The indent AMC specification is for cleaning, inspection and pressure testing of pressure vessels and its associated systems, which include the maintenance, pressure testing and repair services of pressure vessels/ air receivers and its associated systems available at VSSC. List of pressure vessel is enclosed in **Annexure-1**.

PERIOD OF CONTRACT:

This Contract shall be operational for a period of Two years from the date of placement of purchase order. However, VSSC reserve the rights to extend the same for further periods on mutual agreements at same rates, terms & conditions or short close the same by giving one-month prior notice in writing, without any financial obligation on either side.

1. SCOPE OF WORK

The bidder shall provide the service as per the requirement on demand basis by VSSC. At present approximately **384 Nos** of pressure vessels/ air vessels are in operation at VSSC, which are located at different places namely three locations 1. VSSC, 2. CMSE & IISU, Vattiyoorkavu 3. Valiamala, for the following work.

- 1.1 The work involves cleaning, inspection, testing and certification of all pressure vessels, its associated systems such as pressure gauges, relief valves, vent valves, check valves, drain valves, safety diaphragm, plumbing, flange joints etc., and associated piping systems including changing of damaged gaskets to ensure that the pressure vessel is operational.
- 1.2 Hydro pressure testing of pressure vessels up to first mounting shall be at a pressure of 1.5 times the maximum permissible working pressure of each Vessel or 1.25 times the design pressure whichever is less. Test procedure is enclosed as **Annexure-2**. The periodicity of testing of pressure vessel shall be decided by VSSC (minimum once in two years) asper the Kerala Factories Rules.
- 1.3 A detailed drawing showing pressure vessel and associated systems up to first mountings is enclosed as Annexure-2A. Cleaning and inspection of flanges, valves and replacement of gaskets of flange openings removed for testing upto first mounting shall be included in the charges for pressure testing aper Annexure- A and no separate charges shall be paid.
- 1.4 Pressure Vessels owing to its use or construction, **not possible to conduct hydrostatic test**, pneumatic test with a thorough systematic thickness measurement survey shall be carried out. For carrying out pneumatic test, the bidder shall obtain separate approval from the user Division. A detailed procedure for thickness

- measurement and pneumatic test is enclosed as **Annexure-2**. After conducting NDT (Ultrasonic testing), the test area where the paints are removed for testing purpose are to be repainted by the bidder no separate payment shall be paid.
- 1.5 Cleaning, inspection, testing of pipelines and its accessories like valves, flanges etc other than first mountings also shall be under the scope of the work. Testing of Pipelines and maintenance of its accessories beyond first mounting shall be done only with prior approval from Head, user division and focal point Centre Safety Division, clearly indicating the details of the optional works. The pipeline shall be hydrostatically tested at a pressure of 1.25 times the maximum operating pressure. Relevant design code shall be followed before the finalisation of pressure testing of pipelines. Painting of pipelines shall be asper charges quoted.
- 1.6 Painting of compressors, pressure vessels & its associated systems and pipelines is under the scope of the work. However, it is optional and shall be carried out as per the requirement of the user division, VSSC. Painting includes cleaning of all the external surfaces (external) and painting two coat of **light colour epoxy paint** over one coat of **epoxy primer**. The bidder also has to carry out painting of internal surface of vessel if called for. The bidder shall obtain vessel entry clearance from Divisional safety officer before carrying out the painting activity inside the vessel. The charges for the same shall be quoted separately. **Charges quoted shall be inclusive of paint and primer**
- 1.7 Date of testing, due date for next testing, pressure vessel ID no., Division etc., shall be clearly displayed on the vessel.
- 1.8 The consumables like cotton waste, shellac, kerosene, emery sheets, insulation tapes, Teflon tapes, M-seals, chemicals if any required for cleaning pressure vessels., required for maintenance has to be brought by the bidder.
- 1.9 Dismantling of components, movement of the pressure vessels and its system within VSSC for testing and reinstalling at its original location are under the scope by the bidder.
- 1.10 The pressure relief valve shall be tested in a separate work bench or any other approved method over the required operational range and refitting into the vessel shall be done by the bidder. The periodicity of testing of relief valve is once in a year. The smaller safety relief valves which are not economically feasible to test every year and are not used in corrosive environment shall be replaced with the new one in every two years during the periodic cleaning, inspection and testing of the pressure vessels. The bidder shall issue a certificate (Annexure-6) after successful testing of each relief valve separately.

