



## REQUEST FOR BID CIDB

### Annexure C3.2

#### SCOPE OF WORK

Rand Water utilizes Chlorine for the disinfection of the Bulk water produced. Thus, Rand Water has built Chlorine Plant that evaporate liquid Chlorine into gas before injection into the purified water.

Scope of work:

- Measure existing manifold to ensure the correct length of manifold is maintained
- Strip existing pipe manifold made up of valves, elbows, Tees and Flanges.
- Construct new pipe manifold made up of valves, elbows, Tees and Flanges:
  - Install new x 41 (plug valves)
  - Install x 20 Refurbished Manifold Gearbox and Actuator assembly (must assembled to the new Plug valves)
    - Install new Serpentine Valves/header valves x 37 at 2" needle valves
    - Install new Serpentine pipes x 37 by 2m (coil)
    - Install new x 159 flanges with chlorine resistance gaskets at OD 90mm to fit 1" pipe (ASTM A105/A105M-21)
      - Install new x 75 Elbows at 1" (ASTM A105/A105M-18)
      - Install new x 55 Tee's at 1" (ASTM A105/A105M-18)
      - Use new Seamless Pipes total length +- 70 m at 1" OD (ASTM A106B)
      - Install x 2 refurbished Bank Change Over gearbox and actuator (must be assembled to the new plug valves)
        - Clean and pressure test accumulators' x 4
        - Install new rapture discs x 4
        - Use Teadit style NA1122 gasket for flange mounting
        - Use 304 Stainless steel bolts and nuts for flanges
        - Compile and Submit Safety file

NB:

- All welding must conform to ISO 15614-1
- All the welded areas must be 100% X-Ray tested
- All Employees must be trained and certified to work in a chlorine plant.
- All Employees must have the required PPE to work in a chlorine plant (Chlorine mask etc.)
- Pressure testing requires portable hand pump and a gauge. The test pressure is 21 bar
- A data book with material data sheets and certificates required on completion of the project
- The data book should be submitted same day as the invoice, or the invoice will not be accepted
- All the old pipes, valves and fittings removed from the Plant must be returned to Rand Water upon completion of the project
- Successful supplier must submit a safety file and attend induction before work commences

## Annexure C4

### SITE INFORMATION

Site Briefing to be held 08.02.2024 @ 09:00 – we will meet at the Risk Control Parking Area

Vischagat Road, Three Rivers East

Vereeniging, 1939

GPS Coordinates: S 26° 41.520 and E 28° 00.061

#### **THE IMPORTANCE OF WEARING PPE**

Everyone accessing the plant will be expected to wear safety shoes, failure to which no access will be granted.

#### **THE IMPORTANCE OF CARRYING YOUR DRIVER'S LICENSE**

Everyone accessing the site using personal or company vehicles is requested to always carry their valid driver's license.

#### **VALID CAR DISCS ARE ESSENTIAL**

Every company or personal vehicle accessing the site must have a valid car disc. The biometric system will scan and cross-reference these discs to ensure compliance with local regulations. Failure to have a valid car disc may result in the vehicle being refused entry.

#### **DATA SECURITY**

The site complies with the principle of Personal Access to Information Act (PAIA) and as such all data collected will be treated with the utmost confidentiality and used solely for security and access control purposes.