

## **1. Introduction and Interpretation**

1.1. All bids shall comply with this Specification.

1.1.1. This Specification shall apply to all health care facilities falling under the Department of Health, Northern Cape with the List of Facilities and the Schedule of Rates specified for the whole province.

1.1.2. All the documents forming the Contract are to be taken as mutually explanatory of one another and in the event of there being any ambiguity in or discrepancy between the various documents, the documents will take precedence in the following order:

- Specifications and Annexure;
- Special Conditions of Contract

## **2. General**

2.1 This Specification specifies and contains the Department'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 Specification and its Annexures.

## **3. Definitions**

3.1 In addition to the Definitions presented in the General Conditions of Bid, Contract and Order, and unless in this Contract the context otherwise requires or admits, the following words and/or expressions shall have the meanings respectively ascribed to them below.

3.2 Where the context requires, words importing the singular number shall include the plural and vice versa.

- Project Specifications and Annexure;
- Special Conditions of Contract;
- Conditions of Tender;

- General Conditions of Contract, Tender and Order.

#### 4. General

- 4.1 This Project Specification specifies and contains the Department'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 and its Annexures.

#### 5. Definitions

- 5.1 In addition to the Definitions presented in the General Conditions of Tender, Contract and Order, and unless in this Contract the context otherwise requires or admits, the following words and/or expressions shall have the meanings respectively ascribed to them below.

Where the context requires, words importing the singular number shall include the plural and vice versa.

Name	Definition
<b>Chemical Waste</b>	Means expired pharmaceuticals from pharmacies at the Facilities, waste from oncological wards, cytotoxic waste, and other chemical waste generated at the Facilities. Chemical Waste includes liquids and solids and can include flammable substances.
<b>Clinic</b>	Means a Facility designated as such by "Clinic" in the list of Facilities
<b>Collection Programme</b>	Means the Contractor's programme for collecting Waste from the Facilities. The programme shall specify days of the week, month and times that Waste will be collected from each Facility.
<b>Community Health Centre</b>	Means a Facility designated as such by "CHC" in the List of Facilities.

<b>Contract Date</b>	Means the date on which execution of the Contract commences.
<b>Contract Period</b>	Means the period from the Contract Date to the date that the Contract expires. The Contract Period would be 3-years, as ultimately described in the Form of Agreement.
<b>Controlled Combustion Treatment</b>	Means any method, technique or process to render health care risk waste to flue gasses and residues, by means of oxidation at high temperatures. This includes oxidation of waste as well as other thermal treatment processes such as pyrolysis gasification or plasma processes in so far as the substances resulting from the treatment are subsequently incinerated.
<b>Disposable Container</b>	Disposable Containers shall include the following: <ul style="list-style-type: none"> <li>• Sharps Containers, including containers for long sharps;</li> <li>• Specican/specibin Containers for Pathological Waste;</li> <li>• Specican/specibin Containers for Chemical Waste;</li> <li>• Red liners for General Infectious Waste, including sealing mechanisms for liners;</li> <li>• Black liners for General Waste [option].</li> </ul>
<b>Department's Representative</b>	Means such party as the Department may appoint as the Department's Representative for the purposes of this Contract and notify the Contractor in writing.
<b>Environment</b>	Environment is defined as: <ol style="list-style-type: none"> <li>1. the natural environment, consisting of air, water, land, and all forms of life,</li> <li>2. the social, political, cultural, economic and working context and other factors that determine people's place in and influence on the environment, and iii) natural and constructed spatial surroundings.</li> </ol>
<b>Exposure</b>	The intake of radiation or pollutant by organisms present in a

	particular environment (i.e. human, natural), which represents a potential health threat to the living organisms in that environment.
<b>Extraordinary Items</b>	Disposable items not forming part of the normal daily Waste stream, but with characteristics similar to that of Waste.
<b>Facility</b>	Means a Tertiary hospital, regional hospital, district hospital, community health centre, clinic, pharmaceutical depot, mortuary or any other health care facility included in the List of Facilities.
<b>General Infectious Waste</b>	Means Infectious Waste, other than Sharps Waste and Pathological Waste, which is suspected to contain pathogens and normally causes, or significantly contributes to the cause of increased morbidity or mortality of human beings. It inter alia includes items such as blood, contaminated dressings, contaminated diapers or any other disposable items suspected of being infectious.
<b>Good Engineering and Operating Practices</b>	<p>Means (in relation to the performance of any activity, duty, responsibility and/or obligation of the Contractor to which this standard is stated in this Contract to apply) the standards, practices, methods and procedures and the degree of skill, care, diligence, prudence and foresight that would reasonably be expected of a skilled and experienced contractor engaged in the same type of undertaking under the same or similar factual, practical and/or physical circumstances at the time when the relevant decision or judgement is made and/or the relevant act or operation is performed and, without prejudice to the foregoing generality, shall include taking all reasonable steps to ensure that:</p> <ul style="list-style-type: none"> <li>adequate materials, resources and supplies, are constantly available to undertake the Services under normal conditions</li> </ul>

	<p>and reasonably anticipated abnormal conditions;</p> <ul style="list-style-type: none"> <li>• sufficient personnel are available and are adequately experienced and trained to transport and handle the Waste and operate the Treatment Plant properly, efficiently and within the manufacturers' guidelines and specifications and are capable of adequately responding to emergency conditions;</li> <li>• preventive routine and non-routine maintenance and repairs are performed to the Treatment Plant and the Contractor's equipment in general, on a basis that ensures reliable and safe operation, and are performed by knowledgeable, trained and experienced personnel utilising suitable equipment, tools and procedures;</li> <li>• appropriate monitoring and testing is done to ensure that all equipment at the Treatment Plant and the Contractors, equipment in general, is functioning as designed and to provide assurance that such equipment will function properly under normal conditions;</li> <li>• appropriate planned procedures are carried out to ensure the proper collection, transport, handling, treatment and disposal of the Waste, Residues and effluents under normal conditions and reasonably anticipated abnormal conditions;</li> <li>• the Department's Requirements, all Necessary Consents and all applicable Statutory Requirements are complied with.</li> </ul>
<b>Hospital</b>	Means a Health Care Facility larger than a Community Health Centre
<b>Mass Immunisation Campaigns/Vaccinations and prevention of outbreaks.</b>	Means administration of vaccine doses to a large population over a short period of time. e.g HPV campaigns (2x per yr), Flu campaign (1x yr), expanded programme on immunization/vaccinations (Once every three years) and any

	other prevention programmes as a result of new campaigns or outbreaks.
<b>In-Service Training</b>	Means training provided by the division or unit in the Department responsible for organising training programmes for general workers, environmental health practitioners, waste management officers, nurses and doctors at health care Facilities.
<b>Integrated Health Care Waste Management</b>	Is a holistic and integrated course of action that specifies the institutional, infra-structural and technological support, as well as human and financial resources required to establish and implement an integrated Health Care Waste Management Strategy.
<b>Isolation Waste</b>	Means waste containing discarded materials contaminated with excretion, exudates, or secretions from humans or animals who or which are required to be isolated in order to protect others from highly communicable or zoonotic diseases.
<b>Landfill</b>	To dispose of waste on land, whether by use of waste to fill in excavations or by creation of a landform above grade, where the term 'fill' is used in the engineering sense.
<b>Liquid Wastes</b>	Any waste material, whether it being hazardous or non-hazardous and that is identified to contain "free liquids", which readily separate from the solid portion of waste under ambient temperature and pressure.
<b>List of Facilities</b>	See Annexure [List of Facilities] of the Specification.
<b>Manifest System</b>	A system for documenting and controlling the fate of Waste from "cradle-to-grave".
<b>Medicine</b>	Means any substance or mixture of substances used or purporting to be suitable for use or manufacture or sold for use in: <ul style="list-style-type: none"> <li>• the diagnosis, treatment, mitigation, modification or</li> </ul>

	<p>prevention of disease, abnormal physical or mental state or the symptoms thereof in humans; or</p> <ul style="list-style-type: none"> <li>restoring, correcting or modifying any somatic or physical or organic function in humans.</li> </ul>
<b>Non-Combustion Treatment</b>	Means any method, technique or process for microbial inactivation or for otherwise altering the biological, chemical or physical characteristic of Waste so as to render the Waste unrecognisable and in order to reduce the hazards it presents, and facilitate disposal by any means of technology which does not constitute controlled combustion treatment, including but not limited to autoclave treatment;
<b>Necessary Consents</b>	Means all consents, licences, certificates, authorisations, permissions, approvals and permits of any Competent Authority and/or Interested Party that are necessary for the lawful performance of the Services and/or any of the Contractor's other obligations under this Contract.
<b>Anatomical or Pathological Waste</b>	Means tissues, organs, body parts, human fetuses and deceased animals infected with zoonotic diseases, blood, and body fluids, but excludes teeth, hair and nails;
<b>Pharmaceutical depot Sub-depot</b>	An area in which drugs, medicines or pharmaceuticals can be accumulated, deposited, stored and from which it can be distributed.
<b>Planned Outage</b>	Means any shutdown or stoppage affecting the operating capacity of the Treatment Plant or any part thereof, which is planned and of which the Department's Representative has been notified in writing, no later than 1 month before its occurrence.
<b>The Province</b>	Means the Northern Cape Province of the Republic of South Africa
<b>District</b>	Means a Northern Cape Provincial Department of Health

	District.
<b>District Office</b>	Means the Department's administrative office in each of the five districts in the province
<b>Registration Sheet</b>	Means the documentation required for the detailed recording of Waste collection from individual Facilities during each collection round.
<b>Residues</b>	Means any solid or liquid product derived from the Treatment of Waste at the Treatment Plant.
<b>Reusable Container</b>	Means a container manufactured in accordance with Annexure 2 [Specifications for Reusable Containers] of the Specification to be used and re-used for collection of Waste at the Facilities and transport of Waste by the Contractor from the Facilities to the Treatment Plant.
<b>Scheduled Substances</b>	Means Medicines prescribed by the Minister of Health under Section 22A of Medicines and Related Substances Control Act, Act 101 of 1965.
<b>Segregation</b>	The systematic separation of solid waste into designated categories of HCGW and Waste respectively.
<b>Service Failure</b>	Means the Contractor's failure to comply with certain requirements of the Contract. Service Failures are defined in the Specification.
<b>Services</b>	Means the services, duties and obligations to be fulfilled by the Contractor in accordance with this Specification throughout the Services Period.
<b>Services Period</b>	Means the period from the Commencement of Services Date to the expiry of the Contract.
<b>Sharps Container</b>	Means a disposable puncture resistant container which, when sealed, cannot be opened without great difficulty, and which is spill proof under normal handling conditions, used for the storage and transportation of infected sharps items.
<b>Specican/specibin</b>	Means a disposable puncture resistant container which, when



