need for the project to be implemented in the other provinces as soon as possible with regional modification where necessary	No action required at this stage in relation to the wording of the Regulation
12. Space for re-useable containers	Include ideas on how to store the containers efficiently	This will form part of the HCW Management Guidelines and not the Regulations, Not to be included in the regulations, as this will not be enforced
13. Quality of the refuse bags and pigments	Include the standards for the refuse bags in the tender document and also specify which	Is included in the Schedules to the Regulations already.

COMMENTS	REPLY DURING WORKSHOP	ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS
	pigments are environmentally friendly Spot checks for control purposes Bags are not suitable for carrying sharps to the sluice area	
14. Colour coding	Look at using yellow bags instead of red because of the impacts of red pigments	Red is prescribed cf. SABS 0248 but with requirements for the pigmentation i.e. avoidance of heavy metal containing dyes etc.
15. Occupational Health Clinics	Classify as minor generators	Existing classification should be sufficient and will, hence, not be changed, but exceptions will be included to ensure that private households and other non-professional minor generators are not included in the requirement to register etc.
16. Registration and compliance	Do in phases rather than all at once Take into account the capacity of Local Governments	Current wording and all-at-once will be maintained. Current wording will be maintained as Local Governments shall take their capacity constraints into the Plans that they must develop..
<b>Chapter 1</b> 17. Definitions needed	HCW inspector or enforcement officer - who, competences needed Management plan Record of Decision Responsible Person Transfer Facility	Will not be specified further and power to deem who is competent will rest with the MEC Definition will be added and is described in the Schedules
<b>Chapter 2</b> 18. Maximum permissible mass for manual lifting	Was 15 kg the maximum mass permissible?	Yes, No changes will be made
19. Storage facilities for anatomical and pathological waste	There is a move towards cold storage / refrigeration / freezing facilities for storage purposes, making less frequent (weekly) collection possible	See 10 above
20. Specifications for the flooring of storage facilities	Impervious concrete flooring should be specified	Will not form part of the Regulations but will be included in the Guidelines
21. Labelling of HCRW containers	There should be a starting date and a date of sealing Labelling should specify when anatomical or pathological waste is present	Will not form part of the Regulations but will be included in the Guidelines. Containers for pathological waste shall be identifiable. Transporter will be required to indicate time of collection, and treater will need to indicate time of treatment

COMMENTS	REPLY DURING WORKSHOP	ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS
22. Alternative treatments to incineration	Schedules must clearly define the protocols - number of tests, when done etc. Treatment of liquid wastes need to be specified	Agree, Schedules will be elaborated in this regard cf. the Draft Non-burn Verification Protocol by DACEL Treatment of liquid waste will be as per current text. Further guidance will be provided in the HCW Management Guidelines
23. Control of sharps going into sanitary waste bins e.g. at airports	Classify as minor generators?	Will be classified according to the current text as minor/major generators with subsequent requirements. No changes to current text will be made.
<b>Chapter 3</b> 24. Control of HCRW from home based care	HCRW from home based care will be addressed at a later stage. The intention is to make minor generators the responsibility of Local Authorities	No changes to the current text will be made other than providing a clearer definition of home based care and providing exemptions as per 15 above.
25. The status of Local Authorities	Will Local Authorities be classed as major generators and need to register?	Each local authority will have to register it's individual health care waste generators as per the regulations. No changes will be made to the text in this regard.
26. Requirements for generators outside Gauteng	Will generators from outside Gauteng be required to register?	No, but transporters will have to register if taking such waste for treatment in Gauteng. No changes will be made to the text in this regard.
<b>Chapter 4</b> 27. Washing and disinfection of vehicles carrying HCRW	Specifications must cover all vehicles used to carry HCRW - motorbikes for Lab Services etc. Links with the Transport Act - transport of dangerous goods.	The washing and disinfections of vehicles will be covered in the HCWM Guidelines.  A threshold limit will be introduced to ensure that lab specimens in transit etc. will not have to register as transporters as this would result in excessive administration and no added benefit in terms for the quantities of HCRW and its disposal.
28. Signage on vehicles	Vehicles should have a sticker or some form of identification to show that they are a certified HCRW transporter	A requirement will not be introduced at this stage, but registered transporters are welcome to display their registration number/certificate on the vehicles. No changes will be made to the text in this regard.
29. Duty of Care Principle	Because a transporter is accredited, this doesn't exonerate the generator - he is still responsible	No changes will be made to the text in this regard.



