



Bhagyanagar Gas Ltd.

BHAGYANAGAR GAS LIMITED

(A JOINT VENTURE OF HPCL & GAIL)

BID DOCUMENT FOR

**Supply of G.I. Pipes for Hyderabad, Vijayawada and
Kakinada CGD Projects**

**UNDER LIMITED DOMESTIC
COMPETITIVE BIDDING**

Bid Document No.: BGL/373/2017-18

VOLUME II OF II



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LIMITED

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SECTION – 8
MATERIAL REQUISITION



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Material Requisition

Project : Procurement of Galvanised Iron (G.I.) Pipes for City Gas Distribution project at Hyderabad, Vijayawada and Kakinada

Client : M/s Bhagyanagar Gas Limited

Items : GI PIPES according to IS-1239 (Heavy Duty)

Tender No. : **BGL/373/2017-18**

Sl. No.	Description				City	Quantity
	Pipe NB (Inch)	Schedule	Ends	Type		In Running Meters
	GI Pipes with powder coating of size, schedule & specifications indicated below :					
	Pipes Shall confirm IS:1239 (Part-I), Heavy Duty, Continuous Welded with Min. Tensile Strength of 30 kgf/sq.mm & Galvanised Protective Coating to protect from corrosion as per IS:4736/ ASTM A53 or by Electro Galvanising, with Plain End of following sizes as per Technical specification of this tender.					
PART-A						
1.1	1/2"	Heavy	Plain	Galvanised	Hyderabad	1,00,000
1.2					Vijayawada	10,000
1.3					Kakinada	10,000
PART-B						
2.1	3/4 "	Heavy	Plain	Galvanised	Hyderabad	20,000
2.2					Vijayawada	4,000
2.3					Kakinada	4,000



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SECTION – 9
SPECIAL CONDITIONS OF CONTRACT (SCC)



SPECIAL CONDITIONS OF CONTRACT (SCC)

GENERAL

- 1.1 Special Conditions of Contract shall be read in Conjunction with the General Conditions of Contract, Specification of work, Drawing and any other documents forming part of this Contract wherever the context so requires.
- 1.2 Notwithstanding the sub-division of the documents into these separate sections and volumes every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with in the Contract so far as it may be practicable to do so.
- 1.3 Where any portion of the General Conditions of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract, unless a different intention appears, the provisions of the Special Conditions of Contract shall be deemed to over-ride the provisions of the General Conditions of Contract and shall be the extent of such repugnancy, or variations, prevail.
- 1.4 Wherever it is mentioned in the specification that the Contractor shall perform certain work or provide certain facilities, it is understood that the Contractor shall do so at his cost and the **Value of Contract** shall be deemed to have included cost of such performance and provisions, so mentioned.
- 1.5 The materials, design, and workmanship shall satisfy the relevant Indian Standard, the Job Specifications contained herein and Codes referred to where the job specification stipulate requirements in addition to those contained in the standard codes and specifications, these additional requirements shall also be satisfied.
- 1.6 In case of an irreconcilable conflict between Indian or other applicable standards, General Conditions of Contract, Special Conditions of Contract, Specification, Drawings or Schedule of Rates, the following shall prevail to the extent of such irreconcilable conflict in order of precedence:
 - i) Letter of Acceptance/ FOI alongwith Statement of Agreed Variations.
 - ii) Schedule of Rates as enclosures to Letter of Acceptance
 - iii) Special Conditions of Contract
 - iv) Drawings
 - v) Technical/ Material Specifications
 - vi) Instruction to Bidder
 - vii) General Conditions of Contract
 - viii) Indian Standards
 - ix) Other applicable standards



- 1.7 It will be the Contractor's responsibility to bring to the notice of Engineer-in-charge any irreconcilable conflict in the contract documents before starting the work(s) or making the supply with reference which the conflict exists.
- 1.8 In the absence of any Specifications covering any material, design of work(s) the same shall be performed/ supplies/ executed in accordance with Standard Engineering Practice as per the instructions/ directions of the Engineer-in-charge, which will be binding on the Contractor.

2.0 SCOPE OF SUPPLY

The Scope of SUPPLY shall be as set out at Material Requisition, Data Sheets and Technical Specifications given in Volume-II of tender document and supplemented by all stipulation in the total tender document.

