# VOLUME 4

# PROJECT SPECIFICATION

Sustainable Health Care Waste Management in Gauteng

March 2003

# DRAFT VERSION FOR INDUSTRY WORKSHOP

Job 1459103

Ref.No. MOKH 03-03-11

Edition 1. draft 2003-03-11

Prepd. Checked Appd. MOKH/KO

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# 1. Introduction and Interpretation

Save as otherwise specified in this Volume 4 [Project Specification], all words, expressions and abbreviations used in this Volume 4 [Project Specifications] shall (unless the context otherwise requires or admits) have the meanings respectively assigned to them in [Definitions] or elsewhere in this Contract (as the case may be). For the purposes of the construction of the provisions of this Project Specification, no specific requirement specified herein shall limit the generality of any other requirement.

# 2. General

This Project Specification specifies and contains the Employer's requirements for the Services and the Contractor shall, at all times throughout the Contract Period, perform and complete each of the Services in such manner and at such times as shall comply with and satisfy the requirements of this Project Specification.

# 3. [not in use]

# 4. Scope of supply

#### 4.1 The Services

The objective of providing the services covered in the present Contract is to assist Health Care Facilities in the Region in managing Health Care Risk Waste and to remove this waste from the premises, treat it and dispose of it.

All processes and procedures require to be adopted, followed and /or implemented to ensure the safe and efficient removal of Waste from the Facilities shall, in so far as not specifically addressed in this Project Specification be performed and executed by the Contractor in accordance with Good Operating and Engineering Practices.

The scope of supply for the Services shall for the duration of the Services Period, in general terms include the provision by the Contractor of all plants, equipment (including maintenance thereof) consumables, personnel, activities, services, know-how and expertise necessary to safely and efficiently remove all Waste from the Waste Collection Points at all Facilities in the Region and treat this Waste and dispose of the Residues. The scope of supply shall, for the duration of the Services Period, more specifically include:

- Provision and procurement of all Disposable Containers necessary for safely removing the Waste from all Facilities in the Region
- Distribution of Disposable Containers to each Facility in the Region
- Provision, procurement and installation of brackets and holders for Disposable Containers at each and all Facilities in cooperation with each Facility
- Provision and procurement of all Reusable Containers necessary to transport the Waste from all Facilities in the Region to the Treatment Plant

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- Provision, procurement and installation of a freezer at clinics with a maternity ward or otherwise generating pathological waste
- Collection of the Waste from all Facilities in the Region
- Transportation of the Waste from all Facilities in the Region to the Treatment Plant
- Interfacing with the Facilities in securing a safe and efficient removal of Waste and supply of Consumables
- Provision of a training programme on the segregation and handling of HCRW for the staff at the Facilities
- Provision Training of the Contractors personnel in handling HCRW
- Maintaining cleanliness the intermediate storage of Waste at the Waste Collection Points
- Provision of a washing facility for the Reusable Containers
- Washing and disinfection of Reusable Containers following the emptying of these
- Provision and Procurement of a Treatment Plant, staff, consumables, know how and approvals necessary for Treatment of the Waste
- Treatment of all the Waste collected from the Facilities. The Treatment shall be in accordance with Appendix 4 [Requirements for Incineration of HCRW] or Appendix 5 [Requirements for non-burn treatment of HCRW] as relevant for the treatment technology used.
- Transport of Residues to an appropriate landfill in accordance with Necessary Consents
- Provision of appropriately qualified staff for management, maintenance and operation of the Treatment Plant and other Services
- Reporting to the Employer's Representative
- Convening and attending meetings and liasing with the Employer's Representative
- Obtaining and maintaining all Necessary Consents

#### 4.2 The Facilities

The Facilities to be serviced by the Contractor under this Contract are hospitals and clinics in the Region, operated by the Gauteng Department of Health. A list of all Facilities can be found in appendix 7.

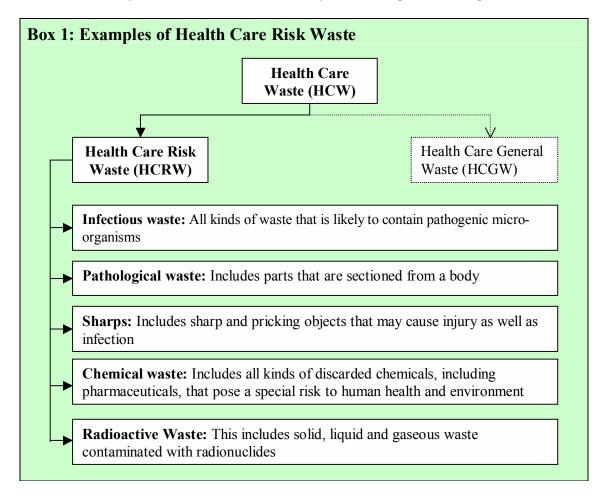
This list can be amended by the Employer during the Contract Period. The Employer shall give the Contractor written notice of any amendments to the List of Facilities. The Contractor shall upon given notice, liase with any Facilities that have been added to the list, and arrange with the Employer and the Facility for the commencement of Services for that Facility. Likewise the Contractor shall terminate its Services to any Facilities that are removed from the list.

The Contractor shall allow for amendments to the List of Facilities that can lead to less than 15% increase or decrease in the volume of Waste covered by this Contractor.

The Contractor can demand a renegotiation of the Schedule of Prices if Amendments to the List of Facilities are made by the Employer that result in a larger than 15% change in the Waste quantity (by mass) covered by this Contract.

# 5. The Waste

Health Care Risk Waste (HCRW) is considered to be the hazardous component of Health Care Waste (HCW) generated in both large and small health care facilities. HCRW has the potential to create a number of environmental, health and safety risks, depending on the particular type of HCRW, the way it is handled, as well as the way in which exposure takes place.



In **Box 1** the five different categories of health care risk waste are defined and examples given of the most commonly found components.

Three of the components of HCRW may be infectious (infectious waste, pathological waste and sharps), but since pathological waste and sharps have additional features, they constitute a separate component.

Radioactive waste is not to be collected by the Contractor and remains outside the scope of this Contract.

For the purpose of this Contract, by Waste shall be understood:

- Infectious waste
- Sharps

- Pathological waste
- Chemical Waste

# **6.** Supply of Disposable Containers

The Contractor shall as part of its obligations, throughout the Services Period, supply all Disposable Containers for each of the Facilities. By Disposable Containers shall be understood:

- Sharps containers
- Containers for Long sharps
- Specibins for pathological waste
- Red liners
- Sealing mechanisms for liners etc. (if required)

The Disposable Containers and Liners shall be supplied, by the Contractor, to the Facilities upon the Contractor receiving orders from the individual Facility, specifying quantities and types.

Disposable Containers shall comply with the specifications in Appendix 1 [Specifications of Disposable Containers]

# 6.1 Distribution of Disposable Containers

The Contractor shall throughout the Services Period ensure that the Facilities have sufficient supply of Consumables. It is the Contractors responsibility to estimate and monitor each Facility's need for Disposable Containers. If a Facility experiences a shortage in the supply of Disposable Containers it shall notify the Contractor. If the Contractor fails to abate the shortage within 24 hours from given notice, it shall constitute a Service Failure.

The Contractor shall not supply more Consumables than needed to each Facility. If the stock of one or more of the Consumables at one Facility, at any time exceeds the consumption of the previous month, then it shall constitute a Service Failure.

The Facilities may wish for some of the Sharps Containers, liners and Specibins to be wall mounted in brackets

The Contractor shall be responsible for supplying and installing brackets for liners, sharps containers and specibins. The Contractor shall during its Roll Out for each Facility in the Region obtain from the Facility Contact Person directions on where to mount the brackets.

#### **6.2** Disposable Containers Delivery Point

The Disposable Containers shall be delivered by the Contractor, to one central storage room at each Facility, which is designated to be the Disposable Containers Delivery Point, against a signed receipt from the Waste Officer or other mandated person. The Contractor shall during

its Roll Out liase with each Facility and establish the location of the Disposable Containers Delivery Point and the acceptable periods and weekdays that supplies can be received during.

# 7. Supply of Reusable Containers

The Contractor shall as part of its obligations, throughout the contract period, supply all Reusable Containers that shall be used to transport the Waste from the Facilities to the Waste Delivery Point.

The Reusable Containers supplied by the Contractor shall comply with the specifications in Appendix 2 [Specifications for Reusable Containers].

# 7.1 Ownership of Reusable Containers

The Contractor shall maintain ownership of the reusable containers throughout the Contract Period. In the event that Reusable Containers are lost while in the custody of a Facility, then the Employer shall indemnify the Contractor

The Contractor shall one later that one month before the first day of the Handover Period submit to the Employer an offer for the Employer to take over the Reusable Containers. The offer shall contain details of numbers and types as well as the Contractors proposed pricing.

#### 7.2 Maintenance of Reusable Containers

The Contractor shall ensure that Reusable Containers used for transportation of Waste, at all times comply with the specifications in Appendix 2. The Contractor shall regularly inspect the Reusable Containers and replace containers that do not comply with the specifications e.g. due to wear and tear. If the Contractor supplies Reusable Containers to a Facility, that do not comply with the specifications in Appendix 2 it shall constitute a Service Failure.

#### 7.3 Managing supply of Reusable Containers

The Contractor shall at all times ensure that the Facilities have sufficient supply of reusable containers. It is the Contractors responsibility to estimate and monitor each facility's need for reusable containers. If a Facility experiences a shortage in the supply of reusable containers, and this shortage is a result of the Contractors negligence, it shall notify the Contractor. If the Contractor fails to abate the shortage within 8 hours from given notice, it shall constitute a Service Failure.

## 7.4 Tracking system for Reusable Containers

The Contractor shall provide a tracking system for use with the Reusable Containers. The Tracking system shall ensure that at any time during the Contract Period documentation exists for which Reusable Containers are in the custody of a Facility and which Reusable Containers have been delivered to the Treatment Plant.

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Each Reusable Container shall have a unique identification code. The identification code shall be placed visibly on the outside of the container. The visible representation of the code shall be permanent anddurable and shall be resistant to the wash and wear sustained through the Contract Period. The identification code shall be a made up of numbers and/or letters.

The tracking system shall as a minimum ensure that a receipt signed by the Contractor and the Facility is issued every time Reusable Containers are delivered to a Facility or Collected from a Facility.

The Treatment Plant shall register each Reusable Container at the time when it arrives at the Treatment Plant. The registration shall contain information about identification code of the Reusable Container, time of arrival and weight at arrival.

The Treatment Plant shall monthly, issue a certificate stating the identification code of the containers, the contents of which have been Treated and the time of Treatment. Please also refer to section 19 Communication.

#### 7.5 Disinfection of Reusable Containers

The Contractor shall ensure Reusable Containers are washed and disinfected immediately after they have been emptied. Appendix 5 contains requirements for the washing and disinfection of Reusable Containers.

# 7.6 Storage of Reusable Containers

The Contractor shall provide storage facilities for the separate storage of contaminated and disinfected Reusable Containers. It is to be ensured that the storage areas will not allow for the disinfected containers to become contaminated in any way between the time of disinfection and the time of collection for distribution to the respective Facilities. The Contractor shall further ensure that the storage facilities are well secured with suitable access control, to prevent access by unauthorised persons to the Reusable Containers.

# 8. Supply and installation of freezers

With the clinics generally generating limited amounts of Waste, the frequency for collecting Waste from the clinics can be less than that of the hospitals. This can however result in too long storage time for placentas and other pathological waste, e.g. at clinics with a maternity ward, or alternatively give uneconomical high frequencies of Waste collection at these clinics.

The Contractor shall therefore supply each clinic that has a maternity ward with a freezer which can be used to store placentas or alternatively arrange for daily collection of placentas. The freezers shall have a volume of 100 to 150 L. The freezer shall be capable of maintaining temperatures from +0 degrees C to -12 degrees C and preferably up to +4 degrees C.

The Contractor must at the time of collection arrange for removal of filled and sealed pathological waste containers from the Freezer.

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# 9. Collection of the Waste

The Contractor shall collect the Waste from the Waste Collection Point at each Facility. The Contractor shall during the Mobilisation Period liase with each Facility and establish the location of the Waste Collection Point. The Contractor shall submit a list, to the Employer of all Waste Collection Points agreed with the Facilities, no later than 2 weeks before Commencement of Services Date.

The Contractor shall ensure that no Waste is left unattended once it has been removed from the Waste Collection Point and until it has been delivered to the Waste Delivery Point.

The Contractor shall collect Waste from the Facilities in accordance with the Collection Programme. The Contractor shall notify affected Facilities and the Employer's Representative of changes to the Collection Programme, 1 week prior to those changes taking effect. The Contractor shall at all times ensure that the Employer's Representative is provided with the valid version of the Collection Programme.

#### 9.1 Waste Collection Point

The Waste Collections Point designates the place at each Facility where the Contractor takes responsibility for the Waste.

The Waste Collection Point will usually be an intermediate storage at the Facility. The Facilities will deliver the Waste to the Waste Collection Point in the reusable containers. The Waste shall be the responsibility of the Contractor when it has been delivered by the Facility to the Waste Collection Point.

In general each Facility will have one Waste Collection Point, however some Facilities may due to their size have more than one Waste Collection Point.

The mortuary will at the hospitals generally be the Waste Collection Point for Pathological Waste.

The Contractor shall be responsible for removing any spillage from the Waste Collection Poing. Failure to remove spillage from the Waste Delivery Point shall constitute a Service Failure.

## 9.2 Storage of Waste

The Waste can be stored at the Waste Collection Point in order to make collection and transport cost efficient. The Contractor shall ensure that the following maximum storage times are not exceeded, alternatively that refrigeration is provided for:

- General infectious waste, maximum storage time 7 days
  Pathological waste including placentas, maximum storage time 4 days if kept refridgerated at or below +4 degree C, otherwise 24 hours.
- Sharps including long sharps, maximum storage time 60 days

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By storage time shall be understood the time from when the Waste is placed at the Waste Collection Point by the Facility, until it is removed from the Facility by the Contractor.

Exceeding the maximum storage time listed above shall constitute a Service Failure.

The Contractor shall ensure that no Waste is stored overnight once it has been removed from the Facility, and until it has been delivered to the Waste Delivery Point. This means that delivery of the Waste by the Contractor to the Treatment Plant, shall take place on the same day that the waste is removed from the Facility. Failure to deliver Waste to the Treatment Plant the same day it has been removed from the Waste Collection Point shall constitute a Service Failure.

# 9.3 Registration of collected Waste

The Contractor shall as part of the Services implement a registration system that will provide the basis for the payment for the services.

For each consignment of Waste collected the Contractor shall issue a Registration Sheet containing information on:

- Identification numbers of collected Reusable Containers
- Type (volume) and net weight of each Reusable Container
- Type of Waste, i.e. infectious waste, pathological waste or chemical waste
- Time and date of collection

The Registration Sheet shall be issued, at the time and place of the waste collection, in 3 copies and each copy is to be signed by the Waste Officer and the Contractor. One Copy of the Registration Sheet, signed by both parties shall be submitted to the Waste Officer before the Contractor leaves the Facility.

# 10. Transport

# 10.1 Requirements for transportation

The Contractor shall transport all Waste from the Facilities to the Treatment Plant.

The Contractor shall at all times observe required health and safety measures and shall avoid spillage of the Waste. If a spillage occurs it shall be removed immediately by the Contractor. Failure to remove a spillage shall constitute a Service Failure.

### 10.2 Requirements for the HCRW Vehicles

HCRW Vehicles used by the Contractor to transport Waste shall be for the sole purpose of transporting HCRW and may not be used for any other purposes.

All HCRW Vehicles shall comply to meet the standards laid down by the National Road Traffic Act (Act 93 of 1996), as well as the bylaws of [the respective local authorities in which area of jurisdiction it has to operate.]

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Access to the HCRW Vehicle's loading compartment shall be safe and unobstructed, thus ensuring easy access for the Contractor's staff.

Storage compartments on HCRW Vehicles shall not have any holes or openings that could result in leaking of liquids that may have spilt from containers

The inner surface of the HCRW Vehicle's storage compartment shall be rust free by being galvanised, manufactured from stainless steel or covered by zinc or other materials approved by the regulating authorities

The internal finish of the load compartment shall allow for easy cleaning, e.g. angels shall be rounded and surfaces shall be smooth.

