

**Specification**

**1. PREAMBLE:**

- 1.1. IR-DRDO retention tank system containing anaerobic bacteria converts human fecal solid matter into inoffensive liquid & gases.
- 1.2. This Special terms and conditions specify the equipment requirements to be fitted on different types of broad gauge (BG) coaches on Indian Railways. This also includes installation/commissioning.
- 1.3. Firm should have well-established stainless steel manufacturing facilities or have supplied these types of tanks in past or similar fabrications items. List of M&P and records of previous supplies to be submitted along-with the offer. In absence of this information offers shall be deemed as incomplete and may not be considered.
- 1.4. Tenderer shall quote separately for the supply of spares for maintenance as per clause # 8.

**2. ELIGIBILITY CRITERIA:**

- 2.1. The tenderer must submit detailed clause-wise comments on the specification and specially mention about availability of in-house CNC laser cutting machine in working order or a valid tie-up in the form of MoU with the agency having CNC laser cutting machine in-house in working order. In absence of above, offers shall be deemed as incomplete and may not be considered.
- 2.2. Since anaerobic IR-DRDO retention tank retention tanks have complexity in manufacturing and requires development time bulk or regular procurement orders should only be given to the firms who have successfully supplied anaerobic IR-DRDO retention tanks to RCF/ICF IR in past and have the infrastructure as mentioned in annexure -A. Availability of infrastructure as mentioned in annexure-A is must for development orders.

**3. SCOPE OF SUPPLY:**

- 3.1. Retention tank with accessories as per drawing indicated in the tender description.
- 3.2. Notice "Jointly developed by IR and DRDO", will be in the scope of tenderer. This will be pasted on the tank.
- 3.3. Traceability plate of stainless steel either engraved or punched shall be welded on suitable visible location of retention tank as indicated in drawing, describing; Firm's name, Year of manufacture and manufactured by in-house CNC laser cutting machine or from outside agency.
- 3.4. Notices for users and maintenance personnel will be in the scope of tenderer. This will be supplied and fixed in the coach, as decided between the tenderer and IR in three languages. Quantity in numbers will be the same as the firm has order for IR-DRDO retention tank.
- 3.5. Supply, installation and commissioning will be in the scope of tenderer.
- 3.6. Spares mentioned in clause # 8 will be supplied along with the equipments.

**4. TECHNICAL REQUIREMENTS**

- 4.1. For selection of material & electrode and manufacturing process firm should follow the guidelines mentioned in annexure-B along with flow chart.
- 4.2. All components and sub-assemblies will be manufactured to a standard for high level of ruggedness, corrosion resistance, and reliability and long-life. There should be no maintenance requirement like painting, lubrication, oiling, periodic tightening of fasteners etc. All fasteners should be of locking type and should not get loose due to coach vibration. If due to any technical/commercial reason, a component/part or sub-assembly does not

Prepared By

*A. M. M. S.*

Agreed By

*(Signature)*