- 1.11 The safety relief valves which cannot be tested inside VSSC, the bidder shall take the relief valves for testing to his premises with the approval of user division, VSSC and same shall be refitted in the vessel after completion of testing.
- 1.12 The pressure gauges shall be calibrated once in a year or as per the requirement of VSSC. The pressure gauges shall be calibrated using dead weight tester/ calibrated master gauge (calibrated in a lab accredited by NABL with a periodicity of at least every six months). Calibration certificate of master gauge shall be submitted to AMC focal point, Safety Division for verification and record. Separate calibration certificate for the pressure gauges shall be provided by the bidder after completion of calibration of pressure gauges as per Annexure-.5
- 1.13 The Bidder shall arrange qualified and experienced workforce asper Section-6 to ensure timely completion of testing of pressure vessels before the due dates.
- 1.14 Installation of new pipelines and extension of existing pipelines is not covered under the scope of this contract. However, the replacement of existing corroded/damaged pipelines and its fittings is permitted. Before the replacement of damaged/corroded pipelines the bidder shall obtain prior approval from user division and focal point Centre Safety Division, clearly indicating the length and size of pipeline to be replaced.
- 1.15 All Emergency/Break-down calls shall be attended by the bidder within 24 Hours up on intimation from user division VSSC / AMC Focal Point, Safety Division.
- 1.16 Providing scaffolding for accessing the hi-rise pressure vessels is under the scope of the bidder. The rates for scaffolding shall be quoted asper **Annexure-A**
- 1.17 All the necessary tools and equipment's including calibrated torque wrench, chain puller, high pressure and low-pressure hand operated hydraulic pump essential for maintenance and testing of pressure vessel shall be brought by the bidder.
- 1.18 The bidder shall carryout maintenance of compressors if called for and rates for such maintenance shall be asper **Annexure-B**
- 2. PERIODICITY OF CLEANING, INSPECTION TESTING AND MAINTENANCE OF PRESSURE VESSELS:
- 2.1 The periodicity of maintenance shall be as follows:

Cleaning, inspection and maintenance of air receivers/ pressure vessels& its associated systems

Once in 24 months. i.e., once in two year

Testing of pressure vessels/air receivers.	: Once in 24 months. i.e., once in two years
ii. Inspection, testing and calibration of safety relief valves	: Once in 12 months i.e., once in a year ie., 01 time in a year after pressure testing.
iii. Inspection, testing and calibration of pressure gauges	: Once in 12 months. i.e., once in a year.
iv. Breakdown Maintenance	: As and when required asper section 1.15

3. QUALIFICATION CRITERIA:

Bidder shall meet the following qualification criteria. The Bidder shall submit all the relevant documents supporting the qualification criteria. Bids of those bidder who does not meet the criteria will not be considered for evaluation.

- 3.1 Bidder should have successfully executed at-least one similar nature contract for hydrotesting pressure vessels to any Govt/ PSU/Private organisations. The word "similar" also refers to any work involving /erection and commissioning of piping/ pressure vessels in which hydrotesting is an integral part of the work order. Copy of purchase order/agreement shall be enclosed.
- 3.2 The bidder shall have minimum one number of testing personnel having valid ASNT/ISNT Leve-2/Level-3 qualification for conducting all the NDT tests for ensuring air receiver tanks are free of defects. Copy of valid certificate must be submitted duly certified by the authorized signatory of the bidder firm along with bid
- 3.3 The Bidder shall submit a copy of Company's registration certificate / Certificate of incorporation / Partnership Deed / Any other registration certificate (as applicable).
- 3.4 The Bidder shall submit a copy of GST registration and remittance details of the last paid GST.
- 3.5 Bidder shall submit a copy of PAN Card.
- 3.6 Bidder should have Independent Provident Fund code number allotted in favour of his establishment under EPF & Misc. Provisions Act 1952. Documentary proof in this regard shall be uploaded while submitting bid online
- 3.7 Bidder shall upload self attested scanned print out of the online IT statement indicating Zero tax liabilities for four consecutive Assessment Years prior to the tender opening date.

3.8 Bidder shall furnish stipulated documents in support of fulfilment of above qualification criteria. Non-submission or incomplete submission or false information of documents may lead to rejection of offer.

4. OBLIGATIONS

4.1 Required water, electricity for the hydro testing shall be arranged by the concerned user division, VSSC. Nitrogen gas required for calibration of pressure gauges & relief valves shall be provided by VSSC. However, adaptors and connecting hoses required for testing is under the scope of bidder.