There shall be a bulkhead between the drivers cabin and load compartment, designed to retain the load, in order to protect the drive in the event that the vehicle is involved in an accident.

There shall be a suitable method for fastening the closed HCRW containers, thus reducing the risk of spills.

All HCRW Vehicles shall be equipped with emergency equipment required by the Necessary Consents. This Equipment shall as a minimum include spill kits containing all personal protective equipment like masks, glows and overalls, as well as folded HCRW containers, brooms, scoops and disinfectants, together with fire extinguishers and the staff shall be trained in the effective use thereof;

# 11. Treatment of the Waste

The objective of Treating HCRW is to deactivate the viruses, bacteria and other pathogens in the waste to a safe level where there is no risk of infection or other negative health impacts to anyone.

The treatment shall further prevent any reuse, intentional or unintentional, of objects such as syringes, sharps etc. by destroying completely or partly these objects and to render them harmless to humans.

The Contractor shall use an automatic device for unloading the contents of the Reusable Containers at the Plant. The procedures and equipment for unloading the Waste shall be designed to minimise the manual handling required.

No manual lifting of receptacles weighing in excess of 15 kg.

The technology to be used for the Treatment of the Waste can be either incineration or a non-burn deactivation technology.

The Contractor can use either Incineration or a non-burn technology for the treatment of Infectious waste.

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Chemical Waste and Pathological Waste shall be incinerated in compliance with the requirements for Incineration.

The Contractor shall ensure that all Waste is Treated no later than 24 hours after it has been delivered to the Treatment Plant

The Contractor shall during a Planned Outage procure the use of cold storage facilities which are suitable for the reception and storage of Waste, with the purpose of storing the Waste until the Planned Outage is over.

# 11.1 Requirements for Incineration

The Contractor shall comply with the requirements in appendix 3 [Requirements for Incineration of HCRW].

### 11.2 Requirements for non-burn treatment

The Contractor shall comply with the requirements in appendix 4 [Requirements for Incineration of HCRW].

# 12. Residues disposal

The Contractor shall be responsible for the disposal of the Residues from the Treatment of the Waste. The Residues shall be disposed of in accordance with Necessary Consents.

The method of transportation selected by the Contractor for the Residues shall ensure that no danger, nuisance or inconvenience is caused to people at or near the Treatment Plant or along any of the transportation routes for the Residues. The Contractor shall ensure that the transportation of the Residues is conducted in accordance with Good Engineering and Operating Practices.

The Contractor shall meet all costs associated with the transportation of the Residues.

The Contractor shall obtain a certificate from the operator of the landfill used for disposing of the Residues, stating the time, date and quantity of Residues delivered to the landfill.

# 13. Training and Consultancy Support

The Contractor shall in its interface with the Facilities provide a Training Programme and Consultancy support, with the purpose of enhancing segregation of the HCW. The Training Programme shall comply with the present Project Specifications and with the Contractor's Training Programme Proposal.

#### 13.1 Background

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In most health care facilities in Gauteng there has been no training or consultancy support for the management of waste. This has resulted in the following poor practices in public health care institutions:

- The available equipment is sometimes poorly deployed in a health facility
- There is inadequate problem solving and so the same problems are likely to keep reoccurring
- Containers and equipment is sometimes incorrectly used
- Containers and equipment is sometimes not available in sufficient numbers or to a sufficient quality
- Segregation of waste is insufficient and poses a health hazard for the collectors of general waste and scavengers at the landfill site as well as resulting in excessive costs of waste disposal.
- There is inadequate link made between waste management and the occupational health and safety aspects of waste such as reporting and wearing of protective clothing Senior management is inadequately informed about health care waste management and therefore is rarely involved with any aspect of waste management
- There has been no policy, standards or code of practice for waste promoted in public health facilities.

To help address these problems the Gauteng Department of Health has appointed in each hospital and community health center a Waste Officer. These individuals receive five days intensive training in health care waste management. They are then expected to facilitate the development of improved health care waste management. This is achieved by working with infection control, the cleaning department, occupational health and safety, hospital/facility management and the Contractor.

However the role of the Waste Officer is a part-time responsibility and therefore it is essential that these individuals are supported in this task. The Contractor shall provide the Waste Officer with technical support and support with training delivery. Technical and training support to clinics will be delivered through their [cluster managers] who are part of regional DoH management structures.

The Training Programme and Consultancy Support shall ensure that there is an ongoing programme of support to health facilities through liaison with the Waste Officer and regional clinic managers. The purpose of this support is to ensure the following:

That all Facilities are prepared for the introduction of new equipment

That all staff are trained to use equipment correctly, to segregate waste properly and in the waste aspects of occupational health and safety

That there is ongoing support to Facilities for problem solving

That there is an ongoing programme of training activities and awareness activities for the Facilities.

The Training Programme and the Consultancy Support shall be integrated and form a comprehensive package of support to each Facility.

The Training Programme and the Consultancy Support shall reflect the approach adopted by the Gauteng Sustainable Health Care Waste Project. All the materials developed were based on the outcomes of an extensive survey at two pilot sites. All the materials and the survey reports used in this pilot initiative are available on the website address ???. The Contractors shall make use of these materials and adapt them as necessary.

# 13.2 Specifications for the training programme

The ongoing Training Programme shall be made available for each and all Facilities in the Region over the entire Services Period. The Training Programme shall be facilitated through the Waste Officer in each hospital and community health center and through regional managers for clinics. The Training Programme shall liaise with Inservice Training in the Region as necessary to ensure maximum impact, publicity and support. Training venues will be supplied by the DoH. The Training Programme shall be conducted on-site at health facilities or locally to minimize transport costs.

### 13.2.1 Target groups for training

The Training Programme shall target the following groups of staff at the Facilities;

- Hospital management (administration and medical services)
- Clinic management including Regional clinic managers
- Health facility occupational health and safety committees and representatives
- Regional environmental health and occupational health and safety representatives
- All categories of medical and allied medical staff in health facilities
- All categories of none medical staff with specific attention to general assistants in health facilities
- Health sciences students who are on placement in health facilities

#### 13.2.2 Baseline and formative information

The Contractor shall refer to annexure L [Programme of Work Leading up to Commencement and after Completion of Pilot Project] and use this as the baseline information in developing the Training Programme.

#### 13.2.3 Training content

The Training Programme shall address present knowledge, skills and attitude gaps. Collectively these will contribute to the type of behaviour that is necessary to sustain the health care waste management system. The following areas are identified as specific priorities, and shall be covered by the Training Programme:

Knowledge gaps

- The hazards of medical waste
- The disposal/treatment of medical waste off site
- The disposal of general waste off site
- The types of medical waste

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- The correct segregation of waste
- The types of containers and liners for the disposal of waste
- The role of the Gauteng Code of Practice for Health Care Waste Management
- The correct use of the personal protective clothing
- The importance reporting and internal performance monitoring and external auditing

# 13.2.5 Attitude Change

Attitude change must be promoted as part of Training Programme. Important attitudes to promote shall include but not be limited to:

- The importance of protecting the environment
- Everyone who works in a health facility is responsible for waste
- Recycling is important
- Good waste management protects everyone's health and safety

### 13.2.6 Skills teaching

Demonstration is an important component of introducing a new waste management system. There are new skills associated with the use of new equipment, at the point of generation, in intermediate storage, internal transport and at central storage.

### 13.2.7 Methodology

The Contractor's approach to training must be outcomes based and participatory. The Training Programme shall utilise simple teaching tools that encourage discussion. The tools shall be picture based and avoid being overly technical.

To facilitate a rapid training inside health facilities the Training Programme shall utilise a train the trainer approach and support cascade training. Where possible training shall be multi-disciplinary and should encourage medical and non-medical staff to work together on waste issues. The training and skills demonstration shall be on the job. However there may be other channels that should be used for effective training such as management meetings and cpd (continuing professional development) meetings for doctors. The Contractor shall ensure that waste management training is integrated into orientation programmes for students on placement in the Facility [. The Training Programme shall include a mechanism to cater for night staff and shift workers. To ensure that training is taking place quarterly monitoring of training activities is essential. Monitoring should also include the identification of further training needs

### 13.2.8 Training materials

The Contractor shall support the training by the use of appropriate visual aids. These materials shall be used in training to reinforce the main teaching information. The training materials shall be picture based, avoid technical language and be in more than one language as appropriate. The training materials shall be print materials, however audiovisual materials may be appropriate if well motivated. All training materials shall be pre-tested by Contractor during

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the design phase. All materials must carry the GdoH logo and be approved by the GDoH before printing.

### 13.2.9 Awareness activities and other support materials

The Contractor shall include awareness activities as part of the Training Programme. Awareness activities shall be used to highlight the importance of waste management, to reinforce key messages and to provide incentives. For example, an inter-ward competition is an excellent tool to promote better segregation. The Gauteng Sustainable Health Care Waste Project has produced an awareness activities booklet for use in health facilities.

It is expected that one awareness activity per hospital and community health centre and two regional awareness activities for clinics and other regional staff be organised per year.

It may be necessary to support awareness activities and the waste management system with the provision of additional materials such as stickers to reinforce the use of black liners for general waste or sharps in the sharps containers.

## 13.2.10 Background training Contractor and trainers

The capacity of the Contractor and the proposed trainers is essential in the award of this Contract. The Contractor shall demonstrate the following:

- Experience in the design of training programmes
- Delivery of a three year training programme
- Experience in the design and production of training materials
- Capacity to ensure ongoing monitoring and regular reporting to the Department of Health
- Experience of evaluation

The Contractor's Trainers shall have the following background:

- Strong non-formal training experience
- Training background in community development/health promotion/environmental health /occupational health
- Familiarity with health facility environment
- Able to work in English and African Languages

#### 13.2.11 Evaluation

Evaluation of the Training Programme will be in two components. The first component is an on-going monitoring plan that records the reach of training, participant satisfaction and identifies on-going training needs. The second component is an independent evaluation survey conducted at the end of year 1 and year 3. This evaluation will measure the impact of the training (including knowledge, attitude and practice changes) and the efficiency of the model for delivering training. The evaluation should be conducted by a sub-contracted person/group independent of the Contractor, to be approved by the Employer.

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#### 13.2.12 Deliverables

Monitoring of the Training Programme will be by regular reporting and submission of key deliverables to the GDoH for approval.

These are:

- Submission of all print materials/audiovisual materials for approval
- Submission of training and awareness programme to DoH for approval in year 1, year 2 and year 3
- Submission of six monthly monitoring reports of training and awareness programme
- Submission of independent evaluation report year 1
- Submission of independent evaluation report year 3

# 13.3 Specifications for the Consultancy Support

The Contractor's shall provide a Consultancy Support. The Consultancy Support shall comply with the present Project Specification and with the Contractor's Consultancy Support Proposal [appendix ??]

The Consultancy Support shall specifically address the technical issues related to the health care waste management system. To hold this position it is essential that persons are familiar with occupational health and safety legislation, infection control principles and the cradle to grave management of all health care waste streams. This support service will be primarily for the Waste Officer in the Facilities, but also to senior management in Facilities in the Region, occupational health and safety committees and other Regional representatives. The consultants would also be expected to support and advise on the Training Programme.

Consultant Support to the health care waste system shall be in two phases. Phase 1 will be an intensive phase of consultant support to ensure the successful roll-out of the new system (refer to clause 14.5) and phase 2 a sustained presence to ensure the maintenance of HCWM standards:

Phase 2 shall have the following objectives

- ensure regular internal monitoring of performance and equipment by health care workers
- support the introduction of the DoH reporting system for health care waste management
- conduct inspections and audits
- provide a 6 monthly report to the DoH and to facility management.

## 13.3.2 Background of consultants

Consultants shall have a background in occupational health and safety, environmental health or infection control. They may also have a nursing or medical background. Consultants shall be familiar with working in health facilities and should have public sector experience.

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#### 13.3.3 Deliverables

Six monthly reports for the DoH

Six monthly reporting to Region and senior management in hospitals and community health centres

# 14. Mobilisation and Roll Out

#### 14.1 Mobilisation

Following the award of Contract the Contractor shall use the Mobilisation Period to mobilise its staff, acquire necessary equipment and supplies. The Mobilisation Period shall further be used by the Contractor to establish communication lines with each of the Facilities as well as with the Regional Office

The Contractor shall liase with the Waste Officer at each Facility during Mobilisation and agree with the Waste Officer on the programme for the implementation at the Facility.

#### 14.2 Roll Out Period

The Contractor assumes responsibility for removing, treating and disposing of the Waste from the Commencement of Services Date. The first 3 months following the Commencement of Services Date is designated the Roll Out Period.

The Contractor shall during the Roll Out Period gradually phase in the new waste management system on all the Facilities.

It is envisaged that at dual system will be operated in the Roll Out Period, where containers provided by the previous contractor shall be used while the Contractors system is rolled out.

The new Waste Management System shall be fully implemented at all Facilities by the Roll Out Completion Date. Failure to achieve a full implementation by the Roll Out Date shall constitute a Service Failure. The new Waste Management System shall be deemed fully implemented when all Waste is placed in the Disposable Containers and removed in the Reusable Containers.

## 14.3 Dual system operation

While Phasing in the new waste management system, the Contractor shall be responsible for collecting, transporting, Treating and disposing of all the Waste from all Facilities. This will require the Contractor to operate the old waste management system in parallel with the new, in the Roll Out Period.

The Contractor shall take stock at all Facilities of the Disposable Cardboard boxes, the sharps Containers and specibins. When the new waste management system has been implemented in a Facility, the Contractor shall take existing stock of Disposable Containers and Cardboard boxes, at that Facility, and supply to Facilities still using the old waste management system.

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If existing stock of Disposable Containers and Cardboard boxes, at the Facilities is not sufficient for whole of the Roll Out Period, The Contractor shall procure these Containers and supply to the Facilities according to needs.

The Contractor shall ensure that each Facility experiences a swift transition from the old to the new waste management system. The Contractor can only run a dual system at Facility level in the Implementation Period.

The maximum duration of the Implementation Period shall be

- for Hospitals, 4 weeks.
- for Clinics, 2 week.

#### 14.3.1 Roll Out Plan

The Contractor shall elaborate a plan for the Roll Out. This Roll Out Plan shall have the following contents:

- 1. Programme for the Roll Out Period, specifying for each Facility the dates for the start and completion of the Roll Out at that Facility
- 2. Specifications for the Training and consulting activities to be undertaken at each Facility in the Roll Out Period
- 3. Details of the Contractors Staff, that will be responsible for the Training and consulting activities
- 4. Details of Facility specific problems and opportunities encountered in the planning of the Roll Out Period together with proposed solutions

The Roll Out Plan shall be submitted to the Employer Representative no later than 1 month after the Contract Date.

# 14.4 Roll Out at each Facility

The Contractors obligations during Roll Out at each Facility shall comprise:

- 1. Liasing with Facility management keeping the management informed of plans, programmes and progress throughout the Roll Out Period
- 2. Installation of brackets for Disposable Containers and Reusable Containers, in the wards, at trolleys etc, as specified in writing by the Waste Officer
- 3. [Implementation of the Training Programme]
- 4. In Cooperation with the Waste Officer ensure that an appropriate Waste Collection Point is available. The Contractor shall where necessary, submit to the Employer's Representative a list of changes to the Waste Collection Points, required for the Contractor to fulfil its obligations
- 5. Submitting to the Waste Officer, with a copy to the Employer's Representative, a programme for the collection of the Waste from the Facility. The programme shall specify at which weekdays and approximate times

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# 14.5 Consultancy during the Roll Out Period

The following activities and responsibilities shall be performed by the Contractor as part during the Roll Out Period:

- A survey at each health facility to determine quantities and types of containers needed
- Identification of a mechanism to ensure the distribution of new equipment at each health facility and to ensure adequate stock levels including of reusable containers
- The promotion of the Gauteng Code of Practice for health care waste management.
- Consultant to ensure that decisions reflect the standards laid out in the Gauteng Code of Practice for health care waste management
- That all new equipment is properly positioned and used
- To help health facilities agree new internal collection routines for high and low risk areas.
- To advise health facilities on the use of intermediate and central storage areas.
- To liaise with the health facility about collection times by the Contractor
- To provide support with the introduction of weighing waste
- Advise on specifications for other equipment to be bought by health facilities such as gloves and additional liners
- To set up regular internal monitoring of performance and equipment by health care workers

# 15. Handover of services

When the Contract Period is approaching the end the Contractor shall liase with the Employer's Representative and the contractor that will take over the Contractor's responsibilities, with the objective of ensuring a smooth and efficient transition of responsibilities to the new contractor.