<b>Container</b>	sealed, cannot be opened without great difficulty, and which is spill proof under normal handling conditions, used for the storage and transportation of infected pathological waste or waste generated in isolation wards.
<b>Statutory Requirements</b>	Means the requirements of any present or future Legislation, ordinance, proclamation, by-law, directive, decision, regulation, rule, order, notice or code of practice having the force of law in the Province and the Republic of South Africa
<b>Treatment</b>	Means any method, technique, or process designed to change the biological character or composition of any Waste so as to eliminate its potential for causing disease, pollution impact on the environment and risk to health.
<b>Treatment Plant</b>	Means the plant or plants used by the Contractor to Treat the Waste.
<b>Unit Price</b>	Means the volumetric and mass price for collecting, transporting, treating and disposing of Waste, as specified in the Schedule of Rates and Quantities.
<b>Unplanned Outage</b>	Means any breakdown, stoppage, interruption, outage or cessation of, in or affecting the operating capacity of the Treatment Plant which occurs other than as a consequence of a Planned Outage.
<b>Waste</b>	<p>Waste shall, for the purpose of this Contract, be considered to include:</p> <ul style="list-style-type: none"> <li>• General Infectious Waste;</li> <li>• Sharps Waste;</li> <li>• Pathological waste;</li> <li>• Chemical Waste;</li> <li>• Isolation Waste;</li> <li>• Extraordinary Items.</li> </ul>
<b>Waste Collection Point</b>	Means for each Facility, the location at which the Waste is

	delivered to, by the Facilities, in Reusable Containers or Disposable Containers and where the Contractor assumes responsibility of the Waste. The Contractor shall during its rollout establish, in consultation with each Facility, the location of each Waste Collection Point.
<b>Waste Management</b>	All activities, administrative and operational, associated with the handling, transport, storage, treatment and disposal of Waste. For the purpose of this Bid it will also include the supply, distribution and maintenance of all disposable as well as reusable containers.
<b>Waste Management System</b>	Means collectively the supply of Disposable Containers, supply of Reusable/Disposable Containers and Health care risk waste consumables, the Collection, Transport and Treatment and disposal, specified in the Specification.
<b>Waste Officer</b>	Means for each Facility a person appointed and authorised to verify and sign the Registration Sheet, also being the Contractor's contact person at Facility level.
<b>Waste Vehicles</b>	Means the vehicles used by the Contractor to transport waste.

## 6. Scope

### 6.1 The Services

6.1.1 The objective of providing the services covered in this Contract is to assist Facilities in the Province in managing Waste and to remove this Waste from the premises, treat it and dispose of it.

6.1.2 All processes and procedures required 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 BID Specification be performed and executed by the CONTRACTOR in accordance with Good Operating and Engineering Practices, the Necessary Consents and all the Statutory Requirements.

The CONTRACTOR shall in the process of rendering the Services, be liable for damage done to the Department's property.

6.1.3 The scope of supply for the Services shall for the duration of the Service Period, in general terms include the provision by the CONTRACTOR of all equipment (including maintenance thereof), personnel, activities, services, know-how and expertise necessary to safely and efficiently collect all waste from the Waste Collection Points at all Facilities in the Province and treat this Waste and dispose of the Residues.

6.1.4 The scope of supply shall, for the duration of the Services Period, more specifically include:

- Supply and distribution of all Disposable and/or reusable Containers (HCRW consumables). To safely collect and remove the waste from all facilities in the Province; Including supply of disposable or re-usable containers and other HCRW consumables for all mass immunisation/vaccination campaigns, and any other prevention programmes for outbreaks conducted by different programmes in the department including MMC programme and pharmaceutical depot.
- Supply and distribution of Spill Kit equipment for all clinics, CHC's and Hospitals. The content should contain all PPE such as absorbent material, a chlorine disinfectant, a leak proof waste disposal container, eye goggles, masks, gloves, overalls, water proof gumboots, water proof aprons, folded waste containers, brooms, scoops, and disinfectants,
- Supply and distribute Bio-hazardous sign for health care waste storages of all clinics, CHC's and Hospitals
- Supply and distribute wheely bins for transportation of health care risk waste for District Hospitals, Regional Hospitals and Tertiary Hospital and big CHC's. (660 ltr plastic wheely bins).
- Supply, installation and maintenance of freezing facilities for storage of bio-hazardous health-care waste at those institutions where collections are only once a week or less. Bidders are required to quote for the costs as follows:

Option 1: Once off cost for outright purchase of the equipment,

- Collection of the Waste from all Facilities in the Province;
- Transportation of the Waste from all Facilities in the Province to a central storage facility/facilities and the Treatment Plant;
- Interfacing with the Facilities in securing a safe and efficient removal of waste as well as the supply and distribution of Healthcare waste consumables;
- Provision of a Training Programme on the Segregation and Handling of waste to staff at all Facilities;
- Provision and/or securing of sufficient and suitable treatment capacity at a Treatment Plant, together with staff, consumables, expertise and approvals necessary for Treatment of the Waste;
- Treatment of all Waste collected from the Facilities;
- Transport of Residues to an appropriately permitted, developed and operated Class H:H landfill site;
- Convening and attending meetings and liaising with the Department's Representative(s);
- Providing electronically or manually HCRW treatment certificates to each and every facility where service was carried out at the end of every month.

6.1.5 Only CONTRACTORS that can provide the entire service as set out will be considered. Bids for a part of the service will not be considered. The bid will be awarded to one BIDDER only to provide the service to institutions in the whole of the Northern Cape.

6.1.6 Bidders are required to indicate whether they own an authorised treatment facility for bio-hazardous waste, such as an incinerator. Should the bidder not be the owner such a treatment facility/ incinerator he should at least rent or have a minimum of two (2) service level agreement with any registered authorised treatment facility/incinerators. Copies of such rental agreement/service level agreements should be attached to the bidder's response to this bid.

- 6.1.7 The successful bidder should have a depot based in the Northern Cape should the bidder's treatment facility / incinerator not be located in the Northern Cape Province. The central storage depot(s) should preferably be located in Kimberley and/or any main/major town of the Northern Cape districts.
- 6.1.8 If storage of Health Care Risk Waste is going to be done, whether in the Northern Cape or not, it will be required from the Bidder to submit proof of authorization and approval of this site, if currently operational, by the department responsible for Environmental Affairs in the relevant province.
- 6.1.9 If a new storage facility is going to be operated, whether in the Northern Cape or not, all legislation must be adhered to, including, but not limited to National Norms and Standards for the storage of waste. The successful bidder will be allowed one month, after its appointment, to provide proof that an application has been submitted to the relevant competent authority and a total of three months, after the date of appointment of the Health Care Risk Waste service provider (the successful Bidder) to obtain the relevant authorization or approval of the site.
- 6.1.10 In both cases, as described above, no storage of any Health Care Risk Waste will be allowed in the Northern Cape or outside this province prior to the site being approved and the relevant authorizations being received. Copies of these documents should be availed to the Department as soon as possible.
- 6.1.11 The Bidder should indicate the physical address of its existing depot in the Northern Cape. If the bidder does not have a depot(s) in the Northern Cape, one month's grace will be provided to secure a rental contract for such a facility in Kimberley or one of the main towns of the Northern Cape Districts. A copy of the contract must be submitted to the Department.
- 6.1.12 The depot and storage facility can be on the same premises or not. The depot may also incorporate the storage facility or not. The depot may include offices, storage facilities for empty, clean or unused containers, storage facilities for vehicles,

clothing, equipment, etc. The storage facility, as discussed above, will mainly be utilized to store Health Care Risk Waste, for very short periods, prior to treatment. See section on "Handling and Storage of Waste" for maximum storage times. Other activities which should be conducted at the approved storage facility and not at the depot itself, if these two are separate, are the washing and disinfecting of reusable containers and of vehicles

The contract will be provided to one CONTRACTOR.

## **7. The contract shall be for a period of three (3) years**

### **7.1 Applicable Documents**

The onus rest with the perspective CONTRACTOR to avail himself of the following documents, which form part of the specifications. All documents shall be the latest edition or version and include the latest amendments

- National Environmental Management Waste Act, 59 of 2008
- National Environmental Management Air Quality Act, 39 of 2004
- National Environmental Management Act, 107 of 1998
- National Norms and Standards for the Storage of Waste, 29 of 2013
- National Road Traffic Act, 93 of 1996
- Northern Cape Department of Health Policy on health care waste management
- Northern Cape Department of Health Procedure for health care risk waste management
- Northern Cape Department of Health standard operating procedure for community health care (Home based care) waste management
- Northern Cape Department of Health, health care waste management plan
- Northern Cape Department of Health Policy on Safety, Health, Environment and Quality
- Northern Cape Department of Health Policy on Disposal of Medicines and Schedule substances
- Gauteng health care waste management regulations, 2004

- Department of Water Affairs and Forestry, Minimum requirements for the handling, classification and disposal of hazardous waste (third edition)
- Code of practice for the management and disposal of non-nuclear radioactive waste, WSCP91—1, May 1998.
- Occupational Health and Safety Act, No 85 of 1993 and Regulations and Procedures
- Hazardous Substance Act No 15 of 1973
- National Health Act , 2003, no 61 of 2003
- Human Tissue Act , No 65 of 1983
- Act and Regulations controlling public health
- State, Municipal and other authorities' laws and regulations controlling water pollution and environmental control ( i.e. Water Act , no 54 of 1956 and Environment Conservation Act, No 73 of 1989,
- World Health Organisation – Safe management of waste from health care activities
- SANS 10248- 1:2008 – Management of Health Care Waste. Part 1 : Management of health Care Risk Waste Form health care facilities
- SANS 10248-1:2008 – Management of Health Care Waste
- SANS 452 Reusable and non-reusable sharps containers
- SANS 1518, Transport of Dangerous Goods- Design, Construction, testing, approval and maintenance for road vehicles and portable tanks.
- SANS 10228, Identification and Classification of dangerous goods for transport
- SANS 10229-1 Transport of Dangerous Goods – Packaging and large packaging from rail and road transport- Part 1: Packaging
- SANS 10231, Transport of Dangerous Goods-Operational requirements for road vehicles
- SANS 0232-3, Transport of Dangerous Goods- Emergency Information System
- SANS 10233(SABS0233) Transportation of dangerous Goods – Intermediate Bulk Containers
- Guidelines for Chief Air Pollution Officer Process No 30 by Department of Environmental Affairs and Tourism

- Medicines and Related Substances Control Act No 101 of 1965
- **Annexure A** : List of Institutions, estimated quantities waste and the frequencies of collection of waste

## 8. The Facilities

- 8.1 The Facilities to be serviced by the CONTRACTOR under this Contract are hospitals, Community Health Centres, clinics, and Pharmacies/dispensaries together with other minor generators of Waste in the Province, operated by the Northern Cape Department of Health. The CONTRACTOR shall service all Facilities which are included in the List of Facilities. **The List of Facilities is presented in Annexure A [List of Health Care Facilities and Forensic Pathology Mortuaries].** The CONTRACTOR will throughout the Contract Period have exclusive right for the supply of all Disposable and/or reusable Containers used for Waste as well as the collection and treatment of Waste generated by any of the Facilities presented in the List of Facilities, or any amended list as allowed for hereafter
- 8.2 Where new Facilities are commissioned or where existing Facilities are shut down, the List of Facilities can be amended by the Department during the Contract Period. The Department shall give the CONTRACTOR written notice of any amendments to the List of Facilities. The CONTRACTOR shall upon receiving such notice, liaise with Facilities added to the list and arrange with the Department and the Facility for the commencement of Services at that Facility. The CONTRACTOR shall in consultation with the Department and the Facility terminate its Services to Facilities that may be removed from the list.