Seller's scope shall include (a) Design, detail engineering, manufacturing of items as per Material Requisition technical specifications, (b) preparation of Quality Assurance / Quality control programme; (c) obtaining Owner's approval; (d) arranging Inspection and Testing certification; (e) Inspection by Purchaser's/Agency Designated by Purchaser, as applicable as per bid document and obtaining Inspection Release Note; (f) obtaining dispatch clearance; (g) Packing; (h) Loading on truck/trailer and Unloading of GI Pipes at Project site; (i) providing all related services as detailed in the technical specification.

3.0 CONTRACT PRICE

The contract price shall be deemed to be firm and valid for the entire duration of the contract till the completion of work, and shall not be subject to any adjustment due to increase in price of materials, utilities, or any other input for performance of work and the contract except for increase/decrease in taxes and duties on account of subsequent legislation.

4.0 DIVISION OF ORDER

BGL reserves the right to divide the quantity among more than one bidder at its sole discretion and as mentioned in BEC of Vol I of II.

5.0 QUALITY ASSURANCE/QUALITY CONTROL:

- 5.1. The Contractor shall "prepare a detailed quality assurance plan for the execution of Contract for various facilities, which will be mutually discussed and agreed to.
- 5.2. The Contractor shall establish document and maintain an effective quality assurance system outlined in recognized codes.
- 5.3. The Purchaser while agreeing to a quality assurance plan shall mark the stages where they would like to witness the tests; review any or all stages of work at shop/site as deemed necessary for quality assurance.

6.0 QUANTITY VARIATION



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The tendered quantity may vary depending upon the project requirement. BGL reserves the right to decrease/ increase the quantity depending upon its requirement.

7.0 DISPATCH INSTRUCTIONS

- 7.1 Seller shall obtain dispatch clearance from the Purchaser prior to each dispatch.
- 7.2. Copy of Inspection Release Certificate, Dispatch Clearance and statement showing the name of the Vessel/Trailers description and weight of material and shipping marks etc. to be submitted along with the documents.

8.0 INSPECTION

Final inspection of the pipe shall only be done by TPIA approved by BGL. All the charges towards all kinds of tests/TPIA cost shall be included in the quoted rates per unit. No additional payment to this effect will be made. The charges towards BGL's Inspection Agency, if engaged, shall be borne by Vendor.

9.0 REJECTION

- 9.1. Any materials/goods covered under scope of supply, which during the process of inspection by appointed third party, at any stage of manufacture/fabrication, and subsequent stages, prior to dispatch is found not conforming to the requirements/specifications of the Purchase Requisition /Order, shall be liable for immediate rejection.
- 9.2. Supplier shall be responsible and liable for immediate replacement of such material with acceptable material at no extra cost or impact on the delivery schedule to EMPLOYER

10.0 TERMS OF PAYMENTS

The Payment shall be made in the following manner subject to completion of all contractual requirements as per tender document.

The terms of payment shall be as follows:

- 90 % (Ninety percent) payment on receipt of goods at site and acceptance of the same along with following dispatch documents.
 - i) Cenvatable Invoice in triplicate
 - ii) Inspection Release note by Owner or his appointed or approved agency.
 - iii) GR / LR
 - iv) Packing List
 - v) Insurance cover note covering transit insurance
 - vi) A certificate from manufacturer that the all items/ equipment under supply including its component or raw material used with manufacturing are new



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and conform to the tender requirement. In case manufacturer is not the contractor, the contractor owning overall responsibility will duly endorse this certificate.

- vii) Performance Bank Guarantee(s) of 10% of Contract Value. If already submitted, a copy of the same.
- viii) Document related to Input Tax credit(ITC) Set off to be claimed by Owner, if applicable.

- 10% (ten percent) within 30 (thirty) days after receipt and acceptance of goods at site.
 - i. Final Acceptance Certificate
 - ii. No Claim Certificate.

However, in case of delay in the commissioning of the items supplied by party or there of beyond 6 months from the date of supply at site , the balance payment shall be released to the party withholding PRS, if applicable.

ii. MODE OF PAYMENT

All payments payable in Indian rupees against the contract shall be released by Owner through account payee cheque payable at par.

iii. DEDUCTION AT SOURCE

Purchaser will release the payment to the Seller after effecting deductions as per applicable law in force.

