

OPPORTUNITIES OF SETTING PRODUCTION LINES AND INDUSTRIES IN TANZANIA FOR MANUFACTURING MATERIALS AND EQUIPMENT REQUIRED FOR GAS DISTRIBUTION PROJECTS

Tanzania Petroleum Development Corporation is implementing natural gas distribution projects countrywide to supply natural gas for power generation, energy source to industries, fuel for motor vehicles, and energy for cooking in households and institutions.

To start with, connection projects are ongoing in the Dar es Salaam City, and also Pwani, Lindi and Mtwara Regions, which are closer to the transportation gas infrastructure. However, the objective is to cover the entire country.

On 29th January 2021 the Minister for Energy, Hon. Dr. Medard Kalemani (MP) called for a meeting with local investors to discuss on the potential opportunity of setting in Tanzania, production lines and industries for manufacturing materials and equipment required for gas distribution projects.

The aim is to ensure that materials required for connection projects are manufactured locally to speed up projects' implementation, at the same time create employment and wealth to the locals, as well as increasing local content.

Materials required includes: **HDPE pipes**, **HDPE fittings**, **Domestic Gas Meters** and associated fittings, **Commercial Gas Meters** and associated fittings, and **PRMS**. The specifications of the materials are as in the tables below.

For networking, future engagement, and maintaining a database of manufacturers, TPDC would like the interested parties to fill in form number TPDC/MAN/2021/Form No. 01 and return the same to TPDC.

You may call for further clarifications:

Eng. Dora Ernest: dernest@tpdc.co.tz; +255 712 144 802

Eng. Emmanuel Gilbert: egilbert@tpdc.co.tz; +255 754 345 886

SPECIFICATIONS OF HDPE PIPES USED FOR CONNECTING NATURAL GAS CUSTOMERS

| HDPE SDR11 Gas pipe should be tested and certified in accordance with | | |
|--|---|-------------|
| S/N | DESCRIPTION | UNIT |
| 1 | 180mm PE 100 | m |
| 2 | 125mm PE 100 | m |
| 3 | 90mm PE 100 | m |
| 4 | 63mm PE 100 | m |
| 5 | 32mm PE 100 | m |
| 6 | 25mm PE 100 | m |
| | | |
| | Carrier pipe used as "HDPE Sleeve for gas pipe crossing" | |
| 1 | Supply 180mm PE carrier pipe (sleeve),PN 16 | m |
| 2 | Supply 200mm PE carrier pipe (sleeve),PN 16 | m |

SPECIFICATIONS OF HDPE FITTINGS REQUIRED FOR NATURAL GAS CONNECTIONS

| S/N | DESCRIPTION | UNIT |
|---|--|------|
| Supply complete pipe fittings, HDPE 100 SDR 11(ISO S5)-EUROPE STANDARD | | |
| 1 | T90mm x 63mm x 90mm (electrofusion) | No |
| 2 | Taping Tee 90 mm / 63mm complete with coupler | No |
| 3 | Taping Tee 63 mm / 32mm complete with coupler | No |
| 4 | Equal Tee 125mm | No |
| 5 | Equal Tee 90mm | No |
| 6 | Equal Tee 63mm | No |
| 7 | Equal Tee 32mm | No |
| 8 | Equal Tee 25mm | No |
| 9 | Ball valve with two(2) purge points 180mm plus operational key | No |
| 10 | Ball valve with two(2) purge points 125mm plus operational key | No |
| 11 | Ball valve with two(2) purge points 90mm plus operational key | No |
| 12 | Ball valve with two(2) purge points 63mm plus operational key | No |
| 13 | End cup 180 mm | No |
| 14 | End cup 90 mm | No |
| 15 | End cup 63 mm | No |
| 16 | Reducer 315/180mm | No |
| 17 | Reducer 180/125mm | No |
| 18 | Reducer 125/90mm | No |
| 19 | Reducer 90/63mm | No |
| 20 | Reducer 63/32mm | No |
| 21 | Reducer 32/25mm | No |
| 22 | Coupler 90mm | No |
| 23 | Coupler 63mm | No |
| 24 | Coupler 32mm | No |
| 25 | Elbow 125mm x 90 degrees | No |
| 26 | Elbow 90mm x 90 degrees | No |
| 27 | Elbow 90mm x 45 degrees | No |
| 28 | Elbow 63mm x 90 degrees | No |
| 29 | Elbow 63mm x 45 degrees | No |
| 30 | Elbow 32mm x 90 degrees | No |
| 31 | Elbow 32mm x 45 degrees | No |
| 32 | Elbow 25mm x 90 degrees | No |
| 33 | Tracer wire and warning tape Printed " TPDC GAS LINE UNDERNEATH-BOMBA LA GESI LA TPDC LIPO CHINI " 250mm wide or more, woven strands of non-conductive polypropylene long lasting barrier solution embedded with copper conductor 2.5mm dia tracer wire insulated,1 roll equivalent to 300m | Roll |