5. ARBITRATION:

- 5.1 In the event of any dispute/s, difference/s or claim/s arising out of or relating to the interpretation and application of the Contract, such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good Offices of the respective Parties and recognizing their mutual interests attempt to reach a solution satisfactory to both the parties. If such a resolution is not possible, within 30 days from the date of receipt of written notice of the existence of such dispute/s, then the unresolved dispute/s or difference/s or claim/s shall be referred to the Sole Arbitrator appointed by the Parties by mutual consent in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 as amended from time to time. The arbitration shall be conducted in Bengaluru in the Arbitration and Conciliation Centre Bengaluru (Domestic and International) as per its rules and regulations. The expenses for the Arbitration shall be shared equally or as may be determined by the Arbitrator. The considered and written decision of the Arbitrator shall be final and binding between the Parties. The applicable language for Arbitration shall be "English" only.
- 5.2 Work under the Contract shall be continued by the Bidder during the pendency of arbitration proceedings, without prejudice to a final adjustment in accordance with the decision of the Arbitrator unless otherwise directed in writing by the Department or unless the matter is such that the works cannot be possibly continued until the decision (whether final or interim) of the Arbitrator is obtained.

6. WORKFORCE & RESPONSE TIME:

The bidder shall mobilise skilled workforce immediately upon the call/placement of order by VSSC. The bidder shall ensure the <u>response time is contained with 24 hours.</u>

SI.No	Category	Qualification and competency/knowledge of Pressure Vessel service Personnel's	
1	Supervisor	Diploma in Mechanical or Electrical with Two years' experience in erection, commissioning and Maintenance of compressors, pressure	

		vessels& air receivers.
2	Fitter	ITI certificate in fitter trade with minimum Two Years' experience in maintenance of compressors, pressure vessels& air receivers.
3	Helpers	10 th class minimum with two years of work experience Maintenance of compressors, pressure vessels& air receivers.

- 6.1 The bidder shall mobilize the following minimum qualified and experienced workforce for maintenance of the Pressure Vessels.
- 6.2 Minimum work force needs to be deployed by the Bidder for the maintenance of each Pressure Vessel for two years is as per the following.

SI.No	Category	No of persons (Minimum)	Remark
1	Supervisor	2	Minimum two teams (Total 6 persons, with
2	Fitter	2	each team having 3 person) to be engaged
3	Helpers	2	by the bidder for carrying out the
	Total	6	maintenance activity at VSSC, VKC, &VMC campus based on the requirement. However, at any point of time two teams shall be mandatorily available for pressure testing and maintenance.

- 6.2.1 Depending on the work load, the bidder may have to increase the workforce by additional manpower/existing minimum manpower to execute work before and after office working hours/day as per the instructions of the user facility Engineer-in-charge and AMC engineer in-charge/Focal point, Safety Division.
- 6.2.2 The bidder shall update the focal point regarding the deputation of Pressure Vessel maintenance teams on daily basis.
- 6.2.3 The bidder shall furnish complete details of the workforce deployed (Number of persons, qualification and experiences of work) to the AMC Focal Point before the commencement of the work for <u>arranging entry passes</u>.
- 6.2.4 The Bidder shall submit the necessary documentary evidence for the qualification and experience of the <u>workforce engaged for work</u>.
- 6.2.5 General working timings for the maintenance workforce including supervisor

is 9.00 hrs to 17.00 hrs on working days (Monday to Friday, Five days a week). Depending on requirement, the working day/hour shall be extended on mutual agreement between Engineer-In-charge of the facility and service agency and approval of AMC focal point, as applicable.

6.2.6 In case, <u>if the bidders fail to complete the maintenance of pressure vessel as per the **schedule in any particular month**, it is the responsibility of the bidder to mobilize additional workforce (day/hour) to complete the same within the stipulated time. **No extra payment will be made** for the additional manpower engaged.</u>