Purchaser will release payments by F&A Dept, BGL to the Contractor after offsetting all dues to the Purchaser payable by the Contractor under the Contract.

11.0 COMPENSATION FOR DELAY (PRICE REDUCTION /LIQUIDATED DAMAGES)

In case of delay in delivery of materials beyond contractually agreed delivery schedule, price reduction schedule will be applicable @0.5% of material value for the unsupplied portion per week of delay or part thereof, subject to ceiling of 5% (FIVE PERCENT) of the total order value. For details, please refer relevant clause of GCC-Goods.

The value referred in PRS clause is excluding taxes & duties.

12.0 PERFORMANCE BANK GUARANTEE SECURITY DEPOSIT:

Bidder will provide Performance Guarantee @10% of order value within 30 days of receipt of FOA/ WO from the Owner. The contract performance bank guarantee shall be valid 03(three) months beyond the expiry of Warrantee/Guarantee period. The Performance Guarantee shall be in form of either Demand Draft or Banker's Cheque or irrevocable Bank Guarantee and shall be in the currency of Contract (issued by any Indian Scheduled



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bank or a branch of an International Bank situated in India and registered with Reserve Bank of India as Scheduled Foreign Bank).

However, in case of Bank Guarantee from banks other than the Nationalized Indian bank, the bank must be a commercial bank having net worth in excess of Rs. 100 Crores or equivalent US Dollars and a **declaration to this effect** should be made by such commercial bank either in the bank guarantee itself or separately on its letterhead.

Performance Guarantee for 10% of order value shall be excluding taxes & duties.

BGL shall not be liable to pay any bank charges, commission or interest on the same.

Failure of the successful bidder to comply with the requirement of this clause shall constitute a breach of contract, cause for annulment of the award, forfeiture of the bid security and any such remedy the Owner may take under the Contract pursuant to GCC-Goods.

There is no exemption to MSEs including SSI units from submission of Security Deposit/ Contract Performance Bank Guarantee (CPBG).

13.0 REPEAT ORDER

BGL reserves the right to place a repeat order within Six (06) months from date of purchase order for upto 50% of order quantities on same rate, terms and conditions.

14.0 DELIVERY

The delivery of the items location wise is as per the Material Requisition.

The Vendor to arrange transportation of these materials from the vendor shop to designated locations of BGL yard in respective cities. No extra payment shall be made for the transportation and deemed to be included in the quoted price.

Bidder to deliver the materials at all locations as per the quantity estimated.

15.0 DELIVERY SCHEDULE

Delivery of the total order quantity will be completed within ten (10) weeks from the date of Fax of Acceptance (FOA)/Purchase Order(PO) as mentioned in Time Schedule (Section-10).

Item Description	Completion period
Manufacture, Inspection, Testing, Supply (on FOT Site basis) including packaging forwarding, transportation, etc.	Progressively within ten (10)weeks from the date of FOA/PO on FOT site basis. As per the time schedule.

Items are to be delivered in two lot as in Time Schedule.

16.0 PACKING, MARKING AND SHIPMENT

The Seller, wherever applicable shall after proper painting, pack and crate all goods for



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sea/air/road/rail transportation in a manner suitable to tropical humid climatic region in accordance with the internationally accepted practices and in such a manner so as to protect it from damage and deterioration, in transit by sea or air or road or rail and during storage at the storehouse. The Seller shall be held responsible for all damages due to improper packing. The Seller shall ensure sizing or packing of all oversized consignments in such a way that availability of carrier and/or road/rail route is properly taken into consideration.

For MARKING & PACKAGING of the GI Pipes shall be as Section-IV of Vol I of I.

Seller shall comply with the Packing, Marking and Shipping Instructions and Special Packaging Requirement as per Attachment II of this Bidding Document.

17.0 INDEPENDENT SELLER

It is expressly understood and agreed that Seller is an independent party and that neither the Seller/ its personnel are servants, agents or employees of Purchaser nor the Seller has any kind of interest in other sellers.

18.0 LIEN

Seller shall ensure that the Scope of Supply supplied under the Agreement shall be free from any claims of title/liens from any third party. In the event of such claims by any party, Seller shall at his own cost defend, indemnify and hold harmless Purchaser or its authorised representative from such disputes of title/liens, costs, consequences etc.