<b>COMMENTS</b>	<b>REPLY DURING WORKSHOP</b>	<b>ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS</b>
<b>Chapter 5</b> 30. Transfer stations	Will they be included in the WIS? Include regulations for transfer stations Disaster management for transfer stations	Transfer stations shall report if waste is taken out of the province. Disaster management would normally form part of the RoD in terms of the EIA process. No changes will be made to the text in this regard.
<b>Chapter 6</b> 31. Validity period of registration: 3 - 5 years	Needs to be more congruence between the different time frames	Agree. Uniform renewal frequencies of 2 years will be included.
32. Auditing time frames	There is a need for an annual audit despite the 5 year registration period	A requirement for submission of annual reports is included. Will be elaborated and strengthened in the final version.
33. Who is ultimately responsible - the CEO or the company?	The name and contact details of the responsible person should appear on the registration form	It is the intention that the CEO of a particular health care facility or service company shall be responsible. E.g. in case of a provincial hospital it is the CEO of that hospital and not the head of the Department of Health that is responsible. No substantial changes will be made to the text in this regard but the wording may be strengthened in this regard.
<b>Chapter 7</b> 34. Potential to bring in other waste streams to the WIS	Make clear that the WIS doesn't only cover HCW Include a reference to the Access to Information Act	A separate WIS Regulation will be made in parallel to the HCRW Regulations.
<b>Chapter 8</b> 35. Who is regarded as an independent inspector?	SANAS is envisaged as the accreditation body	Cf. 17 above
36. Prosecution of offenders needs to be speedy	Prosecution of offenders should be via an Environmental Court as the judicial system is too slow	The Regulations will not provide for the establishment of an environmental court. No changes will be made to the text in this regard.
<b>Chapter 9</b> 37. Who is responsible in terms of enforcement	The CEO / MD is responsible - what is the implication for government hospitals? Look at the wording of Section 39.	Cf. 33 above
38. Reporting of contraventions	Facilitate the reporting of contraventions by the inclusion of a form to be filled in and DACEL contact details Include an emergency number for medical waste disposal contraventions Look at the wording of Section 3(1) and (2) to see if "whistle	Reporting of contraventions shall be by registered parties as per the regulations etc. The public may report contraventions to the MEC's office or the police. No changes will be made to the text in this regard.

<b>COMMENTS</b>	<b>REPLY DURING WORKSHOP</b>	<b>ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS</b>
	blowing" is adequately covered	
39. Section 42 - appeal on Records of Decision (RoD)	Include the option of appeal on any decision, whether positive or negative	The MEC will be the first body of appeal in terms of the Regulation, as indicated. RoD's are managed via other supporting legislation and appeal on RoD's will not be part of this Regulation. No changes will be made to the text in this regard.
40. Section 41 - ceased operations	A contingency plan for dealing with waste from ceased activities needs to be included Provision in the form of environmental insurance for if the company ceases to operate.	Agree with the concept but this cannot be promulgated or managed at this stage. No changes will be made to the text in this regard.
41. Issuing of a safe disposal certificate	Only once waste has been treated according to the standards laid down including: Duty of Care; online monitoring; completed manifest	The issuing of a certificate of Safe Disposal for each batch of HCRW will be required by the Regulations. To be issued by the relevant Treatment Plant.
42. Provision for breakdowns	Include a provision for breakdowns in the RoD	This is covered in the RoD's that do not form part of these regulations. No changes will be made to the text in this regard.
<b>Schedules</b> 43. Schedule 2 and 4	Validation vs monitoring - unpack these schedules to provide greater clarity Continuous monitoring vs batch sampling - needs clarification	Agree, the schedules will be elaborated in this regard.
<b>GROUP 2</b>	<b>FACILITATOR: D FISCHER</b>	
<b>ISSUE OR COMMENT</b>	<b>SUGGESTED IMPROVEMENT</b>	
<b>General comments</b> 44. A concern expressed was that some contractors would only collect the waste that they could fit in the truck - the leftover waste would then only be collect the next day, leading to odours		Cf. 10 above.
45. Conflict with local By-laws and other related Acts	Ensure synergy with By-laws and other related Acts e.g Road Traffic Act	It is assumed that this Provincial Regulations will take preference over local by-laws and that future revisions of local by-laws will take cognisance of the Provincial Regulation. No changes will be made to the text in this regard.