7. GENERAL CONDITIONS:

- 7.1 The Bidder shall arrange own conveyance/transport for their team and materials etc.
- 7.2 Some of the Pressure Vessels/Air Receivers may be deleted from the scope of work during the contract period. Similarly, some new Pressure Vessels/Air Receivers may be included in scope. The bidder shall undertake servicing of such additional Pressure Vessels at the same rates available (Annexure-A) in the contract for similar type/capacity of Pressure Vessels.
- 7.3 Any workforce deployed by the bidder should be medically fit and the fitness is mandatory to work within VSSC premises. In case any health problem is noticed, they shall not be allowed to work inside the premises.
- 7.4 The Bidder shall make their own arrangements for lodging and boarding of their maintenance team during the period of contract. Bidder shall mandatorily arrange an operational office in Trivandrum within 15 days from the award of the contract and same shall be communicated to VSSC. If the bidder fails, the purchase order is deemed to be cancelled.
- 7.5 The Bidder shall register the list of all their items, tools, and equipment etc., brought inside the range, every time at the main CISF security gate.
- 7.6 For Bidder's equipment, tools, materials, etc. which are to be taken out from VSSC campus after completion of work, proper entry shall be made at the main gate duly endorsed by CISF.
- 7.7 The Department shall issue necessary gate passes for taking out the Bidder's materials, as and when required and after completion of work.
- 7.8 Department shall not provide any place to keep a lockable storage cabinet at Work

- centre for keeping the tools. The bidder shall be self-equipped with infrastructure towards various gadgets for their materials, issuing reports, documentation and certificates along with provision for providing printouts/scanned images after approval of competent authority. The Bidder shall not make any claim on the Department for the loss of their instruments, tools etc.
- 7.9 The Bidders shall indemnify the Purchaser/and/or any Officer, employee or any assignee thereof harmless from any loss, damage, liability or expense, on account of damage to the property or environment and injuries including death, to any persons not limited to, employees or agents of the Department, workforce of the bidder or its sub-bidders and all other persons performing any part of the work here under any occurrence caused by any act of commission/omission of the bidder or his sub-bidders or any of them. The bidder shall at his expense defend any suits or proceedings brought against the Department on account thereof and shall satisfy all judgments and pay all expenses which may be incurred by or rendered against them or any of them in connection therewith. The Bidder shall ensure the minimum wages to their work force as per Minimum Wages Act from time to time.
- 7.10 The bidder shall insure him and all his staff against accidents for the duration of the contract period at his cost. The bidder shall produce proof of insurance coverage before starting the work at site in VSSC. The Department will not be responsible for any type of injury including death caused to the bidder's personnel during the work. Bidder shall also submit the proof of renewal of the same policy at least two days before the expiry date of the previous policy to VSSC. The bidder will not be allowed to carry out any activity without necessary insurance coverage of their workforce.
- 7.11 The Department shall not accept any liability for the bidder or sub- bidders, their officers, employees or agents, servants or assigners or any of them or for their property while on the premises or in the service of the Department. i.e., Department shall not be responsible for any loss of life of your service personnel while performing the contract at our premises due to natural calamities/accidents/explosion etc.
- 7.12 In case of any equipment or property of the Department is damaged by the bidder or their workforce/agents, the same shall be rectified "free of cost" by the bidder within the period specified by the AMC Engineer-in-charge/focal point and respective facility in-charge. If the repair is not carried out within the specified period, the bidder shall pay immediately, the amount specified by the Department for the damage otherwise it will be recovered from amount due to them.

- 7.13 The offer shall include all the necessary labour, materials, equipment, transportation services and incidentals connected with the servicing and maintenance (breakdown/preventive/annual/load-test/spares/service for 2 years) of the Pressure Vessels.
- 7.14 A feedback form certified by the user facility and the Pressure Test Certificate/calibration certificate of safety relief valves & pressure gauges duly signed by the bidder, user facility engineer in-charge and Head of the concerned division, shall be submitted to the AMC focal point, Safety Division after completion of each maintenance. The feedback form will be provided to the user division after the award of the contract.
- 7.15 The Department reserve the right to add/delete any number of similar equipment to this Contract during the currency of the Contract.
- 7.16 Before quoting, if required, the bidder shall visit the site for getting necessary inputs about the site conditions such as Pressure Vessel locations and other aspects. Site visit of the facility shall be arranged, with prior communication and on mutually agreed dates, on any working day at least 7 days prior to due date for bid submission.
- 7.17 The offer for AMC for maintenance and testing of Pressure Vessels & associated systems, cost shall be as per Annexure A, B & C of Part- II of the Tender document. (Other type of offers or offer with any other conditions will not be accepted).
- 7.18 If there is any dispute, on the quality of the work or schedules, the decision of the Engineer in-charge of the respective user facility and AMC Focal Point, Safety Division is final and binding on the bidder.
- 7.19 The bidder shall provide required Personnel Protective Equipment (PPE) such as helmets, cotton uniform, gloves, safety belts, shoes, safety goggles etc to all the work force engaged and same should be worn at worksite.
- 7.20 The bidder shall not remove or engage any person without the knowledge and concurrence of the AMC focal point, Safety Division.
- 7.21 The bidder shall abide by the statutory provisions, rules and regulations of Government of India and Government of Kerala in force from time to time for their workforce including ensuring of minimum wages, remittance of EPF and insurance, medical allowance etc. The bidder shall furnish necessary documentary proof to that effect to the satisfaction of the Department as and when demanded. The proof of remittance of EPF subscription and the employee's contributions etc., shall be