19.0 LIMITATION OF LIABILITY

Notwithstanding anything contrary contained herein, the aggregate total liability of Supplier under the Contract or otherwise shall be limited to 100% of contract value. However, neither party shall be liable to the other party for any indirect and consequential damages, loss of profits or loss of production.

20.0 GOVERNING LAW

Laws of India will govern the Agreement and Hyderabad courts will have exclusive jurisdiction on all matters related to Agreement.

21.0 OWNER'S RIGHTS AND REMEDIES

Without prejudice to Owner's right and remedies under Agreement, if SUPPLIER fails to commence delivery as per agreed schedule and/or in reasonable opinion of the OWNER, CONTRACTOR is not in a position to makeup the delay to meet the intended purpose, the OWNER may terminate the AGREEMENT in full or part at SUPPLIER's default and may get supplies from other sources at SUPPLIER's risk and cost.

22.0 Clause no. 16.0 of GCC shall be appended with the following :

Bidder shall arrange Transit Insurance and the cost of which shall be borne by bidder. Quoted price shall be inclusive of the same.



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23.0 Clause no. 30.4 of GCC shall be appended with the following :

SETTLEMENT OF COMMERCIAL DISPUTES BETWEEN PUBLIC SECTOR ENTERPRISE(S) INTER-SE AND PUBLIC SECTOR ENTERPRISE(S) AND GOVERNMENT DEPARTMENT(S) THROUGH PERMANENT MACHINERY OF ARBITRATION (PMA) IN THE DEPARTMENT OF PUBLIC ENTERPRISES

In the event of any dispute or difference relating to the interpretation and application of the provisions of the contracts, such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitrator under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary / Additional Secretary. When so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusively. The parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

24.0 FAILURE & TERMINATION CLAUSE

Time and date of delivery shall be the essence of the contract. If the vendor/contractor fails to deliver the entire quantity of materials ordered/ complete the work or a part thereof within the contractual delivery/ completion period agreed to for such part or total quantity as per the delivery / time schedule or at any time repudiates the contract before the expiry of such period, BGL may without prejudice to any other right or remedy available to it recover damages for breach of the contract in any manner stipulated hereunder:-

(a) Recover from the vendor/ contractor an agreed amount towards Price Reduction Schedule and not by way of penalty a sum equivalent to 1/2% (half per cent) of the contract price of the whole unit per week for such delay or part thereof (this is a genuine pre-estimate of damages duly agreed by the parties) which the vendor/ contractor has failed to deliver within the period fixed for delivery in the schedule, where delivery thereof is accepted after expiry of the aforesaid period.

It may be noted that such recovery of PRS may be up to 5% of the contract price / of the total quantity of items of materials / equipment which the contractor has failed to deliver within the period fixed for delivery; or

(b) Purchase or authorise the purchase elsewhere on the account and at the risk of the contractor, of the materials not so delivered or others of a similar description, by serving prior notice to the contractor / supplier without canceling the contract in respect of the



installment not yet due for delivery;

or

(c) Cancel the contract or a portion thereof by serving prior notice to the contractor and if so desired, purchase or authorise the purchase of the materials not so delivered or others of a similar description (where such materials exactly complying with particulars are not, in the opinion of the purchaser, which shall be final, readily procurable) at the risk and cost of the contractor. If the contractor had defaulted in the performance of the original contract, the purchaser shall have the right to ignore his tender for risk purchases even through the lowest. Where the contract is terminated at the risk and cost of the firm under the provisions of this clause, it shall be solely upto the purchaser to exercise his discretion to collect or not, the security deposit from the firm, on whom the contract is placed, at the risk and expense of the defaulting firm.

(d) Where action is taken under sub-clause (b) or sub-clause(c) above, the contractor shall be liable for any loss which the purchaser may sustain on that account, provided the purchase or if there is an agreement to purchase, such agreement is made, in case of failure to deliver the materials within six months from the date of such failure and in case repudiation of the contract within six months from the date of cancellation of contract. The contractor shall not be entitled to any gain on such purchase and the manner and method of such purchase shall be at the entire discretion of the purchaser. It shall be necessary for the purchaser to give a notice of such purchase on the contractor.