The Handover Period is the last 2 months of the Contract Period.

The Contractor shall during the Handover period liase with the Facilities and ensure that there are stocks of Consumables for no more than one month's normal consumption for each individual Facility.

The Contractor shall, no later than the first day in the Handover Period, submit the following to the new contractor:

- lists with contact details of all Waste Officers
- lists of all Waste Collection Points
- updated Collection Plan
- details of route planning for the Contractor's HCRW Vehicles

The Contractor shall give members of the new contractor's access to participate in collection runs on the Contractor's HCRW Vehicles.

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# 16. Communications

## 16.1 Meetings

In the event that either party requires a meeting in addition to the [quarterly meeting], such meeting shall be convened by giving – unless otherwise agreed - at least 2 weeks' prior written notice to the other party.

# 16.2 Reporting

The requirements for reporting to be fulfilled by the Contractor shall comprise preparing and delivering to the Employer's Representative:

- Copies of all reports required by the Necessary Consents
- Annual Report
- Services Progress Reports
- Daily Reports (only during Emergencies)

### 16.2.1 Annual Report

The Annual Report shall describe in detail the previous calendar year's events and activities including all events that have affected the Contractor's fulfilment of its obligations under this Contract.

Furthermore this report shall include a detailed plan for the next calendar year describing planned events and activities, including a plan for handling expected waste streams.

The Contractor shall ensure that each annual report shall, at minimum, contain the following information:

Special events (events that have influence on the Contractor's obligations), i.e.

- Failures of the Employer or other parties, e.g. late payments.
- The Contractor's Services Failures including the summary of Deductions imposed during the relevant year.

#### Organisation

- Key Personnel
- Other staff
- Changes in organisation

### Health and Safety

• Health and safety report

# Financial report

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- A record of the Disposable Containers delivered with information about type, quantity for each Facility
- A record of the Waste collected with information about weight and volume for each type of Waste and each Facility and destination of the Waste
- Health and safety report
- A financial review to include advice on actual and anticipated cash flow for each Facility

#### **Environmental Report**

• Documentation of compliance with the requirements of Appendix 3 and Appendix 4 via verified documentation

The annual report shall be submitted to the Employer in final draft no later than 2 month after expiry of the previous Payment Year. The first Annual Report shall cover the 12 months following Commencement of Services.

# 16.2.2 Services Progress Report

The Contractor shall prepare and issue a monthly Services Progress Report, which shall be submitted electronically to the Employer and to the Employer's Representative and in original by courier/mail to the same. In case of deviations between these two versions, the original submitted by courier/mail shall prevail.

Each Services Progress Reports during the Services Period shall cover one Month, and start on the 1st day of such month. The first Services Progress Report shall cover the period from the Commencement of Services Date up to the end of the calendar month in which the Commencement of Services Date occurs.

In any event each Services Progress Report shall include:

- a) A description of the performance of the Services supported as necessary by photographs and documents sufficient to illustrate the Services, which have been completed and those which will commence during the next reporting period;
- b) A record of the Consumables delivered with information about type, quantity for each Facility;
- A record of the Waste collected with information about weight and volume for each type of Waste and each Facility and destination of the Waste;
- d) [A record of Waste that has been rejected by the Contractor with details of date, Facility, type of Waste and reason for rejection]
- e) A financial review to include advice on actual and anticipated cash flow for each Facility;
- f) Advice on problems encountered specifically as they relate to the standards and quality of Services;
- g) Advice on direction required from the Employer and/or the Employer's Representative;

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h) Any health, safety and welfare matter.

The Services Progress Report will be attached to the invoice for the month to which such Services Progress Report relates.

The Contractor shall deliver each Services Progress Reports to the Employer's Representative in 3 hard-copies and one copy in electronic form simultaneously with delivering the invoice to which it relates.

### 16.2.3 Daily Report

Daily reports shall be given by the Contractor to the Employer' Representative in the event of any Emergency leading to accumulation of Waste at any Facility or Treatment Plant, or other events that affect the obligations of the Contractor or the Employer under this Contract.

The contents of daily reports cannot be foreseen at this stage but the purpose of each daily report shall be to keep the Employer's Representative fully updated and informed of all activities and actions concerning the Emergency.

Daily reports shall be sent electronically to the Employer's Representative by no later than noon the following day.

# 16.3 Inspections

The Contractor shall at all times provide the Employer's Representative with adequate and prompt assistance in the execution of their duties of monitoring and inspecting the carrying out of the Services. To this end experienced personnel shall be available on request to assist the Employer's Representative. The Contractor shall also provide the Employer's Representative or any staff from the Facilities, with safe access to any location or vehicle used by the Contractor to carry out the Services, for inspection.

The Employer's Representative as well as the Facilities shall act reasonably and co-ordinate their activities with the Contractors routine wherever appropriate and possible.

# 17. Emergency Plan

Without prejudice to any other obligation or liability of the Contractor under this Contract, if at any time during the Services Period the Contractor is prevented from receiving and processing Waste at the Treatment Plant due to the occurrence of an Unplanned Outage then the provisions of this clause 18 shall apply in the period from the date of commencement of the Unplanned Outage until the date of cessation of relevant Unplanned Outage.

The Contractor shall ensure that the maximum storage time for Waste is not exceeded, by:

1. procuring the use of cold storage facilities which are suitable for the reception and storage of Waste, with the purpose of storing the Waste until the Unplanned Outage, or by;

2. procuring the use of a treatment facility. All requirements in this Contract concerning the Treatment shall apply during an Emergency

# 18. Health and Safety

The Contractor is to familiarise himself and comply with all safety regulations, statutes and regulations governing HCW management activities. The safety of all the Contractor's personnel shall be the sole responsibility of the Contractor. Although only serving as background information, Contractors are referred to an extract from the Guidelines for Occupational Exposure to Blood borne Pathogens, 2001 (ICASA Working Group: Roberts S; Van Wyk A; Pearse J) presented in Annexure ??

The Contractor is to submit copies of its health and safety plan that shall be designed to ensure the safety of the persons being involved in or affected by the treatment of HCRW. This health and safety plan should fully conform to the requirements of the South African Occupational Health and Safety (OHS) Act, and the Contractor shall ensure that all it's employees adhere to the requirements stipulated in the plan. A description is to be provided of amongst others all equipment, procedures, training, and other measures that will be taken to ensure the health and safety of all personnel working on the project.

The Contractor shall in its Health and Safety Plan describe the vaccination programme that is implemented for all workers, and what retroviral will be available to workers in the event of needle stick injuries. A record of the Contractors employees working directly with the Waste should be kept daily and each employee shall state on that record any occupational health and safety incidents that may have been experienced during the day, particularly including any needle stick injuries or other abrasions of the skin, feet and hands.

All the Contractor's employees (whether permanent or temporary) shall be adequately insured and no untrained persons shall be allowed to carry out any work under this Contract.

# Appendix 1

#### SPECIFICATION FOR DISPOSABLE CONTAINERS

#### A1: Disposable Sharps Containers

Due to the different rates at which infected sharps are generated as well as the particular requirements for different applications of sharps containers, there is a need for a range of containers to be made available to health care institutions, leaving it up to the institutions to make a decision on the type of container that would meet their particular needs best.

The risk of physical injuries and infection from sharp objects used in hospitals and clinics is high, resulting in a need for sharps containers to meet certain minimum standards in terms of user friendliness, robustness and also the effort required for people to gain access to, or come into contact with sharps previously disposed off.

The type of material used for the manufacture of sharps containers, colouring and printing will in turn impact on the risk of pollution during incineration of such containers.

The following requirements are to be met in the supply of sharps containers:

### A1.1 Range of sharps containers required:

- 1. The following generic types of sharps containers must, as a minimum form part of the supply made available for ordering by the health care institutions:
  - (a) Type A:  $1\frac{1}{2}-4\frac{1}{2}$  litre sharps container;
  - (b) Type B:  $3\frac{1}{2}$ -8 litre sharps container;
  - (c) Type C: 8-15 litre sharps container;
  - (d) Type D: 12-25 litre sharps container;
  - (e) Type E: Tall slim sharps container with a minimum height of 600 mm and capacity of between 5 litre and 10 litre for long sharps.
- 2. A minimum of one sharps container of type B or type C must be of the horizontal loading type.

## A1.2 Material to be used in manufacturing of sharps containers:

- 1. Sharps containers must be manufactured from polypropylene (PP) or alternatively high-density polyethylene (PE);
- 2. The material shall be puncture resistant as per the SABS Code xxxxx (or ISO Code xxxxx) ref. CDC/USA Sharps container requirements;
- 3. Colours and dies must be free of heavy metals;
- 4. There must be no metal objects as part of the containers;
- 5. All sharp container brackets for wall or nursing trolley mounting of containers are to be manufactured from mild steel;
- 6. Sharp container brackets are to be powder coated.

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#### A1.3 Sharp container design requirements:

- 1. Sharps containers shall be rigid, puncture proof, tamper proof and clearly marked as described below;
- 2. Sharps containers shall be manufactured in such a manner that not only the sharps, but also any residual liquids from syringes, are safely retained;
- 3. The preferred colour coding for sharps containers is red
- 4. Parts of the container may be fully or partially transparent to allow for assessment of level of filling or contents. Alternatively, it shall be possible to assess the degree of filling or contents through the aperture/opening;
- 5. Containers shall be designed to allow for disposal of needle and syringe as one unit;
- 6. Sharps containers shall include apertures for the safe removal of sharps/needles from syringes/tubing etc. including "butterfly" type needles on tubes, using a one handed technique;
- 7. Sharps containers shall be designed to avoid over filling and protruding sharps;
- 8. Sharps containers shall in their dimensions facilitate best possible usage of the available volume, i.e., rectangular cross section for parallel packed placing of syringes and other sharps are preferred to circular or oval cross sections; 9. Sharps containers shall be stackable in the unassembled state for effective transport and storage of empty containers;
- 10. Sharps containers shall be stackable in the assembled state and preferable in modular fashion for the different sizes of containers to allow for effective storage and transport of full containers;
- 11. Sharps containers shall allow for easy and safe assembling (e.g. fitting the lid part onto the container part of the sharps containers);
- 12. The lid of a sharps container shall be such as to provide a leak proof and airtight seal that cannot be released once sealed;
- 13. Type D sharps containers shall be equipped with a handle for safe lifting and transport of containers:
- 14. The empty as well as full mechanical stability of the sharps containers, when standing and while being moved or transported shall be ensured, with the exception of the Type E containers for which this requirement will only apply in a static state;
- 15. Sharps containers shall be designed to reduce the risk of spillage of contents in the event of tipping or dropping of sharps containers, preferable by an automatic obstruction of the aperture when not in the upright position.

#### A1.4 Sharp container markings:

- 1. A label shall be so located on the sharps containers as to be clearly visible when stacked with other packaging;
- 2. Sharps containers shall include suitable warning signage, the international biohazards symbol and relevant UN codes as recommended by the World Health Organisation, together with the text "Infectious Sharps for Destruction" or similar text in clear readable letters; [THE LETTER SIZE, COLOURING AND THE BACKGROUND COLOURS TO BE SPECIFIED]
- 3. Lettering on the label shall contrast with the background of the label, be of one size, style and layout that will result in the marking that is clearly readable;

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# 4. The background of the label shall be of the colour that contrasts with the surface area immediately surrounding the label;

- 5. All text shall as a minimum be in the English language and preferably in one or more of the other South African official languages;
- 6. Sharps containers shall be equipped with a maximum filling line at ...... mm from the top rim of the containers.

#### A1.5 Sharps container mounting brackets:

- 1. Sharp containers Type B, C and E should be compatible with wall mounting brackets as well as brackets that can effectively be hanged or clipped onto nursing trolleys to ensure safe positioning of containers during use. All brackets are to be supplied and installed by the contractor as part of the tender;
- 2. Brackets must as a minimum comply with the following specifications:
  - (a) Brackets must be strong and robust and have a serviceable life of at least 5 years under normal working conditions;
  - (b) Brackets shall be grey or off-white coloured and shall be powder coated;
  - (c) Brackets shall be smooth at all surfaces and free from cutting splinters, welding residues etc. that may cause abrasions to the hand or similar;
  - (d) Brackets shall be easy to clean with no exposed areas being unreachable during usual cleaning operations.

### A1.6 Quality control requirements:

- 1. Tenderers shall subject sharps containers to a drop test as per SABS code xxxx (or ISO code xxxx) ref. "CDC/USA Sharps container requirements" by an independent institution like the CSIR, SABS or University and results of the test shall be submitted during the tender;
- 2. Tenderers are encouraged to investigate the possibility of making use of sharps container moulds/models that are internationally available for manufacturing in South Africa as many of the sharps containers currently manufactured in South Africa are found to be inferior to products that are available internationally.

#### A2: Disposable Specican Containers

Different applications and rates of HCRW generation, will require that a range of specican containers to be made available to health care institutions, leaving it up to the institutions to make a decision on the type of container that would meet their particular needs best.

The risk of physical infection from blood and pathological HCRW generated in hospitals and clinics is high, resulting in a need for specican containers to meet certain minimum standards in terms of user friendliness, robustness and also the effort required for people to gain access to, or come into contact with infectious HCRW previously disposed off.

The type of material used for the manufacture of specican containers, colouring and printing will in turn impact on the risk of pollution during incineration of such containers.

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The following requirements are to be met in the supply of specican containers:

# A2.1 Range of specican containers required:

1. The following generic types of specican containers must, as a minimum form part of the supply made available for ordering by the health care institutions:

(a) Type F: 8-15 litre specicans;

(b) Type G: 12-25 litre specicans;

(c) Type H: 70 cm tall, 30 cm diameter that is suitable for limbs.

# A2.2 Material to be used in manufacturing of specican containers:

- 1. Specican containers must be manufactured from polypropylene (PP) or alternatively high-density polyethylene (PE);
- 2. The material shall be puncture resistant in accordance with the SABS Code xxxxx (or ISO Code xxxxx) ref. CDC/USA Sharps container requirements;
- 3. Colours and dies must be free of heavy metals;
- 4. There must be no metal objects as part of the containers;
- 5. All specican container brackets for wall or nursing trolley mounting of containers are to be manufactured from mild steel;
- 6. Specican container brackets are to be powder coated.

### A2.3 Specican container design requirements:

- 1. Specican containers shall be rigid, puncture proof, tamper proof and clearly marked as described below;
- 2. Specican containers shall be designed to reduce the risk of spillage and ensure that any moisture or liquid is safely contained;
- 3. Specican containers with lids shall be designed so that it has a two-phased closure, with the first phase preventing the emission of odours, but still being able to be opened. Once the lid is firmly closed in the second stage, it cannot be opened. The liquid waste containers shall have a screw-type lid that can be closed firmly and remain leak proof.
- 4. Specican containers must allow for the use of a seal that could also be used for identification, whilst providing evidence of tampering/opening;
- 5. The preferred colour coding for sharps containers is WHITE with BLUE lids
- 6. Parts of the specican container may be fully or partially transparent to allow for assessment of level of filling or contents.
- 7. The specicans Type F and G shall in their dimensions facilitate best possible usage of the available volume, i.e., rectangulate cross section are preferred to circular or oval cross sections;
- 8. Except for liquid waste containers, specican containers shall be stackable in the unassembled state for effective transport and storage of empty containers;
- 9. Specican containers shall be stackable in the assembled state and preferable in modular fashion for the different sizes of containers to allow for effective storage and transport of full containers;

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- 10. Specican containers shall allow for easy and safe assembling (e.g. fitting the lid part onto the container part of the specican containers);
- 11. The lid of a specican container shall be such as to provide a leak proof and airtight seal when closed, but should be removable if needed;
- 12. Types F, G and H specican containers shall be equipped with a handle for safe lifting and transport of containers;
- 13. The empty as well as full mechanical stability of the specican containers, when standing and while being moved or transported shall be ensured;
- 14. Specican containers shall be designed to reduce the risk of spillage of contents in the event of tipping or dropping.

