**ANNEXURE A**

**SCOPE OF WORK:**

The contractor shall manufacture a Reverse Osmosis plant capable of delivering 80 000 litres to 100 000 litres of water per day with water purification chemicals and filtration membranes which are locally available. The plant must come with a water product quality indicator and a consumption meter. The manufacturing of the plant must take place at the suppliers’ premises, the plant must be fitted inside a 6m shipping container as shown in figure 1 below, the shipping container’s floor must be waterproof.

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Fig. 1 Typical Reverse Osmosis plant in shipping container

All the incoming and outgoing pipe work to be drilled through the container walls and retrofitted on site to align with the existing piping work on site. The manufactured plant housed in a shipping container must be delivered to site with a crane truck with a capacity to lift a 6m shipping container. Transnet will provide concrete sleepers which can be used as a base for the container. The contractor is responsible for the configuration and installation of the concrete sleepers to suit the New RO plant’s orientation and configuration.

The contractor is to install the plant to the existing water network including the 3-phase electrical connection to power the plant, thereafter, commission the plant complete with the applicable certificated of compliance (COC). Training of five staff is to be provided with certification for the operation and maintenance of the plant. The contractor will be required to provide a six months maintenance of the plant including all the filtration membranes and water purification chemicals.

The Contractor shall perform in accordance with this specification.

**Project specifications:**

* Inspections: Will be done by Project Manager or Transnet Representative and report will be available for action to be taken
* Testing: All work must be done to the satisfaction of Transnet site inspector
* Delivering the Goods: Site at Loop 10 Iron Ore Line. Approximate 400 km from Saldanha [300km tar and 100km Gravel]
* Training of Staff for the operation and maintenance of plant
* Duration of the Contract: Delivery and commissioning within 8 weeks of adjudication
* Penalties: A penalty for late completion of R5 000.00 per calendar day will be charged
* Guarantee: All workmanship and equipment shall be guaranteed for a period of 1 year, from the dateof completion of work
* Inspection of works: Work shall be inspected on a regularly basis as determined by the Project Manager
* Programme & Planning of the work: Delivery within 1 month of adjudication
* Electricity supply: The existing electrical supply is three (3) phase.Electricity will be made available to the Contractor. The contractor must adhere to the safetystandards as per the General Safety Regulations, Electrical Machine Regulations, Electrical Installation Regulations of the Health and Safety Act, (Act 85 of 1993) and SANS 10141. A Compliance Certificate must be handed to Transnet Freight Rail for any electrical Installation
* Access to site: The areas are restricted [Iron Ore Line Loop 10] and the contractor must ensure he complies with the regulations of Transnet Freight Rail in every way. Contractor and/or any sub-contractors shall be given access by the Project Manager. A list of workmen shall be given to the manager to arrange for the necessary approval
* Materials found on site: The Contractor shall not use on the works any materials found on the site without the prior written consent of the manager
* Clearing of site: Upon completion the Contractor shall clear away and remove all rubbish, unused material, plant and debris and leave the site and the whole of the works clean and tidy to the satisfaction of the Project Manager or site Supervisor
* Working outside normal working hours: Normal working hours are between 07:30 and 16:00 Mondays to Fridays. If it is required to work outside the stated normal working hours the Contractor must obtain approval from the Project Manager
* Act 85: The contractor shall comply with the Occupational Health & Safety Act, 1993 (Act 85 of 1993).
* Damages to property: The successful Tenderer shall take adequate precautions against damage to existing assets during the course of the contract
* Special care is to be taken upon entering Transnet property because of the operational movement of trains, cranes, vehicles and staff.
* Before work can commence Project Manager or Site Supervisor is to be contacted so that arrangements can be made for access to the sites. This is for the safety of the workers
* Left over material, rubble and electrical equipment stripped by the contractor are to be removed from site
* The premises shall be left perfectly clean after completion of the work, before payment will be made.
* Contractor will supply all equipment and material with all guarantees included
* The contractor shall include for the proper completion of the work as described and shall allow for all cost incurred
* All Electrical work/repairs to be done by a Qualified Registered Electrician and a COC issued free of charge
* If Transnet Representative is not satisfied with workmanship or quality of work the Contractor must rectify on own cost
* Membranes, dosing and anti-scalant chemicals to be locally available
* Concrete sleeper will be provided by Transnet which can be used as the RO plant container

base.

**AREAS OF DEPLOYMENT / SERVICES:**

Halfweg book off facility (446.3km from Saldanha) A compulsory pre-proposal site meeting and RFQ briefing will be conducted at Transnet Freight Rail, Halfweg Depot, Book-Off Facility on The Iron Ore Line, Transnet Building, Halfweg for a period of ± 2 hours. [Respondents to provide own transportation and accommodation]. The briefing session will start punctually, and information will not be repeated for the benefit of Respondents arriving late.

**PERFORMANCE REQUIREMENTS:**

The service rendered shall comply with the specifications provided to the bidder and any applicable technical specifications.

* Tasks not specified in this document will be identified and mutually agreed between the Service Provider and Transnet Freight Rail.
* All written deliverables must be phrased in terms and language that can be easily understood by non-technical personnel (e.g. laypersons without subject matter expertise).
* All documents deliverables must be in formats (hard copy and electronic) i.e. industry acceptable standards (e.g. MS Word, MS PowerPoint, MS Excel, MS Projects).

## **Transnet Freight Rail Shall:**

* Conduct business in a courteous and professional manner with the Service Provider.
* Provide appropriate information as and when required and only in situations where it is required by the Service Provider to fulfil their duties; by means of raising a Purchase Order (PO).
* Not accept responsibility for any damages suffered by the Service Provider or their personnel for the duration of the contract.
* Not accept any responsibility of accounts/expenses incurred by the Service Provider that was not agreed upon by the contracting parties.
* Shall provide a storage facility for equipment and materials.

## **Service Provider Shall:**

* + Conduct business in a courteous and professional manner.
	+ Ensure that all personnel working under this contract are in good health and pose no risk to any Transnet Freight Rail personnel.
	+ Comply with Transnet Freight Rail security and emergency policies, procedures and regulations.
	+ Ensure that all work performed and all vehicles, plant and equipment brought onto or used on site will be in compliance with the Occupational Health and Safety Act of 85 of 1993 and any Regulations promulgated in terms of this Act and the standard instructions of Transnet Freight Rail.
	+ Maintain its equipment in good order so as to comply with Transnet Freight Rail’s occupational health and safety standards.
	+ Ensure that all personnel working under this contract are adequately trained prior to the commencement of the contract.
	+ Provide all personnel working under this contract with uniforms, which state the name of the Service Provider and that can be clearly identified from other Service Providers, Transnet Freight Rail personnel, etc. Transnet Freight Rail reserves the right to order the immediate removal of a staff member that does not adhere to this arrangement.
	+ Provide all personnel working under this contract with adequate and appropriate Personal Protective Equipment (PPE) and clothing and to ensure these items are worn at all times.

## **OTHER REQUIREMENTS**

The following functions will form part of the contract:

* On the job training for Transnet Freight Rail personnel; - Water Safety Awareness workshop (4-to-5-hour training)
* Proof of a safe water certificate upon completion.