(e) It may further be noted that clause (a) above provides for recovery of PRS on the cost of contract price of delayed supplies (whole unit) at the rate of 1/2% (half per cent) of the contract price of the whole unit per week for such delay or part thereof upto a ceiling of 5% of the contract price of delayed supplies thus accrued will be recovered by the paying authorities of the purchaser specified in the supply order, from the bill for payment of the cost of the material submitted by the vendor/contractor in accordance with terms of supply order, or otherwise.

(f) Notwithstanding any thing stated above equipment and materials will be deemed to have been delivered only when all its components, parts are also delivered. If certain components are not delivered in time the equipment and material will be considered as delayed until such time all the missing parts are also delivered.

25.0 General Conditions

- (i) When the materials are dispatched to the consignee intimation must also be given to this effect. Reference to the supply order should invariably be given in all the relevant correspondence.
- (ii) The tender is liable to be rejected in case the tender does not comply with tender stipulations or the goods, works and services offered do not conform to the required



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specifications indicated there in.

- (iii) Any other terms and conditions offered by the firm and not included in the order/contract, are not acceptable to BGL.



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SECTION – 10
TIME SCHEDULE



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TIME SCHEDULE

Item Description	Completion period
Manufacture, Inspection, Testing, Supply (on FOT Site basis) including packaging forwarding, transportation, etc.	Progressively within ten (10) weeks from the date of FOA/PO on FOT site basis.

Complete materials shall be delivered in two lots.

1st Lot of 70% of GI Pipes shall be completed within four (4) to Six (6) WEEKS from date of award of FOI/ PO.

2nd Lot of 30% of GI Pipes shall be completed within Eight (8) to Ten (10) WEEKS from date of award of FOI/ PO.

Sl.No.	Description				Total Quantity (metre)	Location	Quantity of 1 st Lot (metres)	Quantity of 2 nd Lot (metres)
	Size - inch	Sch	End	Type				
PART-A								
1	1/2	Heavy	Plain	Galvanised	1,00,000	Hyderabad	70,000	30,000
						Vijayawada	10,000	-
						Kakinada	10,000	-
PART-B								
2	3/4	Heavy	Plain	Galvanised	28,000	Hyderabad	20,000	-
						Vijayawada	4,000	-
						Kakinada	4,000	-

The basis of delivery will be FOT site, Hyderabad, Vijayawada and Kakinada basis.

Note: Price Reduction Schedule (PRS) will be based on contract value for the items covered under this schedule.



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SECTION – 11
TECHNICAL SPECIFICATIONS



TECHNICAL SPECIFICATION FOR GI PIPES

SCOPE:-

This specification covers the requirements for Galvanized Iron Pipes for providing the Piped Natural Gas connections. Unless modified by this specification, requirement of IS 1239 (Part-1), Heavy Duty, shall be valid. The material should also meet the Technical Standards/Specifications (T4S) notified by Petroleum Natural Gas Regulatory Board (PNGRB).

The details are as follows:	
Service	: Natural Gas
Working Pressure	: 4 bar (g)
Test Pressure	: 6 bar (g)
Working Temperature	: 0°C to 50°C
Material Description	: IS: 1239 (Part-I) Heavy Duty, Continuous Welded
Min. Tensile Strength	: 30 kgf/sq.mm
Min. Elongation	: 6%
Tolerance	: + Not limited, - 10%
Protective Coating	: Galvanised uniformly to protect from Corrosion as per IS: 4736/ ASTM A53 or by Electro Galvanising
Ends of Pipes	: Plain End
Inspection	: 100% Pressure Testing shall be carried out at factory.

1.0 GENERAL NOTES

- 1.1 All pipes and their dimensions, tolerance, chemical composition, physical properties, heat treatment, hydrotest and other testing and marking shall conform to the codes and standards.
- 1.2 Material test certificates (physical property, chemical composition & heat treatment report) shall also be furnished for the pipes supplied.
- 1.3 Pipe shall be supplied in random length of 3 Mtrs or 6 meters only.
- 1.4 Galvanized pipes shall be uniformly coated with zinc by hot DLF process confirming to IS: 4736 / ASTM A53 or by electro galvanizing.