# A2.4 Specican container markings:

- 1. A label shall be so located on the specican containers as to be clearly visible when stacked with other packaging;
- 2. Specican containers shall include suitable warning signage, the international biohazards symbol and relevant UN codes as recommended by the World Health Organisation, together with the text "Biohazardous Waste for Destruction" or similar text in clear readable letters; [THE LETTER SIZE, COLOURING AND THE BACKGROUND COLOURS TO BE SPECIFIED]
- 3. Lettering on the label shall contrast with the background of the label, be of one size, style and layout that will result in the marking that is clearly readable;
- 4. The background of the label shall be of the colour that contrasts with the surface area immediately surrounding the label;
- 5. All text shall as a minimum be in the English language and preferably in one or more of the other South African official languages;
- 6. Specican containers shall be equipped with a maximum filling line at ...... mm from the top rim of the containers.

#### A2.5 Specican container mounting brackets:

- 1. Specican containers Type F should be compatible with wall mounting brackets as well as brackets that can effectively be hanged or clipped onto nursing trolleys to ensure safe positioning of containers during use. All brackets are to be supplied and installed by the contractor as part of the tender;
- 2. Brackets must as a minimum comply with the following specifications:
  - (a) Brackets must be strong and robust and have a serviceable life of at least 5 years under normal working conditions;
  - (b) Brackets shall be grey or off-white coloured and shall be powder coated;
  - (c) Brackets shall be smooth at all surfaces and free from cutting splinters, welding residues etc. that may cause abrasions to the hand or similar;
  - (d) Brackets shall be easy to clean with no exposed areas being unreachable during usual cleaning operations.

#### A2.6 Quality control requirements:

1. Tenderers shall subject specican containers to a drop test as per SABS code xxxx (or ISO code xxxx) ref. "CDC/USA Sharps container requirements" by an independent

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- institution like the CSIR, SABS or University and results of the test shall be submitted during the tender;
- 2. Tenderers are encouraged to investigate the possibility of making use of Specican container moulds/models that are internationally available for manufacturing in South Africa as many of the specican containers currently manufactured in South Africa are found to be inferior to products that are available internationally.

THIS TABLE IS ONLY SERVING AS AN EXAMPLE FOR EASE OF REFERENCE, BUT THE DATA WILL BE UPDATED WHEN WE AGREED ON THE SIZE INCREMENTS.

Container Type.	Sharps container.	Sharps container.	Sharps container.	Sharps container.	Long Sharps Container.	Specican.	Specican.	Specican.
Container Type	A	В	C	D	Е	F	G	Н
Capacity (litre)	11/2-41/2	3½-8	8-15	12-25	600 mm tall, 100 8-15 mm dia.		12-25	700 mm tall, 300 mm dia.
Required volume increase (litre)	5 7 10 ?							
Container Wall Thickness (mm)		<mark>?</mark>	?	<mark>?</mark>	?	?	?	?
Material Allowed for Container / liner.	PP or HDPE	PP or HDPE	PP or HDPE	PP or HDPE				
Min / Max % recyclable material.	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5
Handle Required.	No	No	Yes	Yes	No	Yes	Yes	Yes
Allowable Material for Handle.	N/A	<mark>N/A</mark>	PP or HDPE	PP or HDPE	N/A	PP or HDPE	PP or HDPE	PP or HDPE
Wall bracket Required.	No	Yes	Yes	Yes	Yes	?	No	No
Wall Bracket Material.	N/A	Mild Steel	Mild Steel	Mild Steel	Mild Steel	<mark>?</mark>	N/A	N/A
Wall Bracket Coating.	N/A	Powder coated	Powder coated	Powder coated	Powder coated	?	N/A	N/A
Container / Liner Colour.	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow
Constituents <u>not</u> allowed in dye.	No heavy metals	No heavy metals	No heavy metals	No heavy metals	No heavy metals	No heavy metals	No heavy metals	No heavy metals

Printing Colour.	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Red
Constituents	No							
not allowed in	heavy							
ink / paint.	metals							

#### A3: Liners

Due to the different rates at which HCRW is generated as well as the particular requirements for different liner applications, there is a need for a range of liners to be made available to health care institutions, leaving it up to the institutions to make a decision on the type of container that would meet their particular needs best. It is further required that liners for both HCRW as well as HCGW be supplied under this contract.

The risk of spillage resulting in infection and pollution is high, resulting in a need for liners to meet certain minimum standards in terms of user friendliness during handling and sealing as well as robustness.

The type of material used for the manufacture of liners as well as colouring used will in turn impact on the risk of pollution during incineration of such liners.

The following requirements are to be met in the supply of plastic liners:

### A3.1 Range of liners required:

- 1) HCRW Liners:
  - a) Type I1: 30-litres @ 60 microns
  - b) Type I2: 30-litres @ 40 microns
  - c) Type J1: 50-litres @ 80 microns
  - d) Type J2: 50-litres @ 40 microns
  - e) Type K1: 85-litres @ 80 microns
  - f) Type K2: 85-litres @ 40 microns
  - g) Type L1: 100-litre @ 80 microns
  - h) Type L2: 100-litre @ 40-microns
- 2) HCGW Liners:
  - a) Type M1: 85-litre @ 40 microns
- A3.2 Material to be used in manufacturing of liners:
- 1) Manufactured from PE;
- 2) Shall not contain in excess of ....% recycled PE to ensure that strength and resistance to tearing is acceptable;
- 3) Dies must not contain heavy metals.
- 4) Ties for plastic bags shall be non-PVC elastic ties, steel wire, non-PVC plastics sealing tags of the self-locking type, or heat sealers purpose made for HCRW bags. Bags shall not be closed by stapling or rope ties.
- A3.3 Liner design requirements:
- 1) Liners for HCGW must be black;
- 2) Liners for HCRW must be red;

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- 3) Liners may be semi transparent;
- 4) All seams must be single/double welded
- 5) All liners are to be supplied with appropriate ties, with the number of ties exceeding the number of liners by 10%.

The following minimum material thickness shall be observed:

- 1) Liners with a capacity of less than 50 litres used for receiving placentas, pathological waste, blood bags or other wet waste that is likely to be dripping of bodily or potentially contaminated fluids: Not less than 60 microns;
- 2) Liners with a capacity of less than 50 litres used for receiving of dry infectious waste: Not less than 40 microns;
- Liners in holders for HCRW with a capacity of 50 litres or more that is used in metal racks and frames for dry infectious waste: Not less than 80 microns;
- 4) Liners in holders for HCRW with a capacity of 50 litres or more that is used in reusable containers for dry infectious waste: Not less than 40 microns.

# A3.4 Liner markings:

No markings/printing will be required on any of the liners.

#### A3.5 Liner mounting brackets:

- 1. Liners Type ...... should be compatible with wall mounting brackets as well as brackets that can effectively be hanged or clipped onto nursing trolleys to ensure safe positioning of containers during use. All brackets are to be supplied and installed by the contractor as part of the tender;
- 2. Brackets must as a minimum comply with the following specifications:
  - (a) Brackets must be strong and robust and have a serviceable life of at least 5 years under normal working conditions;
  - (b) Brackets shall be grey or off-white coloured and shall be powder coated;
  - (c) Brackets shall be smooth at all surfaces and free from cutting splinters, welding residues etc. that may cause abrasions to the hand or similar;
  - (d) Brackets shall be easy to clean with no exposed areas being unreachable during usual cleaning operations.

#### A3.6 Quality control requirements:

The properties of the liners shall be demonstrated as follows:

- 1. Impact (Strength F50) ASTM D1709
- 2. Thickness variation (min, max average). Add requirement here for heavy-duty bags
- 3. Yield strength ASTM D882 (or similar). Add requirement here for heavy-duty bags
- 4. Break strength, ASTM D882, (or similar). Add requirement here for heavy-duty bags
- 5. Elongation, ASTM D882, (or similar). Add requirement here for heavy-duty bags
- 6. Tear strength, ASTM D1922, (or similar). Add requirement here for heavy-duty bags

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7. Where relevant the compliance with the requirements shall be demonstrated in the extrusion direction and perpendicular to the extrusion direction.

[THIS TABLE IS ONLY SERVING AS AN EXAMPLE FOR EASE OF REFERENCE, BUT THE DATA WILL BE UPDATED WHEN WE AGREED ON THE SIZE INCREMENTS.]

Container Type.	Plastic liner.								
Container Type	I1	I2	J1	J2	K1	K2	L1	L2	M1
Capacity (litre)	30	30	50	50	85	85	100	100	85
Liner Thickness (im)	60	40	80	40	80	40	80	40	40
MATERIAL ALLOWED FOR LINER.	<mark>PE</mark>								
MIN / MAX % RECYCLABLE MATERIAL.	0/0	0	0	0	0	0	0	0	0
Wall bracket Required.	No	Yes	Yes	No	Yes	No	Yes	No	No
Wall Bracket Material.	N/A	Mild Steel	Mild Steel	N/A	Mild Steel	N/A	Mild Steel	N/A	N/A
Wall Bracket Coating.	N/A	Powder coated	Powder coated	N/A	Powder coated	N/A	Powder coated	N/A	N/A
Container / Liner Colour.	Red	Black							
Constituents	No								
not allowed in	heavy								
dye.	metals								
Printing Colour.	N/A								
Constituents	No								
not allowed in	heavy								
ink / paint.	metals								

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Specifications for Reusable Containers

[To be developed following evaluation of Pilot Project]

Specification for HCRW treatment through incineration.

The Contractor shall observe the following emission standards when using incineration as the method of Treatment of the Waste:

Minimum Environmental Performance Requirements for Thermal Treatment Facilities

### (1) Emissions to the Atmosphere:

Туре	Maximum allowable emission to the air from thermal treatment facilities	Monitoring Frequency Samples per year Standard (reduced after period of documented compliance)		
Units	mg/Nm <sup>3</sup>			
PM/dust	180	Continuous		
СО	-	Continuous		
TOC	-			
Dioxin/furan (nanogram) TEQ	0.2	4(1)		
HC1	30	Continuous		
HF	-	-		
$SO_2$	25	Continuous		
$NO_x$	-	-		
NH <sub>3</sub>	-	-		
Pb, (same for Cr, Be, Ar, As, Sb, Ba, Ag, Co, Cu, Mn, Sn, V, Ni)	0.5	4 (1)		
Cd (same for Tl)	0.05	4 (1)		
Hg	0.05	4 (1)		
Ref. Cond	11% O <sub>2</sub> , 273 Kelvin, 101.3 kPa			

### (2) Emissions to Sewer Systems

- (a) Effluents must be approved by the relevant local authority.
- (b) No effluents from the treatment process may be discharged to open waters or land unless cleaned to a level approved by the relevant local authority

[Procedures for testing and reporting to be developed]

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Specification for HCRW treatment through non-burn treatment technologies

Sterilisation has generally been accepted to mean the complete elimination of all forms of microbial life including highly resistant bacterial endospores such as B. subtilis. However, complete elimination or destruction is difficult to prove and, sterilisation is usually expressed as a 6 log<sub>10</sub> reduction, i.e. 99.9999% or 1 in a million survival, see section 1 [2]. However, disinfection depends on the process used, the microorganisms that are affected and the level of inactivation achieved. The following four categories have been accepted [3]:

- Level I: Inactivation of vegetative bacteria, fungi and lipophilic viruses at ?6 Log<sub>10</sub> reduction.
- Level II: Inactivation of vegetative bacteria, fungi, lipophilic/hydrophilic viruses, parasites and mycobacteria at ?6 Log<sub>10</sub> reduction.
- Level III: Inactivation of vegetative bacteria, fungi, lipophilic/hydrophilic viruses, parasites and mycobacteria at ?6 Log<sub>10</sub> reduction; and inactivation of B. stearothermophilus spores or B. subtilis spores at ? 4 Log<sub>10</sub> reduction.
- Level IV: Inactivation of vegetative bacteria, fungi, lipophilic/hydrophilic viruses, parasites and mycobacteria at ?6 Log<sub>10</sub> reduction; and inactivation of B. stearothermophilus spores or B. subtilis spores at ? 6 Log<sub>10</sub> reduction.

The above standards apply to any treatment process, including thermal, chemical and irradiation processes. The scientific evidence suggests that B. stearothermophilus and B subtilis can be used interchangeably for any treatment process even though the former are more resistant to wet heat, simply because of the margin of safety provided by the use of these highly resistant species.

The Contractor shall when using a non-burn technology for Treatment of Waste, deactivate this waste to Level III.

[Procedures for testing and reporting to be developed]

### CLEANSING, DISINFECTION AND INSPECTION OF REUSABLE CONTAINERS

As the reusable HCRW containers will be returned to the health care facilities, where it will be used for round collection of HCRW from within the facilities and placed inside the wards, it is very important that such bins be cleaned and disinfected to the level where it will not create any risk of infection to patients, health care staff or HCW management staff.

For the sake of the pilot studies, the tenderers will be require to provide specific details as part of the method statement on the system to be implemented for the effective cleaning and disinfection of all reusable containers, irrespective of whether it being wheelie bins or plastic boxes.

The interior and exterior cleaning and disinfection process for reusable containers should at least include the following steps:

- Thoroughly cleaning the bins using warm water in combination of anti-microbial soap;
- Rinsing with warm water;
- Applying a suitable disinfectant with a chlorine-releasing agent on all interior as well as exterior surfaces in accordance with the manufacturer's instructions;
- Thoroughly drying the containers;
- Implementing an inspection routine to identify any damaged containers that are unfit for further use;
- Implementing of appropriate quality assurance measures that will ensure effective cleaning and disinfection of both containers and lids:
- Storage of bins in an appropriate location that will prevent it from becoming recontaminated.