<b>COMMENTS</b>	<b>REPLY DURING WORKSHOP</b>	<b>ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS</b>
46. Consider formidable epidemic diseases (Congo Fever)	Re-usable containers would not be ideal in this case	The wording is changed to allow disposable containers provided that they comply with the general material requirements such as puncture resistant and leak proof.
47. A lack of clarity between authorization in terms of section 22 of the ECA and section 24 of the ECA	Provide clarification in the definition of "authorisation" - as per section 24	The Regulations will be amended to clearly indicate that the regulations are promulgated in terms of the section 24 of the ECA whereas the authorisation in relation to the EIA process and Records of Decisions are in terms of section 22 of the same act.
48. Would minimum requirements with respect to thermal processes include incinerators treating e.g. carcasses from the zoo, cremators?	Clarification is needed and timeframes for compliance	No. The definition of HCRW will be elaborated to clearly indicate that carcasses in general are not included and that only sharps from veterinary services and laboratory animals that may carry diseases communicable to humans are included.
49. A distinction is made between major and minor generators, but no distinction is made with regards to the relative risk of waste from different generators	Make a distinction between high risk generators e.g. labs that perform dangerous diagnoses	No such distinction will be made. It is assumed that all HCRW is "high risk" . No changes will be made to the text in this regard.
50. Annual audits	Annual audits for both transporters and treatment facilities need to be articulated	Agree. The requirement for an annual report will be elaborated in the Regulations.
<b>Chapter 1</b> 51. Definitions needed	Thermal and non-thermal treatment. The suggestion was to define thermal and all other treatments would be classified non-thermal The "statutory law" included in the definition of HCRW was not acceptable. The definition should be included or the law identified	Agree. The definitions will be elaborated to provide greater clarity.
<b>Chapter 2</b> 52. Authorisation - section 4(b) requires DACEL to consider if the proponent can comply now or in the future	Consider whether this is practical or not	It may be difficult to foresee the future, but there could be situation e.g. with pending lawsuits or similar that would justify the current wording. No changes will be made to the text in this regard.
53. The process for the closure of non-compliant technology is lacking	Include guidelines for the process to be followed in closing non-compliant facilities	The Regulations will be elaborated to clearly state the process for managing non-complying treatment plants for upgrading or closure via the registration process

COMMENTS	REPLY DURING WORKSHOP	ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS
54. Withdrawal of authorization	Ensure that there is a mechanism whereby authorisation can be withdrawn if there is non-compliance	Text will be amended to allow for revoking the authorisation in the event of serious and repeated contraventions only.
<b>Chapter 3</b> 55. HCRW plans and guidelines	It was agreed that generators should produce HCRW plans and that a guideline should be provided DACEL did not need to review the plans - reviewing the audit reports annually would be acceptable	Regulations will be elaborated to clearly state that the regulations require Major Generators to submit Plans that are audited every 2 years and that are signed and endorsed by the CEO who would be responsible in case of contravention or fraudulent reporting. This will form part of the renewal of the registration.
56. Forum for review of HCRW plans	Provide a forum for the review of HCRW plans so that information sharing and general improvement could take place	This will not be included in the Regulations, but a generic HCW Management Plan and guidelines for making such plans will be developed by DACEL. Submitted plans can be made available to the public on request cf. access to information act. Department of Health will be approached to facilitate this forum. No changes will be made to the text in this regard.
57. Inspection of the HCRW plans - undertaken by the enforcement inspectors or by the EHO's?	There should be provision made for the inspection of the entire system	EHO's already have particular powers to enter premises etc. In terms of the Regulations only DACEL staff that have been granted the particular designation of HCW Inspector will be able to exercise the powers of entry etc. This is not aimed at the hospital as EHO already inspect them, it was for the treatment plants and the transporters facilities of the Regulations. This will be made clearer in the Regulations.
<b>Chapter 4</b> 58. Would the minimum requirements be applied to waste coming into the province from other provinces (specifically to the containerization)?	Clarification is needed	The Regulation is clear in this regard. Waste brought to treatment plants in Gauteng must comply to the Regulations and the Transporters must register. Waste being transferred through Gauteng from one province for treatment in another (or same) province will not be affected by the Regulations. No changes will be made to the text in this regard.

