

WORK ORDER

WO NO.: 0503 / AGL / WO / O & M – PNG / FP / 2015

Date : 05.10.2015

M/s FUTURE PROJECTS
SHOP NO. 5 HAPPY HOME APT. 1 NEAR MALAIKA,
SHANTI PARK, MIRA ROAD, THANE
Contact – 022-28119735, 9322862988
Email id - info@futureprojects.in

Attn: Mr. BHANU SINGH

Sub.: Work of O&M - PNG MDPE Network for Indore, Ujjain & Gwalior City Gas Distribution Project.

- Ref.: 1. Tender No.: AGL/180/O&M – PNG/08-15 dated 30.08.2015
2. Your submitted Offer No. FUTURE/AGL/180/08-15 DATED 15.09.2015
3. LOI NO. : 0503_A/AGL/LOI/O&M-PNG/FP/IND/2015 DATED: 29.09.2015
4. LOI NO. : 0503_B/AGL/LOI/O&M-PNG/FP/UJJ/2015 DATED: 29.09.2015
5. LOI NO. : 0503_C/AGL/LOI/O&M-PNG/FP/PTM/2015 DATED: 29.09.2015

Dear Sir,

With reference to your offer no. FUTURE/AGL/180/08-15 DATED 15.09.2015 against our Tender No. : AGL/180/O&M – PNG/08-15 dated 30.08.2015 and all subsequent correspondences till date O&M of MDPE Network & associated works for Indore, Ujjain and Pithampur CGD project, we are pleased to issue this Work Order on following Terms and Conditions:

1. SCOPE OF WORK

The scope of work shall be as per Bid Document - AGL/180/O&M – PNG/08-15 dated 30.08.2015 and :

- Schedule of Rates of Indore, Ujjain and Pithampur attached as Annexure – I, II, III
- Inventory list as per Annexure – IV
- HSE Clauses as per Annexure - V



पंजीकृत कार्यालय : २०२-बी, दूसरी मंजिल, एनआरके बिजनेस पार्क, विजय नगर चौराहा, ए.बी.रोड, इन्दौर ४५२०१० म.प्र. टेलीफोन : ०७३१-४२२२५२०
ईमेल : info@aglonline.net, वेब साईट : aglonline.net

Regd. Office : 202-B, II Floor, NRK Business Park, Vijay Nagar Square, A.B. Road, Indore-452010 (M.P.) Telephone : 0731-4222520
email : info@aglonline.net, website : aglonline.net

The work shall be executed strictly in accordance with the terms and conditions set out below and the bidding document which forms an integral part of this Work Order. No variation of any nature shall be permitted to these conditions except with AGL's prior consent in writing.

2. ORDER VALUE

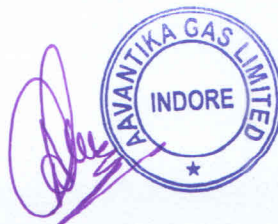
The estimated Total Value of this work order for Indore, Ujjain and Pithampur city is Rs 2,33,59,421 /- (RUPEES TWO CRORE THIRTY THREE LACS FIFTY NINE THOUSAND FOUR HUNDRED AND TWENTY ONE ONLY) .

Individual City wise value is as mentioned below :

- INDORE CITY: Rs 1,03,99,901/- (RUPEES ONE CRORE THREE LACS NINETY NINE THOUSAND NINE HUNDRED AND ONE ONLY) as per your quoted prices vide the above referred offer. the total order value is inclusive of all taxes and duties as per Schedule of Rates (SOR) attached herewith as Annexure-I
- UJJAIN CITY: Rs 66,80,172/- (RUPEES SIXTY SIX LACS EIGHTY THOUSAND ONE HUNDRED AND SEVENTY TWO ONLY) as per your quoted prices vide the above referred offer. the total order value is inclusive of all taxes and duties as per Schedule of Rates (SOR) attached herewith as Annexure-II
- PITHAMPUR CITY: Rs 62,79,348/- (RUPEES SIXTY TWO LACS SEVENTY NINE THOUSAND THREE HUNDRED AND FOURTY EIGHT ONLY) as per your quoted prices vide the above referred offer. the total order value is inclusive of all taxes and duties as per Schedule of Rates (SOR) attached herewith as Annexure-III

Statutory variations in taxes & duties shall be dealt with as per Tender Clause-59 of GCC.