## List of Facilities

1 MILITARY HOSPITAL ABSA CLINIC	PRIVATE BAG X 1026 4755 BLOCK U	THABA TSWANE DOORNKOP	0143 1821	
ACTONVIILLE CLINIC ACTONVILLE HOSPITAL	732 KHAN CRESCENT P O BOX 18663	ACTONVILLE ACTONVILLE	1301 1506	Sr Sayed
AKASIA CLINIC	P O BOX 58850	KAREN PARK	0118	ANDREW
ALBERT STREET CLUINIC	80 ALBERT STREET	JOHANNESBURG	2001	SISTER SUSAN
ALBERTINA SISULU CLINIC	STAND 14863 ZONE 11	SEBOKENG	1982	
ALBERTON CLINIC	P.O.BOX 4	ALBERTON	1450	SISTER STEGMAN
ALBERTON NORTH CLINIC	P O BOX 4	ALBERTON	1449	Sr Anna Phatedi
ALEXANDRA HEALTH CLINIC	DOVE LANE	JOHANNESBURG	2090	PHINDI
ALEXANDRA HEALTH CLINIC	48 - 4TH AVENUE	WYNBERG	2090	
ALEXANDRA HEALTH CLINIC	STAND 105	ALEXANDRA	2090	Sr Mapule Molotshwa
ALEXANDRIA CLINIC	33 1 ST AVENUE	WYNBERG	2090	Ms Dankile Ntsanwisi
ALEXANDRIA ORAL CLINIC	33 1 ST AVENUE	WYNBERG	2090	
ALGOA FRAIL CARE CENTRE	P O BOX 7236	NEWTON PARK	6055	
ALRAPARK CLINIC	PEACH ROAD	ALRA PARK	1490	Sr Enslin
ARGYLE CLINIC	P O BOX 23818	JOUBERT PARK	2044	NOT LISTED
ARWYP MEDICAL CENTRE	P O BOX 3452	KEMPTON PARK	1620	MRS WIPKEMA
ASTRID CLINIC	P O BOX 27140	SUNNYSIDE	0132	Sr van Schalkwyk
ATTERIDGEVILLE CLINIC	RAMOHOEBOE	ATTERIDGEVILLE	8000	
	SQUARE			
AUKLAND PARK	1ST FLOOR, STUDENT		2092	LINDA
AZAADVII LE CLINIC	SHOPPING CENTRE	JHB	4750	4744D\/II.I.E.QLINIIQ
AZAADVILLE CLINIC	AZAAD STREET	AZZAADVILLE		AZAADVILLE CLINIC
BANARENG PRIMARY	P.O. BOX 61	ATTERIDGEVILLE	8	SUSAN
BAPO PRIMARY	P.O. BOX 214	BAPONG		
BARAGWANATH HOSPITAL BARCELONA DENTAL CLINIC	P O BERTSHAM STAND 17042 EXT 28	BERTSHAM BARCELONA	2013 1519	Ms Mohlamme Sr Lucia Sithole
BARNEY HURWITZ HOSPITAL		AUCKLAND PARK	2006	SI Lucia Silliole
BAVIAANSPOORT CLINIC	BAVIAANSPOORT	LYNN EAST	0186	Sr M E Morakaladi
BEDFORD HOSPITAL	P O BOX 111	BEDFORD	5780	STEYN OPPERMAN
BEDFORD CLINIC	BOX 24	BEDFORD	5780	SISTER RODDA
BEKKERSDAL EAST CLINIC	P O BOX 751052	WESTONARIA	1779	Sr Mpetsheni
BEDFORDVIEW CLINIC	VAN VUUREN	BEDFORDVIEW	2007	Sr Thandiwe Mhlongo
	CRESCENT		2001	-
BEKKERSDAL CLINIC	3150 KHOMOYAHLABA		1782	NOT LISTED
BEKKERSDAL CLINIC	STAND 1298	BEKKERSDAL	1779	NOT LISTED
BELL STREET HOSPITAL	P O BOX 145	PAARDEKRAAL	1752	SISTER LINDA FICQ
BELLA VISTA CLINIC	ALEX DU TOIT DRIVE	BELLA VISTA	2091	
BENONI	PRIVATE BAG X 2	FARAMERE		MATRON MOLOKO
BENONI DENTAL CLINIC	HOSPITAL AND BESTER STR	NORTHMEAD	1501	MATRON MOLOKO
BENONI FEMALE CLINIC	68 HOWARD STREET	BENONI	1501	MATRON MOLOKO
BERARIO CLINIC	HOOVER STREET	JOHANNESBURG	2001	
BEREA CLINIC	TUDHOPE RD	BEREA	2198	
BEVERLEY HILLS CLINIC	HOLLYWOOD STR.STAND1971	EVATON WEST	1980	DAVID MADIBO
BEZ VALLEY CLINIC	6 TH STREET	BEZ VALLEY	2094	
BIRCHLEIGH CLINIC	HOUTKAPPER STR	BIRCHLERIGH	1619	CLINIC HEAD
BIRCHLEIGH NORTH CLINIC	MOOIFONTEIN RD	BIRCHLEIGH NORTH		ELNA LOCK
BOIPATONG CLINIC	P.O.BOX 23	VANDERBIJLPARK	1911	SISTER E.RANI
BOKSBURG CLINIC	P O BOX 26077	BOKSBURG	1478	0.000
REIGER PARK /	COMMISSIONER STR /	REIGER PARK	1459	Sr Stillwen

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PREVIOUOSLY BOKSBURG CLINIC BOKSBURG HOSPITAL BOLOKANANG PRIMARY BONAERO CLINIC BOPELONG CLINIC BOPHELONG CLINIC BOSMONT CLINIC BOTSHABELO HOSPITAL BOTSHELONG PRIVATE	LEON FERRIERA DRIVE MAIN REEF ROAD P.O.BOX X509 ATLAS ROAD PRIVATE BAG X120 632 MATTHEWS STR GRIFFITHS RD PRIVATE BAG X 527 P O BOX 17438	BOKSBURG GARANKUWA BONAERO PARK HALFWAY HOUSE VANDERBIJLPARK BOSMONT BOTSHABELO SUNWARD PARK	1459 208 1619 1685 1911 2093 9781 1470	MATRON MATAU MRS H.STEYN Sr Dorcas Mcube Ms Ansie Willemse
CLINIC	D O DOV 40404	LIEDOLII EO	0000	Ma Curia Adama
BOUGAINVILLA HOSPITAL BRACKENHURST CLINIC	P O BOX 49194 ROY CAMPBELL STR	HERCULES ALBERTON	0030 1448	Ms Suzie Adams SISTER VERMAAK
BRENTHURST CLINIC	P O BOX 8999	JOHANNESBURG	2000	Ms Sibongile Mchunu
BRISTLE CONE CLINIC	PLOT 123	ORANGE FARM	1805	on one of the container
BRITS CLINIC	P.O. BOX 106	BRITS	0250	MRS DIPPENAAR
BRITS CLINIC	P.O.BOX 106	BRITS	0250	SISTER RASELEKA
BRITS CLINIC	12 CHURCH STR	BRITS	0250	
BRITS PRIVATE MEDI CLINIC	P O BOX 2379	BRITS	0250	Ms R van Rensburg
BRITS TOPIC HOUSE	KERK STREET	BRITS	0250	
BRIXTON CLINIC	ESTHER STREET	BRIXTON	2091	
BRONKHORSPRUIT	P O BOX 2288 / 29	BRONKHORSTSPRU	1020	Ms Rosemary van der
HOSPITAAL	LANHAM STREET	IT FLOODADO DADK	1011	Merwe
BUSHKOPPIES CLINIC	OAKLEY STREET	ELDORADO PARK ESTATE	1811	
CARSTENHOF CLINIC	PRIVATE BAG X 54	HALFWAY HOUSE	1685	Ms Wood gate
CASTLE CAREY CLINIC	P O BOX 16383	PRETORIA NORTH	0116	Ms Vicky Freemantle
CENTRAL CLINIC	FOUNTAIN STREET	KRUGERSDORP	1739	MRS MEKGWE
CENTRAL PRISON CLINIC	POTGIETER STREET	PRETORIA	0001	Sr LH Maako
CHIAWELO HEALTH CENTRE	1743 RIHLAMPHU STR	NKANDLA	3855	
CHRIS HANI CLINIC	CRECHE SITE	TSAKANE	1551	
CLAREMONT CLINIC	98 PRINCESS ROAD	CLAREMONT	2092	NOT LISTED
CLINTON CLINIC	P O BOX 1059	ALBERTON	1450	
CONSTANTIA PARK	P O BOX 33550	GLENSTANTIA	0010	
CORONATION CLINIC	GLEN CAIRN STREET	CORONATIONVILLE		MRS JORDAAN
CORONATION HOSPITAL	PRIVATE BAG X 20	NEWCLARE	2112	MRS JORDAAN
CROSBY HEALTH CENTRE	77 INGELBY STR	CROSBY	2092	SISTER LION
CROWN GARDENS CLINIC	ULSTER CRESCENT	CROWN GARDENS	2091	
CRYSTAL PARK CLINIC CULLINAN HOSPITAL	STRAND STREET P O BOX 44	BENONI CULLINAN	1501 1000	
CULLINAN REHAB CENTRE	PRIVATE BAG X 1005	CULLINAN	1000	MATRON MOGALEFA
DALVIEW CLINIC	P O BOX 20	BRAKPAN	1540	NOT LISTED
DANMED CLINIC	P O BOX 97899	WESPARK	0146	NOT LISTED
DANVILLE KLINIEK	10 TRANSORANJE RD	DANVILLE	0183	1101 210125
DAVEYTON CLINIC	180 TOM BOYA STR	DAVEYTON	1501	NOT LISTED
DAVEYTON CLINIC	BOPHELONG STREET	DAVEYTON	1520	NOT LISTED
DAVEYTON CLINIC	ESSELEN STREET	DAVEYTON	1520	SISTER SIBEKO
DAVIDSONVILLWE CLINIC	CAMPBELL STR	ROODEPOORT	1520	SISTER LONGWE
DAXINA CLINIC	P.O. BOX 2267	LENASIA	1820	MR NAGAR
DENEYSVILLE CLINIC	P O BOX 101	DENEYSVILLE	1932	
DIEPKLOOF CLINIC	7463 REDSHAW ROAD	DIEPKLOOF	1862	SISTER
DIEPKLOOF CLINIC	3790 MARTINUS	DIEPKLOOF ZONE 3	1862	MOHLAHLENE SISTER
DIEPKLOOF CLINIC	SMUTS 7604 ZONE 2	DIEPKLOOF	1862	MOHLAHLENE
DIMAKATSO PRIMARY	P.O. BOX 144	SOSHANGUVE	152	•
		3301 // 11100 V L	102	•

DINWIDDIE CLINIC DISCOVERERS HEALTH CENTRE	OXFORD STREET P O BOX 4	DINWIDDIE FLORIDA	1401 1710	MATRON VAN DER SCHYFF
DOBSONVILLE CLINIC DONOVAN MCDONALD OLD AGE	STAND 516 D MCDONALD CENTRE	DOBSONVILLE MARAISBURG	1863 1709	COITT
DOORNKOP CLINIC DR YUSAF DADOO HOSPITAL DRESSER CLINIC	3206 BLOCK 4 PRIVATE BAG X 210 2521 EVEREST STREET	DOORNKOP KRUGERSDORP THOKHOSA	1821 1740 3838	MISS TLADA
DRIEHOEK CLINIC DUBE CLINIC	STUTTAFORD STR STAND 2413	VANDERBIJLPARK DUBE	1911 1800	SISTER OOSTHUIZEN
DURBAN DEEP HOSPITAL EAST LYNNE CLINIC	P O BOX 1703 MEEU STREET	ROODEPOORT EAST LYNNE	1725 0186	SISTER SESHIGWANA
EAST RAND PRIVATE HOSP EDEN PARK CLINIC	PRIVATE BAG X 5 FERRERIA AND ABRUM	SELCOURT EDENPARK		DR PAUL BIRDSEY SISTER MOLELEKI
EDENVALE CLINIC EDENVALE DENTAL CLINIC EDENVALE GEN HOSPITAL EDLEEN CLINIC EERSTERUST CLINIC	8 TH AVENUE 113 V RIEBEECK STR PRIVATE BAG X 1005 OLEANDER STREET 214 WILLIE SWART STR	EDENVALE EDENVALE EDENVALE EDLEEN EERSTERUST		NO H/WORKERS NO H/WORKERS Ms Botha EUNICE STEENKAMP Sr Roberts
EIKENHOF MOBILE UNIT ELDORADO PARK CLINIC ELIM CLINIC ELSBURG CLINIC ELSBURG DENTAL CLINIC EMAPHOPHENI CLINIC EMMARENTIA CLINIC EMPILISWENI CLINIC ENNERDALE CLINIC	VEREENGING RD HEINKEL ROAD P O BOX 88 P O BOX 45 VOORTREKKER STR 13625 EXT 10 93 KOMATI ROAD ZONE 7 5446 SMITH STR CRYOLITE STREET	MEYERTON ELDORADO PARK KEMPTONPARK GERMISTON ELSBURG INANDA EMMARENTIA SEBOKENG ENNERDALE ENNERDALE	1872 1813 1620 1401 1428 1500 2001 1982 1830 1830	Sr Nehabelang VALERIE LOMBAARD SISTER ZONDO NO H/WORKERS MATRON SIBAYA
ENTOKOZWENI PRIMARY ERIN CLINIC ESSELEN STREET AIDS CLINIC	P.O. BOX 422 676 TLAMA SECTION 17 ESSELEN STREET	SOSHANGUVE TEMBISA HILLBROW		NO H/WORKERS SISTER SEGALE SR SIBANYONI
ESTCOURT CLINIC ETWATWA CLINIC EUGENE MARAIS HOSPITAL	BOX 15 6944 EXT 9 MANDELA P O BOX 30013	ESTCOURT ETWATWA WONDERBOOMPOO RT	1519	SISTER GREAVES MARIA LETTIE GREGROFOSKI
EVATON MAIN CLINIC EZIBILENI ORTHOPEDIC FAERIE GLEN CLINIC	1459 ADAMS ROAD P O BOX 4237 GLENWOOD STREET / P O BOX 1504	EVATON ALRODE FAERIE GLEN	1980 1451 0043	SISTER KHUMALO  Mr Ferreira
FAMILY PLANNING CLINIC FAR EAST RAND HOSPITAL FAUCHARD CLINIC FEMINA KLINIEK	CARL STREET PRIVATE BAG X 50 P O BOX 743 P O BOX 56215	BRITS SPRINGS FLORIDA HILLS ARCADIA	1716	MR STEMMER MATRON MATAMBO SISTER GROBLER WELMA VAN JAARSVELD
FINETOWN CLINIC FLEURHOF CLINIC	FINETOWN MALACHITE AND SPINEL	LENASIA FLORIDA	1828 1709	
FLORA CLINIC	P O BOX 5116	WELTEVREDEN PARK	1715	MATRON LAMBRECHT
FLORIDA CLINIC	8 MADELINE STREET	FLORIDA	1709	

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FLOWER NURSING HOME	4 NOTTINGHAM RD	KENSINGTON	2094	Sr Mabetha
FOLONG CLINIC	157 D F MALAN DR	PRETORIA	0002	MANAGED
FORDSBURG CLINIC	P O BOX 42510	FORDSBURG	2033	MANAGER
GA RANKUWA HOSPITAL	PRIVATE BAG X 422	PRETORIA	0001	DACCALE
GARDEN CITY CLINIC	P O BOX 45175	MAYFAIR	2108	PASCALE
GARMENT WORKERS UNION	KERK AND END STREET	JOHANNESBURG	2001	
GAZANKULU CLINIC	MAUNDE STREET	SAULSVILLE	0125	
GELUKSDAL CLINIC	1 UITTOG STR	BRAKPAN	1546	Sr Mnguni
GENETIC SERVICES	JOUBERT STREET EXT		2193	
GERMISTON CITY HEALTH	CNR QUEEN AND CROSS STREET	GERMISTON	1401	MR MAKHUDU
GERMISTON CLINIC	P.O. BOX 1493	WADEVILLE	1422	NO H/WORKERS
GERMISTON HOSPITAL	PRIVATE BAG X 1035	GERMISTON	1400	MR MAKHUDU
GLENANDA CLINIC	SURMAN AND	GLENADA	2091	
	VORSTER			
GLYNWOOD HOSPITAL	P O BOX 635	BENONI	1500	MRS T.BENNETT
GOLDFIELDS WEST HOSPITAL	P O BOX 998	WESTONARIA	1780	
GRASSMERE	P O GRASSMERE	GRASSMERE	1828	
GREYMONT CLINIC	38 3 RD STREET	GREYMONT	2195	SISTER JACKIE
GROOTVLEI MINE HOSPITAL	P O BOX 445	SPRINGS	1560	
HALFWAY HOUSE CLINIC	MARKET STREET	MIDRAND	1685	SISTER MEIRING
HAMMANSKRAAL CLINIC	KUDUBE PLAZA	HAMMANSKRAAL	0400	
HARMELIA HOSPITAL	P O BOX 8751	EDENGLEN	1613	SISTER GONS
HARTEBEESPOORT CLINIC	P O BOX 976	HARTEBEESFONTEI N	0216	NO H/WORKERS
HEALTH CENTRE	POLLSMOOR ROAD	KIRSTENHOF	7945	MATRON
HELDERKRUIN CLINIC	PHEASANT STREET	HELDERKRUIN	1724	NO H/WORKERS
HELEN JOSEPH HOSPITAL	PRIVATE BAG X 47	AUCKLAND PARK	2006	MATRON
HENDRY BERNSTEIN	STAND 9004	SHARPEVILLE	1939	
HOSPITAL				
HERCULES CLINIC	TALJAARD STR	HERCULES	0082	SISTER NDLOVU
HILLBROW CLINIC	KLEIN AND SMIT STR	HILLBROW	2001	
HILLBROW HEALTH CENTRE	PRIVATE BAG X 23140	JOUBERT PARK	2044	
HILLTORIA CLINIC	HILTONIA HOLDINGS	LENASIA	1824	NO H/WORKERS
HONEYDEW CLINIC	D F MALAN DRIVE	HONEYDEW	2040	
HOPE TRAINING HOME	P O BOX 72195	PARKVIEW	2122	
HORIZON CLINIC	P O BOX 195	BOKSBURG	1460	NO H/WORKERS
HURLEYVALE	17 TH AVENUE	EDENVALE		NO H/WORKERS
HYDROMED	P O BOX 8751	EDENGLEN		MRS VAN COLLER
IMPALA CENTRE	P O BOX 222	SPRINGS	1560	
IRENE CLINIC	CHURCH HALL	IRENE	0062	
ISABELLA DENTAL CLINIC	29 HELITROP STR	KEMPTON PARK	1619	
IVORY PARK CLINIC	P O BOX 130	HALFWAY HOUSE	1685	
JABAM CLINIC	3123 TUMAHOLE DR	JABAVU	1809	
JAKARANDA HOSPITAL	P O BOX 30301	SUNNYSIDE	0132	
JAN HOFFMEYER CLINIC	1 ST STREET	VREDEDORP	2092	
JAN MAREE CLINIC	FLEMING AND GOULD STR		1739	
JEPPE HEALTH CENTRE	34 FORD STREET	JEPPE	2094	
JOHAN HEYNS HEALTH CENT		VANDERBIJLPARK	1900	
JOHANNESBURG DENTAL	81 BRANDIS STR	JOHANNESBURG	2001	
JOHANNESBURG EYE HOSP	P O BOX 1712	NORTHCLIFF	2115	
JOHANNESBURG HOSPITAL	PRIVATE BAG X 39	JOHANNESBURG	2000	
JOHANNESBURG PRISON	9 MAIN STREET	LAMPTONVILLE	1401	