<b>COMMENTS</b>	<b>REPLY DURING WORKSHOP</b>	<b>ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS</b>
59. The need for reporting	It was agreed that there was a need to report and that what was required could be achieved	No changes will be made to the text in this regard.
<b>Chapter 7</b> 60. Amendments proposed for the WIS	There was general agreement on the proposed WIS A phased approach to information collection and reporting was agreed on	No changes will be made to the text in this regard.
<b>Chapter 8</b> 61. The difference between inspection and auditing was not clearly stated	Clearly differentiate between these two terms and make the differences plain	This will be clarified in the text of the Regulations.
62. There was not sufficient clarity for the term "MEC"	Make clear when the MEC of Health or the MEC for Environment was referred to	Agree. This will be made clear. The Regulations give powers to the MEC for Environment only.
<b>Schedules</b> 63. There is a discrepancy in the requirements for thermal and non-thermal disposal	There should be congruency between the two	The Schedules for both types of treatment plants will be elaborated and for both types environmental performance, destruction levels and monitoring frequencies and requirements will be stated.
64. Schedule 3 - requires DEAT guidelines to be met	It was suggested that there be a move towards EU standards and timeframes for these to be met.	No changes will be made to the text in this regard. DEAT Guidelines will be maintained as this is the current recommendation from the National Department for Environment and Tourism and the affordability of using EU standards in SA has not been established. However, the Department envisages that requirements may be revisited at a later stage.
65. Of concern was that monitoring frequency would be reduced if compliance was demonstrated over a period of time	Needs consideration	No changes will be made to the text in this regard. It is seen as an important motivation that monitoring costs can be reduced if plants are operated well and in conformity with the requirements.
66. Timeframes for reporting	Include in the schedules	No changes will be made to the text in this regard.
<b>GROUP 3</b>	<b>FACILITATOR: S NKOSI</b>	
<b>ISSUE OR COMMENT</b>	<b>SUGGESTED IMPROVEMENT</b>	
<b>General comments</b> 67. Some of the current schedules in the regulations	Define thermal treatment.	Agree. Thermal treatment will be defined more clearly.





<b>COMMENTS</b>	<b>REPLY DURING WORKSHOP</b>	<b>ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS</b>
only apply to incineration and not to thermal processes.		
68. The processes of EIA and authorisation differ.	The processes need clarification. A streamlined EIA process is envisaged for the upgrading of existing HCRW treatment plants e.g. by means of the addition of scrubbers	Yes, the process in terms of the Regulation is developed to manage existing facilities that have not received a recent RoD via the EIA Process. Hence, it is two different processes. For existing plants the Regulations provide a streamlined process where e.g. location is not being considered. No changes will be made to the text in this regard.
69. What about the processes for disposal after treatment?	DWAF's minimum requirements cover most of this and only aspects not included in the minimum requirements will be included e.g. combustion efficiency.	No changes will be made to the text in this regard.
70. Pre-treatment of HCRW prior to transporting would reduce some of the risk.	Needs consideration	Pre-treatment on-site is not considered desirable in general due to the availability of specialised regional treatment facilities. No changes will be made to the text in this regard.
71. Of concern was that DACEL / local authorities may not have the resources to handle all of the registrations and applications causing a delay in implementing the Regulations.	Additional resources should be brought into DACEL.	DACEL is committed to promulgating and managing the Regulations and provide the resource needed. No changes will be made to the text in this regard.
72. The Regulations do not address the need for green procurements by health care facilities, amongst others leading to PVC containing items being replaced by alternative materials at the time of procurement.	Needs to be addressed.	Agree. The waste hierarchy will be introduced. The schedules are limiting the use of PVC and heavy metal containing products but dedicated green procurement procedures are not proposed to be regulated but would form part of the Waste Management Plans that are required in these Regulations. No changes will be made to the text in this regard.
73. The Regulations were felt to be meeting the requirements of the health care industry, subject to some amendments and were fully supported by the group.		Noted.
<b>Chapter 1</b> 74. Labelling and tracking of waste - will there be a particular place on the bins	A tracking system will be required, but the type of system will be left to the industry.	No changes will be made to the text in this regard as it is chosen not to regulate to this level of detail.