SPECIFICATIONS OF DOMESTIC GAS METERS & ASSOCIATED FITTINGS FOR CONNECTING NATURAL GAS CUSTOMERS

Complete smart pre-paid domestic Gas meter and utilizing piping to fit connection from PE inlet 25 mm gas pipe, Gas threaded type, all should be assembled and APPROVED

| S/N | DESCRIPTION | UNIT |
|-----|---|--------|
| 1 | 38 mm GRP protective sleeve | m |
| 2 | 38mm PVC genuine Formed Bend (black) | No |
| 3 | Inlet transition fittings 25/20mm with all associated fittings | No |
| 4 | 20 mm steel ball valve-leaver operator / Emergency control valve (ECV), PN 16 | No |
| 5 | 20mm gas meter flexible pipe connector (Anaconda) with end fittings compatible in a gas meter | Unit |
| 6 | Wall mounted gas Meter housing box, Mark 2 Type (503mm x 408mm x 224mm) | No |
| 7 | Meter regulator: Inlet pressure 75 mbar, Nominal outlet pressure 21 mbar, Low pressure cut-Off at inlet pressure of 11.5 mbar to 15 mbar, be compatible with gas meter | No |
| 8 | Complete smart pre-paid Gas meter integrated with mobile payment credit system (having local electronics mobile payment system) | Unit |
| | <p><i>The meters must have the following min specifications;</i></p> <p>Metering standard EN1359, Intrinsic safety EEX ia IIA T3, Capacity G2.5A including mounting and fittings, Working voltage: DC 6V (1.5V*4) Four AA (local available), Display LCD: 0.01 m³, working Pressure range 0.5kPa to 50kPa, working temperature -10 to + 50, Minimum and Maximum flow rate is 0.01 to 10 m³/h, respectively, Permissible error 3% for Q_{min} and 1% for Q_{max}, Recording reading 99999.999m³, Multiple fraud detection function</p> | |
| 9 | Copper reducer 3/4" to 5/8" threaded adaptor fittings (female fitted in meter & male to copper pipe) | No |
| 10 | Utilization Copper pipe size 5/8", @ Roller has 15m, wall thickness 2mm, genuine for Natural gas | Roller |
| 11 | Butterfly valve fittings to fit 5/8" copper pipe, PN 7 | No |
| 12 | 3/4" x 5/8" Male nipple brass | No |
| 13 | Copper elbow 5/8" fittings | No |
| 14 | Flexible horse pipe, 1500m length, 12mm thick with coupling, for gas stoves | No |
| 15 | Solid genuine copper earthing rod, high conductivity to BS2874 C101 | No |
| 16 | 4mm yellow/green earth wire (roll =100m) | No |
| 17 | Thread tape gas quality PTFE thread tape yellow in colour, thick, full density to satisfy BGC IM/16 BS6974:1989 & BS 1592 Note: It's a film tape commonly used in pipes for sealing pipe threads-(Only for Gas) | No |

SPECIFICATIONS OF PRMS USED FOR CONNECTING NATURAL GAS CUSTOMERS

| S/N | DESCRIPTION | UNIT |
|-----|---|-------|
| | Design,fabricate, supply, install, test and commision Pressure Reducing and Metering skid (PRMS) | |
| 1 | PRMS with twin stream, two metering sets: inlet 7bars, outlet 75 mbars, with Rotary Positive Displacement (RPD) meter, Qmax 100 SCM/H,Qmin 1SCM/H of natural gas. (Design should be approved by client) | No |
| 2 | Supply trolley powder fire extinguishers (for all classes of fire) | No |
| 3 | Witness Factory Acceptance Test FAT) | Staff |

ADDITIONAL PRS REQUIREMENTS

| Item | Flow Capacity | Parameters | Type of Meter | Configuration |
|---|---------------|---------------------------|--|---|
| Industrial PRSM-type 1. Supply of Dual Stream Metered Regulating Station (MRS) Skid with 3" inlet and 3" outlet; for inlet pressure range 3.5 to 7 bar (G) & outlet pressure of 3-2 bar (G) having 2500 SCM/H Capacity for filtration & PRS stream & with dual RPD meters after filtration, one of 3" G2500, 150# for 56 to 2500 SCMH Cartage Filter & other of 2" G65, 150# for 70 to 700 SCMH capacity Y Type filter , RPD Meter's shall be with Battery operated EVC having integral/external GPRS and GSM Battery operated Modem, Software's, Cables between EVC & Modem, local communication / configuration cable for EVC to Laptop. | 2500 SCM/H | Inlet Pressure; 7 bars | RPD Meter (Rotary Positive Displacement Meter) with EVC & Latest Modem | Dual Filter stream, Dual Stream Active, Monitor PCV/SSV |
| | | Outlet Pressure; 3-2 bars | | |

TANZANIA PETROLEUM DEVELOPMENT CORPORATION



TPDC/MAN/2021/FORM No.1

APPLICATION FORM FOR PARTICIPATING IN AVAILABLE OPPORTUNITY FOR NATURAL GAS EQUIPMENTS MANUFACTURING IN TANZANIA

| PART 1: DETAILS OF THE APPLICANT | |
|----------------------------------|--|
| 1. | <p>Name of Applicant (Insert trading name), business address, telephone and fax numbers</p> <p>(a) Name of the Applicant.....</p> <p>(b) Business address: Street.....Plot No..... Block No.....Building No.....</p> <p>(c) Postal Address:</p> <p>(d) Telephone No:</p> <p>(e) Facsimile:Cell phone.....</p> <p>(f) E-Mail.....</p> |
| 2. | <p>Location and complete address of the proposed facility</p> <p>(a) Location: Street.....Plot No..... Block No..... Building No.....</p> <p>(b) Postal Address:</p> |
| 3. | <p>Registration Status: (Fill where appropriate and also attach relevant copies)</p> <p>(a) Certificate of Incorporation No.....</p> <p>(b) Certificate of Compliance No.....</p> <p>(c) Business license No.....</p> <p>(d) TIN No.</p> <p>(e) VAT No.....</p> <p>(f) Any other (specify).....</p> |
| 4. | <p>Legal status of the Applicant:</p> <p><input type="checkbox"/> Sole Proprietorship</p> <p><input type="checkbox"/> Partnership</p> <p><input type="checkbox"/> Public Limited Liability Company</p> <p><input type="checkbox"/> Private Limited Liability Company</p> <p><input type="checkbox"/> Parastatal Organization</p> <p><input type="checkbox"/> Government Agency</p> <p><input type="checkbox"/> Cooperate Society</p> <p><input type="checkbox"/> Joint Venture</p> <p><input type="checkbox"/> Other (specify)</p> |
| 5. | Contact Person: |

(a) Name:

(b) Title:

(c) Physical address:
 Street..... Plot No.....Block No.....
 Building No.....

(d) Postal address:

(e) Telephone Number:

(f) Facsimile:Cell phone:

(g) E-Mail:

6. Provide on a Separate sheet information related to the Applicant where applicable:

Shareholding Arrangements

Directors

Members of the Board of Directors

Chief Executive Officer (where applicable)

7. If the applicant is in a Joint Venture with another entity, provide the following details:

(a) Name of another Entity:

Official Names of Directors:
 Official Names of Partners:
 Nationality:
 Shareholding (%):

(a) Physical address:
 Street..... Plot No Block No

Building No

(b) Postal address:

(c) Telephone No:

(d) Facsimile..... Cell phone

(e) E- Mail:

PART II-TECHNICAL INFORMATION

8 Provide a detailed capacity for the intended facility:

| S/N | Facility | Installed Capacity | Estimated time to start production |
|-----|--|--------------------|------------------------------------|
| 1 | HDPE Pipes | | |
| 2 | HDPE Fittings | | |
| 3 | Domestic meters and associated connection fittings | | |
| 4 | Commercial meters and associated connection fittings | | |
| 5 | Complete PRMS | | |
| | | | |
| | | | |

| PART IV-LIST OF ENCLOSURES | |
|--------------------------------------|---|
| 9. | <p>Indicate below and where appropriate, the certified copies of, or extracts from, the following documents the applicant is providing in this application:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Certificate of Registration <input type="checkbox"/> Certificate of Incorporation <input type="checkbox"/> Memorandum of Association <input type="checkbox"/> Articles of Association <input type="checkbox"/> JV contract <input type="checkbox"/> Audited financial statement for the past three consecutive years <input type="checkbox"/> Other (specify) |
| PART V- DECLARATION OF THE APPLICANT | |
| 10. | <p>I..... (insert name) being..... (ininsert tittle/position) hereby declare that I am authorized to make this application on behalf of the applicant and that to the best of my knowledge the information supplied herein is correct and that within a reasonable period of time after notice, I undertake to provide whatever additional information, TPDC may require in order to evaluate this application.</p> <p>SWORN/AFFIRMED at) by the said Who is identified to) me by/known to me personally)</p> <p>the latter being known to me personally this) DECLARANT DAY OF2021</p> <p>BEFORE ME:</p> <p style="text-align: center;">_____ COMMISSIONER FOR OATHS</p> |