JOHN FOTHERINGHAM	RANDJESLAAGTE	JOHANNESBURG	2192
CLINIC JOUBERT PARK CLINIC	ROAD CNR KLEIN AND	JOHANNESBURG	2001
	NOORD STR		
JOY CLINIC	748 EKWAKWA STR	BENONI	1501
JUBILEE HOSPITAL	PRIVATE BAG X 449	HAMMANSKRAAL	0400
JUKSKEIPARK CLINIC	ROBYN STREET	JUKSKEIPARK	2194
KAGISO CLINIC	12521 AINSLEY STREET	KAGISO	1754
KAGISO CLINIC	8757 KAGISO AVE	KAGISO	1754
KALAFONG HOSPITAL SCHOOL	PRIVATE BAG X 396	PRETORIA	1
KATGHLEHONG CLINIC	310 GOBA SECTION	KATHLEHONG	1431
KATHLEHONG CARE CENTRE	310 GOBA SECTION	GERMISTON	1401
KATHLEHONG CLINIC	MASAKHANE STREET	KATHLEHONG	1431
KATLEHONG CLINIC	MASAKHANE STREET	KATHLEHONG	1421
KEMBIRCH MEDI-CROSS CLINIC	P O BOX 6813	BIRCHLEIGH	1621 MS ZELDA VAN BLERK
KEMPSTON CLINIC	98 KEMPSTON AVE	BENONI	1501
KEMPTON PARK MEDI CLINIC		KEMPTON PARK	1620 SR LINDA PIENAAR
KENRIDGE HOSPITAL	P O BOX 17308	HILLBROW	2038 MS VAN AYSSEN
KENRIDGE HOSPITAL	P O BOX 17308	HILLBROW	2038 MS. VAN AYSSEN
KHUMALO CLINIC	181 KATHLEHONG	KATHLEHONG	1431
KHUTSONG CLINIC	MAIN STREET	CARLETONVILLE	2499
KHUVENI MATERNITY HOSPITAL	5883/4 TURTON STR	DAVEYTON	1507
KHUVENI MATERNITY	5883/4 TURTON	DAVETON	1507
HOSPITAL	STREET	DAVETON	1007
KIEBLER PARK CLINIC	KENNETH GARDENS	KIEBLER PARK	2091
KINGSWAY CLINIC	113 E KINGSWAY STREET	BRAKPAN	1540 SR. ZONDO
KLIPSPRUIT CLINIC	DAISY STREET	KLIPSPRUIT	1812
KLIPSPRUIT CLINIC	FRED CLARKE SCHOOL	KLIPSPRUIT	1809
KLIPTOWN CLINIC	49 STATION RD	KLIPTOWN	1811
KLIPTOWN CLINIC	ASCOT ROAD	ELDORADO PARK	1812
KLIPTOWN CLINIC	49 STATION ROAD	KLIPTOWN	1811
KLIPTOWN CLINIC	ASCOT RD	ELDORADO PARK	1812
KLOPPER PARK CLINIC	KRUIN STREET	KLOPPER PARK	1429
KNIGHTS CHEST HOSPITAL	P O BOX 13011	KNIGHTS	1413 DIANA RATHALE
KOCKSOORD CLINIC	MARKET AND HUMAN		1759
	ST		
KOOKRUS CLINIC	VERWOERD AVE	MEYERTON SOUTH	1961
KOOKRUS CLINIC	VERWOERD AVENUE	KOOKRUS	1964 SR K MTHEMBU
KOPANONG HOSPITAL	PRIVATE BAG X031	VEREENIGING	1930 J DE BRUYNS
KRUGERSDORP CLINIC	P O BOX 2315	KRUGERSDORP	1740 SR KAREN COETZEE
KRUGERSDORP HOSPITAL	P O BOX 914	KRUGERSDORP	1740 MARA MILLER
KRUGERSDORP HOSPITAL	P O BOX 914	KRUGERSDORP	1740
KRUINHOF CLINIC	34 BESTER STREET	KRUINHOF	1429
KWA - THEMA CLINIC	7001 MOSHOESOE STR	SPRINGS	1575
LAUDIUM HEALTH CENTRE	6 TH AVENUE	LAUDIUM	0037
LAUDIUM HEALTH CENTRE	PRIVATE BAG X1	LAUDIUM	37 SR. KOLAPEN
LAWLEY CLINIC	BARACUDA STREET	LENASIA	1824
LEGAE PRIVATE CLINIC	PRIVATE BAG X18	ROSSLYN	200 MS. J MBATHA
LENASIA CLINIC	NIRVANA DRIVE	LENASIA	1821
LENASIA CLINIC	LILY AND SYLVIA STR		1827
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LENASIA CLINIC	WIMBLEDON RD	LENASIA SOUTH	1827
LENASIA CLINIC	9388 ACTURISES STR	LENASIA	1827
LENASIA CLINIC	PRIVATE BAG X07	LENASIA	1820 MATRON SERLEY
LENASIA HEALTH CLINIC	CNR ROSE AND	LENASIA	1820 MS K PATEL
	ELAND AVENUE		
LENMED CLINIC	P O BOX 855	LENASIA	1820
LENMED CLINIC	P O BOX 855	LENASIA	1820
LEONDELE CLINIC	19 NERINE STREET	LEONDALE,	1401
LEGINDELE GENNIG	TO THE TIME OTTREET	GERMISTON	1101
LERATONG HOSPITAL	PRIVATE BAG X2078	KRUGERSDORP	1740 MS KHOZA
LESEDI HOSPITAL	P O BOX 82616	SOUTHDALE	2135
LESEDI HOSPITAL	P O BOX 82616	SOUTHDALE	2135
LETHABILE CLINIC	1590 BLOCK B	BRITS	264 AR MANGANYI
LIFEMED CLINIC	P O BOX 2181	FLORIDA	1710 MATRON LEFATSI
LILLIAN NGOYI CLINIC	OLD POTCH ROAD	DIEPKLOOF	1862
LINKSFIELD EYE AND	P O BOX 64106	HIGHLANDS NORTH	2037 SR FOREMAN
DENTAL			
LINKSFIELD PARK CLINIC	P O BOX 46337	ORANGE GROVE	2119
LINMED HOSPITAL	P O BOX 13028	NORTHMEAD	1511 MATRON A LOMBARD
LISTER CLINIC	P O BOX 4183	JOHANNESBURG	2000 SR SHAIDA
LITTLE COMPANY OF MARY	P O BOX 17012	GROENKLOOF	27 MS HERSOMAN
LOUIS PASTEUR HOSPITAL	P O BOX 11876	TRAMSHED	126 MATRON VAN DE
			KERK
LOXTONVALE PRIMARY	P.O. BOX 326	KEIMOES	8860
LUIPAARDSVLEI CLINIC	LEWIS STREET	LUIPAARDSVLEI	1739
LUSAKA CLINIC	898 FLAMINGO RD	KAGISO	1753
LYNDHURST CLINIC	156 JOHANNESBURG	LYNDHURST	2000
	RD		
M L PESSEN CLINIC	P O BOX 218	RANDFONTEIN	1760
MALVERN	P O BOX 28372	MALVERN	4055 LIZ MAHONEY
MALVERN CLINIC	HEREFORD STREET	MALVERN	2094
MAMELODI WEST CLINIC	CHABANGU STREET	MAMELODI WEST	0122
MAMELODI CLINIC	P O RATHEBILE	MAMELODI	-122 MS MOKGADI
MANDELA CLINIC	8299 PELE STREET	TEMBISA	1635
MASHAKANE HEALTH CARE	1INDUSTRIAL ROAD	GA-RANKUWA	208 SR. L ZWANE
MAYFAIR CLINIC	9TH AVENUE	MAYFAIR	2092 SR. T MOALUSI
MAYO CLINIC	P O BOX 5173	WELTEVREDEN	1715
W/ CTO GENTIO	ι ο Βολοίτο	PARK	1710
MEADOWLANDS CLINIC	HEAS STREET CIRCLE	MEADOWLANDS	1852 ELIZABETH
			MALUMBA
MECLOV CLINIC	80 LOVEDAY STR	JOHANNESBURG	2001
MEDFEM CLINIC	P O BOX 2233	CRAMERVIEW	2060 DR. J VAN
MEDEODUM LIGODITAL	D 0 D0V 00050	01 14 14 17 (01 15 15	RENSBURG
MEDFORUM HOSPITAL	P O BOX 30359	SUNNYSIDE	132 INGRID LOMBARD
MEDI DENT DAY CLINIC	P O BOX 972	GERMISTON	1400
MEDI DENT DAY CLINIC	P O BOX 972	GERMISTON	6001
MEDICROSS CLINIC	PRINCESS CROSSING	ROODEPOORT	1724 MR PETER HEILIG
MEDIVAAL HOSPITAL	PRIVATE BAG X020	VANDERBIJLPARK	1900 ANDRIES
			ENGELBRECHT
MEDUNSA ORAL HEALTH	PRIVATE BAG X 848	PRETORIA	0001
MELDENE	P O BOX 29033, CNR	MELVILLE	2109 WILMA BULL
	3RD AVE AND MAIN ST		
MELDEWS	P.O. BOX 29033	MELVILLE	2109
MERAFE STATION	CNR MOLIWA AND	SOWETO	1868 AR WATT WALLA
MENTEDTON DAY OF THE	MOTLOMO ST	MEX (EDTO):	4000 00 000000
MEYERTON DAY CLINIC	PRIVATE BAG X1690	MEYERTON	1960 SR SEGOPPA
MID ENNERDALE CLINIC	2 ND AVENUE	ENNERDALE	1830

MILLSITE HOSPITAL MILLSITE HOSPITAL MILPARK HOSPITAL MMAMETHLAKE HOSPITAL MMAMETHLAKE HOSPITAL MODDERFONTEIN HOSPITAL MODDERFONTEIN HOSPITAL MOFOLO CLINIC MOHLAKENG CLINIC MOLELEKE CLINIC MONTANA PRIVATE HOSPITAL		RANDFONTEIN RANDFONTEIN AUCKLAND PARK BA - MOGOTO HAMMANSKRAAL MODDERFONTEIN MODDERFONTEIN MOFOLO RANDFONTEIN KATHLEHONG MONTANA PARK	1760 1760 2006 MS SETTLER 0432 0400 1645 1645 1801 1759 1431 EMILY / KGOMOTSO 151 MATRON BREEEDT
MOOT ALGEMENE HOSPITAAL	POSBUS 24765	GEZINA	31 SR SIBEKO
MORNINGSIDE MEDI CLINIC MOROKA CLINIC MPUMELELO CLINIC MUELMED HOSPITAL MUELMED HOSPITAL MULBARTON HOSPITAL NALEDI HOSPITAL NALEDI MOBILE CLINIC NANCEFIELD CLINIC NANCEFIELD CLINIC	PRIVATE BAG 6 3197 ROCKVILLE NKOSI STREET P O BOX 27140 P O BOX 27140 P O BOX 17011 PRIVATE BAG X109 SHACK 207 187 DARTMORE AVE NANCEFIELD	BRYANSTON RUSLOO IVORY PARK EXT 9 SUNNYSIDE SUNNYSIDE MULBARTON VEREENIGING NALEDI ELDORADO PARK NANCEFIELD	2021 MATRON COOPER 1475 1685 0132 132 2059 MS PLATT 1930 SUE CLIPSTONE 1874 1812 0904
NATALSPRUIT HOSPITAL	SQUATTER PRIVATE BAG X 01	ALRODE	1451
NATALSPRUIT HOSPITAL NEDPARK CLINIC NEDPARK CLINIC NETCARE REHABILITATION	PRIVATE BAG X 01 P O BOX 27154 P O BOX 27154 2 BUUTIUG ROAD	ALRODE SUNNYSIDE SUNNYSIDE AUKLAND PARK,	1451 0132 132 1190
NETCARE REHABILITATION	2 BUNTING ROAD	JHB AUCKLAND PARK	1196
CLINIC NEW KENSINGTON CLINIC NIGEL CLINIC NIGEL FAMILY CLINIC	P O BOX 75089 P O BOX 23 44 CHURCH STREET	GARDEN VIEW NIGEL NIGEL	2047 MS GAY WIGGILL 1490 1491
NIGEL HEALTH CENTRE NKOUPHILA CLINIC	P O BOX 508 8405 SEJEWE STREET	DUNNOTAR DOBSONVILLE EXT. 2	1590 MATRON MASHIGO 1863
NOORDGESIG CLINIC	COLIN AND MAIN ROAD	NOORDGESIG	1804 SR SIBONGILE THELEJANE
NOORDHEUWEL CLINIC	LUDHURSTANDHOFFN AR STR	KRUGERSDORP	1739
ODI HOSPITAL OLIFANTSFONTEIN CLINIC OLIFANTSFONTEIN CLINIC OLIVEDALE CLINIC OPTIKLIN EYE HOSPITAL ORANGE FARM CLINIC ORCHARDS CLINIC	PRIVATE BAG X 509 PEARCE STREET PEARCE STREET PRIVATE BAG X 10029 P O BOX 14649 STAND 2896 57 OAKLAND RD	MABOPANE OLIFANTSFONTEIN OLIFANTSFONTEIN RANDBURG FARRAMERE ORANGE FARM ORCHARDS	0190 1665 1665 MS CHANAEMANG 2125 1518 1805 2192
ORLANDO CLINIC ORLANDO CLINIC OZISWENI CLINIC PALMRIDGE CLINIC PARK LANE CLINIC PARKHURST HEALT CENTRE	6516 RATHEBE STREET 6516 MOKOKI STREET 320 WEST ROAD PALMRIDGE ROAD PRIVATE BAG X40500 5 TH AVENUE	ORLANDO EAST ORLANDO EAST EVATON GERMISTON HOUGHTON PARKHURST	1804 POLUSA  1804 LILIAN GOING 1980  1401 2041 MS EBRAHIM 2193