COMMENTS	REPLY DURING WORKSHOP	ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS
for an identification label for tracking purposes?	In the tender specifications for the outsourcing of HCRW management to provincial hospitals, a specific system may be required.	
<b>Chapter 2</b> 75. Transition from cardboard boxes to re-useable containers.	12 months was felt to be reasonable for the transition period.	No changes will be made to the text in this regard.
76. A lack of information on what constitutes HCRW and Health Care General Waste (HCGW).	Reference was made to the Guidelines, which list the typical items.	Agree. The definitions in the Regulations will be made clearer.
77. There is a lack of detailed specifications on the disinfection process and products to be used.	Brand names of disinfectants would not be used, but SABS approved disinfectants would be called for.	Agree. Schedule 1 will be elaborate to be clearer on this.
<b>Chapter 3</b> 78. Who is responsible for the registration process and does that party have the capacity to handle the process?	Whoever is required to receive and process the required registrations (provincial and local government respectively) must urgently be capacitated to handle the registrations. All forms etc. must be ready by the time registration is due to commence to eliminate frustration at a process that can't be handled effectively by the authorities. DACEL will embark on an awareness programme informing generators of the need to register and how to go about it.	No changes will be made to the text in this regard, but the concern is noted
<b>Chapter 4</b> 79. There is a need for uniform standards for the authorisation process across Gauteng, particularly due to the inconsistency regarding the By-laws promulgated by the various Local Councils in Gauteng.	Integrate the authorisation process on a local and a provincial level so that a uniform process can be achieved. Registration on a provincial level will ensure that all transporters in Gauteng are registered and authorised to operate, even where this is not required by local By-laws	No changes will be made to the text in this regard. The issues will be taken up with the Local Governments.
80. What about waste transporters from outside Gauteng that bring HCRW into the province?	Waste transporters from outside Gauteng will also be required to register to be able to operate within Gauteng. All the regulations will therefore also apply to them as far as it will	Cf. 9 & 26 above

COMMENTS	REPLY DURING WORKSHOP	ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS
	impact on transport and treatment operations undertaken within Gauteng.	
<b>Chapter 6</b> 81. What about other treatment facilities e.g. crematoria?	Crematoria will not be included in these regulations, with the understanding that no HCRW (pathological waste) may be treated at a facility that does not comply with the standards. This then excludes crematoria for the treatment of HCRW unless it complies with the incinerator standards in the Regulations.	It will be highlighted that crematoria that receive pathological waste must comply with the requirements of the Regulations in terms of the standards for thermal treatment plants.
82. What about veterinary waste?	Other than laboratory animal carcasses, Animal carcasses are considered to be different from HCRW and will be dealt with in a separate process.	Cf. 48 above.
83. The combustion efficiencies required are specified to very accurate levels, whereas there are a number of less accurate assumptions that will serve as input into the calculation.	The accuracy required should be compatible with the accuracy of the information used to determine the efficiencies.	In the Schedules it will be specified that the emission limits are calculated as 24 hour averages.
<b>Chapter 7</b> 84. How public will the test results e.g. of emissions be?	Test result should be available to the public and in particular HCRW generators (Duty of Care Principle) unless it can be proven to be commercially important for such information not to be made public.	Public have access to information through existing law. These regulations can not take away this access. No changes will be made to the text in this regard.
<b>Chapter 8</b> 85. Regulation effectiveness is only as effective as the enforcement.	Effective enforcement of the regulations is vital.	No changes will be made to the text in this regard.
86. Full time inspectors would be desirable to ensure compliance by treatment facilities at all times, and not only during random sampling or testing.	Full time inspectors will not be possible due to resource constraints in authorities. Industries are to be encouraged to comply voluntarily. Authorities are to have spot checks.	No changes will be made to the text in this regard.
87. Operations between 0:00 and 5:00 are less likely to comply with the required standards due to less monitoring capacity during those times	Limit operations during these periods and only when special permission is granted should be the standard set. Longer operating hours do	Operating hours will not be limited as it is in everybody's interest to have cost effective utilisation of installed treatment plants. The requirement for on-line monitoring of some parameters