The actual order value shall, however, be subject to variation depending upon the actual quantities of work executed, measured and accepted for payment at site. The contract rates shall remain firm and fixed till completion of all works and no adjustment / escalation in prices on any account shall be permissible except for the statutory variation in taxes and duties.



3. CONTRACT PERIOD

Contract period shall be for Two (2) Years from the date of Award.

4. CONTRACT PERIOD EXTENSION

Contract period shall further extended for another One Year on same terms & conditions as per AGL Discretion.

5. PENALTY

As soon as the leakage point identification is done ; the nearest valves in the upstream and downstream shall be closed within 15 minutes.

The identified leakage shall be attached and repaired within the span of 2 hrs; however if the contractor fails to do so a penalty shall be imposed in proportional with the leakage/ vent gas quantity as calculated by the EIC.

Penalty imposition shall be as per the sole discretion of the EIC depending upon the responsiveness shown by the contractor as per the severity of leakage.

Apart from the above the following criteria also entitles for the imposition of penalties:-

- Against non fulfilment of the minimum service level standards.
- Against the schedule maintenance of is not done within 3 days of the annual O&M plan.
- Against non availability of skilled manpower for each instance without justification.
- Against any manipulation / malpractices.
- Against not using Personal protective Equipments (PPE) or proper tools / tackles for each instance.
- Against deployment of any employee of age less than 18 years in any of the activity.
- Against non availability of material / spares required for emergency breakdown maintenance.
- Against non observation / misbehavior and non compliance of statutory requirements and HSE during execution of O&M work.

No penalty shall be applicable in case of;



- Force majeure.
- When AGL has instructed not to carry out the work, for which only written evidence shall be considered / granted.
- Reasons not attributed to contractor.

6. TESTS AND INSPECTION:

All Tests and Inspection for the executed work shall be inspected by the Engineer – In – Charge. The Test and Inspections shall be carried out as per Clause No. 55 of Section – III, GCC of the Tender Document.

7. TERMINATION OF CONTRACT

The contract can be terminated as detailed in clause no 64 & 72 of General Condition of Contract (GCC) of tender document.

8. COMPLIANCE WITH STATUTORY AND LEGAL REQUIREMENTS

The contractor shall comply with all legal requirements under various labour laws like contract labour (regulation and abolition) Act, Provident Fund and Miscellaneous provision Act, Minimum Wages Act and all other applicable laws.

Contractor shall indemnify owner / consultant in the event of failure of contractor to comply with any legal and statutory requirements.

9. APPLICABILITY OF LAW & JURISDICTION

The order shall be Governed and interpreted in accordance with the applicable laws of India and Court of Madhya Pradesh shall be exclusive Jurisdiction.

10. ARBITRATION

For all disputes or differences, other than the matters where decision of the Engineering Charge is deemed to be final and binding as provided in the tender, which cannot be resolved mutually, arbitration would be as per clause 79.0 of General Condition of Contract.



11. HEALTH SAFETY AND ENVIRONMENT (HSE)

Contractor shall comply with all HSE norms as per SCC Clause no 10 of Tender document and also as per HSE RULES attached herewith as Annexure - V

12. TOOLS / TACKLES / EQUIPMENTS / CONSUMABLES

The Contractor shall maintain inventory of following Tools / Tackles & Materials of reputed make at all the times. Contractor will take prior approval from Engineer-In-Charge before procurement of material as per as per Tool, Tackles & Material Requirements attached herewith as Annexure-IV.

13. SITE ORGANISATION

Subject to the provisions in the document and without prejudice to Contractor's liabilities and responsibilities to provide adequate qualified and skilled personnel for the work, contractor shall deploy and maintain site organization and augment the same as decided by the Engineer-in-charge depending on the exigencies of work as to complete works within the contracted time schedule and without any additional cost to Owner.

14. DEFECT LIABILITY PERIOD

The defect liability period shall be 12 months from the date of handing over as certified by the Engineer in Charge as per Clause 57.0 of General Conditions of contract-Works (GCC-Works).

15. DRAWINGS / DOCUMENTS

Contractor shall make efforts on submission of all relevant Drawings / Documents pertaining to executed O&M – PNG Work.

16. PAYMENT TERMS AND CONDITIONS

Contractor shall submit his RA bill to the respective Engineer-In-Charge of Employer, attaching all the required documentary proof confirming there upon that all statutory obligations as per rules are being observed. Un-disputed payment shall be made to the contractor through Finance Department against Bills, duly certified by respective Employer's Engineer-In-Charge within 15 (Fifteen) days, if found in order. No interest shall be paid in case of delay in payments. For payment terms, refer clause no. 5 & 6 of SCC.



Payment shall be released after applicable tax deductions at source as per rules & acts enforced during the tenancy of the contract

17. PAYMENT METHODOLOGY

- 17.1 The contractor shall raise invoices on monthly basis (RA BILL) for works carried out duly certified by Engineer-in-Charge in triplicate.
- 17.2 The payments to the Contractor will be released within a period of 30 days from the date of receipt of the certified invoice as per the terms and conditions of the Contract.
- 17.3 AGL will release payment as per SCC Clause No. 5.

All applicable taxes as per rules and acts enforced during the tenancy of the contract shall be deducted at source.

Documents to be submitted / produced along with the Invoices:

- Invoices with IT no. / ST No. printed thereon.
 - ESI/EPF challan / undertaking for the period of the measurement along with RA Bills.
 - Insurance Policy as per relevant clauses of Contract Agreement, including Comprehensive All Risk (CAR) policy
 - Any other documents required for the purpose of processing the bills
- 17.4 Payment will be released through normal banking channels on receipt of relevant documents along with correct invoice, complete in all respects.
- 17.5 The invoice shall have the Work Order No. and complete description as indicated in Schedule of Rates as per Annexure-I, II and III.
- 17.6 Invoices shall be submitted to the EIC as under:

1 original + 1 copy with necessary documents to :
Mr. V.K. Shrote (Chief Manager- Operations)
Aavantika Gas Limited
2nd floor, 202-B NRK Business Park,
Vijay Nagar Square, Indore (M.P.)
Contact : 0731-4222520



18 CONTRACT PERFORMANCE BANK GUARANTEE

Successful bidder shall be required to submit, within fifteen (15) days from date of issue of "Fax of Intent", the Contract Performance Bank Guarantee for 10% of the total order value. The validity of the CPBG shall be 3 months beyond the Warranty / Defect Liability period of the contract.

In the event that completion of work is delayed beyond the scheduled completion date for any reason whatsoever, the contractor shall have the validity of the Contract Performance Bank Guarantee suitably extended to cover the period of delay.

The proceeds of the Contract Performance Bank Guarantee shall be payable to the Employer as compensation for any loss or damage resulting from the Contractor's failure to complete its obligations under the Agreement

The Contract Performance Bank Guarantee shall be denominated in the currency of the Agreement and shall be in one of the following forms:

A bank guarantee issued by a scheduled/ nationalized bank is acceptable to the Employer, in the form provided in the bid documents. The Contract Performance Bank Guarantee will be discharged by the Employer and returned to the Contractor not later than One hundred eighty (180) days following the date of completion of all the Contractor's performance obligations under the Contract, including any warranty obligations.

19. CONTRACT AGREEMENT

You are requested to execute an agreement as per proforma enclosed in the bid document on a non-judicial stamp paper of M.P. State and of appropriate value within 15 (fifteen) days of issue of this WO. The cost of non-judicial stamp paper shall be borne by you.

The following documents shall be forming part of agreement.

- Tender No.: AGL/180/O&M – PNG/08-15 dated 30.08.2015
- Your Offer No. FUTURE/AGL/180/08-15 DATED 15.09.2015
- All correspondences made in regard to above mentioned tender till date
- This Detailed Work Order along with Annexure – I, II, III, IV and V



20. OTHER TERMS & CONDITIONS

All other provisions covered under bidding document along with Instructions to Bidders, General Conditions of Contract-Works (GCC-Works), Special Conditions of Contract-Works (SCC-Works), other sections of bid document, shall be fully applicable to this order without any deviation unless otherwise agreed upon in writing.

21. ENGINEER – IN – CHARGE

The Engineer-In-Charge for this WO shall be:
Mr. V.K. Shrote (Chief Manager- Operations)
Aavantika Gas Limited
2nd floor, 202-B NRK Business Park,
Vijay Nagar Square, Indore (M.P.)
Contact : 0731-4222520

22. ACCEPTANCE OF ORDER

This work order is being issued in duplicate. One copy of the order duly signed, stamped and dated on each page, shall be returned, within 7 days from the date of issuance of this work order to:

Manager – C&P(Aavantika Gas limited)
2nd floor, 202-B NRK Business Park,
Vijay Nagar Square, Indore (M.P.)
Contact : 0731-4222520

23. Enclosure:

Annexure – I (Schedule of Rates – INDORE City)
Annexure – II (Schedule of Rates – UJJAIN City)
Annexure – III (Schedule of Rates – PITHAMPUR City)
Annexure – IV (List of “TOOLS / TACKLES / EQUIPMENTS / CONSUMABLES”)
Annexure – V (HSE Clauses)



Yours Sincerely

FOR AAVANTIKA GAS LIMITED



Himanshu Nigote
Manager - C&P

CONTRACTOR'S ACCEPTANCE

We accept the WO in its entirety.

Place

Signature :

Date

Name :

Designation :

Seal

ANNEXURE - I

SCHEDULE OF RATES (SOR) : INDORE

AGL/180/O&M-PNG/08-15

Item No.	Description of Item	Unit	Qty	Per Unit Rate inclusive of all Taxes (INR)	Total Price inclusive of all Taxes (INR)
1	Manpower				
1.1	In charge for PNG O&M	Man Month	24	24,600	5,90,400
1.2	Shift Incharge for PNG O&M	Man Month	72	15,120	10,88,640
1.3	Technician/Plumber for PNG O&M	Man Month	72	13,440	9,67,680
1.4	PE Welder for PNG O&M	Man Month	48	13,500	6,48,000
1.5	Helper	Man Month	240	8,500	20,40,000
1.6	House keeping staff for DRS, industrial skids, valve chambers, TLPs, etc	Man Month	48	8,500	4,08,000
2	Maintaining Inventory of Tools / Tackles / Materials / Consumables As per list A, B C & D given in Para 4 of scope of work (To be maintained in Emergency Vehicle & Office)	Month	24	25,000	6,00,000
3	Transportation (Mahindra Pickup / Mahindra Bolero Camper / Tata 207 with driver and fuel for round the clock duty, Latest model 2014 make)	Month	24	40,000	9,60,000
4	Communication (Mobile to all employees and 1 No. Landline)	Month	24	5,000	1,20,000
5	Office space (Appx. 500 sq. feet) with computer having internet facility	Month	24	15,000	3,60,000
6	Quotation for Additional Item Rates for O & M				-
6.1	Supply & Installation charges Of RCC Route Marker	Nos	700	250	1,75,000
6.2	Supply & Installation charges Of Pole Marker	Nos	300	1,800	5,40,000
6.3	Repainting of RCC Route Marker	Nos	350	100	35,000
6.4	Repainting of Pole Marker	Nos	200	200	40,000
6.5	Constrution of new MDPE Valve chamber with cover (size 1m*1m drawing enclosed in tender)	Per chamber	10	5,000	50,000
6.6	JCB Rate/RCC breaker(including all labour and fuel charges)	per hour	500	1,000	5,00,000
7	Total amount for 24 months inclusive of all taxes				91,22,720
	Service tax@ 14%				12,77,181
	Total amount for 24 months inclusive of all taxes				1,03,99,901
Total Amount In words : ONE CRORE THREE LACS NINTY NINE THOUSANDS NINE HUNDRED ONE ONLY					



ANNEXURE - II

SCHEDULE OF RATES (SOR) : UJJAIN

AGL/180/O&M-PNG/08-15

Item No.	Description of Item	Unit	Qty	Per Unit Rate inclusive of all Taxes (INR)	Total Price inclusive of all Taxes (INR)
1	Manpower				
1.1	In charge for PNG O&M	Man Month	24	18,500	4,44,000
1.2	Shift Incharge for PNG O&M	Man Month	48	12,600	6,04,800
1.3	Technician/Plumber for PNG O&M	Man Month	48	12,500	6,00,000
1.4	PE Welder for PNG O&M	Man Month	48	11,500	5,52,000
1.5	Helper	Man Month	144	8,500	12,24,000
1.6	House keeping staff for DRS, industrial skids, valve chambers, TLPs, etc	Man Month	24	8,750	2,10,000
2	Maintaining Inventory of Tools / Tackles / Materials / Consumables As per list A, B C & D given in Para 4 of scope of work (To be maintained in Emergency Vehicle & Office)	Month	24	20,000	4,80,000
3	Transportation (Mahindra Pickup / Mahindra Bolero Camper / Tata 207 with driver and fuel for round the clock duty, Latest model 2014 make)	Month	24	30,000	7,20,000
4	Communication (Mobile to all employees and 1 No. Landline)	Month	24	5,000	1,20,000
5	Quotation for Additional Item Rates for O & M				-
5.1	Supply & Installation charges Of RCC Route Marker	Nos	500	250	1,25,000
5.2	Supply & Installation charges Of Pole Marker	Nos	300	1,000	3,00,000
5.3	Repainting of RCC Route Marker	Nos	300	100	30,000
5.4	Repainting of Pole Marker	Nos	150	200	30,000
5.5	Contruction of new MDPE Valve chamber with cover (size 1m*1m drawing enclosed in tender)	Per chamber	6	5,000	30,000
5.6	JCB Rate/RCC breaker(including all labour and fuel charges)	per hour	300	1,300	3,90,000
5.7	Total amount for 24 months inclusive of all taxes				58,59,800
	Service tax@ 14%				8,20,372
	Total amount for 24 months inclusive of all taxes including				66,80,172
Total amount In Words : SIXTY SIX LACS EIGHTY THOUSANDS ONE HUNDRED SEVENTY TWO ONLY					



ANNEXURE - III

SCHEDULE OF RATES (SOR) : PITHAMPUR

AGL/180/O&M-PNG/08-15

Item No.	Description of Item	Unit	Qty	Per Unit Rate inclusive of all Taxes (INR)	Total Price inclusive of all Taxes (INR)
1	Manpower				
1.1	In charge for PNG O&M	Man Month	24	18,500	4,44,000
1.2	Shift Incharge for PNG O&M	Man Month	48	12,600	6,04,800
1.3	Technician/Plumber for PNG O&M	Man Month	24	11,200	2,68,800
1.4	PE Welder for PNG O&M	Man Month	48	11,200	5,37,600
1.5	Helper	Man Month	144	8,500	12,24,000
1.6	House keeping staff for DRS, industrial skids, valve chambers, TLPs, etc	Man Month	24	8,500	2,04,000
2	Maintaining Inventory of Tools / Tackles / Materials / Consumables As per list A, B C & D given in Para 4 of scope of work (To be maintained in Emergency Vehicle & Office)	Month	24	20,000	4,80,000
3	Transportation (Mahindra Pickup / Mahindra Bolero Camper / Tata 207 with driver and fuel for round the clock duty, Latest model 2014 make)	Month	24	30,000	7,20,000
4	Communication (Mobile to all employees and 1 No. Landline)	Month	24	5,000	1,20,000
5	Quotation for Additional Item Rates for O & M				-
5.1	Supply & Installation charges Of RCC Route Marker	Nos	500	250	1,25,000
5.2	Supply & Installation charges Of Pole Marker	Nos	300	1,000	3,00,000
5.3	Repainting of RCC Route Marker	Nos	300	100	30,000
5.4	Repainting of Pole Marker	Nos	150	200	30,000
5.5	Construction of new MDPE Valve chamber with cover (size 1m*1m drawing enclosed in tender)	Per chamber	6	5,000	30,000
5.6	JCB Rate/RCC breaker(including all labour and fuel charges)	per hour	300	1,300	3,90,000
5.7	Total amount for 24 months inclusive of all taxes				55,08,200
	Service tax@ 14%				7,71,148
	Total amount for 24 months inclusive of all taxes including				62,79,348
Total amount In words : SIXTY TWO LACS SEVENTY NINE THOUSANDS THREE FOURTY EIGHT ONLY					



INVENTORY (TOOLS / TACKLES / EQUIPMENTS / CONSUMABLES) LIST

Contractor shall maintain inventory of following Tools / Tackles & Materials of reputed make at all the times. Contractor will take prior approval from engineer in-charge before procurement of material.

A. Tools / Tackles & Materials

Sr. No.	Name of Item	Units	Qty
1	Drill Machine - 24"	Nos	1
2	Drill Machine - 10"	Nos	1
3	Drill Bit	Set	2
4	Wire Brush	Nos	1
5	Small Hacksaw	Nos	1
6	Fire Blanket	Nos	1
7	Fire Retardant suit	Nos	1
8	Flame Proof Torch	Nos	1
9	Normal Torch	Nos	1
10	Screw Jack with Tommy Bar	Nos	1
11	PTZL Safety Harness	Nos	1
12	Cable & pipeline locator	Nos.	1
13	Calibrated Gas Detector	LC 1% LEL	1
14	Fusion Machine	Nos	1
15	Generator	Nos	1
16	Instruments for taking TLP readings	Kit	1
17	Ext. Board With Cable (with RCCB & MCB)	metres	40
18	Conversion Kit	Kit	1
19	PE Cutter	Nos	1
20	PE Pipe Scraper	Nos	2
21	Squeeze Tool for pipe dia 20mm to 180 mm	Nos	1 for each size
22	Hydraulic Squeeze Tools	Set	1
23	Alignment Clamp for pipe dia 20 mm to 180 mm	Nos	1 for each size
24	PE Saddle Clamp	nos	2
25	MDPE leak clamp, 180 mm dia	Nos.	2
26	MDPE leak clamp, 125 mm dia	Nos.	2
27	MDPE leak clamp, 63 mm dia	Nos.	2
28	Steel Leak clamp, 4" dia	Nos.	2
29	Steel Leak clamp, 10" dia	Nos.	2
30	Allen key	set	1
31	Pipe Die for 1/2"	nos	1
32	Wise For Pipe Die	Nos	1
33	Gutkha For Threading	nos	1
34	Tool Box	Set	1
35	Pipe Wrench	nos	2
36	Slide Wrench	nos	1



37	Screw Driver	Set	1
38	Fix Spanners (8*9 to 24*27)	Set	1
39	Ring Spanners (8*9 to 24*27)	set	1
40	Hammer	nos	2
41	Plastic Hammer	nos	1
42	Brass Hammer	nos	1
43	Measure Tape (0 to 5 Meter)	nos	2
44	Fire Extinguisher 5 Kg	nos	2
45	Rope 16mm	metres	40
46	Emergency Light	nos	2
47	Pr. Gauge (0 to 1 bar)	nos	2
48	Pr. Gauge (0 to 10 bar)	nos	2
49	Simmering Tool	nos	2
50	Manometer	nos	1
51	Gaiti (Tool for excavation)	nos	2
52	Phawda	nos	2
53	Tagara	nos	2
54	Bucket	nos	2
55	Sign Board	nos	2
56	Van Locker Key	nos	1
57	Chisel	nos	2
58	File	nos	2
59	2½ Pipe Rench	nos	1
60	Valve Chamber Opener	nos	2
61	PE Valve Chamber Key	nos	2
62	Non Sparkling Tool Set	Set	1
63	Hack Saw / Blade	Nos	5
64	Safety Helmet	Nos	10
65	Cotton Hand Globes	Pair	5
66	Gum Boot	Pairs	4
67	Ear Muff	Nos	5
68	Ear Plug	Nos	5
69	Reflective Jacket	Nos	10
70	Rubber Hand Gloves	Set	4
71	Safety Goggles	Pairs	5
72	Permanent Marker	Nos	2
73	Acetone	Litre	1
74	Tissue Paper	Roll	1
75	Warning Tape	Meter	100
76	Waste Cloths	Roll	1
77	Safety Shoes	Pair	10
78	Spray Bottle	Nos	5
79	First Aid Box	nos	2
80	Cordoning Tape	metres	200
81	Soap Solution Bottles	nos	3



B. Additional Tools / Tackles for Excavation work

S.No.	Tools Tackles List	SIZE	NOS.
1	Guardrails, fences Barricading set	Set	1
2	Flash Lights	Nos.	4
3	Line dori & chuno	Set	1
4	Ladder for egress ingress	Set	As per req.
5	Side support set	Set	As per req.
6	Dewatering Pumps with hose pipes	Set	As per req.
7	Tractor with trolley	Set	As per req.
8	Excavation machines	Set	As per req.
9	Pneumatic Breaker with Compressor unit	Set	As per req.

C. Additional Tools / Tackles for Valve chamber maintenance

S.No.	Tools Tackles List	SIZE	NOS.
1	Paint Brushes	Set	1
2	Paint Scrappers	Set	1
3	Pipe Pieces For Leverage to Operate Valve	Set	1
4	Valve Key Set	Set	1
5	Grease Gun	Set	1
6	Paint for painting of chamber walls, pipes, valves, etc.	Ltr.	As per Req.
7	Grease for valve greasing	Kg.	As per req.



D. GI/Copper Consumable items

Item No.	Description of Item	Unit	Qty
1	GI Ø ½" Pipe	Metres	20
2	GI Ø 1" Pipe	Metres	10
3	GI Ø ½" Coupler	nos	15
4	GI Ø ½" Union	nos	15
5	GI Ø ½" Elbow	nos	15
6	GI Ø ½" Plug	nos	15
7	GI Ø ½" Tee	nos	15
8	GI Ø ½" Clamp	nos	15
9	GI Ø ½" Hex Nipple	nos	10
10	GI Ø ½" Nipple ½"x 2"	nos	10
11	GI Ø ½" Nipple ½"x 3"	nos	10
12	GI Ø ½" Nipple ½"x 4"	nos	10
13	GI Ø ½" Nipple ½"x 6"	nos	10
14	Regulator Bush	nos	10
15	Isolation Valve Ø ½"	nos	10
16	Isolation Valve Ø 1"	nos	2
17	O' Ring For Meter Adopter	nos	20
18	Gas Tap	nos	10
19	Adaptor Up / Down	nos	10
20	Fittings For Pr. Gauge	set	3
21	Suraksha Hose	nos	10
22	Rawal Plug	nos	50
23	Screw	nos	50
24	Jet 110	nos	10
25	Jet 125	nos	10
26	Copper Pipe, ½"	Meters	20
27	Soldering Wire	Meters	50
28	Flux	Gm	250
29	Copper Union, 1.2"	Nos	10
30	Copper – GI adapter	Nos.	10

E. PE Pipes & Fittings

All PE pipes & fittings, required for repairing damages, shall be provided by AGL



Aavantika Gas Limited

HSE Clauses

Medical & Welfare Arrangement

- Contractor shall maintain first aid facilities for its employees at site. First aid box should be made available at site all the time.
- Contractor shall make outside arrangements for ambulance service and for the treatment of industrial injuries. Names of those providing these services shall be furnished to employer prior to start of construction and their telephone numbers shall be prominently posted in contractor's field office.
- All critical industrial injuries shall be reported promptly to employer, and a copy of contractor's report covering each personal injury requiring the attention of a physician shall be furnished to the employer.
- Hygiene requirements met on site by providing fresh & portable drinking water without any impurities.
- If the female workers then are employed provision of crèche for their children's done at each site.
- Proper & sufficient place for the workers to rest during the breaks

Near miss/ Incident/ Accident/ Dangerous Occurrence Reporting

- The contractor shall report any and all actual Near Miss, Hazards, Incidents, accident to the AIC , HSE department occurring as a result of or in connection with the execution of the Works by the means forthwith upon becoming aware of them.
- The contractor shall keep actual and detailed records of any and all sicknesses, diseases, injuries, deaths, dangerous occurrences or 'near miss', hazards & incident.

Such details shall include the following as a minimum:

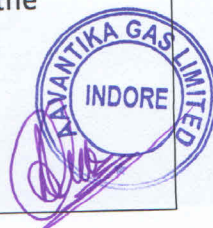
- The date and time of the incident
- The full name and occupation of any person affected;



- The nature of any sickness, disease or injury;
 - The time lost;
 - Description of what happened (or what could have happened);
 - Date reported to the relevant enforcing authority and means of such reporting
- Accident Investigation and Reporting Procedures should be adopted by contractor as instructed by employer.

Tools & Equipments at Site

- Provision of Fire Extinguisher (10 kg ABC) duly examined, tested & inspected once in a period of 3 months
- Provision of O2 Meter – (Inspection once in a 6 months)
- Inspection & Testing certificats for welding machine, mobile compressor, diesel, generator, lifting machines, slings, chain pulley blocks, tools & tackels available at site.
- Display of safety & emergency sign boards / hoarding covering the following
 - Inconvenience to members of public regretted/Work in progress
 - No smoking signboard
 - Name of the employer & contact details
 - Name & details of the Emergency contact number
 - Name & details of the external ambulance services with whom tie up is made
 - Work permit display at site
- All electrical accessories like drilling machine grinders, welding machines, fusion joint machines, junction boxes, loose cables & extension boxes are in good working conditions having earthing & without any cuts / bruises.
- Adequate lighting arrangements provided while working during night time.
- Standard barricading continuous steel / wooden, linked barriers with chain links as per site requirement. All barricades conspicuously seen in the dark/night time by the road users so that no vehicle hits the barricade. Visibility ensured by affixing retro



reflective stripes of required size and shape at appropriate angle at the bottom and middle portion of the barricades.

- Following safety precautions to be taken while using electric power tools.
 - RCCB and industrial fittings shall be used compulsorily on the circuit preferably at a position to offer maximum protection to the user.
 - Only trained person should use it.
 - Defective power tool shall not be used.
 - Only three pin plugs with proper covers should be used. No naked or cut wires should be used.
 - Machine should not be used with direct power supply, without operating switch.
 - The user should wear appropriate dress & safety equipment like, safety goggles, face shields safety shoes etc., for protection against flying metal chips.
 - Earthing / grounding must be provided for electric tools.
 - Excess force during its use may break the disc /tool resulting in accident.
 - Special care must be taken while using it in overhead position.
 - Power supply should be disconnected after completion of the job and tool should be stored in proper safe place.

Lifting Tools and Tackles

- All Lifting tool and Tackle supplied with Crane/hydra shall have SWL Marking, Identification Tag, and Relevant certificate issued by competent person once in 12Months
- Statutory form/ fitness certificates should be submitted by the contractor for the vehicle like hydra/ K10/ JCB during mobilization Audit.



- **Miscellaneous**

- Loading and Unloading operation shall be carried out by competent person.
- A proper rigging plan shall be made before starting the activity
- Tool Box Talk shall be conducted
- All hazard should be identified before starting Loading and Unloading operation
- Riggers are trained having valid STC Cards
- Site Barricading: During Loading and Unloading operation area should be barricaded properly

Safety Training Requirement

- Each and every person deployed at site should undergone safety training as per instruction from employer.
- No person should work without having proper safety training card.
- Contractor should follow the policy of safety training as per employer requirements.

Other HSE Requirements

- Before commencing any job all statutory clearances, licenses / permissions/ WORK PERMITS etc. shall be obtained and shall be made available at site. Site specific Hazard Identification and Risk Assessment is must for all sites as per **employer** procedure.
- No Site Activity shall be started before carrying out a kick off meeting with the concerned HSE Incharge of the region and followed by site mobilization Audit to verify all the HSE requirements and preparedness.
- The contractor Safety officers and the Project Manager should attend the Safety Meeting held as per employer schedule.
- The project Manager should ensure the presence of self and other team members for the forums or meetings organized by HSE department as the case may be.
- Contractor should follow all the new HSE systems, procedures, process as and when implemented by employer.