PARKURST HEALTH CENTRE PETERVALE CLINIC PHOENIX HOUSE PHOLOSONG CLINIC PHOLOSONG CLINIC PHOLOSONG HOSPITAL PHOMOLONG PHUTANONG CLINIC PIMVILLE CLINIC	5TH AVENUE CAMBRIDGE STREET P O BOX 6041 MORULE CENTRE MORULE CENTRE PRIVATE BAG X4 MGADI STREET UITTOG X 1 / P O BOX 15 3623 ZONE 3	PARKHURST PETERVALE JOHANNESBURG MABOPANE MABOPANE BRAKPAN ATTERIDGEVILLE GELUKSDAL SOWETO	2193 2151 2001 SR LEONE 0190 190 ST NTULI 1547 SR MASISI 0008 1548 SR L MNGUNI
POORTJIE CLINIC POSTVIEW CLINIC PRAXMED THEATRE	MAIN POST OFFICE PLOT 82 WILLIAM AVE P O BOX 21	ORANGE FARM POORTVIEW BULTFONTEIN	1805 2040
PRETORIA ACADEMIC HOSPITAL	PRIVATE BAG X1690	PRETORIA	0001 SR KOEKEMOER
PRETORIA EAST HOSPITAL PRETORIA EYE INSTITUTE PRETORIA GYNAECOLOGY	PRIVATE BAG X997 P O BOX 56184 P O BOX 27053	PRETORIA ARCADIA SUNNYSIDE	0001 MS BEURMANN 0007 0132 DICKY ERASMUS
HOSPITAL PRETORIA HEART HOSPITAL PRETORIA NORTH PRETORIA NORTH CLINIC	P O BOX 27213 P O BOX 18489 P O BOX 18489 / 291	SUNNYSIDE PRETORIA NORTH PRETORIA NORTH	0132 SR R VAN WYK 0116 -116 SR SUSARAH
PRETORIA NORTH DAY CLINIC	BURGER STREET P O BOX 16997	PRETORIA NORTH	DEMMIS 116 MS VAN NIEKERK
PRETORIA NORTH DENTAL PRETORIA OOS HOSPITAAL PRETORIA UROLOGY HOSPITAL	380 JACK HINDON STR PRIVATE BAG X 997 P O BOX 13271	PRETORIA NORTH PRETORIA HATFIELD	0182 0001 -28 SR VAN RENSBURG
PRETORIA WEST CLINIC PRETORIA WEST HOSPITAL PRETORIA WEST HOSPITAL PRETORIUS PARK CLINIC PRINCESS CLINIC	FREDERICK STREET PRIVATE BAG X02 P O BOX 97588 LORISTO STREET 8 HARRY STREET PRIVATE BAG X 02	PRETORIA WEST PRETORIA WEST WESPARK PRETORIA ROODEPOORT	0183 -117 MS KOCH 146 0002 1724
PRINSLOO STREET CLINIC PROTEA CLINIC PROTEA CLINIC PROTEA GLEN CLINIC	STAND 3115 P O BOX 1146 1704 REDCURRENT STR	PRETORIA WEST PROTEA SOUTH KRUGERSDORP PROTEA GLEN	0117 1814 1740 SR JACOBS 1819
PROTEA CLINIC PROTEA CLINIC	STAND 3115 P O BOX 1146 1704 REDCURRENT	PROTEA SOUTH KRUGERSDORP	1814 1740 SR JACOBS
PROTEA CLINIC PROTEA CLINIC PROTEA GLEN CLINIC  QUEENSHAVEN CLINIC R V BIRD DENTAL CLINIC RABIE RADGE CLINIC RAINBOW CLINIC RAND AIDS ASSOCIATION RAND CLINIC RANDBURG CLINIC / EMERGENCY SERVICE RANDBURG DAY CLINIC RANDBURG DAY CLINIC RANDFONTEIN CHEST	STAND 3115 P O BOX 1146 1704 REDCURRENT STR P O BOX 49057 363 PRINSLOO STR KORHAAN CRESS 2 KOCH STREET PRIVATE BAG X03 P O BOX 2518 RABIE STREET/ HANS	PROTEA SOUTH KRUGERSDORP PROTEA GLEN ROSETTENVILLE PRETORIA RABIE RADGE JOUBERT PARK LYNDHURST HOUGHTON	1814 1740 SR JACOBS 1819 2130 0002 1685 2001 DR MOKHESI 2106 MS VERMEULEN 2041 MS WHITEHORN
PROTEA CLINIC PROTEA CLINIC PROTEA GLEN CLINIC  QUEENSHAVEN CLINIC R V BIRD DENTAL CLINIC RABIE RADGE CLINIC RAINBOW CLINIC RAND AIDS ASSOCIATION RAND CLINIC RANDBURG CLINIC / EMERGENCY SERVICE RANDBURG DAY CLINIC RANDBURG DAY CLINIC	STAND 3115 P O BOX 1146 1704 REDCURRENT STR P O BOX 49057 363 PRINSLOO STR KORHAAN CRESS 2 KOCH STREET PRIVATE BAG X03 P O BOX 2518 RABIE STREET/ HANS STRYDOM P O BOX 56401 P O BOX 56401	PROTEA SOUTH KRUGERSDORP PROTEA GLEN  ROSETTENVILLE PRETORIA RABIE RADGE JOUBERT PARK LYNDHURST HOUGHTON RANDBURG  PINEGOWRIE PINEGOWRIE	1814 1740 SR JACOBS 1819 2130 0002 1685 2001 DR MOKHESI 2106 MS VERMEULEN 2041 MS WHITEHORN 2194 2123 2123 MS J DON

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REIGER PARK CLINIC	LEON FERREIRA DRIVE	BOKSBURG	159
RETSWELAPELE CLINIC REUVEN CLINIC	MAREKA STREET 31 WEST TURFONTEIN	SHARPEVILLE REUVEN	1939 2091
REX STREET CLINIC	15-19 REX STREET	ROODEPOORT	1724
RISPARK MOBILE CLINIC	PLOT 21	RISPARK	2053
RIVERFIELD LODGE	P O BOX 67372	BRYANSTON	2021
RIVERFIELD LODGE RIVERLEA CLINIC	P O BOX 67372 JUKSKEI STREET	BRYANSTON	2021 2093
RIVERLEA CLINIC RIVERLEA MAYOR CLINIC	COLORADO DRIVE	RIVERLEA RIVERLEA	2093
ROBINSON HOSPITAL	P O BOX 37	RANDFONTEIN	1760 MATRON A FOURIE
ROCKVILLE CLINIC	9489 KOLOSENG STREET	TSAKANE	1548
ROODEPOORT CLINIC	54 ONTDEKKERS RD	ROODEPOORT	1724
ROODEPOORT CLINIC	PRINCESS CROSSING	ROODEPOORT	1724
ROODEPOORT CLINIC	PRIVATE BAG X 30	ROODEPOORT	1724
ROOIHUISKRAAL CLINIC	TIPHOLHOEKIE	ROOIHUISKRAAL	0154
ROSEACRES CLINIC	P O BOX 2302	PRIMROSE	1416 SR RIETA PRINSLOO /HEILA
ROSEASCRES CLINIC	P O BOX 2302	PRIMROSE	1416
ROSEBANK CLINIC	P O BOX 52230	SAXONWOLD	2132
ROSEBANK CLINIC	P O BOX 52230	SAXONWOLD	2132 MS. SHEWAN
ROSETTENVILLE HEALTH CENT	ROSE AND MABEL STR	ROSETTENVILLE	2190
ROSHNEE CLINIC	BILAL STREET	VEREENIGING	1939
ROSSETTENVILLE CLINIC	C/N ROSE AND MABEL STR.		2094 DUDU KHOZA
ROSSLYN CLINIC	91 PIET RAUTENBACH STREET		200 A SEGOA
RUST - TER - VAAL CLINIC	1 KIEPERSOL AVE	VEREENIGING	1939
SAMMY MARKS A CLINIC	CNR PRINSLOO AND CHURCH STREET	PRETORIA	0002
SANDOWN CLINIC	WEST STREET	SANDOWN	2196
SANDRINGHAM CLINIC	ANNE AND ATHLONE STR	SANDRINGHAM	2192
SANDTON CLINIC	CROSS STREET	BRYANSTON	2021
SANDTON MEDI-CLINIC	PRIVATE BAG X1	BRYANSTON	2021 MATRON POS
SANDTON SURGICAL CENTRE	P O BOX 650604	BENMORE	2010 G HYNIKE
SAULSVILLE CLINIC	33 SEKHU STREET	SAULSVILLE	0125
SCHOONGEZICHT	GORDON ROAD, "THE BERG" SHOPPING CENTRE	FLORIDA	1709
SCHOONGEZICHT	GORDON ROAD, THE	FLORIDA	1709 SR DEETLEEFS
MEDICROSS	BERG SHOPPING CNTRE		
SEAD CLINIC	1 NTONGA STREET	DUDUZA	1496
SEBOKENG HOSPITAL	PRIVATE BAG X058	VANDERBIJLPARK	1900 MS. MAKUME
SELBYPARK MEDICAL CENTRE/RMH HOSPITAL	P O BOX 62171	MARSHALLTOWN	2107
SELKIRK CLINIC	P O BOX 78001	SANDTON	2146 SR. MEYER
SENVANE CLINIC	1928 KOMATIE RD	TSHIAWELO	1818
SHANTY CLINIC	1000 ARMITAGE STREET	ORLANDO WEST	1804
SHARPEVILLE COMMUNICTY		SHARPEVILLE,	1939
CENTRE	4000 DI 001(11	VEREENIGING	0.40.4
SHOSHANGUVE CLINIC	1630 BLOCK H	SOSHANGOVE	0164

SILVERTON	P BOX 2064	SILVERTON	0127
SILVERTON MEDICROSS	P O BOX 2064	SILVERTON	127 SR. PRINSLOO
CLINIC	1 O BOX 2004	SILVLITION	127 314.1 14113233
SIMUNYE CLINIC	EXT 8	TSAKANE	1548
SINOVILLE CLINIC	VERONICA STR	MONTANA	0151
SIR ALBERT MEDICAL	P O BOX 1794	RANDFONTEIN	1760
CENTRE	. 6 26/(1/61	TO INTO CITYLE	
SIZWE TROPICAL DISEASES	PRIVATE BAG X2	SANDRINGHAM	2131 MS MALETE
HOSPITAL			
SONDELA EKHAYA	P.O. BOX 232	RANDFONTEIN	1760
SONTO THOBELA CLINIC	982 MANDELA DRIVE	NIGEL	1490 GLADYS MOLOI
SOUTH BAY CLINIC	STAND 74086	TURFFONTEIN	2140
SOUTH HILLS CLINIC	GENEVA ROAD	SOUTH HILLS	2197
SOUTH RAND HOSPITAL	PRIVATE BAG X1	ROSETTENVILLE	2130 MS. YIKA
SPARTAN CLINIC	LEWIS ROAD	SPARTAN	1619
SPATIO CLINIC	P O BOX 74401	LYNNWOOD RIDGE	40
SPRINGS CLINIC	20 FIRST AVENUE	SPRINGS	1575
SPRINGS MEDICROSS CLINIC	P O BOX 2213	SPRINGS	1560 MS. GAIL BOSMAN
SPRINGS PARKLAND CLINIC	P O BOX 86	SPRINGS	1560 MS. VILJOEN
SPRINGS PRIVATE HOSPITAL	P.O. BOX 533	SPRINGS	1559
ST MARYS WOMANS CLINIC	P O BOX 227	SPRINGS	1560
STAANVAS CENTRE	P O BOX 26033	ARCADIA	7 MS SLABBER
STERKFONTEIN HOSPITAL	PRIVATE BAG X2010	KRUGERSDORP	1740 MS SKEA
SUIKERBOSRAND CLINIC	P O HEIDELBERG	HEIDELBERG	2400
SUIKERBOSRAND CLINIC	P O HEIDELBERG	HEIDELBERG	2400
SUNNINGHILL HOSPITAL	P O BOX 4867	RIVONIA	2128 SR ELLA MCGREGOR
SUNNYSIDE CLINIC	20 TREVENNA ROAD	SUNNYSIDE	-2
SUNNYSIDE GALLERIES	154 MEARS STREET	SUNNYSIDE	-2
SUNWARD PARK HOSPITAL	P O BOX 18483	SUNWARD PARK	1470 MS BOOYSEN
TAMBO HOSPITAL	PRIVATE BAG X2	BOKSBURG	1460 DR KAPP
TAMBO MEMORIAL	PRIVATE BAGX2	BOKSBURG	1460 MATRON MOLOKO
TARA MOROSS HOSPITAL	PRIVATE BAG X 7	RANDBURG	2125
TEMBISA CLINIC	INDUSTRY ROAD	OLIFANTSFONTEIN	1665 DR MEMELA
TEMBISA HOSPITAL	PRIVATE BAG X7121	OLIFANTSFONTEIN	1665 MATRON MANAMELA
THEMBELILHE CLINIC	VOLTA STREET	LENASIA SOUTH	1827
	MOBILE		
THUTHUKANI CLINIC	P O BOX 130	HALFWAY HOUSE	1685
TLADI CLINIC	STAND 144	KWA - XUMA	1868
TLHOKOMELONG CLINIC	THANDI MODISE STR	EVATON	1980
TOEKOMSRUS CLINIC	KLINIEK STREET	RANDFONTEIN	1760
TOKISONG CLINIC	86 MASELOANE	RESIDENSIA	1911
TDIOME CLINIC	STREET D.O. BOY 4544		2420 CD LODNA DELLING
TRIOME CLINIC	P O BOX 1514	ROOSEVELT PARK	2129 SR LORNA BELLING
TRIOMF CLINIC	EDWARD STREET	TRIOMF	2092 SR LORNA BELLING
TSHEBO THEMBA HOSPITAL	P O BOX 2635	FLORIDA	1710 SR SWANEPOEL
TURFFONTEIN CLINIC	BISHOP AND CHURCH STR	TURFFONTEIN	2190
UNION HOSPITAL	P O BOX 1002	ALBERTON	1450 MATRON GELDAARD
UNITAS HOSPITAL		LYTTELTON	1400 MATRON GELDAARD
URBAN HEALTH CLINIC	P O BOX 15123 18 HOEK STREET	JOHANNESBURG	2001
VAAL ATIC CLINIC	LEONIE BUILDING	VANDERBIJLPARK	1911
VALHALLA CLINIC	VINDELLA AND	VALHALLA	0185
VALUALLA GLINIG	SHIRLEY STR	VALITALLA	0 103
VAN DYK PARK CLINIC	OLIVE STREET	BOKSBURG	1459
VAN RHYN PLACE OF	TSESSEBE STREET	VAN RHYN BENONI	1500
SAFETY	. JEGGEDE GIREET	THE PERSON	
VANDERBIJL PARK CLINIC	CNR FRIKKIE MEYER	VANDERBIJLPARK	1911

VENTERSPOS CLINIC VEREENIGING MEDI CLINIC VEREENIGING MEDI CLINIC VERUBE CLINIC	115 CARLTON STREET P O BOX 760 P O BOX 21 56 MASOPHA STREET	VEREENIGING THREE RIVERS SAULSVILLE,	1782 1930 MS STRYDOM 1935 0125
VERWOERDBURG CLINIC VILLA LIZA CLINIC VOSLOORUS CLINIC	RABIE AVENUE CUCKOO STREET 10558 MORENA STREET	PRETORIA LYTTLETON BOKSBURG VOSLOORUS	0157 1459 1475
VOSLOORUS POLY CLINIC WATTENVILLE CLINIC WELTEVREDEN PARK CLINIC	30 DITSHEGO STREET NKOSI STREET	VOSLOORUS WATTENVILLE WELTEVREDEN PARK	1475 0263 1709 SR OOSTHUIZEN
WENDYWOOD CLINIC	WENDY AND DARWIN		2148
WESKOPPIES HOSPITAL WESTBURY HEALTH HOSPITAL	PRIVATE BAG X113 DU PLESSIS STREET	PRETORIA WESTBURY	1 N MABENA 2093
WESTONARIA CLINIC WHEELERS FARM CLINIC WHITE CITY CLINIC WIERDA PARK CLINIC WILDEBEESFONTEIN CLINIC	P O BOX 19 P O LENASIA 9977 THOMA RD SAXBY AVE ORANGE FARM 536	WESTONARIA LENASIA WHITE CITY ELDORAIGNE WILDEBEESFONTEI N	1779 1821 1575 0157 0312
WILGEHEUWEL HOSPITAL WILGERS HOSPITAL WILGESPRUIT MOBILE CLINIC	PRIVATE BAG X11 P O BOX 73928 ZEISS ROAD	HONEYDEW LYNNWOOD RIDGE	2040 SR VAN DER MERWE 40 MATRON UYS
WINDSOR CLINIC WYNBERG CLINIC	EARLS AVENUE OLD PRETORIA MAIN ROAD / CAREY LEES ST	WINDSOR EAST MARLBORO	2194 2090 DR SITHOLE
YA RONA CLINIC YEOVILLE CLINIC ZAKARIYA PARK CLINIC ZAMANI CLINIC ZOLA CLINIC ZONDERWATER DENTAL CLINIC	6647 RALEIRA STREET FORTESCUE ROAD CLOVE DRIVE 3540 DUBE STREET 780 ZOLA STREET ZONDERWATER PRISON	RANDFONTEIN YEOVILLE LENASIA DUDUZA KWA - XUMA CULLINAN	1760 2198 1822 1496 ST WILLER 1868 1000 MR SINCLAIR
ZONDI FAMILY HEALTH ZONE 12 CLINIC/FALLS UNDER EMFULENI HEALTH DEPARTMENT	669 ZONDI STREET STAND 7418 ZONE 12	KWA - XUMA SEBOKENG	1868 1911
ZONKEZIZWE CLINIC	1400 ZONE 4, ZONKEZIZWE	KATHLEHONG	1431
ZONKEZIZWE CLINIC	5606 ZONE 6, ZONKEZIZWE	KATHLEHONG	1431
ZUID AFRIKAANSE HOSPITAAL	P O BOX 3036	SUNNYSIDE	-132 SR PETRA BASSON
ZWARTKOPJIES	RAND WATER PUMP STATION	MONDEOR ALBERTON	1449

#### SCHEDULE OF RATES AND QUANTITIES

#### Preamble

- 1. The Schedule of Rates and Quantities must be read in conjunction with the Conditions of Tender, the General Conditions of Contract, Special Conditions of Contract, Project Specifications and Annexures and all other data included in these documents for the full intent and meaning of each clause or item.
- 2. The Tenderer is advised to check the number of pages and, should any be found to be missing or in duplicate or the figures or writing indistinct or this Schedule of Rates and Quantities contains any obvious errors, the Tenderer must inform the Consultant at once and have it rectified. No liability whatsoever will be admitted in respect of errors due to the foregoing.

Should there be any doubt or obscurity as to the meaning of any particular item, the Tenderer must obtain an explanation of it, in writing, from the Consultant. No claims for extras arising from any such doubt or obscurity will be admitted after submission of the Tender.

3. The Tenderer is advised to read carefully the Specifications in so far as they apply to items in the Schedule of Rates and Quantities. Descriptions of activities described in the Schedule of Rates and Quantities are abbreviated.

No claim whatsoever will be allowed in respect of errors in pricing due to abbreviation of the description of items which are fully described when read in conjunction with the relevant specification.

4. The Tenderer is hereby advised that the quantities provided in the Rates and Quantities are monthly estimates and the total tender amount is determined by multiplying the total monthly cost for each Region by the 60 months for which the contract will be awarded.

It is further to be noted that the quantities provided in the Rates and Quantities are preliminary monthly estimates and the actual monthly quantities (whether in excess or short of the estimated quantity) will be determined by the end of each month in accordance with the waste recordings made throughout the month. For this purpose, the whole of the contents of the Schedule of Rates and Quantities are to be considered as provisional and therefore subject to re-measurement and adjustment in part or as a whole. All such adjustments will be based on, or pro-rata to, the schedule unit prices submitted by the Contractor.

5. It is deemed that provision for head office overheads, consumable stores, profit, etc., as well as all labour, material and equipment costs, is made in the priced items of the measured schedule following the preliminary schedule and that any increases or decreases in the measured quantities will correspondingly adjust for these charges.

- 6. Tenderers are referred to the Project Specification in which further information in respect of certain scheduled items can be obtained. This is meant as an aid to Tenderers but does not imply that the Specifications or clauses referred to are the only sources of information in respect of these items and further information and explanations may be found elsewhere in the Tender documents and in the Annexures.
- 7. The sum and unit prices to be inserted in the Schedule of Rates and Quantities are to be the fully inclusive value of the work described under the several items, including all costs and expenses which may be required in and for the execution of the work described, together with all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based.
- 8. All unit prices shall be quoted nett and be exclusive of Value Added Tax (VAT). Provision is made in the summary page for the addition of Value Added Tax to the total of the various Sections comprising the Schedule of Rates and Quantities.
- 9. All unit prices, extensions and totals must be entered in the Schedule in BLACK INK.

A sum or unit price is to be entered against each item in the Schedule of Rates and Quantities, whether quantities are stated or not. Items against which no price is entered will be considered as covered by other prices or rates in the schedule.

The Tenderer is at liberty to insert a rate of his own choosing for each item in the schedules and his attention is drawn to the fact that the Contractor has the right, under various circumstances to payment for additional works carried out, and that the Consultant is obliged to base his assessment of the rates to be paid for such additional work on the rates inserted in the schedule by the Tenderer.

In cases where schedule rates are considered to be too high, such rates may be of sufficient importance to warrant rejection of a tender.

- 10. All prices shall be quoted in the currency of the Republic of South Africa and will be subject to adjustment as specified in clause 2.6 of the Special Conditions of Contract.
- 11. Where any discrepancy exists between the unit price and the extended total against any item, the discrepancy will be adjusted by altering the total amount filled in against such item and, consequently, the total tender sum.

## 22.1.1 Schedule of Rates & Quantities

# 22.1.2 Region A: Reusable Container System

Section A	A1: Prelin	ninary and General for all aspects of	of the Service	•		
Item No	Ref.	Item Description	Unit	Quantity	Rate (Rand)	Amount (Rand)
A1.1		FIXED COSTS:				
A1.1.1	Spec Item.	Supply or secure equipment required for manufacture of the full range of disposable containers.	Sum	1		
A1.1.2	Spec Item.	Supply or secure equipment required for manufacture of the full range of reusable containers.	Sum	1		
A1.1.3	Spec Item.	Supply or secure equipment required for the distribution of disposable and reusable containers as well as the collection and transport of HCRW from health care facilities throughout Region A to the nominated HCRW treatment facility.	Sum	1		
A1.1.4	Spec Item.	Supply or secure sufficient and compliant HCRW treatment capacity for the full duration of the contract, including any backup that may be required in the event of breakdowns.	Sum	1		
A1.1.5	Spec Item.	Supply or secure a suitable facility for the cleansing and disinfection of reusable HCRW containers for the full duration of the contract.	Sum	1		
A1.1.6	Spec Item.	Supply all training material and aids required for the training and capacity building within the health care facilities.	Sum	1		
A1.2		VARIABLE COSTS				
A1.2.1	Spec Item.	Maintenance of equipment required for manufacture of the full range of disposable containers.	Month	60		
A1.2.2	Spec Item.	Maintenance of equipment required for manufacture of the full range of reusable containers.	Month	60		

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A1.2.3	Spec Item.	Maintenance of equipment required for the distribution of disposable and reusable containers as well as the collection and transport of HCRW from health care facilities throughout Region A to the nominated HCRW treatment facility.	Month	60	
A1.2.4	Spec Item.	Maintenance of sufficient and compliant HCRW treatment capacity for the full duration of the contract, including any backup that may be required in the event of breakdowns.	Month	60	
A1.2.5	Spec Item.	Maintenance of a suitable facility for the cleansing and disinfection of reusable HCRW containers for the full duration of the contract.	Month	60	
A1.2.6	Spec Item.	Rendering training and capacity building within the health care facilities as described in Section	Month	60	
Total Co	ontract Co	sts for Section A1 (VAT Excluded)	:		

Section A	2: Supply	and Distribution of Dis	posable Containers.			
Item No	Ref.	Item Description	Unit	Quantity	Rate (Rand)	Amount (Rand)
A2.1		DISPOSABLE SHARE	S CONTAINERS:			,
		Monthly supply and d	lelivery to the hospitals a	nd clinics of the	following t	ypes of red??
		disposable sharps conta				
		_	NAL SIZES SELECTED I			
			D ACCORDINGLY. THE I	REF NUMBER W	TLL REFER	TO THE ITEM
		DESCRIPTION IN TH		ſ	1	r
A2.1.1	Spec	Type A: $\frac{1\frac{1}{2}-4\frac{1}{2}}{1}$ litre	Number/month			
	Item.	sharps container.				
A2.1.2	Spec	Type B: $3\frac{1}{2}$ -8 litre	Number/month			
	Item.	sharps container.				
A2.1.3	Spec	Type C: 8-15 litre	Number/month			
	Item.	sharps container.			]	
A2.1.4	Spec	Type D: 12-25 litre	Number/month			
	Item.	sharps container.				
A2.1.5	Spec	Type E: Tall slim	Number/month			
	Item.	sharps container with				
		a minimum height of				
		600 mm and capacity				
		of between 5 litre and				
		10 litre for long				
42.2		sharps.	CAN CONTAINEDC			
A2.2		DISPOSABLE SPECIO			C-11i	C 11
			lelivery to the hospitals a	na clinics of the	ionowing t	ypes of yellow
A 2 2 1	Cmaa	disposable specican cor		T		
A2.2.1	Spec	Type F: 8-15 litre	Number/month			
	Item.	specicans			<u> </u>	

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A2.2.2	Spec	Type G: 12-25 litre	Number/month			
	Item.	specicans	27 1 / 1			
A2.2.3	Spec	Type H: 70 cm tall,	Number/month			
	Item.	30 cm diameter that				
		is suitable for limbs.				
A2.3	Spec	SPECIAL DISPOSABI	LE CONTAINERS			
	Item.		elivery to the hospitals a	and clinics of the	following typ	pes of <i>yellow</i> ??
		special disposable conta	ainers:			
A2.4		HCRW LINERS:				
			elivery to the hospitals an	d clinics of the fo	llowing type:	s of <i>red</i> HCRW
	~	liners:		1	1	T
A2.4.1	Spec	Type I1: 30-litres @	Number/month			
12.12	Item.	60 microns	NT 1 / /1			
A2.4.2	Spec	Type I2: 30-litres @	Number/month			
A2.4.3	Item.	40 microns Type J1: 50-litres @	Number/month			
A2.4.3	Spec Item.	80 microns	Number/month			
A2.4.4	Spec	Type J2: 50-litres @	Number/month			
A2.7.7	Item.	40 microns	Number/monum			
A2.4.5	Spec	Type K1: 85-litres @	Number/month			
112	Item.	80 microns	1 (41110 41/111011411			
A2.4.6	Spec	Type K2: 85-litres @	Number/month			
	Item.	40 microns				
A2.4.7	Spec	Type L1: 100-litre @	Number/month			
	Item.	80 microns				
A2.4.8	Spec	Type L2: 100-litre @	Number/month			
	Item.	40-microns				
A2.5		HCGW LINERS:				
		Monthly supply and				
		delivery to the hospitals and clinics				
		of the following types				
		of black HCGW				
		liners:				
A2.5.1	Spec	Type M1: 85-litre @	Number/month			
	Item.	40 microns	- 1,0			
Total Mo	nthly Cos	ts for Section A2 (VAT I	Excluded):	1		
	•	`	,			X 58 ???
						(months)
T-4.1.C	4	-4 P Cl42 A 2 / T / T	F111\.			()
1 otal Coi	itract Cos	sts for Section A2 (VAT	Excluded):			

Section .	Section A3: Replacement of Reusable Containers lost or severely damaged during use by GDoH.								
Item No	Ref.	Item Description	Unit	Quantity	Rate (Rand)	Amount (Rand)			
A3.1		REUSABLE BOX CONTAINERS: Replacement of <i>red</i> reusable box containers lost or severely damaged during use by GDoH for the duration of the contract.							
A3.1.1	Spec Item.	50-litre containers as per specification	Number						

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A3.1.2	Spec	100-litre containers as per	Number			
	Item.	specification				
A3.2		CAGE TROLLEYS:				
		Replacement of galvanised cage tro	lleys lost or sev	verely damaged du	iring use by	GDoH for the
		duration of the contract.				
A3.2.1	Spec	Cage trolleys as per specification	Number			
	Item.					
			<mark>OR</mark>			
		DEPENDING O	ON THE OUTC	OME OF THE PI	<b>LOTS</b>	
A3.1		REUSABLE WHEELIE BINS:				
		Replacement of red reusable wheel	ie bin containe	ers lost or severe	ly damaged	during use by
		GDoH for the duration of the contract	t.			
A3.1.1	Spec	660-litre wheelie bins as per	Number			
	Item.	specification				
A3.1.2	Spec	770-litre wheelie bins as per	Number			
	Item.	specification				
				•		
Total C	ontract C	osts for Section A3 (VAT Excluded):				
1 otal C	onti act C	osis idi Sectioni AS (VAI Excludeu).				

	A4: Colle	ection, Transport, Treatm	ent and Disposal of HCF	RW, including m	aintenance a	nd distribution
Item No	Ref.	Item Description	Unit	Quantity	Rate (Rand)	Amount (Rand)
A4.1		types of containers. The	NTAINER transport, treatment and discost is also to include for ge trolleys where applicab	the cleansing and		
A4.1.1	Spec Item.	50-litre reusable box containers transported in cage trolleys	Number/month			
A4.1.2	Spec Item.	100-litre reusable box containers transported in cage trolleys	Number/month			
			OR Demonstrate and the cont		· [	
A4.1.1	Spec	660-litre reusable	Dependent on the out	come of the Pilots		
A4.1.1	Item.	wheelie bins	Number/monum			
A4.1.2	Spec Item.	770-litre reusable wheelie bins	Number/month			
A4.2			f HCRW of HCRW (collected in disposal of HCRW, irresp			
A4.2.1	Spec Item.	Cost per kg of HCRW inside the reusable containers.	Kg/month			

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A4.3		Total cost per kg of HCI	se sharps containers and sp RW (separately collected in ction, transport, treatment iner used:	n and including th	
A4.3.1	Spec Item.	Total cost per kg of HCRW from disposable containers, excluding cost of containers.	Kg/month		
	•	osts for Section A4 (VAT )	,		X 58 ??? (months)

# 22.1.3 Region A - Interim: Disposable Container System

Item No	Ref.	Item Description	Unit	Quantity	Rate (Rand)	Amount (Rand)
A5.1		DISPOSABLE CARDBO Supply and distribute t micron plastic liners, wit	he following sizes disp			
A5.1.1	Spec Item.	50-litre cardboard boxes, with plastic liner.	Number/month			
A5.1.2	Spec Item.	140-litre cardboard boxes, with plastic liner.	Number/month			
A5.2		Disposable plastic sharps Supply and distribute horizontal loading) to all	yellow/red/white dispos		ps container	s (vertical or
A5.2.1	Spec Item.	Capacity of between 4 and 6 litre	Number/month			
A5.2.2	Spec Item.	Capacity of between 7 and 12 litre	Number/month			
A5.2.3	Spec Item.	Capacity of between 18 and 25 litre	Number/month			
A5.3		Disposable plastic species Supply and distribute years and Clinics within Region	<mark>ellow/red/white</mark> disposab	le plastic specican	containers to	o all Hospitals
A5.3.1	Spec Item.	Capacity of between 4 and 6 litre	Number/month			
A5.3.2	Spec Item.	Capacity of between 7 and 12 litre	Number/month			
	Spec Item.	Capacity of between 18 and 25 litre	Number/month			

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	X (mo	2 nths)	<mark>???</mark>
Total Contract Costs for Section A5 (VAT Excluded):			

Section system.	A6: Colle	ction, Transport, Treatment and	Disposal of HCR	W collected in di	isposable HC	CRW containe	
Item No	Ref.	Item Description	Unit	Quantity	Rate (Rand)	Amount (Rand)	
A6.1		SYSTEM Total cost per kg of HCRW (inc	Total cost per kg of HCRW (including the mass of the disposable containers) for the collectic transport, treatment and disposal of HCRW, irrespective of the type of disposable contain				
A6.1.1	Spec Item.	Total cost per kg of HCRW from disposable containers, excluding cost of containers.	Kg/month				
Total M	onthly Co	osts for Section A6 (VAT Exclude	ed):				
Total C	ontract Co	osts for Section A6 (VAT Exclude	ed):	_		-	