- 1.5 Zinc conforming to any grade specified in IS:13229-1991 with latest amendments shall be used for the purpose of galvanization.
- 1.6 **Galvanizing Bath:** The molten metal in galvanizing bath shall contain not less than 98.5% by mass of zinc
- 1.7 **Mass od zinc coating:** Minimum mass of zinc coating determined as per IS:6785 shall be 360 gms/m².
- 1.8 **Uniformity of galvanized coating:** The galvanized coating when determined on a 100mm long test piece un accordance with IS:2633-1986 with latest amendments shall withstand 5 one minute dip.
- 1.9 **Freedom from defect :** The zinc coating on internal and external surfaces shall be uniform adhered reasonably smooth and free from such imperfection as flux, ash and drop inclusion , bare patches, black spots, lumpiness runs , rust stains, bulky white deposits and blisters. Rejection and acceptance of these defects shall be in accordance with Appendix A of IS 2629: 1985 with latest amendments.
- 1.10 **Powder Coating** The GI pipe shall be provided YELLOW coloured protective coatings by applying a polyester powder coating over hot dip galvanized pipe as per the standard powder coating procedures.

1.11 PRESSURE TEST:

Hydrostatic pressure test shall be carried out at pressure of 6Mpa (50Kgf/ Cm²). Vendor to submit the internal pressure test certificate for the same. If required, BGL representative or Third Party Inspection agency appointed by BGL shall witness finished goods testing as per the sample procedure specified in clause no 14 of IS 1239 (part – 1).

2.0 MARKING AND DESPATCH

- 2.1 All pipes shall be marked in accordance with the applicable codes, standards and specifications.
- 2.2 Paint or ink for marking shall not contain any harmful metal or metallic salts, such as zinc lead or copper which causes corrosive attack in heat.
- 2.3 Pipes shall be dry, clean and free from moisture, dirt and loose foreign materials of any kind.
- 2.4 Pipes shall be protected from rust, corrosion and mechanical damage during transportation, shipment and storage.
- 2.5 Both ends of the pipe shall be protected with the following material. Plain End : Plastic Cap Bevel End : Wood, Metal or Plastic Cover Threaded End : Metal or Plastic Threaded Cap
- 2.6 Steel end protectors to be used on galvanised pipes, shall be galvanised.



2.7 BGL logo shall be marked / embossed on the pipes.

3.0 SPECIFICATION FOR PURE POLYESTER POWDER COATING OF GI PIPES

This BGL Specification specifies the requirements for powder coating (Pure Polyester) of GI Pipes suitable to use for carrying Natural Gas directly exposed to sunlight.

3.0 Specification for Powder Coating:-

Powder Material	Pure Polyester.
Application	Electrostatic Spraying. (40 - 90 kV, Manual / Automatic)
Baking Schedule	180 ⁰ C to 200 ⁰ C for 10 minutes (Metal Temperature)
Coating Thickness	50 – 60 Microns (For GI Pipes)
	70 – 80 Microns (For ERW Pipes (Heavy Class))*

* ERW pipes are generally obtained from the manufacturers with a protective layer like a varnish applied on the pipe, to prevent corrosion. In order to obtain a proper application of pure polyester powder coating on the ERW pipes, the varnish has to be removed by use of a suitable method, but with prior approval of BGL.

3.1:- TESTING:-

Film Type : Glossy / Satin

Gloss 60⁰ (ASTM D - 523 - 60) :86 - 95%

Cross Hatch Adhesion (ASTM D - 5870) : GT = 0/100.

Cylindrical bending Test (ASTM D - 522) 5 mm rod dia. : Passes.

Enrichsen cupping (minimum) : 8 Passes.

Pencil Hardness (minimum) : 2H

Scratch Resistance (Kg. Min) : 3

Impact Resistance Kg. Min (ASTM D - 2794) : Direct – 150
: Indirect – 150

Salt Spray Resistance (ASTM B - 117) : 1000 hours (minimum).

Porosity (DIN - 53161) : Passes.

Humidity Resistance (ASTM D - 2247) : 1000 hours (minimum).

Weathering Gloss retention after 1000 hours (Sun test with water immersion, Xenon 150 K.lux)
: 60 – 70%



Color: Canary Yellow.

4.0:- MARKING:

4.1 Each pipe shall be EMBOSSSED with manufacturers name or trade mark and the size designation at the interval of not more than 2 meters.

Pipe shall be supplied in random length of 3 to 6 meters only.

Each packing containing pipes shall carry the following stamped or written by indelible ink.

- a) Manufacturer name and trade mark.
- b) Designation of pipe.
- c) Lot number.
- d) ISI Monogram

Each pipe confirming to this standard shall also be marked with BIS standard mark.

