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## **SPECIAL CONDITIONS OF CONTRACT**

### **1.0 GENERAL**

GAIL(INDIA) LIMITED has 576 KMS of LPG pipeline network for transporting of LPG from vishakhapattinam to various oil marketing companies such as HPCL, BPCL & IOCL located at Kondapalli and cherlapally in Andhra Pradesh. VSPL Pipeline are being operated from 5 different maintenance base centres situated at vishakhapattinam, Rajahmundry, G-Konduru (near kondapally), Suriapet, and Chellapally. The LPG transported from vizag through pipeline is received at TOT G-KONDURU and distributed to OMCs Kondapalli and chellapally. The Receiving terminals at kondapally from are within a radius of approximately 4 kms from TOT G-KONDURU.

FOR THE TERMINAL STATION AT **G.KONDURU** ; ABOVEGROUND PIPING FACILITIES AND STRUCTURES NEED REPAINTING AS PER SPECIFICATIONS.

### **2.0 GENERAL SCOPE OF WORK**

- 2.1 The scope mainly consists of repainting of pipelines ranging from ½" to 12" in diameter, structures, Basket filters, Hot & cold flare systems, scrapper launchers and scrapper receivers valves and equipments , etc. installed at the following locations.

#### **PAINTING OF ABOVE GROUND PIPING FACILITIES & STRUCTURES**

| Sl. No. | LOCATION                                                          |
|---------|-------------------------------------------------------------------|
| 1.      | GAIL'S TOT /BOOSTER STATION – VSPL , G KONDURU                    |
| 2.      | GAIL'S RECEIVING TERMINALS- LPG BOTTELING PLANT HPCL , Kondapalli |
| 3.      | GAIL'S RECEIVING TERMINALS- LPG BOTTELING PLANT BPCL, Kondapalli  |
| 4.      | RECEIVING TERMINALS- LPG BOTTELING PLANT IOCL, Kondapalli         |

- 2.2 Before procurement of paint the contractor shall bring the standard shade card/catalogue of the manufacturer and get it approved from the Engineer-in-charge (EIC). The contractor shall also submit test certificate of paints, primers marked with batch number by the manufacturer of the paint along with shelf life of the paint and

the data sheet of the same before application for the approval by EIC. However contractor may be asked by EIC to bring other shades also whenever it may be required.

- 2.3 Painting of terminal piping inside installations at majority places is at various heights ranging from “zero” to “five metres” from working level. However in certain areas the height may vary upto 15 metres. The job also includes scaffolding works to be done by the contractor wherever required.
- 2.4 The estimated areas are listed in annexure-1. These are only estimates and may have variation on either side for which the contractor shall have no extra financial claim with respect to the quoted rate.
- 2.5 It is the responsibility of the contractor to visit the installations before submitting the bid.
- 2.6 The contractor has to maintain one permanent supervisor at site at all times during execution of the painting jobs. The supervisor has to follow the instructions of EIC, BIC and site engineer and co-ordinate for the smooth execution of the job. The supervisor must obtain safety work permit before start of the job from the respective engineer and designated safety officer.

### **3.0 TECHNICAL SCOPE OF WORK**

- 3.1 These technical specifications shall be applicable for the work covered by this contract, over and above and without prejudice to the various codes of practice, standard specifications etc., it being specifically understood that contractor shall carry out the work in all respects with the best quality of materials and workmanship and in accordance with the best engineering practice and instructions of Engineer - in-Charge.

- 3.2 Wherever it is stated in the specification that a specific material is to be supplied or a specific work is to be done, it shall be deemed that the same shall be supplied or carried out by the contractor at his own cost.

Any deviation from this standard without within deviation permit from appropriate authority will result in rejection to job.

- 3.3 The paint requirement is “three layer coat” with one coat of primer, 2 coats of finish paint directed in **annexure-2** for details of Schedule of Rates. The primer must be of minimum HIGH BUILD EPOXY MASTIC COATING and the paint must be minimum

ACRYLIC POLYURETHANE ENAMEL. Any other higher grade of paint certified by standards is also qualified technically. The aboveground piping was painted with Polyurethane paint shade of colours as specified in 6.1.

- 3.4 The scope of work for three layer coat will include cleaning of pipe surface (removal of dust, oil/grease, if any and clean the surface with water and drying of the same) manual preparation as per paint manufacturer's standards / recommendations, supply and application of self priming HB Epoxy Mastic paint (primer) of minimum 100 micron DFT and two coats of finish paint of acrylic Polyurethane enamel of 60 DFT in total (i.e minimum 30 microns in each coat). Before painting initial DFT of existing painting thickness to be measured.
- 3.5 The uniform coating thickness shall be maintained throughout the pipeline length/ surface, paint manufacturer shall guarantee the suitability of the Maintenance painting system for a life of minimum "two years" for the environmental conditions prevailing in Krishna district.
- 3.6 DFT readings shall be checked and recorded after application of each coat and extra coat of paint should be applied to make-up the DFT specified without any extra cost to the owner.
- 3.7 Only approved thinners of the particular primer / paint can be used for mixing and application of the paint.

**3.8 PAYMENT, MEASUREMENT AND APPLICATION PROCEDURE:**

- 3.8.1 No area should be painted without prior clearance of GAIL engineer / EIC in every stages of application of paints.
- 3.8.2 Bidder / contractor shall maintain application of paints based on average theoretical spreading area with maximum 10% as handling and application losses. Average theoretical spreading area shall be obtained by manufacturers batch certificate.
- 3.8.3 Paint / primer consignments of same colour above 40 liters in quantity shall accompany the copy of manufacturer's batch certificate, without batch certificate the same shall not be accepted by GAIL.
- 3.8.4 If any particular colour of paint / primer with requirement of equal to or less than 40 liters are used for entire contract period, then the spreading area shall be calculated

from manufacturers data sheet which is to be provided by the contractor prior to approval for use of such paint / primer.

3.8.5 Payment of bill shall be based on joint measurement of area by GAIL Engineer and contractor. Payment shall be made on the basis of area covered. Payment shall be released within 15 days from the date of Invoice/Bill duly certified by GAIL Engineer.

3.8.6 If contractor paints and gets an area which is more than the average theoretical spreading area (with maximum 10% as handling and application losses) then the payment shall be restricted to the average theoretical spreading area with 10% application loss only. No payment shall be released for the excess area covered by the contractor.

3.8.7 If contractor paints and gets an area which is less than the average theoretical spreading area (with 10% maximum as handling and application loss) then the payment shall be restricted to the actual area covered by the contractor with that paint only.

Example : Let average theoretical spreading area = 10 M<sup>2</sup>/litre/coat

With 10% application loss = 9 M<sup>2</sup>/litre/coat

If contractor paints more than 9 M<sup>2</sup>/litre/coat with 01 liter paint, then bill shall be paid for 9 M<sup>2</sup>/coat only.

If contractor paints less than 9 M<sup>2</sup> say 7.5 M<sup>2</sup>/coat, then bill shall be paid for 7.5M<sup>2</sup>/coat area only.

3.8.8 Measurement of Valves / NRV:

Valves up to 3" measurement will be same as respective size of piping.

All Valves including MOV & NRV's, 4" & above, the distance between the two flanges will be measured and area will be calculated as 1.5 times the distance between flanges of the respective size of piping.

3.8.9 Measurement of Flanges will be same as respective size of piping.

3.8.10 Measurement of Equipments and its foundations:

For measurement of equipment area, maximum length, maximum width and maximum height of the equipment will be measured and the surface area will be

calculated. No extra measurement will be added or deducted for curvatures, bends or varied contours of the equipment.

For foundations actual surface area will be calculated by measuring the length and width of the foundation.

#### **4.0 DETAILED TECHNICAL SPECIFICATIONS AND SCOPE OF WORK**

The detailed specification defines the extent of works, requirements for surface preparation, selection and application of paints on external surfaces of equipment, vessels, piping, steel structures etc.

##### **4.1 EXTENT OF WORKS:**

- (a) PAINTING OF ALL UN-INSULATED CARBON PIPING.
- (b) ALL ITEMS CONTAINED IN A PACKAGE UNIT AS NECESSARY
- (c) PAINTING OF ALL STRUCTURAL STEEL WORK, PIPE STRUCTURAL STEEL SUPPORTS, WALKWAYS, HANDRAILS, LADDERS, PLATFORMS, STEEL RODS ETC.
- (c) SUPPLY OF ALL PRIMERS, PAINTS AND ALL OTHER MATERIALS AND CONSUMMABLES REQUIRED FOR COMPLETION OF PAINTING WORKS IN ALL RESPECTS.
- (d) IDENTIFICATION LETTERING / NUMBERING ON ALL PAINTED SURFACES PIPING WHEREVER REQUIRED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTE ALREADY LETTERED AREA AND MATTER AND REPRODUCE EXACTLY.
- (e) SCAFFOLDING FOR THE JOB TO EXECUTE WITH UTMOST SAFETY.

##### **4.2 CODES & STANDARDS**

4.2.1 Surface preparations shall be as per the recommendation of the manufacturer and also as per the specification given under PHILOSOPHY OF APPLICATION OF PAINTING –CODES & STANDARDS

4.2.2 The paint manufacturer's instructions shall be followed as far as practicable at all times. Particular attention shall be paid to the following:

- Proper storage to avoid exposure to sun as well as extremes of temperature.
- Surface preparation prior to painting.

- Mixing and thinning.
- Application of paints and the recommended limit on time intervals between coats.

#### 4.3 PAINT SUPPLY REQUIREMENT

##### 4.3.1 PAINT MANUFACTURERS

The Primer and Paint shall be anyone of the following makes of FIRST QUALITY.

1. Asian Paints (India) Ltd.
2. Berger Paints India Ltd.
3. Goodlass Nerolac Paints Ltd.
4. Shalimar Paints
5. Jenson and Nicholson Paint Ltd.,
6. Sigma Coating, Mumbai
7. Bombay Paints Ltd
8. Sigma Coatings, Singapore
9. Ameron, USA
10. Kansai Paint, Japan
11. Hempel Paint, USA
12. Valspar corporation, USA
13. Courtaulds Coating, UK

All painting materials shall be procured by the contractor from any of the reputed approved manufacturer as stated above as per the specification and shall be accompanied by the manufacturer test certificate & data sheet specifying the requirements specified under 4.3.2

##### 4.3.2 PAINT MATERIALS

Manufacturers shall furnish the characteristics of all paints indicating the suitability for the paint system for a minimum period of **TWO YEARS** for the prevailing environment in Kondapalli, Krishna Districts.

Primer and finish coats shall be of class-1 quality and shall conform to the following:

##### PRIMER

| SELF PRIMING HIGH BUILD COATING |                    |                                                                                                           |
|---------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------|
| 1.                              | Technical Name     | High build surface tolerant Epoxy mastic coating                                                          |
| 2.                              | Type & Composition | Two pack component cured with polyamidoamine.<br>Modified Epoxy with special catalyst suitably pigmented. |

Scope of work and Special conditions of contract – Tender for Painting of above ground and structures at GAIL, Vijayawada O&M base.

|    |                                                                     |                                                          |
|----|---------------------------------------------------------------------|----------------------------------------------------------|
| 3. | <b>Volume Solids</b>                                                | 80 %                                                     |
| 4. | <b>DFT</b>                                                          | 100-125 microns per coat                                 |
| 5. | <b>Mixing Ratio</b>                                                 | As per manufacturer recommendation                       |
| 6. | <b>Theoretical covering capacity<br/>(in sq.mtr./ coat / litre)</b> | 6.0 sq.mtr to 9.0 sq.mtr.                                |
| 7. | <b>Drying time</b>                                                  | TOUCH: 04 hours,<br>HANDLE: Over Night<br>HARD: 24 hours |
| 8. | <b>Overcoating interval</b>                                         | Minimum: Overnight<br>Maximum: Depending on conditions   |
| 9. | <b>Colour</b>                                                       | Light Grey; Smoke Grey                                   |

|     |                             |                                                          |
|-----|-----------------------------|----------------------------------------------------------|
| 8.  | <b>Drying time</b>          | TOUCH: 04 hours,<br>HANDLE: 08 hours<br>HARD: Over Night |
| 9.  | <b>Overcoating interval</b> | Minimum: Overnight<br>Maximum: Depending on conditions   |
| 10. | <b>Colour</b>               | Brown; Grey                                              |

#### **FINISH PAINT FOR ABOVE GROUND PIPING AND STRUCTURES**

| <b>POLYURETHANE ENAMEL PAINT</b> |                                                                     |                                                                                                      |
|----------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1.                               | <b>Technical Name</b>                                               | Acrylic Polyurethane enamel                                                                          |
| 2.                               | <b>Type &amp; Composition</b>                                       | Two pack cured with Aliphatic Isocyanate.<br>Acrylic resin with urethane hardener suitably pigmented |
| 3.                               | <b>Volume Solids</b>                                                | 40 %(minimum)                                                                                        |
| 4.                               | <b>DFT</b>                                                          | 30-40 microns per coat                                                                               |
| 5.                               | <b>WFT</b>                                                          | 70 – 90 microns per coat                                                                             |
| 6.                               | <b>Mixing Ratio</b>                                                 | As per manufacturer recommendation                                                                   |
| 7.                               | <b>Theoretical covering capacity<br/>(in sq.mtr./ coat / litre)</b> | 10.0 sq.mtr to 13.0 sq.mtr.                                                                          |
| 8.                               | <b>Drying time</b>                                                  | TOUCH: 01 hour<br>HANDLE: 04-06 hours<br>HARD: Over Night                                            |
| 9.                               | <b>Overcoating interval</b>                                         | Minimum: Overnight<br>Maximum: Unlimited                                                             |

|     |          |                        |
|-----|----------|------------------------|
| 10. | Colour   | AS SPECIFIED UNDER 6.0 |
| 11. | Pot life | 6 to 8 hours           |

#### 4.3.3 SPECIAL NOTES ON PAINT MATERIALS:

|   |                                                                                                                                                                                                                                                                                                                                                                                             |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ➤ | Paints specified such as self priming high build, Polyurethane are the minimum requirement of paint guaranteed for minimum 02 years. However the applicator shall quote for the paint of higher grade with necessary documentation such as standards supporting the specifications proving that the grade quoted is higher order to the minimum required, international specifications etc. |
| ➤ | Covering capacity and DFT depends on method of application. Covering capacity specified above is theoretical. Covering area will be measured strictly as per clause no3.9. Allowing the losses during application, minimum specified DFT should be maintained.                                                                                                                              |
| ➤ | All primers and finish coats should be cold cured and air drying unless otherwise specified.                                                                                                                                                                                                                                                                                                |
| ➤ | The paint shall have resistance to corrosive atmosphere and suitable for marine / saline environment.                                                                                                                                                                                                                                                                                       |
| ➤ | All paints shall be applied in accordance with manufacturer's instructions for surface preparation, intervals, curing and application. The surface preparation, quality and workmanship should be ensured.                                                                                                                                                                                  |
| ➤ | Technical data sheets for all paints shall be supplied at the time of submission of quotations.                                                                                                                                                                                                                                                                                             |
| ➤ | The contractor shall also guarantee for extra time period other than the minimum required.                                                                                                                                                                                                                                                                                                  |

#### 4.4 TOOLS AND EQUIPMENT

Painting brushes, Brass/iron wire brushes, emery paper, marking cloth, buffing wheel, grinding/buffing machine, roller, spray gun, manila ropes, coconut coir ropes etc and any other consumables, for cleaning & painting and all equipment, scaffolding materials (Compulsorily required for painting of pipeline and platform) to be used shall be suitable for the work and all in good order and shall be arranged by the contractor at site and in sufficient quantity and within the quoted prices. All safety

materials such as helmet, safety shoes, safety belts, cotton uniform etc is in the scope of contractor's supply.

## 5.0 STORAGE

Paints and painting material shall be stored only in rooms to be provided by contractor and approved by Engineer-in-Charge/Base-in-charge for the purpose. All necessary precautions shall be taken to prevent fire. The storage building shall preferably be separate from adjacent building. A signboard bearing the words "PAINT STORAGE - NO NAKED LIGHT - HIGHLY INFLAMMABLE" shall be clearly displayed outside.

## 6.0 COLOUR CODES & IDENTIFICATION SIGNS:

### 6.1 COLOUR CODES:

|                              |                                                                                                   |
|------------------------------|---------------------------------------------------------------------------------------------------|
| HYDROCARBON PIPELINES        | Dark Admiralty Grey                                                                               |
| PIG LAUNCHER/RECEIVER        | Dark Admiralty Grey                                                                               |
| VALVES                       | Sky blue/silver white/Black                                                                       |
| VALVE ACTUATOR               | Signal red                                                                                        |
| PRESSURE VESSELS             | Smoke grey                                                                                        |
| MONKEY LADDERS               | <u>Runners:</u> Red<br><u>Rungs:</u> Black                                                        |
| STEP LADDERS                 | <u>Hand rails:</u> Horizontal Structures-Red<br>Vertical Structures: black<br><u>Steps:</u> Black |
| SERVICE WATER LINE           | Sea green                                                                                         |
| AIR PIPELINE                 | Sky blue                                                                                          |
| STRUCTURES                   | Smoke grey                                                                                        |
| FIRE WATER LINE,<br>HYDRANTS | Fire red                                                                                          |

### 6.2 IDENTIFICATION SIGNS:

6.2.1 Line number/Vessel number/Equipment number in block letters shall be stenciled or handwritten on the pipelines, Vessels, Equipments at more than one location as directed by EIC or BIC.

6.2.2 Flow direction shall be indicated by an arrow at following locations:

- (i) at battery limit points
- (ii) intersection points & change of direction points in piping ways
- (iii) other points such as midway of each piping way, near valves, junction joints of service appliances, walls, on either side of pipe culvert.
- (iv) for long stretch or yard piping at 50 metre interval
- (v) at start and terminating points

6.2.3 Size of letters shall be as specified by EIC. As a minimum rule the size of letters printed shall be as below:

|                                        |               |
|----------------------------------------|---------------|
| Columns & vessels                      | 150 mm (high) |
| Pumps, compressors and other machinery | 50 mm (high)  |
| Piping                                 | 40 -150 mm    |

6.2.4 It is the contractor's responsibility to note down the data of already numbered/lettered piping before surface preparation and complete the letter writing, arrow indications etc., after completion of the repainting job of the particular pipeline (as per directions of EIC/BIC)

6.2.5 Colours of arrows shall be black or white and in contrast to the colour on which they are superimposed i.e. white/grey respectively. The length and width of arrow shall be as per the standard Industry practice for process plants.

6.2.6 The rate quoted by the contractor in schedule of rates for painting jobs shall be inclusive of the above job i.e line marking and flow direction arrow.

## **7.0 INSPECTION AND TESTING**

7.1 All painting materials including primers and thinners brought to site by contractor for application shall be procured directly from manufactures as per specifications. The contractor shall also submit test certificate of paints, primers marked with batch number by the manufacturer of the paint along with shelf life of the paint and the data sheet of the same before application for the approval by EIC. Paint formulations without certificates are not acceptable.

7.2 Engineer-in-Charge at his discretion may call for tests for paint formulations. Contractor shall arrange to have such tests performed including batch wise test of wet paints for physical and chemical analysis. All costs there shall be borne by the contractor.

- 7.3 The painting work shall be subject to inspection by Engineer-in-Charge at all times. Inspection and testing shall be performed during and on completion of application of primer/paint by EIC/BIC/Site-engineer. In particular, following stage wise inspection will be performed and contractor shall offer the work for inspection and approval of every stage before proceeding with the next stage. The record of inspection shall be maintained in the registers. Stages of inspection are as follows:
- a) Surface Cleaning
  - b) Application of Rust converter.
  - c) Primer application
  - d) Each coat of paint
- 7.4 The inspection and tests shall be done as follows:
- Visual examination of surface preparation as per the relevant standards/good engineering practice.
  - Visual examination of appearances and uniformity of the surface painted.
- 7.5 The contractor shall provide without charge all reasonable facilities required for inspection.
- 7.6 The payment shall be made on the basis of certification by BIC/EIC after proper surface preparation, primer painting and final painting after completion of work in all respects for particular section of pipelines and structures in form of running bills.
- 7.7 Any defect such as dripping, blistering etc. or condition of preparation, thickness, bond etc. not conforming to the requirements are noticed during the various stages of inspection shall be rectified by the contractor to the entire satisfaction of Base-in-Charge/Engineer-in-Charge before proceeding further.
- 7.8 Irrespective of the inspection, repair and approval at intermediate stages of work, contractor shall be responsible for making good any defects found during final inspection / guarantee period / defect liability period as defined in general condition of contract. Final inspection includes measurement of painted area and check of workmanship.
- 7.9 Dry film thickness (DFT) shall be checked before painting of pipeline and supports and recorded. After application of paint, the total DFT of pipeline should be initial DFT "plus" 160 microns DFT for three layer coating. DFT readings shall be checked and recorded after application of each coat and extra coat of paint should be applied to make-up the DFT specified without any extra cost to the owner.

- 7.10 After surface preparation, the primer should be worked by brush application to cover the crevices, corners, sharp edges etc., in the presence of inspector nominated by Engineer-in-Charge.
- 7.11 The shades of successive coats should be slightly different in colour in order to ensure application of individual coats. The thickness of each coat and complete coverage should be checked as per provision of this specification. This should be approved by Engineer-in-Charge before application of successive coats.
- 7.12 The contractor shall provide standard thickness measurement instrument with appropriate range(s) for measuring. The thickness measurement instrument shall preferably be “electronic” and the latest valid calibration certificate of the instrument must be submitted to EIC before start of measurements.
- 7.13 Final inspection shall include measurement of paint dry film thickness, check of finish and workmanship. The thickness should be measured at as many points / locations as decided by Engineer-in-Charge and shall be within + 10% of the dry film thickness.
- 7.14 The surfaces should be coated within 6 hours of surface preparation operation. In case it is not painted within 06 hours the same shall be again prepared before application of paint. If at any surface the paint has badly peeled off or the surface has got badly corroded then the contractor shall completely remove the paint/primer and clean the surface completely as per good painting standards.
- 7.15 A minimum time interval of 18 hours shall be given for successive coats.
- 7.16 At the discretion of Engineer-in-charge, the paint manufacturer must provide the expert technical service at site as and when required. This service should be free of cost and without any obligation to the owner, as it would be in the interest of the manufacturer to ensure that both surface preparation and application are carried out as per their recommendations.

## **8.0 GUARANTEE**

- 8.1 The Contractor shall guarantee that the chemical and physical properties of paint materials used are in accordance with the specifications contained herein / to be provided during execution of work
- 8.2 The contractor shall also produce the test report from the manufacturer regarding the quality of the particular batch of paint supplied.. In addition to this the contractor must

submit batch certificate of paints, primers marked with batch number by the manufacturer of the paint along with shelf life of the paint and the data sheet of the same before application for the approval by EIC. Paint formulations without certificates are not acceptable. The Engineer-in-Charge shall have the right to test wet samples of paint at random for quality.

- 8.3 For execution of all the items given specifications shall have to be followed. The contractor shall execute the work strictly in accordance with specifications and instructions of the Engineer - in – Charge (EIC).
- 8.4 The paint falls on the pavement, ground surface shall be cleaned properly with cleaners/degreasers etc.
- 8.5 The places which are difficult to reach such as edges, corners, welds, nuts, bolts etc. shall be painted properly.
- 8.6 The painted surface shall not have the brush marks, waves, variation in colour, texture and finish.
- 8.7 The painted surface shall have uniform thickness and only 10% tolerance will be allowed for individual coats. However the total thickness of the system shall not be less than 250 micron on piping and structures.
- 8.8 A minimum time interval of 18 hours shall be given for successive coats.
- 8.9 Minimum guarantee period for the painting shall be **one year** from date of completion of painting in all respects.
- 8.10 The Security deposit for the contract shall be retained and the same may be released after successful completion of defect liability period of **one year**.
- 8.11 Any defect noticed during the various stages of inspection shall be rectified by the contractor to the entire satisfaction of Engineer-in-charge before proceeding further. Irrespective of the inspection, repair and approval at intermediate stages of work, the contractor shall be responsible for making good any defects found during final inspection (or) defect liability period as defined in General conditions of the contract.

## **9.0 DOCUMENTATION**

- 9.1 A quality plan with procedure for qualification trails and for the actual work shall be submitted.
- 9.2 Daily progress report with details of weather condition, particular of application no of

- coats and type of materials applied, anomalies, progress of work versus programme.
- 9.3 Result of measurement of temperature relative humidity, surface profile, film thickness, holiday detection, adhesion tests with signature of appropriate authority.
- 9.4 Particular of surface preparation and paint application during trials and during the work.
- 9.5 Details of non-compliance, rejects and repairs.
- 9.6 Type of testing equipments and calibration.
- 9.7 Code and batch numbers of paint material used.
- 9.8 The record of inspection shall be maintained in the registers. Stages of inspection are as follows:
- (a) Surface Cleaning
  - (b) Application of Rust converter.
  - (c) Primer application
  - (d) Each coat of paint

#### **10.0 SAFETY ON PAINTING OF PIPING AND PLATFORM**

SAFETY OF PERSONNEL IS REQUIRED WHILE DOING THE PAINTING ON PIPELINE AND PLATFORM AT THE HEIGHTS MORE THAN 2 METERS. CONTRACTOR HAS TO PROVIDE SAFETY BELTS AND SCAFFOLDING FOR THE WORKING PERSONNEL AND THE PAINTING PERSONNEL SHOULD COMPULSORY WEAR THE SAFETY BELT WHILE DOING THE PAINTING OF STRUCTURAL AT HEIGHT. CONTRACTOR IS SOLE RESPONSIBLE FOR THE SAFETY OF THE PERSONAL. PERMISSION WILL NOT BE GIVEN FOR THE WORK WITHOUT WEARING OF SAFETY BELTS AND SAFETY ARRANGEMENT FOR DOING THE PAINTING AT HEIGHTS MORE THAN TWO METERS.

#### **11.0 CONTRACTOR'S SCOPE OF SUPPLY:**

- 11.1 Complete paint material as per requirement.
- 11.2 All safety materials such as helmet, safety shoes, safety belts, cotton uniform etc.
- 11.3 Painting brush, Brass/iron wire brushes, emery paper, marking cloth, buffing wheel, grinding/buffing machine, roller, spray gun etc and any other consumables.
- 11.4 General purpose tools and tackles, rope etc.

11.5 Any other material which is required for completion of the job.

**12.0 GAIL's Scope :**

12.1 Water and electricity will be issued at free of cost.

12.2 Safety belts will be issued at free of cost for work at height. After completion of the job the same to be returned GAIL F&S dept in good condition. If any damage noticed while returning to GAIL, the cost of safety belt will be recovered from the contractor.

**SPECIAL CONDITION OF CONTRACT -COMMERCIAL**

**SITE INFORMATION:**

It is understood that before quoting the rates, the bidder has visited the worksite and has acquainted himself fully with the nature and quantum of job to be carried out by him in case of Award. Ignorance of this will not be considered after the award of Contract. The contractor will be responsible to complete the entire job in all respects, including any other work necessary to complete the job in all respect.

**1. GENERAL:**

1.01 The special conditions of contract shall be read in conjunction with the General Conditions of Contract, schedule of rates, scope of work and any other documents forming part of contract wherever context so requires.

1.02 In general the scope of job shall be as per the job details given in SCOPE OF WORK and SCHEDULE OF RATES. However details specification of jobs shall be as per details given in this contract under scope of work and as per standard Engineering practice and relevant codes applicable in petroleum plant.

1.03. GAIL reserves the right to reject any one or all the personnel employed by bidder on the basis of their performance, conduct and / or discipline.

1.04. The material and tools and tackles of the bidder can be checked by the Engineer-in-charge or his authorized representative for safety and security reasons. No tools & tackles shall be removed from the site without prior permission of Engineer-in -Charge.

1.05. The rates quoted in schedule of rates should be inclusive of all taxes, duties, levies, contract tax, sales-tax, statutory payments, license fee etc. and excluding service tax. The quoted rates shall remain valid for the entire period of contract and no escalation whatsoever shall be permissible after award of the contract.

1.06. The bidder shall make his own arrangement for the transportation, conveyance, lodging & boarding of his men and GAIL will have no obligation in this respect.

1.07. Nothing herein contained shall restrict the owner from accepting similar services from other agencies at its discretion.

1.08. The bidder shall be solely and exclusively responsible in engaging or employing persons for the executions of the contract. All employees engaged by the bidder shall be on his pay roll and be paid by him. GAIL will have no liability whatsoever concerning the employees of the bidder.

1.09. The bidder shall indemnify the owner against all loss or damages or liability arising out of or in the course of his employing persons or out of his relations within his employees.

1.10. The bidder shall be directly responsible for any disputes arising between him and his employees and GAIL shall be indemnified against all losses, damages or claims arising thereof.

## **2. SECURITY/PERMISSION FOR THE PERSONNEL DEPLOYED:**

2.01. All bidder's personnel entering the plant must have prior permission from the each GAIL security in-charge. The bidder shall arrange on his own for police varification and identity card for the persons to be deployed by him before starting of the contract and submit the same to GAIL Security In charge.

2.02. The bidder's men are required to keep the entry permission with them all the time inside the plant and should produce it to the security personnel, if required..

## **3. WORK TO BE CARRIED OUT IN RESTRICTED AREA:**

The work is to be carried out in “Restricted Area” and the bidder shall have to obtain the necessary permission to work as per instructions of the EIC and shall start the job only after obtaining suitable work permit.

## **4. BIDDER TO PROVIDE SAFETY APPLIANCES:**

The bidder shall provide **cotton cloth, safety shoes and helmets** to all the personnel deployed under the contract. Other safety appliances such as dust mask, safety belts, ear

plugs & ear muff or any other safety appliances will be provided by GAIL as per requirement during the execution of the contract.

#### **5. DEPLOYED PERSONNEL TO OBSERVE SAFETY RULES:**

All the bidder's men, who are permitted inside the plant should strictly follow all safety rules & regulations. They should be conversant with the safety precautions to be followed in handling LP Gas and associated products. The bidder shall abide by the advice & guidance of the safety officer in the plant. In addition, the bidder shall follow the safety codes framed and use safety shoes, helmet, safety belt, dust mask (wherever required). Smoking inside the plant is strictly prohibited. No bidder's men are allowed to possess match boxes, lighters, cigarettes, beedies, transistors or any other causes of fire hazards.

#### **6. PRICE REDUCTION SCHEDULE**

Clause 27 of GCC for PRS/LD is applicable.

#### **7. JURISDICTION:**

All questions, disputes or difference arising under or out of or in connection with this contract shall be subject to the exclusive jurisdiction of the courts of Vijayawada (A.P) only.

#### **8. SOR QUANTITIES:**

All the SOR quantities shown in schedule of rates are only indicative and the same may be subjected to variation in both ways. The bidder shall not seek any revision in the price quoted on account of any such variation in the quantity. Payment shall be made only for the actual work certified by the Engineer-in-charge.

#### **9. MOBILISATION PERIOD**

Mobilisation period for the bidder shall be 15 days from the date of issue of work order.

#### **10. PERIOD OF CONTRACT AND EXTENSION OF THE CONTRACT:**

10.1. The work shall be completed within 6 (six) months from the date of award of the work.

10.2. The Defect Liability of contractor will be One (01) year from completion of work and the Contract Performance Guarantee shall be released after expiry of Defect Liability Period.

#### **11. PRICES:**

11.01. The contract price shall be arrived at by considering the jobs description as per the SOR and the rate quoted by the bidder. Even in the event of variation of the contract

value arising from non execution of certain SOR items, the unit rate as quoted by the bidder shall remain the same and no revision in rates whatsoever will be applicable during the present tenure of contract or extension thereof.

11.02. The rate quoted by the bidder shall remain firm throughout the period of the contract. Schedule of rates shall be deemed to include and cover all cost, expenses, liabilities taxes and duties including work contract tax of every description and all risk of every kind to be taken in executing and completing the work.

11.03. The unit rate quoted shall include all expenditure envisaged by the bidder.

## **12. BILL SUBMISSION:**

### **1.0 BILLING & PAYMENT**

The payment for executed work will be made in three installments. The contractor will submit bills in triplicate for the services rendered duly certified by the Engineer in charge. Payment shall be made through E-BANKING SYSTEM only.

Income Tax /TDS & other taxes as applicable shall be deducted at source from the contractor's bill as per latest tax rules.

The service tax shall be paid extra at actual against submission of tax invoice with the following mandatory details.

1. ADDRESS OF THE SERVICE PROVIDER( *ON CONTRACTOR'S COMPANY LETTER HEAD*)
2. BILLING TO ADDRESS : *GAIL (India) LTD, VSPL, LPG Booster Station G. Konduru, Vijayawada*
3. SERVICE TAX REGISTRATION NO:
4. SERVICES REGISTERED:
5. INVOICE/BILL NO:
6. INVOICE/BILL DATE:
7. SERVICE TAX AMOUNT:
8. ED. CESS AMOUNT:
9. HIGHER EDUCATIONAL CESS AMOUNT:
10. NAME& SIGNATURE OF AUTHORISED SIGNATORY WITH STAMP/SEAL.

The bidder shall submit bills for jobs executed in triplicate to EIC along with copies of inspection reports for the areas painted duly signed by EIC / GAIL Engineer. The payment shall be released by GAIL by way of e-banking for which the bidder shall have to share their bank account number of ICICI / SBI (branch with e-banking facility).

### **2.0 PAYMENT SCHEDULE**

2.01.First & second installment: 35%payment for each installment will be made after completion of equivalent value of SOR .

2.02. 30% payment will be made after completion of all SOR ITEMS and fulfilling of all contract obligations as final payment.

Contractor shall submit the Final Bill after completion of entire jobs & check list points etc as per the Work order along with Complete Bill of Materials, No Dues Certificate, No claim Certificate, Completion certificates, complying to all statutory obligations.

### **13. PAYMENT OF ADVANCE:**

No advance in any case will be paid for the contract.

### **14. OTHER TERMS AND CONDITIONS:**

14.01. bidder should ensure that no damage of machine parts/equipments/ piping is caused by their personnel while executing the jobs.

14.02. All the bidder's materials, equipments, tools & tackles will be marked and punched with the name of bidder. All such material will be shown at the factory main gate for necessary entry. The responsibility of taking the equipment inside the plant and taking it out after the job completion shall be with the bidder.

14.03. The bidder shall review the progress of work during the visit with the concerned GAIL Engineers. In case of delay he will be required to adjust the working time or extend the period of stay to complete the job in totality.

### **15. DOCUMENTS REQUIRED FOR CLAIMING SERVICE TAX:**

The bidder shall indicate in the bid the service tax registration number and in case the service tax registration number is not available, the bidder will give confirmation for obtaining registration with a copy of application for registration.

The contractor liable to pay service tax for the work/ services rendered to GAIL, shall specifically mention the service tax registration number in their invoices. Further, the amount and rate of service tax shall be separately and distinctly specified in the invoice.

For payment of service tax, serially numbered invoice/ bill shall be issued by service provider and should also specify the following:

- (i) The name, address and registration number of the service provider.
- (ii) The name and address of the recipient of the taxable service.
- (iii) Description, classification & value of taxable service provided and;
- (iv) The service tax payable on such services.

## **16. LEGAL AND STATUTORY RESPONSIBILITY OF THE CONTRACTORS:**

16.1 It shall be the sole liability of the contractor (including the contracting firm) or company should have independent PF Codes allotted by the PF Authorities under the employees Provident Funds and Miscellaneous Provision Act, 1952.

16.2 The contractor shall also be bound to discharge obligations as provide under various statutory enactments including the employees provident fund and Miscellaneous Provisions Act 1952, ESI Act, 1948, Minimum Wages Act 1948, Payment of Bonus Act, Payment of Wages Act 1936, Workmen's Compensation Act 1923, the Contract Labour (R&A) Act, 1970 the interstate Migrant workmen (Regulation of employment and condition of service) Act, 1979 and other relevant Act, Rules and regulations in force from time to time.

16.3 The Contractor shall ensure that the Contractor / Contracting firm should have separate ESI Code allotted under the Employees' State Insurance Act – 1948 in case the work center / site office is covered under the said Act. In case the area where our work center is situated is not covered under the ESI. It must be ensured that the Contractor / Contracting firm should cover his / its employees under suitable insurance coverage.

16.4 The contractor shall be responsible for necessary contributions towards PF. Pension, ESIC or any other statutory payment to Government Agencies as applicable under the law in respect of the contract and personnel employed by the contractor for rendering services to GAIL and shall deposit the required amounts with the concerned authorities on or before due dates. The contractor shall also be responsible for payment of any administration / inspection charge thereof, wherever applicable in respect of personnel deployed by him relating to the work of GAIL. The contractors shall also submit the proof of depositing the employees Provident fund contribution.

16.5 The contractor shall regularly submit all relevant records / documents in this regard to GAIL representative for verification and upon such satisfactory only, GAIL shall make payment of monthly running account bills only to contractor.

16.6 The contractor shall ensure and will be solely responsible for payment for wages and other dues latest by 7<sup>th</sup> of the following month to the personnel deployed by him. The contractor shall be directly responsible and indemnify the company against all charges, actions, suites, losses, claims, dues proceedings etc arising out of disputes relating to the dues and employment of personnel deployed by him.

16.7 The contractor shall indemnify the company against all losses or damages if any caused to it on account of acts of the personnel deployed by him.

16.8 The contractor shall ensure regular and effective supervision and control of the personnel deployed by him and gives suitable direction for undertaking the contractual obligations.

16.9 The contractor shall indemnify and keep the owner harmless of all claims, damages or compensation payable at law in respect or in consequence of any accident or damage arising under or by reason of this agreement or execution of contract.

16.10 The persons to be deployed under the contract should be on the rolls of the contractor / contracting firm. The contractor / contracting firm shall issue proper identity cards to all the persons deployed for execution of work. The identity cards shall be signed by the contractor / contracting firm or his authorized representative.

## **17.0 CONTRACT PERFORMANCE SECURITY**

The successful bidder of the contract has to deposit 10% of total contract value in the form of BG towards their Contract Performance Security within 15 days from placement of order. The Contract Performance Security will be refunded to contractor after expiry of Defect Liability Period as per clause No.24.0 of G.C.C.

## **18.0 SUPERVISION**

18.1 All the activities as mentioned in the scope of work are to be carried out in General Shift ( i.e., 09:15 hrs to 17:45 hrs), it is responsibility of the contractor to allocate, manage site activities while executing the work, guide his personnel to carryout the work with proper safety and to meet the requirements of GAIL.

## **19.0 TERMINATION OF CONTRACT**

19.1. Notwithstanding anything contained elsewhere, GAIL may at any time at its discretion terminate the contract or part of the contract after giving 30 days notice in writing to the bidder without assigning any reason and upon such termination, GAIL shall have the right to remove their materials from site and the bidder shall be paid price of the work satisfactorily completed in accordance with the provision of this contract.

19.2. If GAIL considers that the performance of the bidder under the contract is unsatisfactory or not up to the expected standard, GAIL shall notify the bidder in writing and may specify in details the cause of its dissatisfaction. If, even after written notification from GAIL, the bidder fails to improve the performance within the specified period mentioned in the notification, GAIL may terminate the contract unilaterally.

**A)** GAIL may without prejudice to its right against the contractor in respect of any delay of otherwise or any claims for damage, in respect of any breach of the terms of the contract and without prejudice to any right or remedies under any of the provisions of this contract or otherwise, by notice in writing absolutely terminate the contract with immediate effect in nay of the following cases:

In the even of the contractor going into liquidation or winding up his business or making arrangement with his creditors, GAIL shall have the right to terminate the contract without prejudice to any other right/remedies.

In the event, if it is found that contract has been procured by submitting incorrect or incomplete statements by the contractor or by making any misrepresentation.

If in the opinion of GAIL, the contractor has delayed or suspended the execution of work, the facilities and Vehicles etc., offered by the contractor to be inadequate for effective completion of the job.

In the event of any breach of the terms and conditions of the contract by the contractor or if the contractor is found to be indulging in activity subversive to GAIL's interest or activity prejudicial to the interest of GAIL and for any other good or sufficient reasons.

Up to such termination of the contract the security Deposit/Bank Guarantee are liable to be forfeited / invoked to satisfy the outstanding claims of GAIL.

Notwithstanding anything contained above, GAIL may, as its sole discretion, terminate this contract by giving the contractor 30 days written notice to the effect, without assigning any reasons whatsoever. The contract shall be deemed to have expired on expiry of the original period unless extended.

#### **B) SUMMARY OF TERMINATION OF CONTRACT DUE TO SUBMISSION OF FALSE DOCUMENTS:**

Bidders are required to furnish the complete and correct information / documents required for evaluation of their bids. If the information / documents forming basis of evaluation is found to be false/forged, the same shall be considered adequate ground for rejection of the Bids and forfeiture of Earnest Money Deposit.

In case, the information/documents furnished by the contractor forming basis of evaluation of his bid is found to be false/forged after the award of the contract, GAIL shall have full right to terminate the contract immediately and get the remaining job executed at the risk & cost of such contractor without any prejudice to the other rights available to GAIL under the contract such as forfeiture of Security Deposits, withholding of payments etc.

In the case the issue of submission of false document comes to the notice after execution of the work, GAIL shall have full right to forfeit any amount due to the contractor along with forfeiture of Security Deposit furnished by the contractor.

Further, such contractor/bidder shall be blacklisted for future business with GAIL

#### **20.0 Abnormally High rate Items (AHR)**

In item rate contract where the quoted rates for the item exceeds 50% of the owner's estimated rates, such items will be considered as Abnormally High Rated items (AHR) and payment of AHR items beyond the stipulated quantities included in the schedule of rates shall be made at the least of the following rates:

- 1) Rate as per SOR, quoted by the contractor.
- 2) Rate of the item, which shall be derived as follows:
  - a) Based on rate of machine and labour as available from the contract (which includes 10% covered towards contractor's profit overhead and other expenses)
  - b) Based on prevailing market rate of machine, material and labour plus 10% to cover supervision, contractor's profit & overheads, when the rates are not available in the contracts