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as well as the human nature.	however allow a facility to be more cost effective.	will guard against night pollution. No changes will be made to the text in this regard.
88. Identification of inspectors.	Inspectors should carry the required identification to prevent unauthorised entry by outsiders.	No changes will be made to the text in this regard, but it is noted.
<b>Chapter 9</b> 89. How will contravention of Regulations be dealt with?	In addition to penalties, ongoing contravention of the Regulations should result in the cancellation of Authorisation, which will prevent such a party from operating in Gauteng.	The section will be strengthened to provide a tool for closing operations if repeated contraventions are observed.
<b>PLENARY REPORT BACK</b>		
<p>Dr Rama summarized the issues discussed in <b>Group 1</b> as follows:</p> <p>90. HCRW management guidelines are needed;</p> <p>91. There is a need for cost recovery by the Authorities through the charging of fees;</p> <p>92. Conflict with other regulations and SABS guidelines should be minimised;</p> <p>93. Clarity is needed on the registration requirements for cross-border transporting of HCRW;</p> <p>94. Storage - should the storage temperature be lowered so that HCRW needs collecting less often?</p> <p>95. What is meant by a transfer facility?</p> <p>96. Compliance should be described in terms of the duty of care of the generator.</p>	<p>A theoretical facility at the moment, but could be relevant.</p>	<p>No changes will be made to the text in this regard.</p> <p>Agree. Will be included.</p> <p>No changes will be made to the text in this regard.</p> <p>No changes will be made to the text in this regard.</p> <p>Agree. Will be lowered to -2 degrees C or below for pathological waste.</p> <p>No changes will be made to the text in this regard.</p> <p>No changes will be made to the text in this regard.</p>
<p>Ms Fischer reported back on issues discussed in <b>Group 2</b> as follows:</p> <p>97. It was important to obtain integration between by-laws and the regulations - align closely with the Road Traffic Act;</p> <p>98. The issue of significant epidemical diseases and the re-useable containers needs</p>		<p>No changes will be made to the text in this regard.</p> <p>There will be no requirement for reusable containers but for puncture and leak proof. Hence, e.g.</p>

COMMENTS	REPLY DURING WORKSHOP	ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS
<p>to be covered;</p> <p>99. Define the authorization needed in terms of Section 24 of the Environmental Protection Act;</p> <p>100. Would crematoria and other thermal facilities be included under the regulations?</p> <p>101. Would the standards for thermal and non-thermal treatment be the DEAT or the EU standards?</p> <p>102. Of concern was the statement that monitoring could be reduced if compliance was demonstrated over a period of time;</p> <p>103. Start-up, shut-down and upset conditions need to be covered;</p> <p>104. The Department of Health has a role to play in facilitating the sharing of good management plans between institutions;</p> <p>105. The role and authority of the Environmental Health Officer in hospitals needs to be clarified;</p> <p>106. Transporters need annual auditing;</p> <p>107. Define inspection and auditing;</p> <p>108. Does the MEC have the right to amend schedules, and if so, in consultation with whom?</p>		<p>disposable polymeric containers can be used on isolation wards etc. Not part of the Regulations. No changes will be made to the text in this regard.</p> <p>Cf. 81 above</p> <p>Cf. 1 and 64 above.</p> <p>Cf. 65 above.</p> <p>Agree. Is included in Annual Reporting. No changes will be made to the text in this regard. No changes will be made to the text in this regard, but noted.</p> <p>Cf. 57 above. No changes will be made to the text in this regard.</p> <p>No changes will be made to the text in this regard. No changes will be made to the text in this regard. Yes. Must be Gazetted. No changes will be made to the text in this regard.</p>
<p>Issues discussed in <b>Group 3</b> as presented by Sr. Hattingh were as follows:</p> <p>109. Different options for the tracking of HCRW need to be considered;</p> <p>110. Specifications for the disinfection of containers are needed;</p>		<p>No changes will be made to the text in this regard.</p> <p>Cf. above 77 above</p>



COMMENTS	REPLY DURING WORKSHOP	ACTION TAKEN FOR POSSIBLE INCLUSION IN THE REGULATIONS
<p>111. DACEL must launch a campaign to clarify the registration process;</p> <p>112. Accuracy required for reporting must be in line with the accuracy of the assumptions made;</p> <p>113. Crematoria also need regulations if used for treatment of HCRW;</p> <p>114. Workshops are needed for veterinary regulations;</p> <p>115. Who will have access to the data from treatment plants?</p> <p>116. It was not felt to be sufficient for inspectors to only visit plants from time to time - however, the practicality of compliance monitoring needs to be considered.</p> <p>117. No distinction is made between the relative risk of generators.</p>		<p>Agree, see 78 above.</p> <p>No changes will be made to the text in this regard.</p> <p>Cf. 48 &amp; 81 above.</p> <p>No changes will be made to the text in this regard. E.g. Access to information Act. No changes will be made to the text in this regard.</p> <p>No changes will be made to the text in this regard.</p> <p>Correct. No changes will be made to the text in this regard.</p>



## APPENDIX 2 : LIST OF ATTENDEES

### HCRW - DRAFT REGULATIONS WORKSHOP - 27 MARCH 2003

#### ATTENDANCE LIST

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**HCRW - DRAFT REGULATIONS WORKSHOP - 27 MARCH 2003**

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