4.2 Paint or ink for marking shall not contain any harmful metal or metallic salts, such as zinc lead or copper which causes corrosive attack in heat.

4.3 Pipes shall be dry, clean and free from moisture, dirt and loose foreign materials of any kind.

4.4 Pipes shall be protected from rust, corrosion and mechanical damage during transportation, shipment and storage.

Both ends of the pipe shall be protected with the following material.

Plain End: Plastic Cap

Bevel End :

Wood, Metal or Plastic Cover

Threaded End: Metal or Plastic Threaded Cap

Steel end protectors to be used on galvanised pipes, shall be galvanized.

5.0 INSPECTION/ DOCUMENTS:

Inspection shall be carried out as per BGL specifications.

The manufacturer will engage the Third Party Inspection agency approved by PNGRB and the cost of the same will be included in the quoted rates.

BGL representative or Third Party Inspection agency authorized by BGL may carry out stage wise inspection during manufacturing / final inspection.



Vendor shall furnish all the material test certificates, proof of approval, licence from specified authority as per specified standard, if relevant internal test / inspection reports as per BGL technical specifications and specified code for 100% material, at the time of final inspection of each supply of each lot.

Even after Third Party Inspection BGL reserves the rights to select a sample of pipes randomly from each manufacturing batch and have these independently tested. Should the result of these testes fall outside the limits specified in BGL technical specifications. Then Bhagyanagar Gas Ltd reserves the rights to reject all production supplied from the same batch.

6.0 DATA SHEET:

Sl. No.	Description	Vendor's Offer	Deviation if any	Remark
1	Vendor is the manufacturer of Heavy Class GI Pipes as per IS 1239 (part - I)			
2	Raw Material used for manufacturing of GI pipes should be as per IS - 1239 (Part - I)			
3	GI Pipes should be supplied as Plain Ends			
4	Out side and Inside Surface of GI pipes should be Free from defects			
5	Zinc as per IS 4736:1986 used for galvanising			
6	The molten metal in galvanising bath shall contain not less than 98.5% by mass of zinc			
7	Mass of Zinc Coating as per IS 6745 - 1972 shall be 400 gms/m ²			
8	Selection of sample will be as per IS 4736 - 1986			
9	Hydrostatic Test pressure will be carried out at 6 Mpa			
10	Marking will be done as per BGL Specifications BGL/ENG/PE/07			



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Note:

1. The Bidder has to confirm the above data sheet and need to submit required documents.
2. If any deviation is required in the above said specifications / Data Sheet vendor has to specify with reasons and proof of documents.

7.0 PACKING:

Packing size to be mentioned to ensure uniformity in delivery condition of the material being procured. Bidder shall submit the packaging details during QAP and also compiled with at the time delivery.



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SECTION 12
SCHEDULE OF RATES (SOR)

Sl. No	Description				City	Quantity (Meters)(a)	Unit Price Ex works including cost of raw material/components, TPI charges, packaging, forwarding, (Rs.) (b)	Per unit freight charges, transit insurance including loading at vendor's works and unloading at BGL's site but excluding GST, any other taxes & duties upto FOR Project site (c)	Per unit GST (Rs.) -----% (d)	Per unit FOT Site (Rs.) (e) = (b) + (c) + (d)	Total FOT project Site inclusive of all taxes and duties (Rs.) (f) = (a) x (e)	
	GI Pipes as Per IS - 1239 and of following sizes & schedule indicated below and BGL's Technical Specifications.											
	Pipe NB (Inch)	Schedule	Ends	Type								
	PART -A											
1.1	½"	Heavy	Plain	Galvanised	Hyderabad	1,00,000						
1.2					Vijayawada	10,000						
1.3					Kakinada	10,000						
	Grand Total amount for Part -A inclusive of all taxes & duties inclusive of GST. (1.1+1.2+1.3), Rs. (in Words)											
	PART -B											
2.1	¾"	Heavy	Plain	Galvanised	Hyderabad	20,000						
2.2					Vijayawada	4,000						
2.3					Kakinada	4,000						
	Grand Total amount for Part -B inclusive of all taxes & duties inclusive of GST.(2.1+2.2+2.3),Rs. (in Words)											

Sign & Seal of Bidder: