



TENDER FOR

**ANNUAL MAINTENANCE CONTRACT (AMC) OF FIRE FIGHTING
EQUIPMENT AT VARIOUS LOCATIONS OF AMBALA-KURUKSHETRA GA**

TECHNICAL VOLUME

TENDER NO. HGPL/2025-26/C&P/038

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1.0 INTRODUCTION

Hindustan Petroleum Corporation Limited (HPCL) is a Central Public Sector with a Maharatna Status, and a Forbes 2000 and Global Fortune 500 company incorporated in 1974 engaged in refining and marketing of petroleum products with its headquarter in Mumbai, Maharashtra.

Oil India Limited (OIL) is also a Central Public Sector with a Maharatna Status engaged in the business of exploration, development and production of crude oil and natural gas, transportation of crude oil and production of NATURAL GAS / RLNG founded in 1959 with its headquarters in Duliajan, Assam.

HPOIL GAS Private Limited. (Joint venture of HPCL & OIL India Ltd.) has received the authorization from PNGRB vide letter PNGRB/CGD/BID/8/2018/GA/Ambala-Kurukshtera District dated 22/02/2018 & PNGRB vide letter PNGRB/CGD/BID/8/2017/BEC/GA-Kolhapur dated 06/03/2018 to Lay, Build and Operate City Gas Distribution networks in Ambala, Kurukshtera & Kolhapur Districts. HPOIL GAS Private Limited (hereinafter referred as HGPL/Owner), is supplying Piped Natural Gas (PNG) to domestic, commercial, and Industrial consumers and Compressed Natural Gas (CNG) to automobiles in Ambala-Kurukshtera & Kolhapur District. HPOIL GAS Private Limited intends to provide the network to cover areas of Ambala-Kurukshtera & Kolhapur to supply Natural gas to Domestic, Commercial consumers through MDPE network and to new CNG stations through steel pipeline network.

2.0 BRIEF DESCRIPTION OF PROJECT

The present project is for Annual Maintenance Contract for Services of Fire Extinguishers of HPOIL Gas for Ambala-Kurukshtera GA.

3.0 DEFINITIONS:

Where used in this document, the following terms shall have the meanings indicated below, unless clearly indicated by the context to this order:

1	PROJECT	City Gas Distribution Project- Ambala-Kurukshtera GA
2	OWNER	HPOIL GAS PRIVATE LIMITED
3	MANUFACTURER	The party, which manufactures and supplies equipment and services to the OWNER or to Contractor
4	FE	Fire Extinguisher
5	DCP	Dry Chemical Powder
6	ABC	ABC type fire. (Solid, Liquid and Gas)
7	BC	B & C type Fire (Liquid and Gas)

4.0 BRIEF OF WORK

The maintenance of fire-fighting equipment is of critical significance when it comes to fire safety. Firefighting equipment maintenance is important for the following reasons:

- Operational Readiness: Regular maintenance ensures that fire extinguishers are in proper working condition

and ready to be used in case of a fire emergency.

- Reliability: Fire extinguishers are relied upon as the first line of defence in controlling small fires.
- Compliance with Regulations: Fire safety regulations and codes often require periodic maintenance and inspection of fire extinguishers.

Fire-fighting equipment maintenance is crucial for operational readiness, reliability, compliance with regulations, increased safety, early issue detection, and cost-effectiveness. It helps ensure that Fire-fighting equipment are prepared to function effectively in emergencies, safeguarding lives, and property.

5.0 SCOPE OF WORK

The scope of work as follows –

General:

- Provide a brief introduction and awareness session on the fundamentals of fire safety to available HGPL employees at each location.
- Capture photographs of training sessions and maintain records, sharing them with HGPL for all locations.
- Conduct practical, hands-on training on operating various types of fire extinguishers.
- Capture photographs of training sessions and maintain attendance and documentation records for submission to HGPL.
- Ensure compliance with IS codes and standards during maintenance activities.
- Submit a duly verified inspection report covering all firefighting facilities to HGPL on a quarterly basis (preferably in the first week of each quarter). Include photographs and condition assessments in the report.
- Provide stand-by fire extinguishers at all respective sites during the collection of existing extinguishers for refilling, hydrotesting, or painting to ensure uninterrupted fire safety coverage.
- Refill fire extinguishers under the supervision of HGPL representatives, using materials as per specified clauses.
- Refill fire extinguishers using approved materials as per Clause 10.
- Maintenance activities to be conducted as per IS 15301 and other relevant codes/standards
- Ensure compliance with all applicable regulations and statutory documentation.
- Supply and install defective or worn-out parts identified during inspections. Replacement parts must meet SOR rates and specifications.
- Conduct repairs or replacements in the presence of HGPL officials to ensure transparency.

Scope of Work for Servicing, Cleaning and Tagging of Fire Extinguisher:

This Scope of Work outlines the specific tasks and quality expectations for the servicing, cleaning, and tagging of fire extinguishers across all designated locations under HGPL jurisdiction. The objective is to ensure that all firefighting equipment is fully functional, compliant with safety standards, and properly documented.

1. Cleaning and Maintenance of Fire Extinguishers:

- a) Thorough external cleaning of each fire extinguisher using appropriate cleaning agents and materials to remove dust, dirt, oil, and other contaminants.
- b) Cleaning of attached components such as the hose pipe and force handle to ensure proper appearance and functionality.
- c) Visual inspection for signs of physical damage, corrosion, leakage, or missing parts.

2. Weight Verification of CO₂ Fire Extinguishers

- a) All CO₂ type fire extinguishers shall be weighed using a calibrated weighing machine to determine the net weight of the gas.
- b) Weight shall be compared against the standard marked weight on the extinguisher body to assess gas depletion or leakage.
- c) Any deviation from acceptable limits must be recorded and reported.

3. Inspection and Functional Check

- a) Each extinguisher must undergo a detailed inspection in accordance with applicable IS standards and HGPL safety guidelines.
- b) Check the pressure gauge for correct pressure levels (for stored pressure type extinguishers).
- c) Ensure that locking pins, nozzles, seals, and brackets are intact and functional.
- d) Verify that the fire extinguisher is placed at the designated location and is easily accessible.

4. Tagging and Labelling

- Affix a new inspection tag on each extinguisher, clearly indicating:
 - a) Date of inspection
 - b) Name of inspecting personnel
 - c) Condition status (Serviceable/Requires Attention/Unserviceable)
 - d) Next due date for inspection
- Each tag must be durable, legible, and securely attached.

5. Reporting

Prepare and submit a comprehensive report to HGPL upon completion of the service activity. The report must include:

- a) Serial number and location of each extinguisher
- b) Type and capacity of extinguisher
- c) Inspection results (condition, pressure, weight, etc.)
- d) Observations, if any repairs or replacements are required
- e) Photographic evidence (before and after servicing)

- All data must be compiled and submitted in both hard and soft copies (Excel or PDF format).

Scope of Work for Refilling of Fire Extinguisher:

This Scope of Work outlines the detailed responsibilities, quality standards, and service deliverables for the refilling of fire extinguishers across HOGPL-operated sites. The contractor shall ensure uninterrupted fire safety, compliance with IS standards, and knowledge enhancement of HOGPL staff through awareness sessions.

1. Provision of Stand-by Fire Extinguishers

- a) Contractor must provide stand-by fire extinguishers at all relevant sites before removing existing units for refilling, hydrotesting, painting, or any other maintenance activity.
- b) The stand-by extinguishers must be of appropriate type and capacity, duly inspected, and in serviceable condition to ensure continuous fire safety coverage during the absence of the original units.

2. Refilling of Fire Extinguishers

- a) All fire extinguishers shall be refilled under the direct supervision of HOGPL's authorized representative or Engineer-in-Charge (EIC).
- b) Refilling shall be carried out using approved and high-quality materials as per Clause 15 of the technical specifications and as per the fire extinguisher type (e.g., ABC, CO₂, Foam, DCP).
- c) Refilling must adhere to IS 2190:2010 and other relevant IS codes, ensuring full compliance with national safety and operational standards.
- d) All hydrotesting, repainting, and labelling activities (if required) must be completed before the refilling this process.

3. Fire Safety Awareness and Training

- a) At each site visited for refilling work, the contractor shall conduct a brief fire safety awareness session for available HOGPL personnel.
- b) The session must cover:
 - Basics of fire classification
 - Types and use of fire extinguishers
 - Fire prevention and response protocols
- c) Hands-on practical training must also be conducted, demonstrating the proper use of different types of fire extinguishers to enhance preparedness during fire incidents.
- d) These sessions must be interactive and instructional, ensuring participants gain working knowledge of emergency response.

4. Documentation and Reporting

- a) Maintain attendance sheets and documentation for each training session, including:
 - Names and signatures of participants
 - Date and location
 - Trainer's name and designation
- b) Capture photographs of the awareness and practical training sessions, properly labelled with date, time, and location, and submit them along with the final report.
- c) Submit a comprehensive report to HOGPL including:
 - Details of extinguishers refilled (type, capacity, location, serial number)
 - Stand-by equipment deployment logs

- Training documentation
- Compliance checklist per IS code
- Any non-conformities or recommendations observed during the refilling process

5. Quality Assurance and Compliance

- a) The contractor shall ensure that all work is conducted in accordance with best industry practices and statutory safety norms.
- b) All equipment used (including refilling materials and weighing scales) must be calibrated, certified, and approved by relevant authorities.
- c) Safety precautions must be taken during handling, transportation, and refilling of fire extinguishers.

Scope of Work for Hydrotesting of Fire Extinguisher:

This scope of work covers the hydrostatic pressure testing (hydrotesting) of fire extinguishers—including CO₂, ABC, and DCP types—at prescribed intervals as per relevant Indian Standards (IS) and as directed by the Engineer-in-Charge (EIC). The work includes testing, certification, documentation, and submission of reports and PESO certificates to HOGPL authorities.

To conduct hydrostatic pressure testing of fire extinguishers as per the prescribed periodicity in IS 2190:2024 or as and when instructed by the Engineer-in-Charge (EIC), ensuring that all extinguishers remain safe, serviceable, and compliant for fire safety readiness.

1. Applicable Standards and Intervals

- a) All hydrotesting activities shall be carried out in accordance with the latest revisions of relevant Indian Standards, specifically IS 2190:2024, IS 2878 (for CO₂), IS 2171/IS 10658/IS 11833 (for DCP), and IS 13849 (for ABC).

2. Pre-Test Inspection

- a) Conduct a thorough visual inspection to check for:
 - Corrosion
 - Physical damage
 - Wear and tear
 - Leakage or deformity
- b) Identify unserviceable or rejected extinguishers and report them to the EIC for further instructions.

3. Testing Procedure

- a) Visual Inspection: Each extinguisher shall undergo a thorough visual inspection for corrosion, dents, leaks, and other physical defects prior to hydrotesting.
- b) Hydrostatic Pressure Testing:
 - CO₂ Type: Test at a minimum pressure of 255 bar (as per IS 2190:2024), held for 30 seconds.
 - ABC/DCP Type: Test at a minimum pressure of 35 bar, held for 150 seconds.
- c) The extinguisher shall be filled with water and pressurized in a protective cage or behind a shield to ensure technician safety.

- d) Any extinguisher showing leakage, pressure drop, or permanent deformation shall be rejected and replaced.
- e) All test equipment and procedures must comply with the requirements of PESO and the relevant IS standards.
- f) Carry out hydrotesting as per IS 2190:2024 and relevant IS codes, using calibrated hydrotesting equipment.
- g) Test each extinguisher at the specified test pressure:
- h) Maintain pressure for the prescribed time to check for leakage, bulging, or rupture.
- i) Any unit failing the test must be marked and segregated for disposal or decommissioning as per the EIC's instruction.

4. Certification and Documentation

- a) CO₂ Extinguishers: A hydrotesting report, duly certified and PESO-approved, must be submitted. The report should include details such as serial number, make, test pressure, test duration, results, and next due date for testing.
- b) ABC/DCP Extinguishers: Submit a hydrotesting report as per standard practice, including all relevant test data and compliance statements.
- c) PESO Certification: The agency conducting the hydrotesting must hold a valid PESO certificate. A copy of this certificate must be submitted to the designated HOGPL officer along with the test reports.
- d) All certificates and reports must be generated through the PESO online system, signed by a competent person, and counter-signed by the authorized authority.

5. Compliance and Quality Assurance

- a) All hydrotesting and certification must be performed by agencies approved by PESO and in compliance with SMPV (U) Rules, 198156.
- b) Any extinguisher failing the hydrotest or found non-compliant shall be removed from service and replaced immediately.
- c) The contractor is responsible for maintaining records and ensuring traceability of all tested extinguishers, including next due dates for testing.

6. Reporting and Handover

- a) Submit the following to HOGPL officer:
 - PESO certificate of the testing agency.
 - Duly certified hydrotesting reports for each extinguisher, specifying compliance with relevant IS standards and PESO requirements.

List of extinguishers tested, with serial numbers, test results, and next due dates

Scope of Work for Painting and Labelling of Fire Extinguisher:

This Scope of Work outlines the detailed procedures, material requirements, and quality standards for the painting and labelling of fire extinguishers installed at various HOGPL locations. The intent is to restore and maintain the visibility, identification, and compliance of fire extinguishers as per applicable standards.

The objective is - To ensure that all fire extinguishers are:

- Clearly identifiable and legible for quick recognition and use during emergencies.
- Properly protected against corrosion and environmental degradation.
- Marked with standardized information to maintain compliance with IS norms and HOGPL safety protocols.

1. Surface Preparation

- a) Carefully inspect each fire extinguisher for rust, old paint, or contaminants.
- b) Remove existing loose paint, rust, oil, or debris from the body using:
 - Sandblasting or manual abrasion (as appropriate)
 - Wire brushes, emery paper, or suitable degreasers
- c) Ensure the surface is smooth, clean, and dry before painting.

2. Painting

- a) Painting shall be carried out using standard industrial-grade paint, preferably powder coating for enhanced durability, corrosion resistance, and aesthetic finish.
- b) In absence of powder coating, high-quality synthetic enamel paint may be used with prior approval from the Engineer-in-Charge (EIC).
- c) The paint Color and finish must strictly comply with the respective IS standards (e.g., red for ABC type etc.).
- d) Ensure even coating without drips, bubbles, or patches.

3. Labelling and Signage

- a) After the painting is complete and cured, appropriate labelling and signage must be applied on the extinguisher body, including but not limited to:
 - Type of fire extinguisher (ABC, CO₂, DCP, Mechanical Foam, etc.)
 - Capacity and Weight (Gross weight, Net weight of extinguishing agent)
 - Serial Number
 - Hydrotesting and Refill Dates
 - Operating Instructions and safety symbols
- b) All labels and signage must be:
 - Durable, heat- and moisture-resistant, and affixed properly (either through screen printing, adhesive vinyl, or stencilling)
 - Clear, legible, and visible from a reasonable distance

4. Quality Assurance and Compliance

- a) Ensure compliance with IS 2190:2010 and other applicable Indian Standards related to fire extinguisher maintenance.
- b) Only trained personnel shall carry out painting and labelling to avoid obscuring critical components or pressure gauges.
- c) No paint shall be applied on:
 - Hosepipes
 - Gauges
 - Discharge nozzles
 - Seals and safety pins

5. Documentation

a) Submit a brief report with:

- List of extinguishers painted and labelled
- Type and quantity of materials used
- Pre- and post-painting photographs (if required)
- Confirmation of compliance with EIC instructions

Scope of Work for Supply and Installation of Accessories/Spares for AMC of Fire Extinguisher:

This Scope of Work defines the activities and responsibilities for the supply and installation of spare parts/accessories required for the upkeep and maintenance of fire extinguishers installed across various HOGPL sites. The goal is to ensure continuous operability, reliability, and compliance with safety standards through timely replacement of worn or damaged components.

The objective is: To replace defective or damaged fire extinguisher components identified during routine servicing and inspections, thereby ensuring that all units remain fully functional and ready for emergency use.

1. Supply of Accessories/Spares

a) The contractor shall supply original, high-quality, and IS-approved components for various types of fire extinguishers as per SOR, including but not limited to:

- Discharge Hose – Flexible hosepipe suitable for respective extinguisher type, length, and pressure rating.
- Force Handle/Carrying Handle – Ergonomically designed and corrosion-resistant, matching the specific model of the extinguisher.
- Pressure Gauge – Color-coded dial-type gauges (green, red, yellow zones) calibrated for the extinguisher's pressure range.
- Operating Valve/Control Valve – Heavy-duty valve body with leakage-proof seal, compatible with the extinguisher design.

2. Installation and Fitment

a) Installation of supplied accessories shall be carried out by trained technicians.

b) The contractor must ensure:

- Compatibility of the replacement part with the extinguisher model
- Proper sealing, pressure tightness, and leak testing post-installation
- No interference with normal operation or safety mechanisms

c) The replaced components must be securely fitted and tested in accordance with IS 2190:2024 guidelines.

3. Disposal of Damaged Components

- a) All damaged or unserviceable parts must be removed and handed over/disposed of as per HOGPL and regulatory guidelines.
- b) Records of replaced items must be maintained for traceability and audit purposes.

4. Documentation and Reporting

- a) Submit a detailed report to HGPL after each replacement activity, including:
 - Component(s) replaced with part specifications
 - Reason for replacement (e.g., damaged, corroded, malfunctioning)
 - Pre- and post-replacement photographs (if required)
 - Installation date and technician's name
- b) Maintain inventory records for spares issued and installed.

5. Compliance and Quality Assurance

- a) All components supplied and installed shall:
 - Comply with relevant IS standards
 - Be new, unused, and free from defects
 - Carry manufacturer warranty where applicable
- b) All installation work must be done using appropriate tools and safety measures, under the supervision of HGPL or its authorized personnel.

6.0 FREQUENCY

- Servicing, Cleaning Testing of fire Extinguishers and firefighting equipment installed at several location – Once in a Quarter (Preferably in the first week of the month).
- Refilling of fire extinguisher – Once In a year
- Painting – As and When Required or Instruct by the client
- Hydrotesting – Every Three (3) Years DCP/ABC type Fire Extinguisher.
- Hydrotesting – Every Five (5) Years (CO2), type Fire Extinguisher.

7.0 SECRECY:

All the data / information / description / documents / papers etc. which shall be handed over to the bidder's working team members shall be treated confidential documents of M/s HGPL. It shall be the bidder's responsibility to maintain the secrecy of these documents / information / data / descriptions/papers and ensure that such information / data / description / documents / papers shall not be used or put up, directly or indirectly, intentionally or unintentionally in any office, court or in public against HGPL without the written consent of HGPL.

8.0 INSURANCE:

The bidder shall provide insurance to cover his men, material, machinery and equipment. The HGPL shall not be liable to any claim for accident/loss / theft during execution of work or during the transportation / stay.

9.0 OTHER TERMS & CONDITIONS:

- 1) In case of any dispute during work /job execution, the decision of Project Incharge/ HGPL management shall be final and binding on the bidder.

- 2) Bidder shall provide their own stationary, Laptop, checklists etc. to their team members to execute day today activities for the job.
- 3) Gate pass shall be arranged by HGPL (As and when required).
- 4) The rates quoted shall be inclusive professional fees, site visit, all types of expenses viz. transportation, boarding & lodging etc. related to site visits for Quarterly Inspection and visit to HGPL, GA office for meeting. No other claim in this regard shall be entertained.
- 5) Bidder to note that in case team is required to put extra man days beyond the minimum stipulated man days for satisfactory completion of the job, no extra payment shall be made by HGPL for extra man days.
- 6) Party may visit the location to access the quantum of job & understand the nature of activity prior to participate in the bidding.

10.0 DOCUMENTATION

- Relevant documents shall be submitted to the Owner on every Quarter, after inspection of fire Extinguisher and other firefighting equipment's installed at above said location (Refer clause 11).
- Inspection Report, Certificates, Test certificate, Warranty is to be submitted to HGPL officials.
- Training attendance sheet, which have covered during the site visit, is to be submitted to above mentioned.
- Test certificate of Dry Chemical Powder (Sodium Bicarbonate) is to be submitted to the HGPL officials.
- Test certificate or other relevant data of CO2 is to be submitted to the HGPL officials.
- Hydrotesting certificates for ABC/DCP type fire extinguishers must be submitted to HGPL officials.
- Only PESO-certified hydrotesting is allowed for CO2 type fire extinguishers, and the corresponding certificates must also be submitted to HGPL officials.

11.0 SCOPE OF SUPPLY & QUALITY OF MATERIALS

Supply and Installation – The term 'supply and installation' refers to the provision and installation of specific (damaged) parts or equipment, including all taxes and transportation costs, excluding GST, up to the point of testing and commissioning.

- For 4 Kg BC type Extinguisher (Stored Pressure) – Dry Chemical Powder (Sodium Bicarbonate)
- For 6 Kg BC type Extinguisher (Cartridge Pressure) - Dry Chemical Powder (Sodium Bicarbonate)
- For 9 Kg ABC type Extinguisher (Stored Pressure) - Dry Chemical Powder (Sodium Bicarbonate)
- For 10 Kg ABC type Extinguisher (Cartridge Type) - Dry Chemical Powder (Sodium Bicarbonate)
- For 10 Kg DCP type Extinguisher (Cartridge Type) - Dry Chemical Powder (Sodium Bicarbonate)
- For 25 Kg DCP type Extinguisher (Trolley) - Dry Chemical Powder (Sodium Bicarbonate)
- For 75 Kg DCP type Extinguisher (Trolley) - Dry Chemical Powder (Sodium Bicarbonate)

The scope of work shall bound to relevant Indian Standards & guidelines. Other rules related to Industrial shall be applicable as required.

12.0 LOCATIONS

- City Gate Station, Jalbera- Ambala
- 8 DRS Locations (03 Kurukshetra and 5 Ambala)
- Ambala Cantonment Office

- Kurukshetra Office
- 29 CNG Station

12.1 NOTES (AS APPLICABLE):

- 1) Supplier Test Certificates shall be subject to review and approval by the Client and/or Third-Party Inspection Agency (TPIA).
- 2) This document outlines the generic test requirements. Any additional tests or inspection scopes specified in the contract documents shall also be applicable, unless otherwise mutually agreed upon in writing.