## 9. The Waste

- 9.1 Waste shall, for the purpose of this Contract, be considered to include:

- General Infectious Waste;
- Sharps Waste;
- Pathological waste;
- Isolation waste



- Pharmaceutical waste
- Chemical Waste;

Extraordinary Items.

9.2 For the purpose of this contract will waste with a reading of less than 74bq not be considered as radioactive waste and therefore fall in the scope of the contract. Cytotoxic waste removal will therefore be included in this contract.

## **10. General Infectious Waste**

General Infectious Waste includes HCRW, other than Sharps Waste and Pathological Waste, which is suspected to contain pathogens and normally causes, or significantly contributes to the cause of increased morbidity or mortality of human beings. It *inter alia* includes items such as blood, contaminated dressings, contaminated diapers or any other disposable items suspected of being infectious.

## **11. Sharps Waste**

11.1 Sharps Waste includes any device having acute rigid corners, edges, or protuberances capable of cutting or piercing, including, but not limited to, all of the following:

- Hypodermic needles, syringes, blades, and needles with or without attached tubing; and
- Broken glass items, such as Pasteur pipettes and blood vials contaminated with infectious materials.

11.2 Sharps Waste will be containerized in Sharps Containers by the respective Facilities, prior to it being removed from the Facilities by the CONTRACTOR.

## **12. Anatomical/Pathological Waste**

Anatomical/Pathological Waste includes tissues, organs, body parts, human foetuses, blood and body fluids, but excludes hair and nails.

### **13. Isolation Waste**

Means waste containing discarded materials contaminated with excretion, exudates, or secretions from humans or animals who or which are required to be isolated in order to protect others from highly communicable or zoonotic diseases.

### **14. Chemical Waste**

Chemical Waste includes expired pharmaceuticals from pharmacies at the Facilities, waste from oncological wards, cytotoxic waste, and other chemical waste generated at the Facilities. Chemical Waste includes liquids and solids and can include flammable substances.

The laboratories at the Hospitals handle their own Chemical Waste, and such Chemical Waste is therefore not forming part of this Contract.

### **15. Extraordinary Items**

The Facilities may from time to time generate large waste items that cannot be containerized and that are suspected of being infectious or that would contain hazardous chemicals. The exact nature of these items cannot be defined upfront but it can include contaminated mattresses and mercury containing items like fluorescent tubes.

### **16. Waste Segregation and Containerization**

#### **16.1 Sharps Waste**

Sharps Waste will be containerized in disposable Sharps Containers by the staff at the Facilities prior to the CONTRACTOR assuming responsibility for the Waste. Facility staff shall ensure that waste is easily traceable by means of correct labelling on the sharps waste container through means of writing facility name, health care practitioner's name, ward, date of removal from the point of source.

## **16.2 General Infectious Waste**

General Infectious Waste will be collected in liners and containerized in the Containers by the Facility staff prior to the CONTRACTOR assuming responsibility for the Waste. Facility staff shall ensure that waste is easily traceable by means of correct labelling on the container, box or plastic through means of writing facility name, health care practitioner's name, ward, date of removal from the point of source.

## **16.3 Anatomical/Pathological Waste**

The CONTRACTOR shall ensure that Containers with Pathological Waste shall be clearly identifiable. Pathological Waste will be containerized by the Facility staff. Pathological Waste shall be removed from the Facility in a clearly identifiable tamper proof Container. Facility staff shall further ensure that Pathological Waste containers are clearly identifiable in order to allow the CONTRACTOR to select appropriate means of treatment and disposal. Facility staff shall ensure that waste is easily traceable by means of correct labelling on the container through means of writing facility name, health care practitioner's name, ward, date of removal from the point of source.

## **16.4 Isolation Waste**

All Isolation waste must be double bagged and sealed with red tape, the colour coding for isolation waste container shall be red and labelled with the words "DANGER- HIGHLY INFECTIOUS". Facility staff shall ensure that waste is easily traceable by means of correct labelling on the container, box or plastic through means of writing facility name, health care practitioner's name, ward, date of removal from the point of source. The contractor shall use appropriate protective clothing when collecting and disposing Isolation waste.

## **16.5 Chemical Waste**

The CONTRACTOR shall ensure that Containers containing Chemical Waste shall be clearly identifiable. In General Chemical Waste shall be placed at the Waste Collection Point by the Facility staff in Container(s) marked as Chemical Waste

## **16.6 Pharmaceutical Waste**

16.6.1 Pharmaceutical waste will be segregated, containerized and clearly marked according to Scheduled Substances categories as prescribed under Section 22A of Medicines and Related Substances Control Act, Act 101 of 1965, thereby enabling the CONTRACTOR to comply with the legislated requirements during the handling, treatment and disposal of Chemical Waste.

16.6.2 Special precautions as defined in the Medicines Control Council guidelines must be taken into consideration for the containment of pharmaceutical waste consisting of unused, expired or contaminated medicines to prevent theft and the illegal distribution of such.

16.6.3 Prescribed process for the removal of medicine by the Contractor (Schedule 1-Schedule 4);

- 1) The contracted company shall be contacted to collect expired medication from the pharmacy
- 2) A pharmacist plus a witness must witness the removal from the stock as authorised for destruction;
- 3) A manifest document must be issued by the waste removal company, after weighing the expired stock, as proof of the expired stock uplifted.
- 4) All the collected stock must be correctly labelled on the container for easy tracking purposes, Name of the pharmacist present during removal, facility name, and date of removal must all appear clearly on the container.

16.6.4 Prescribed process for the destruction of the Schedule 5, Schedule 6 and Schedule 7 medication:

- a) The responsible pharmacist should first obtain approval in writing, for destruction from a person duly authorised by the Director General: Health.
- b) The request must be made on the institution letterhead stating the following details:
  - 1) Name, quantity, strength, batch number (if applicable) and dosage form of the medicine and scheduled substances;
  - 2) The date of expiry of the medicines and schedule substances;
  - 3) The name of the pharmacist employed by the Contractor, authorised by the Director General: Health shall witness the destruction.
  - 4) Permission must be granted in writing before the medication can be prepared for destruction;
  - 5) The board of survey or condemning committee must authorise the destruction of the medicine;
  - 6) The responsible pharmacist must make all the necessary arrangements with the pharmacist employed by the contractor, or SAP to witness the destruction;
  - 7) The contracted company must be contacted to collect the expired medication from the pharmacy.
  - 8) A manifest document shall be issued by the Contractor, after weighing the expired stock, as proof of expired stock collected.
  - 9) Once permission has been granted by the Director General: Health and the board of survey, the medicine can be destroyed in the presence of the of an inspector, an officer of the South African Police Service or any other authorised person by the Director General e.g the pharmacist employed by the Contractor as authorised.
  - 10) Such person or officers, shall issue a certificate or in case of the police a case number, confirming the destruction of medicine.
  - 11) The destruction certificates must be completed with all the relevant disposal documents to ensure an audit trail at all times. All records must be kept for period of five years.

16.6.5 Facility staff shall ensure that Chemical Waste is safely wrapped, bottled or otherwise contained, before placing it in the Container. Facility staff shall ensure that Chemical Waste is labelled with identification of the substance, in order to allow the CONTRACTOR to select appropriate means of treatment and disposal.

**16.6.6 Expired pharmaceuticals may already have been accumulated at some Facilities at the Commencement of Services Date. The CONTRACTOR shall collect, transport, treat and dispose of all accumulated pharmaceuticals within the first 12 months of the Services Period.**

## **17. Extraordinary Items**

Containerization of Extraordinary Items shall be arranged between the Facility and the CONTRACTOR, whenever Extraordinary Items are generated.

## **18. Supply of Containers**

18.1 The CONTRACTOR shall as part of its obligations, throughout the Services Period, supply and distribute Containers for each of the Facilities. Containers shall include the following:

- Sharps Containers, including containers for long sharps;
- Containers for Pathological Waste;
- Containers for Chemical Waste;
- Red liners for General Infectious Waste, including sealing mechanisms for liner;
- Black liners for General Infectious Waste [option]

18.2 Containers shall be supplied and delivered to the Facilities by the CONTRACTOR, upon the CONTRACTOR receiving an order from the Department's Representative, specifying types and quantities. Containers shall comply with the specifications provided.

## **19. Ownership of Reusable Containers**

- 19.1 The Contractor shall maintain ownership of all reusable containers throughout the Contract Period. In the event of Reusable Containers being lost or severely damaged while in the care of a Facility, the Contractor shall replace such Reusable Container(s) and the Department shall pay to the Contractor the replacement cost thereof.
- 19.2 When Reusable Containers, through the container recording system, are found not to be in circulation or accounted for at any particular Facility where previously delivered, three-monthly audits are to be undertaken. Should the Facility not be able to locate such Reusable Containers, it will be listed as missing and the Contractor will issue the Department with an invoice for the replacement of any such Reusable Containers, with clear reference to the Reusable Container numbers, then to be removed from the Reusable Container asset register. Should such Reusable Containers however at any later stage within the Contract Period be located by the Facility and found to be in a serviceable condition, the Contractor will be required to issue the Department with a credit note for such a container, once again indicating the container number. Such reusable container is then to be reinstated on the Reusable Container asset register.
- 19.3 Inspections for physical damage of Reusable Containers is however to be done each time when responsibility for Containers is transferred between the Contractor and the Facility, i.e. during delivery of empty Reusable Containers and during collection of full Containers. Where a Reusable Container delivered by the Contractor is found to be severely damaged, the Facility has the right to refuse acceptance of such Container, upon which the Contractor is to replace the damaged Reusable Container with an undamaged container. Where damage is however detected by the Contractor at the time when full Reusable Containers are collected, the Facility is to confirm such damage in writing, after which the Contractor is to have the container repaired or replaced, depending on what the most cost effective solution would be. The Contractor is then to invoice the Department accordingly for the repair or replacement of the said container,

providing full details on the Reusable Container number. Should the Reusable Container be replaced, the damaged container is to be delivered to the Facility who will take responsibility for its destruction and disposal, after which the container is to be removed from the Reusable Container asset register.

- 19.4 At the time of expiry of the Contract, or on termination of Contract before its expiry, the Department shall be entitled to (but not required to) take over ownership of all Reusable Containers against payment to the Contractor. Such payment to the Contractor shall be the depreciated value of each Reusable Container, using the tendered Replacement Cost as the initial value, with a linear depreciation over 5 years and a residual value after 5 years of 20% of the Replacement Cost.
- 19.5 Bidders are also referred to Section 18.7 on Remuneration for lost Reusable Containers.

## **20. Maintenance of Reusable Containers**

- 20.1 The Contractor shall ensure that Reusable Containers supplied to the Facilities are at all times suitable for collection and transportation of Waste. Reusable Containers supplied to the Facilities shall be fully functional and without visible cracks or excessive surface wear. All wheels (and brakes where applicable) on Reusable Containers must be fully operational.
- 20.2 The Facilities shall have the right to reject a Reusable Container if it is not properly maintained or properly cleaned and disinfected.
- 20.3 Supply of a Reusable Container which does not comply with these requirements shall constitute a Service Failure.

The Contractor shall be responsible for the maintenance of Reusable Containers that have been severely damaged and for which the Department has paid for the Replacement Cost.



## **21. Managing supply of Reusable Containers**

- 21.1 The Contractor shall at all times ensure that the Facilities have sufficient supply of Reusable Containers. It is the Contractor's responsibility to estimate and monitor each facility's need for reusable containers. Should a Facility experience a shortage in the supply of Reusable Containers, the Contractor will be notified and if the Contractor fails to abate the shortage within 24 hours from the time of notice, it shall constitute a Service Failure.
- 21.2 The Contractor shall deliver Reusable Containers to a storage area nominated by the respective Facilities. Such storage areas could be the Waste Collection Point, provided that provision is made to prevent disinfected containers from becoming contaminated by the presence of full containers.

## **22. Tracking system for Reusable and non-reusable Containers**

- 22.1 The Contractor shall provide an appropriate tracking system to ensure that at any time during the Contract Period records exist of all Reusable and non-reusable Containers in the care of any particular Facility, or alternatively of Reusable Containers delivered to the Treatment Plant.
- 22.2 In order to save time during data recording on delivery of empty containers or during collection and mass recording of full containers, it is a requirement for an electronic identification system to be used, which could either be a bar-coded system, a transponder system or similar approved. Irrespective of the system used, it is to be ensured that all data recorded is verifiable by the HCW Officer or its representative. The requirement of container marking as described below, is however still to be adhered to even though an electronic recording system will be used, for identification by the Facility during internal use where scanners or similar equipment is not available.
- 22.3 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 and durable and shall be resistant

to any tear and wear sustained during the Contract Period. The identification code shall be made up of numbers and/or letters.

- 22.4 The tracking system shall as a minimum ensure that a receipt signed by the Contractor and the Waste Officer, is issued every time Reusable Containers are delivered to a Facility or Collected from a Facility. A copy of the receipt shall be submitted to the Waste Officer, or it's representative, at the time of collection and delivery.
- 22.5 The Contractor shall ensure that the Treatment Plant shall register each Reusable Container at the time when it arrives at the Treatment Plant. The registration shall contain information on the identification code of the Reusable Container, its time of arrival as well as the waste category it contains.
- 22.6 The Treatment Plant shall on a monthly basis issue a certificate stating the identification code of the containers received, the contents Treated and the time of Treatment.
- 22.7 Bidders are further referred to Section 15 on Communication.
- 22.8 All reusable container delivery sheets shall be triplicate carbonized copies or similar approved.

### **23. Disinfection of Reusable Containers**

- 23.1 The Contractor shall ensure that Reusable Containers are washed, disinfected and dried immediately after it has been emptied. Annexure 3 describes the requirements for washing and disinfection of Reusable Containers.
- 23.2 Preference is to be given to automated bin washers that can handle both Type A and Type B Reusable Containers.

## 24. Storage of Reusable Containers

The Contractor shall provide suitable storage facilities at the Treatment Plant for the separate storage of contaminated and disinfected Reusable Containers. The Contractor shall ensure that the storage areas will not allow contamination of disinfected containers 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 to the Reusable Containers by unauthorized persons.

## 25. Distribution of Containers

- 25.1 Except in the case of Large Orders, the CONTRACTOR shall deliver all Containers ordered to the individual Facilities within 2 weeks from receipt of a written order. Failure to do so shall constitute a Service Failure.
- 25.2 A Large Order placed by a Facility can be handled by the CONTRACTOR as a partial order, meaning that delivery can be split into several deliveries, insofar that sufficient supply for daily consumption by the Facility is secured. In the event of an order being handled by the CONTRACTOR as a partial order, the CONTRACTOR shall be responsible to ensure sufficient supply for daily consumption of any item(s) ordered, during the period of a week after receiving a written order, until delivery of that order has been finalized.
- 25.3 The CONTRACTOR shall during Rollout liaise with each Facility to establish acceptable delivery times and locations to which Containers shall be delivered. Should containers be delivered during scheduled Waste collection rounds, the CONTRACTOR will be responsible to ensure that new containers are not contaminated during the transportation and delivery thereof.

## 26. Collection of the Waste

- 26.1 The Facility is responsible for the collection and the internal transport of the containerized Waste, from the wards and units, to the Waste Collection Point.

Collection of waste include health care waste generated at home based care settings where home based health care worker is attached to health care facility of the department. Such waste may include but not limited to 1.5 litre insulin sharps waste container, red plastics for dressing and boxes, 10 litre green container for expired schedule 1 to 4 medicines as prescribed by NCDOH Standard Operating Procedure for Community health care (Home based care) waste management.

- 26.2 The CONTRACTOR shall ensure that no Waste is left unattended between the time when it is removed from the Waste Collection Point and the time when it was delivered to the Treatment Plant.
- 26.3 The CONTRACTOR shall collect Waste from the Facilities in accordance with a Collection Programme. The CONTRACTOR shall notify the affected Facilities and the Department's Representative of changes to the Collection Programme, one week prior to such changes taking effect. The CONTRACTOR shall at all times ensure that the Department's Representative as well as the respective Facilities will be provided with the latest revision of the Collection Programme.
- 26.4 Waste collection rounds shall be undertaken between 8:00 and 15:00 on agreed days of the week. Waste collection outside of the aforesaid hours shall only be permitted if the CONTRACTOR agrees with the Facility in writing, provided also that the Department's Representative has been informed in writing of this agreement.
- 26.5 Any delays of the collections schedule due to unforeseen circumstances such as breakdowns as well as the remedial steps to ensure collection of the waste needs to be communicated to the institutions affected by such occurrences immediately when it happens. The drivers of the trucks therefore must therefore be able to communicate with the institutions concerned as well as the CONTRACTOR's office when such delays are expected.

## **27. Waste Collection Point**

- 27.1 The Waste Collections Point designates the point at each Facility from where the CONTRACTOR takes responsibility for the Waste. The CONTRACTOR shall as part of the Rollout, in cooperation with each Facility, establish the location of the Waste Collection Point(s). Facilities may due to their various sizes have more than one Waste Collection Point.
- 27.2 The Waste Collection Point will generally be a storage room at the Facility, to which Facilities are to deliver the Waste in Containers. The CONTRACTOR shall during the Mobilisation Period liaise with each Facility and establish the location of the Waste Collection Point(s) and make arrangements for Waste collection personnel to gain access to such Waste Collection Points.
- 27.3 The Waste shall become the CONTRACTOR's responsibility once it has been removed from the Waste Collection Point.
- 27.4 The CONTRACTOR shall submit a list, to the Department's Representative of all Waste Collection Points agreed with the Facilities, no later than 2 weeks before Commencement of Services Date. Where any difficulties in terms of access to the proposed Waste Collection Points may have been identified, such problems are to be reported without delay to the Department's Representative in writing.
- 27.5 The CONTRACTOR shall be responsible for removing any waste spillage at the Waste Collection Point that may have been caused by the CONTRACTOR. Failure to immediately clean spillage from the Waste Collection Point shall constitute a Service Failure.
- 27.6 Kimberley and/ or any main/major town in the Northern Cape Districts, depending on the location of the depot (s) will serve as the base point for calculation of distances for collection fees. Bidders are required to suggest the most cost effective routes for collection of health care waste from the institutions

## **28. Weighing of the Waste**

- 28.1 The CONTRACTOR shall provide a suitable scale for weighing of waste at the time of collection from each Facility. An official of the institution where the bio-hazardous waste is collected must be present to verify the weight of the waste collected by the CONTRACTOR and the number of containers provided for collection and co-sign documents that recorded the services rendered.
- 28.2 All scales used for weighing the Waste shall be approved for commercial use, and shall be calibrated by an independent and accredited party. The weighing of the Waste performed at the Facility under the supervision of the Waste Officer shall form part of the basis for payment for the collection, transport, treatment and disposal of Waste

## **29. Recording of Waste Collected**

- 29.1 The CONTRACTOR shall as part of the Services implement a recording system that will form part of the basis for payment of services rendered. For each consignment of Waste collected the CONTRACTOR shall issue a recording sheet containing information on:
- Type (volume), Number and net weight of each Container;
  - Waste categories, i.e. General Infectious Waste, Pathological Waste or Chemical Waste;
  - Time and date of collection;
  - Driver details;
  - Details of Facility representative witnessing Waste collection;
- 29.2 The recording sheet shall be issued in triplicate at the time and place of Waste collection, with each copy signed by the Waste Officer and the CONTRACTOR. One signed copy of the Recording Sheet shall be retained by the Waste Officer before the CONTRACTOR leaves the Facility.

- 29.3 The CONTRACTOR shall record the collection and Treatment of Waste from each Pathological Waste container, after which a report is to be issued to certify Treatment of such Pathological Waste. The aforesaid report is then to be submitted to the Waste Officer at that Facility, before the end of the calendar month in which the Waste was treated.
- 29.4 All waste collection recording sheets shall be triplicate carbonized copies or similar approved.

### **30. Transport**

#### **30.1 Requirements for transportation**

- 30.1.1 The CONTRACTOR shall transport all Waste from the Waste Collection Points at the Facilities to the Treatment Plant.
- 30.1.2 The CONTRACTOR shall at all times observe the required health and safety measures and shall avoid spillage of Waste. In the event of spillage occurring, it shall immediately be removed by the CONTRACTOR. Failure to remove any spillage immediately shall constitute a Service Failure.
- 30.1.3 The CONTRACTOR shall, when transporting both new and filled Containers in the same vehicle, ensure that the new Containers do not become contaminated through contact with filled Containers.
- 30.1.4 All Waste Vehicles shall comply to meet the standards laid down by the National Road Traffic Act (Act 93 of 1996), as well as any other necessary requirements.
- 30.1.5 Access to the Waste Vehicle's loading compartment shall be safe and unobstructed, thus ensuring easy access for the CONTRACTOR's staff.
- 30.1.6 Storage compartments on Waste Vehicles shall not have any holes or openings that could result in leaking of liquids that may accidentally have spilt from containers. The interior surface of the Waste Vehicle's storage compartment shall be smooth, seamless and rust free. The internal finish of the storage compartment

shall further allow for easy cleaning, e.g. angles shall be rounded and surfaces shall be smooth, without any material joints creating the opportunity for dirt collection. All vehicles shall have a tight-fitting, leak-proof door enclosing the loading area. All vehicles must display the bio-hazardous logo and have communication available with the CONTRACTOR's head office and the destination point(s). Trem Cards must be displayed on the vehicles

30.1.7 All vehicles must be equipped with a tracking system to ensure that the vehicles can be tracked in the case of theft and hijacking.

30.1.8 There shall be a bulkhead between the driver's cabin and load compartment, designed to retain the load, in order to protect the driver, should the vehicle be involved in an accident.

30.1.9 There shall be a suitable method for fastening the closed Containers, thus reducing the risk of spills and ensuring that there is no sudden movement of the Waste.

30.1.10 All Waste Vehicles shall be equipped with emergency equipment required. This equipment shall as a minimum include spill kits containing all personal protective equipment like masks, gloves and overalls, as well as folded Waste containers, brooms, scoops and disinfectants, together with fire extinguishers. The staff shall be familiar with the emergency procedures whilst also trained in the effective use of such emergency equipment. The CONTRACTOR shall ensure that access to loaded vehicles is restricted.

### **31. Treatment of the Waste**

31.1 The objective of Treating Waste 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 humans.



- 31.2 The Treatment of Waste shall further prevent any intentional or unintentional reuse of objects such as syringes, sharps etc. by completely or partly destroying these objects and rendering it harmless to humans.
- 31.3 The CONTRACTOR shall treat the Waste from all Facilities in the Province in accordance with the statutory and regulatory provisions.
- 31.4 The CONTRACTOR shall obtain list of email address of each facility manager and ensure electronically or manual distribution of treatment certificate to each facility.
- 31.5 The CONTRACTOR shall obtain a treatment certificate from the operator of the treatment plant and provide it to the department. The date, time of treatment and mass of the waste treated shall be indicated of the certificate. The certificates must forwarded to:

The Department of Health

Private Bag X 5049

KIMBERLEY

Attention: Sub-directorate Environmental Health.

## **32. Requirements for Treatment**

- 32.1 Treatment is not required for Chemical Waste, if it is disposed of at a hazardous waste landfill in accordance with the regulatory framework that guides processes of this nature.
- 32.2 Waste other than Pathological Waste and Chemical Waste, shall be treated by means of either Controlled Combustion Treatment or Non-Combustion Treatment.

32.3 Pathological Waste shall only be treated by means of Incineration Treatment.

### **33. Handling and Storing of Waste.**

33.1 The CONTRACTOR shall use a hydraulic device for unloading the Containers at the Treatment Plant. The procedures and equipment for unloading the Waste shall be designed to minimize the manual handling required.

33.2 The CONTRACTOR shall secure the use of cold storage facilities suitable for the storage of Waste until the waste is being transported to the treatment plants/incinerators. Waste should be stored for a maximum period of forty-eight (48) hours and pathological waste should be kept frozen

33.3 The CONTRACTOR shall be responsible for the disposal of all Residues from the Treatment of Waste. The Residues shall be disposed of in accordance with the Statutory and Regulatory requirements.

33.4 The method of transportation of the Residues selected by the CONTRACTOR shall be compatible with the type of Residues generated to ensure that no danger, nuisance or inconvenience is caused to people at or near the Treatment Plant, along any of the transportation routes or at the landfill site used for disposal of the Residues. The CONTRACTOR shall ensure that the transportation and disposal of the Residues is conducted in accordance with Good Engineering and Operating Practices.

**The CONTRACTOR shall meet all costs associated with the transportation and disposal of the Residues.**

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

## **34. Communications**

### **34.1 Meetings**

34.1.1 Weekly Project Meetings will be held between the Department's Representative and the Contractor during the first month of the contract, where after the meetings between the Department's Representative and the Contractor will be held monthly (or as agreed) for the remainder of the Contract Period.

34.1.2 The Contractor shall at all meetings be represented by persons suitable qualified and authorised to make commitments and enter into agreements on behalf of the Contractor. If the Contractor fails to attend or be appropriately represented at these meetings it shall constitute a Service Failure.

## **35. Reporting**

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

- Monthly Reports;
- Incident Reports;

### **35.2 Monthly Report**

35.2.1 The Contractor shall prepare and issue a Monthly Report, which shall be submitted electronically to the Department and to the Department's Representative as well as a hard copy by courier/mail to the same. In case of deviations between these two versions, the hard copy submitted by courier/mail shall prevail.

35.2.2 Each Monthly Report during the Services Period shall cover one Month, and start on the 1st day of such month.

35.2.3 In any event each Monthly Report shall inter alia include:

1. A record of the Disposable Containers delivered with information about type and quantity for each Facility;
2. A record of Reusable Containers delivered with information about type and quantity for each Facility;
3. A record of the Waste collected with information on weight and volume for each category of Waste collected from the various Facilities, as well as the destination of such Waste;
4. Advice on problems encountered specifically as they relate to the standards and quality of Services;
5. Advice and directives required from the Department and/or the Department's Representative;
6. A summary of incident reports submitted during the previous month, as well as the measures taken to rectify the situation and to prevent a reoccurrence of such incidents;
7. Any health and safety matters;
8. Any environmental matters.
9. Operational failures by the Department e.g. late payment.
10. Operational failures by the institutions e.g. overloading of containers

35.2.4 A summary of the particular month's invoices rendered to the participating institutions shall be part of the monthly report. The monthly report shall reach the Department not later than the 7<sup>th</sup> of the month following the month on which is reported on.

## **36. Incident Report**

- 36.1 Incident reports shall be issued by the Contractor to the Department's Representative in the event of any emergency leading to accumulation of Waste at any Facility or Treatment Plant, other events that affect the obligations of the Contractor or the Department under this Contract, as well as health and safety related incidents.

- 36.2 The contents of incident reports cannot be foreseen at this stage but the purpose of each incident report shall be to keep the Department's Representative fully updated and informed of all activities and actions concerning the emergency. Incidents reports will further be used for immediate and detailed reporting on any accidents that impacted on the health and safety of people, as well as environmental situations that created a risk of pollution.
- 36.3 Incident reports shall be forwarded in electronic form to the Department's Representative by no later than noon of the day following the day of the incident, with hard copies formally submitted within 7 days thereafter.

### **37. Inspections**

- 37.1 The Contractor shall at all times provide the Department's Representative and/or any Waste Officer, with adequate and prompt assistance in the execution of their duties of monitoring and inspecting the Service delivery. To this end experienced personnel shall be available on request to assist the Department's Representative and/or (Environmental Health Practitioner) Waste Officer. The Contractor shall also provide the Department's Representative or any Waste Officer, with safe access for inspection of any location or vehicle used by the Contractor to render the Services.
- 37.2 The Department's Representative as well as the (Environmental Health Practitioner) Waste Officers shall act reasonably and coordinate their activities with the Contractors routine wherever appropriate and possible.

### **38. Backup Arrangements**

- 37.1 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 processing Waste at the Treatment Plant due to the occurrence of an Unplanned Outage, then the Contractor shall invoke the backup arrangements in the period from the date of commencement of the Unplanned Outage until the date and time of cessation of such Unplanned Outage.

38.2 The backup arrangements shall ensure that Waste is stored in a manner avoiding odour problems as well as health and safety hazards and in accordance with the Necessary Consents, by:

1. Procuring the use of cold storage facilities that are suitable for the storage of Waste, with the purpose of storing the Waste until the cessation of the Unplanned Outage, or by;
2. Procuring the use of an alternative treatment facility until the cessation of the Unplanned Outage.

38.3 An Unplanned Outage with a duration exceeding 2 weeks will be considered to be a Service Failure. An Unplanned Outage occurring less than 3 months after the previous Unplanned Outage shall constitute a Service Failure regardless of the duration of such Unplanned Outage.

38.4 The Contractor shall further prevent a backlog in the supply and delivery of Reusable and Disposable Containers, as well as prevent a build-up of Waste at any of the Facilities, due to unforeseen breakage of Waste collection vehicles, by:

1. Ensuring access to and securing the use of additional Waste collection vehicles that are in compliance with these Specifications;

Increasing the container delivery and Waste collection shifts to the extent that all deliveries and collection is in accordance with the approved schedule, provided that this arrangement is conveyed to and agreed by the Facilities to ensure the availability of staff at the Facilities for the verification of containers delivered and Waste collected.

38.5 The availability of backup Waste vehicles during routine maintenance of the Waste Collection fleet would not be considered justification by the Contractor for requesting increased Waste collection shifts from the Facilities.

38.6 Labour unrest or strikes shall not be considered to be reason for any shortage in the delivery of reusable and disposable containers, or any build-up of Waste at the

Facilities, or alternatively any backlog in the treatment of Waste at the Treatment Facility.

- 38.7 The cost of making the required backup arrangements and facilities available is to be included in the unit price for the collection and treatment of HCRW and the Department will not be liable for any additional payments resulting from the provision, implementation or use of backup arrangements or facilities.

### **39. Health and Safety**

- 39.1 The Contractor is to familiarize itself and comply with all safety regulations and statutes governing HCW management activities. The safety of the Contractor's personnel, its subcontractor's personnel, as well as that of Facility staff members or members of the public affected by the execution of the Services, shall be the sole responsibility of the Contractor.
- 39.2 The Contractor is to submit copies of its operational health and safety plan that shall be designed to ensure the health and safety of any persons involved in or affected by the management of Waste. The Contractor will be liable for any damage to property or injury to the Contractor's personnel, personnel from other contractors, Facility staff members or members of the public, resulting from any activities related to the collection and removal of Waste from Facilities by the Contractor. General compliance with the stipulations of the Occupational Health and Safety Act and Regulations (Act 85 of 1993), and in particular with Section 37 (2), will be required throughout the Contract Period.
- 39.3 The Contractor shall in its Health and Safety Plan describe the vaccination programme that is implemented for all workers, as well as the antiretroviral treatment that will be available to workers in the event of needle stick injuries. Daily records of the Contractor's, employees Waste handling operations should be kept and all occupational health and safety incidents that may have been experienced during the day is to be reported, particularly with respect to any needle stick injuries or other abrasions of the skin.

- 39.4 The Contractor shall ensure that all employees and subcontractor's employees (whether permanent or temporary) are adequately insured. No untrained persons shall be allowed to carry out any work under this Contract.

#### **40. Training and Consultancy Support**

- 40.1 The CONTRACTOR shall in its interface with the Facilities provide a Training Programme and consultancy support, with the purpose of enhancing safe and effective handling and management of the HCW. The Training Programme shall enhance the skills and knowledge of the trainees with regard to the handling and management of HCW. A trainer shall have a background of occupational health and safety, environmental science, spill management or infection prevention and control. Health Welfare Sector Education and Training Authority (HWSETA) Accredited Training programme or registered with any other SETA which will also be endorsed by the Health Profession Council of South Africa (HPCSA) for CPD points will be provided on request to the Department at any time during the contract period.

##### **40.2 Qualifications for Trainers**

- 1) Experience in the design of training programmes;
- 2) Experience in the design and production of training materials and presentation;
- 3) Experience of performance evaluation;
- 4) Have minimum of 3 years in the field of health care waste management, Spill management, Infection prevention and control, occupational health and safety or quality assurance;
- 5) Ability to work in English or any of the other 11 official South African languages

##### **40.3 The training programme shall contain but not limited to the following;**

- 1) Methodology of the training;
- 2) Programme for the training session;
- 3) Examples of all training materials to be used by the service provider;
- 4) Pre and post evaluation forms;



5) Attendance verification.

40.4 The Contractor will be required to consult with the Department's Representative to arrange an information session for guidance and assistance on the training materials and methods applied. Training programme will be coordinated from Environmental Health Unit (Waste management Coordinator) at Department of Health provincial office. Provincial office (Environmental Health unit) will communicate training schedules to district and health care facilities ensuring appropriate logistics are adhered to.

**41. Indemnity**

41.1 The Contractor shall be liable for and hereby indemnifies the Department against:

Any and all statutory and/or civil legal action and/or the Contractor's employees and/or agents, under any and all circumstances.

41.2 Any and all litigation resulting from non-compliance by the Contractor and/or the Contractor's employees and/or agents and/or suppliers of containers and materials with the standards, laws and Regulations applicable to this tender and/or these tender's specifications, under any and all circumstances.

41.3 Any damage to the Department's property whether movable or immovable, including any loss directly flowing from damage to such property or any act of omission on the part of the Contractor or its employees or any damage arising from the use and occupation of the Department's property by the Contractor;

41.4 Legal liability in respect of any claims, which may be made against the Department arising out of damage to property, whether movable or immovable, of any third parties, including any damage directly or indirectly flowing from any act or omission on the part of the Contractor and management and allocated staff or any damage arising from the use and occupation of the Department's property.

- 41.5 Legal liability claims in respect of the death, injury or illness of any person, including employees of the Department or their dependants or loss flowing there from or arising from anything done or omitted by the Contractor and management and allocated staff employees or any damage while using or occupying the Department's property.

## **42. CONTRACTOR'S EMPLOYEES**

- 42.1 The Bid must submit a list of all the employees who will be involved in the delivery of this service. Should any new or alternate employees be employed during the tenure of the contract, such employee details must be submitted to the Department before the site is visited
- 42.2 The contractor shall adequately provide his employees with all the necessary tools/equipment and consumable requirements necessary to render the services covered under the contract.
- 42.3 The contractor and his employee shall at all times comply with and in no way attempt to circumvent or degrade the security arrangements in force at department's institutions. Neither the contractor nor his/her employees will be indemnified from prosecution arising from their non-compliance with security arrangement in place. The contractor and his/her employees shall at all times have lawful respect for the property of the department and for traffic rules and signs on the premises.
- 42.4 The Department may request the contractor to remove or cause to be removed any of the contractor's service personnel from the Department's premises for reasons which, in the opinion of the Department, are in the interest of best satisfying the contract.

42.5 All members of the Contractor's employees shall, while on the Department's premises, wear adequate protective wear required for the executive of their duties.

42.6 All members of the contract's employees shall, while on the Department's premises, carry an identity card acceptable to the Department.

#### **43. CONTRACTOR'S VEHICLES**

43.1 All vehicles used in the execution of this service shall be those stated in the questionnaire. Should any new or alternate vehicle be used during the tenure of the tenure of the contract, such vehicle details must be submitted to the Department before the site is visited.

43.2 A copy of the registration certificate of vehicles that will be used for the purpose of the contract must be submitted at the closing date of this tender.

43.3 Should the Bid not be the owner of such vehicle then the owner must submit a declaration that he/she gives permission to the Bid to use such vehicle for the purpose of the contract.

43.4 All vehicles used in the execution of this service shall be fully roadworthy, licensed and suitable for the execution of services covered under the contract.

#### **44. RATES: CHARGES, PRICE ADJUSTMENTS & PAYMENT**

##### **44.1 CHARGES**

44.1.1 The service charges incurred by the Department under the contract shall be those stated in the pricing schedule (NCT7-forms) only.

NB: All charges shall be inclusive of VAT.

NB: All delivery, installation, commissioning and/or railrage costs, customs, import duties, etc. and surcharge must be included in the tender price

44.1.2 For the purpose of this tender all charges for rate per kilometre will be calculated from Kimberley or any other main/major town in the Northern Cape Districts.

#### **45. PRICE ADJUSTMENTS**

- 45.1 The department will consider a price adjustment on a annual basis only after twelve months in operation. The contractor must submit a written application three month prior to the required month of increase. Price adjustment will be limited to inflation rate of the existing price. A higher price increase will only be considered if it can be substantiated applicable figures.
- 45.2 If payment has been affected in respect of any service not satisfactorily carried out, the contract shall reimburse the institution for the full amount of the invoice.
- 45.3 A separate account/ invoice shall be rendered to the Head of each Institution concerned.
- 45.4 Each invoice must bear the tender number and a copy of the Service Report Form must be attached to the invoice.
- 45.5 The Heads of the Institutions concerned, agrees to make timeous payments on receipt of the specified invoices, normally within 30 days after receipt of the said invoices. The Contractor must report any undue delay of payment in writing to the Head of the Institution concerned. If the problem regarding the delay of payment cannot be resolved, the Contractor shall submit a written report to the Deputy Director-General.

#### **46. Resolution of Disputes**

- 46.1 Should any difference or dispute at any time arise which the parties are unable to resolve amicably, whether in regard to the meaning or effect of any term of this agreement, or implementation of any parties obligation under this agreement, or any matter arising from or incidental to it, within seven (7) working days of either

party notifying the other party of the dispute, then in the event, such difference or dispute shall be submitted to arbitration with following provisions.

- 46.2 The arbitration shall be held on an informal basis, it being the intention that decision should be reached expeditiously and inexpensively as possible, subject to the due observance of the principals of Justice.
- 46.3 Failing agreement, an arbitrator will be appointed by the chairman of the Bar of Advocates, Kimberley. The arbitrator shall be a person to be agreed upon between both parties.
- 46.4 The arbitrator shall be entitled to make such an award, including an award for specific performance, an interdict, and damages or otherwise, as the arbitrator in his discretion seems fit and appropriate.
- 46.6 The arbitrator shall at all times have regard to the intentions of the parties underlying the agreement.
- 46.7 Any award shall be final and binding on both the parties and carried into effect.
- 46.8 Each party shall bear his own cost concerning such arbitration.
- 46.9 If no agreement regarding the proposed change can be reached, the party who received notice of the proposed change shall then furnish the other party with three (3) months written notice of his intention to terminate the contract.

#### **47. Handover of Services**

- 47.1 The CONTRACTOR shall liaise with the Department's Representative and the current CONTRACTOR to take over the responsibilities, with the objective of ensuring a smooth and efficient transition of waste removal service
- 47.2 The CONTRACTOR shall during the Handover Period liaise with the Facilities and ensure that available stocks of Containers are no more than one month's normal consumption for each individual Facility.

## 48. Penalties

- 48.1 If a Service Failure occurs, a penalty equal to the amount of one percent (1%) of the monthly amount during which the service failure occurred.

Table defines Service Failure but not limited to the ones mentioned below;

Service Failure
The Contractor fails to supply a Facility with Disposable Containers that are compliant with the Project Specification, within 2 weeks of the Contractor receiving an order for such Disposable Containers.
The Contractor fails to supply a Facility with Reusable Containers, within 2 weeks of the Facility or District having notified in writing the Contractor of a shortage of Reusable Containers.
The Contractor supplies a Facility with a Reusable Container that is not in compliance with the Specifications for Reusable Containers.
The Contractor supplies a Facility with a Reusable Container that is not washed and disinfected in compliance with the Requirements for Washing and Disinfecting Reusable Containers.
The Contractor fails to <u>immediately</u> remove a spillage caused by the contractor's staff at a Waste Collection or loading Point.
The Contractor without prior to agreed arrangement fails to remove Waste from the Waste Collection Points on the days as per program submitted by the contractor.
The Contractor Fails to deliver Waste to the Treatment Plant within 48 hours after it has been stored in the depot.
The Contractor fails to <u>immediately</u> remove a spillage that occurred during transportation of Waste.
The Contractor fails to attend or be appropriately represented at a project meetings.

- 48.2 Penalties for Service Failures will be instigated by the HCW Officer of the Facility affected by the Service Failure. Where the Contractor believes that the Service Failure for which he / she is penalized was as a result of circumstances or conditions beyond his / her control, a written submission can be made to the Department's Representative. Having investigated the matter, the Department's Representative will make a ruling on the matter as to whether the penalty will be upheld, or whether it is to be waived. Should the Contractor not be satisfied with the ruling of the Department's Representative, the Contractor has the right to take further action for dispute resolution as allowed for in the General Conditions of Tender, Contract and Order.

## **Annexure A**

### **SPECIFICATION FOR DISPOSABLE CONTAINERS**

Although Bidders are allowed to submit indicative samples and are not required to submit actual prototypes of the Disposable Containers at the time of Bid, such samples will be used for verification of features and quality standards until such time that actual prototypes are submitted for approval after award of Contracts to successful Bidders.

#### **A1.1: 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 Sharps Containers to be made available to the Facilities, leaving it up to the respective Facilities to make a decision on the type of container that would best meet their particular needs.

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 following requirements are to be met in the supply of Sharps Containers:

##### **A1.1.1 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 Facilities:
  - (a) Type A: 1-4 litre sharps container;
  - (b) Type B: 4-8 litre sharps container;
  - (c) Type C: 8-15 litre sharps container;
  - (d) Type D: 15-25 litre sharps container;



- (e) Type E: Tall slim sharps container with a minimum height of 600 mm and capacity of between 5 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.

#### **A1.1.2 Material to be Used in Manufacturing of Sharps Containers.**

- 1. Sharps Containers must be manufactured from polypropylene (PP) or alternatively polyethylene (PE);
- 2. The material shall be puncture resistant as per the SANS Code 10248 Sharps Container requirements;
- 3. Ink colours and dies must be free of heavy metal.;

#### **A1.1.3 Sharps Container design requirements.**

- 1. Sharps Containers shall be rigid, puncture resistant, leak resistant, tamper proof and clearly marked as described below;
- 2. The required colour coding for Sharps Containers is yellow in accordance with SANS 0248.
- 3. Parts of the Sharps Container shall 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;
- 4. Sharps Containers shall be designed to allow for disposal of needle and syringe as one unit;
- 5. 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;
- 6. Sharps Containers shall be designed to avoid overfilling and protruding sharps;

7. Sharps Containers shall in their dimensions facilitate best possible usage of the available volume, i.e., rectangular plan cross section for parallel packed placing of syringes and other sharps are preferred to circular or oval plan cross sections;
8. Sharps Containers shall allow for nesting in the unassembled state for effective transport and storage of empty containers;
9. 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;
10. The outer dimensions of the Sharps Containers shall be compatible with the inner dimensions of the Reusable Containers to ensure effective modular storage and easy release of Sharps Containers from reusable 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 (a) lid and (b) opening closure of a Sharps Container shall ensure that the lid and opening closure cannot be released after installation and sealing respectively through the introduction of a non-reversible sealing design;
13. Types D and E Sharps Containers shall be equipped with a foldaway handle for safe handling and transport of containers;
14. The mechanical stability of the empty as well as full Sharps Containers, when standing and whilst being moved or transported, shall be ensured for all Sharps Containers, with the exception of the Type E containers for which this requirement will only apply when standing 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.

#### A1.1.4 Sharp Container Markings

1. Labels on the Sharps Containers will 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 (WHO), together with the text "Infectious Sharps for Destruction" or similar text clearly readable and identifiable with a font set suitable for the type and size of the container;
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 official South African languages;
6. Sharps Containers shall be equipped with a maximum filling line that protects against overfilling. The placement of the max fill line shall as a minimum be 35-mm below the level of the aperture of the container;
7. The sizes of hazard labelling shall be as specified in SANS 0248:

Net volume of containers (litre)	Minimum Label Size (mm)
≤ 0,5	15 x 15
> 0,5 but ≤ 5	20 x 20
> 5 but ≤ 20	30 x 30
> 20	100 x 100

**A1.1.5 Quality control requirements.**

1. Sharps Containers shall be able to pass a drop test in accordance with United Nations Recommendations on the Transport of Dangerous Goods, Chapter 6 with particular reference to paragraphs 6.1.5.3 to 6.1.5.6. The Contractor shall verify this by submitting to the Department's Representative a report on the said drop test, carried out by an independent institution like the CSIR and SABS.

**A1.2: Specican/specibin Containers**

Different applications and rates of Waste generation, will require that a range of Specican/specibin Containers be made available to the Facilities, leaving it up to the Facilities 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 Waste generated in hospitals and clinics is high, resulting in a need for Specican/specibin 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 Waste previously disposed off.

The following requirements are to be met in the supply of Specican/specibin Containers:

**A1.2.1 Range of Specican/specibin Containers required.**

1. The following generic types of Specican/specibin 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 Specican/specibin Container;
  - (b) Type G: 15-25 litre Specican/specibin Container;
  - (c) Type H: 40-70 litre sealable isolation ward container suitable for all waste from isolation wards as well as certain amputations. Type H containers must

have an opening of at least 800 cm<sup>2</sup> and no side of the aperture may be less than 250 mm should the opening be rectangular/polygonal;

- (d) Type I: 80-100 litre, 650 mm tall, 350 x 400 mm diameter that is suitable for limbs.

#### **A1.2.2 Material to be Used in Manufacturing of Specican/specibin Containers.**

1. Specican/specibin Containers must be manufactured from high-density polyethylene (HDPE), thus being able to withstand temperatures as low as -5° C for cold storage of pathological waste;
2. The material shall be puncture resistant in accordance with the SANS Code 0248;
3. Printing colours and dies must be free of heavy metals;

#### **A1.2.3 Specican/specibin Container design requirements.**

Types D and E Sharps Containers shall be equipped with a foldaway handle for safe handling and transport of containers;

1. Specican/specibin Containers shall be rigid, leak resistant, puncture resistant, tamper proof and clearly marked as described below;
2. Specican/specibin Containers shall be designed to reduce the risk of spillage and ensure that any moisture or liquid is safely contained;
3. Specican/specibin Containers with lids shall be designed so that it has a two-staged closure, with the first stage preventing the emission of odours, but still allowing the Specican/specibin Container to be opened. Once the lid is however firmly closed by means of a non-reversible sealing design in the second stage, it should not be possible to be reopened;
4. Specican/specibin Containers must allow for the use of a seal that could also be used for identification, whilst providing evidence of tampering/opening;

5. The required colour coding for Specican/specibin Containers is red, with red lids when used for pathological waste;
6. Parts of the Specican/specibin Container shall be fully or partially transparent to allow for assessment of level of filling or contents, provided that this will not in any way impact on the strength or the leak resistance of the container.
7. The Specican/specibin Containers Type F and G shall in their dimensions facilitate best possible usage of the available volume, i.e., rectangular plan cross section are preferred to circular or oval plan cross sections;
8. Specican/specibin Containers shall allow for nesting in the unassembled state for effective transport and storage of empty containers;
9. Specican/specibin 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;
10. The outer dimensions of the Specican/specibin Containers shall be compatible with the inner dimensions of the Reusable Containers to ensure effective modular storage and easy release of Specican/specibin Containers from Reusable Containers;
11. Specican/specibin Containers shall allow for easy and safe assembling (e.g. fitting the lid part onto the container part of the Specican/specibin Containers);
12. Types F, G, H and I Specican/specibin 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/specibin Containers, when standing and while being moved or transported shall be ensured;
14. Specican/specibin Containers shall be designed to reduce the risk of spillage of contents in the event of tipping or dropping.

**A1.2.4 Specican/specibin Container Markings:**

1. A label shall be so located on the Specican/specibin Containers as to be clearly visible when stacked with other packaging
2. Specican/specibin Containers shall include suitable warning signage, the international biohazards symbol as detailed in SANS 0248, together with the text "Biohazardous Waste for Destruction" or similar text in clear readable letters;
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 official South African languages;
6. The sizes of hazard labelling shall be as specified in SANS 0248:

Net volume of containers (litre)	Minimum Label Size (mm)
≤ 0,5	15 x 15
> 0,5 but ≤ 5	20 x 20
> 5 but ≤ 20	30 x 30
> 20	100 x 100

**A1.2.6 Quality control requirements:**

1. Specican/specibin Containers shall be able to pass a drop test in accordance with United Nations Recommendations on the Transport of Dangerous Goods, Chapter 6 with particular reference to paragraphs 6.1.5.3 to 6.1.5.6. The Contractor shall verify this by submitting to the Department's Representative a report from the said drop test, carried out by an independent institution like the CSIR and SABS.

**A1.3 THEATRE/MATERNITY BAGS**

All theatre/maternity bags shall be use only

1. The theatre /maternity bags shall be red, leak-proof, high-density, polyethylene material of not less than 50-micron thickness
2. The theatre/maternity bags shall be self-sealing.
3. The bags shall be  $\pm 500$  mm X 600 mm ( $\pm 30$  L)

**A.1.4. ENVELOPE AMPUTATION BAGS**

1. Containers suitable for a large volume non sharps highly contagious bio-hazardous healthcare waste, which cannot be placed in cardboard containers
2. These bags shall be for single use
3. The bags shall be red of colour, leak-proof, polyethylene material of not less than 120-micron thickness
4. These bags must preferably be self-sealing
5. These sizes of the bags shall be  $\pm 500$  X 1200 mm ( $\pm 60$  L)

**A.1.5. CARDBOARD CONTAINERS, COMPLETE WITH WASTE HOLDING POLYETHYLENE BAG FOR HAZARDOUS HEALTH CARE WASTE**

1. These containers must be suitable for non-sharps bio-hazardous waste and pharmaceutical solids
2. The containers shall be of single use
3. The container must be made of rigid cardboard or equivalent material with die-cut folding lid.
4. The container must be lined with red, leak-proof, high density, polyethylene material not less than 50-micron thickness.
5. The containers must be capable of accepting all forms of non-sharp hazardous health-care waste.
6. The containers must be clearly marked with the international bio-hazardous logo.
7. The containers shall not exceed a carrying capacity of 15 kg.
8. The containers shall be supplied in the following sizes:



- $\pm 150$  l for lighter waste,
- $\pm 50$  l for heavier waste

#### **A1.6 HUMAN TISSUE CONTAINERS**

These containers must be suitable for any human tissue (amputations, placentas, expired blood etc.), medical/surgical consumable soiled with body fluids & excretions as well as aborted fetuses up to the age of 26 the week of gestation.

1. The containers must be single use only.
2. The containers shall have a watertight lid, to contain liquids safely and have a security seal to ensure no tampering.
3. The containers shall be clearly marked "CONTAINING HUMAN TISSUE" with the international bio-hazardous logo
4. The containers shall be supplied in the following sizes:
  - Volume of  $\pm 2$  l
  - Volume of  $\pm 10$  l
  - Volume of  $\pm 20$  l

**Annexure B****CLEANSING, DISINFECTION AND INSPECTION OF REUSABLE CONTAINERS**

The cleaning and disinfection of the Reusable Containers shall be done in accordance with the Regulations and the following requirements:

- A3.1. Written operating procedures must be established by any person responsible for disinfecting Reusable Containers, which procedures shall include approved testing methodologies for relevant biological and other indicators relating to the adequate disinfection of Reusable Containers for each unit, as well as all pertinent operating parameters;
- A3.2. Adequate disinfection of Reusable Containers must be monitored by any person responsible for disinfecting Reusable Containers, based on swab tests or similar sampling procedures for relevant biological indicators, which tests or sampling must be conducted by a competent person. Such samples must be processed by an accredited laboratory for the following biological indicators: (a) Bacterial cultures; and (b) Fungal cultures;
- A3.3. The minimum frequency of testing to be conducted in terms of Clause (2) above, must be in accordance with the following:
  - (a) Initial testing prior to commencement of operations: Daily sample swab tests of disinfected Reusable Containers for 5 (five) working days;
  - (b) Testing during usual operation: Weekly sample swab tests of disinfected Reusable Containers before dispatch to Facilities; and monthly sample swab tests of Reusable Containers after delivery to a Facility;
  - (c) After 4 (four) consecutive months of achieving reasonably adequate levels of disinfection for Reusable Containers, the test frequency as required by (a) and (b) above, may be reduced to 50 (fifty) %; Provided that should any one

sample fail to achieve a reasonably adequate level of disinfection, the frequency levels required by (a) and (b) above must be adhered to.

- A3.4. Any person responsible for disinfecting Reusable Containers must ensure that a report is compiled quarterly by a competent person, regarding the level of disinfection achieved based on the results of the tests conducted in terms of Clause (2) above, which report shall include details of all procedures used.
- A3.5. The number of swab samples taken shall be reasonable compared to the number of Reusable Containers being disinfected per day at the disinfecting facility and shall be determined by a competent person.
- A3.6. The specific area of the Reusable Container to be used for sampling, as well as the location for intercepting Reusable Containers for sampling once delivered to a Facility, shall be determined by a competent person.
- A3.7. The reports required in terms of Clause (3) above must be retained for a period of 3 (three) years.
- A3.8. A 3.5% Sodium hypochlorite solution or similar approved is recommended as a solution for disinfection of Reusable Containers, as only scanty growth of bacillus species was detected in 50% of the samples taken during the Pilot Studies. The bacillus species isolated falls into the Group 1 category that is unlikely to cause human disease. Special attention is however also to be given to the risk of odour generation and where feasible, the addition of a deodorising agent to the disinfection solution may be beneficial.

**Notwithstanding the aforesaid recommendations, it will ultimately remain the Contractor's responsibility to ensure that the requirements for deactivation of micro-organisms are achieved.**

- A3.9 Based on findings from the Studies undertaken in other provinces it was found that contamination of the reusable containers occurred during the handling and transport thereof, it is recommended that this aspect be addressed by protecting

reusable containers from contamination by providing disposable wrapping (similar to "Glad Wrap") around the handles, provided that the containers are not touched in any area other than that before the wrapping is removed and round collection is done within the Facilities.

Contamination of disinfected reusable containers could alternatively be prevented by fitting a disposable plastic cover over the containers after disinfection, once again only to be removed at the start of any collection round. To optimise the use of such disposable covers, it may be designed in such a way that it could be used as bin liners when removed from the reusable containers, should that be a viable option.

**Notwithstanding the aforesaid, the Contractor will ultimately remain responsible to prevent contamination of containers after disinfection.**

## **Annexure C**

### **REUSABLE CONTAINERS.**

Although Bidders are allowed to submit indicative samples and are not required to submit actual prototypes of the Reusable Containers at the time of Bid, such samples will be used for verification of features and quality standards until such time that actual prototypes are submitted for approval after award of Contracts to successful Bidders.

#### **A2.1: Reusable Containers for Hospitals and Clinics.**

Due to the vastly different rates at which Waste is generated in Hospitals and Clinics respectively, as well as the limitations that exists on internal movement and storage of large wheelie bins at clinics, it is intended that two different sizes of wheelie bins be used for the respective applications.

The risk of physical injuries by and spillage from Waste containers used in hospitals and clinics are high, resulting in a need for reusable wheelie bins to meet certain minimum standards in terms of quality, robustness and user friendliness.

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

##### **A2.1.1 Range of Reusable Containers required:**

The following generic types of Reusable Containers must form part of the supply made available for distribution to Facilities:

- (a) Type A: 600 to 800-litre wheelie bins, primarily for use in Hospitals;
- (b) Type B: 200 to 300-litre wheelie bins, primarily for use in Clinics, as well as for transport of Specican/specibin Containers containing pathological waste from hospitals.

##### **A2.1.2 Manufacturing process to be used in manufacturing of Reusable Containers:**

- (a) Container body: - One-piece injection moulding;

- (b) Container lid: - One-piece injection moulding;
- (c) Wheel hubs: - Injection moulding;
- (d) Hinge pins: - Injection moulding;
- (e) Tyres: - Compressed solid rubber

*Note: No moulded parts are to show any foreign substances, shrink holes, cracks or blowholes. There should also not be any obvious colour streaks.*

#### **A2.1.3 Material to be used in manufacturing of Reusable Containers:**

- (a) Body, lid, wheel hubs and hinge pins: High-density polyethylene (HDPE) - Ultra violet stabilised to withstand an average annual UV radiation level of 160 Kilocalories per cm<sup>2</sup>. Only virgin material is to be used;
- (b) Tyres: First grade compressed solid rubber;
- (c) Axle: Solid steel galvanised yellow chrome plated;
- (d) Colorant: The colorant shall be colourfast to prevent the plastic material colour from altering appreciably in normal use;

#### **A2.1.4 Reusable Container design requirements:**

1. Reusable Containers shall be rigid, puncture resistant, leak resistant, tamper proof;
2. Flat lids shall be affixed to wheelie bin bodies by means of hinged shafts;
3. Lids shall be such as to provide a seal between the body and the lid that will prevent/minimise the release of odours;
4. The empty as well as full mechanical stability of the Reusable Containers, when standing and while being moved or transported shall be ensured;
5. Reusable Container bodies shall be slightly tapered to allow for easy release of its contents when tipped, as well for it to be nested in the unassembled state for effective transport and storage of unassembled containers;
6. Reusable Containers shall allow for easy and safe assembling;

7. Reusable Containers shall be designed to reduce the risk of spillage of its contents in the event of accidental tipping or dropping by providing two sets of 10-mm holes opposite to the hinge side, also securing the bin contents by inserting 2 cable ties. Such holes are not in any way to impact on the structural integrity of the bins and is not to allow the ingress of water or the release of odours from the bin;
8. Suitable and sufficient cable ties are to be provided with each batch of clean and disinfected Reusable Containers delivered to the respective Facilities for sealing of full containers, forming part of the Reusable Container system;
9. Reusable Containers shall in its dimensions facilitate best possible usage of the available volume when stored or transported;
10. Types A and B Reusable Containers shall preferably be modular in plan for the 2 sizes of containers to allow for effective storage and transport of empty and full containers;
11. Type A Reusable Containers shall be equipped with handles on both sides of bin body and Type B Reusable Containers shall be equipped with own full width handle for handling and manoeuvring of containers. Lifting of wheelie bins will only be required by means of hydraulic bin lifting equipment;
12. All Reusable Containers must be compatible with standard combination lifting mechanisms in use in South Africa, with the acceptance lifting mechanism lip reinforced with locking lip, honeycomb reinforcing as well as reinforcing webs;
13. All bar code plates or transponder tags used for the identification of reusable wheelie bins shall be attached by means of a suitable epoxy or similar method that will prevent the accumulation of dirt behind the plates or tags;
14. The colour coding for Reusable Containers should be in accordance with SANS 0248, with appropriately coloured attachable tags for easy identification of the various categories of Waste to be collected in the Reusable Containers:

- |                              |            |            |
|------------------------------|------------|------------|
| a) General Infectious Waste: | Body - Red | Lid - Red; |
| b) Pathological Waste:       | Body - Red | Lid - Red; |
| c) Chemical Waste:           | Body - Red | Lid - Red; |

15. All Type A Reusable Containers are to be provided with drainage holes and tight sealing plugs at the base of the bins;
16. Lifting trunnions are to be fitted on either side of the Type A reusable bin body;
17. A yoke for the fitment of the flat lid to be affixed by a hinge pin must be an integral part of the back of the Type A Reusable Container body;
18. All Type A Reusable Containers shall be equipped with a handhold slotted on the front of the lid;
19. Type A Reusable Containers are to be equipped with 4 swivel wheels, with a diameter of minimum 250 mm, fitted to the base of the bin body. Two wheels placed symmetrically over the longest of the two horizontal axes shall be equipped with brakes. The wheels shall be non-marking;
20. A simple foot brake is to be provided on 2 of the swivel wheels;
21. For all Type A Reusable Containers, the swivel wheel connecting areas at the base of the bin must be reinforced with moulded webbing and fins;
22. All wheels and lifting trunnions on Type A Reusable Containers are to be connected by means of steel screws for plastic part assembly. The use of rivets is unacceptable.

#### **A2.1.5 Reusable Container markings:**

1. A label shall be so located on the Reusable Containers as to be clearly visible when stored with other wheelie bins;
2. The Department's name is to be hot-foiled in black on the front face of bin body, approximately 50-mm in height;
3. Serial numbers are to be hot-foiled in black on the side of body, not less than 8-mm in height. Incorporated in the number is the month and year of manufacture, which is visible when the containers are nested;
4. Reusable Containers shall include suitable hot-foiled warning signage, the international biohazards symbol and relevant UN codes as recommended by the World Health Organisation. The following text shall be provided in clear readable letters for the various Waste categories:



- a) General Infectious Waste: "Infectious Health Risk Waste for Destruction" or similar text;
  - b) Pathological Waste: "Infectious Pathological Waste for Destruction" or similar text;
  - c) Chemical Waste: "Chemical Health Care Risk Waste for Destruction" or similar text;
- 5. Lettering on the label shall be in red to contrast with the background colour, be of one size, style and layout that will result in the marking that is clearly readable;
  - 6. The background of the label shall be of the colour that contrasts with the surface area immediately surrounding the label;
  - 7. All text shall as a minimum be in the English language and preferably in one or more of the other official South African languages;

**A2.1.6 Quality control requirements:**

- 1. Reusable Containers are to meet the requirements of SANS code 1494/1989. Copies of certification of containers will be required.

**Identification of Service Provider:**

No	Functionality Requirements	Weight (%)
1	Permit (Municipal/Provincial) to transport hazardous material (infectious waste)	15
2	Contractual Agreements (Treatment Facilities and Health Care Risk Waste Consumables)	15
3	Proof of training for employees in the management of Hazardous Chemicals/ Healthcare risk waste	15
4	Proof of Professional Drivers Permits (PDP) for all drivers	5
5	Depot for the storage of health care risk waste consumables and health care risk waste	5
6	At least a minimum of three (3) years experience in logistics management	5
7	Proof of tracking devices for vehicles and consumables	5
8	Proof of calibrated scales for weighing of health care risk waste for each truck/vehicle	5
9	Reference(Good Standing) for services previously provided	5
10	Employees Vaccination Certificates for Hepatitis A & B	5
11	Accreditation to provide training (Level 3) as per SAQA classification	5
12	Financial viability (R4 000 000 threshold bank statement or Bank guarantee)	15
	<b>Total</b>	<b>100</b>
	<b>Final Score (For the bidder to enter next level under functionality)</b>	