- submitted to the Department authorities from time to time.
- 7.22 The bidder shall follow strictly the procedure/procedures for performing pressure test, calibration etc., If any deviation found, Department shall reserve rights to close the contract, if any deviation are found / observed.
- 7.23 It is the responsibility of the bidder/their workforce to maintain the cleanliness of the maintenance bay, working premises etc.
- 7.24 The bidder should mobilize their team within 10 days from the date of receipt of the purchase order.
- 7.25 The bidder shall deploy their maintenance staff below the age of 60 years.
- 7.26 The technical information, drawings, specifications and other related documents forming part of enquiry or contract shall be the property of the Department and shall not be used for any other purpose, except for execution of the contract. This technical information, drawings, specifications and other related documents shall be returned to the Department with all approved copies and duplicates, if any, immediately after they have been used for the agreed purpose.

8. ENTRY PASSES FOR BIDDER'S STAFF:

- 8.1 The bidder and their work force need <u>photo entry passes issued by the Department</u> to enter into work spots at VSSC. For this purpose, the bidder shall provide Aadhar proof of all his workforce, attested copies of educational qualification and conduct certificate from local authorities (Police Verification Certificate) to the department before commencement of the work. The bidder shall abide by the security restriction imposed by the Department for their workforce, tools and materials from time to time.
- 8.2 In respect of those Contract workforce, who are <u>removed from rolls</u>, their entry <u>passes shall be returned to the Department immediately after intimation to the AMC focal point</u>. Non- surrender or misplacement of any entry pass shall be charged from the bidder at the rates prescribed by the Department from time to time. As VSSC, Thiruvananthapuram is a highly restricted and sensitive area, the workforce deputed for maintenance shall have very good character and high integrity.
- 8.3 The request for entry pass and complete details of the <u>workforce deployed along</u> <u>with their qualification and areas of work shall be submitted</u> to Engineer incharge/focal point of the AMC.
- 8.4 If the Bidder needs to <u>add any workforce to the contract, the bidder shall submit necessary documents in order to verify the qualification criteria.</u>

9. COMPLIANCE OF SAFETY REGULATION:

- 9.1 Bidder shall ensure that the workforce deployed to render the service shall <u>observe</u> all safety norms at their cost. VSSC shall not be responsible for any eventuality arising out of any negligence on the part of bidder in observing the safety norms.
- 9.2 Bidder should engage only those <u>workforces who are qualified and experienced</u> for the work to be done and for which PO has been placed.
- 9.3 The Bidder's workforce shall <u>be Indian National</u> for execution of the work. Only skilled workforce with experience of this particular work shall be employed. No workforce below the age of 18 years shall be employed. The bidder shall pay to each workforce, wages not less than those specified by Minimum Wages Act.
- 9.4 Work shall be supervised all the time during the execution period either by the bidder themselves or by qualified authorized supervisor of the bidder.
- 9.5 It is the <u>responsibility of the bidder to ensure safe working</u> of their workers while carrying out the work and shall follow all Statutory Safety norms and precautions. The Bidder shall provide and ensure use of PPE's such as Safety Belts, Face Shield, Masks, Goggles, Glasses, Ear Plug, Welding Shields, Hand Gloves, Safety Shoes, safety belts etc.by their workers for safe working.
- 9.6 The Bidder shall ensure calibrated master gauge for the calibration of pressure gauges. The master gauges shall be calibrated asper standard and copy of certificate shall be provided to AMC focal point, VSSC.
- 9.7 Special precautions shall be taken while working at height or handling heavy jobs. The Bidder shall ensure that none of their workers work at a height without using Safety Belts. The Bidder themselves or their qualified supervisor only shall supervise the work while their workforce work at heights or while handling heavy jobs.
- 9.8 In case of any damage to VSSC property/equipment by the bidder due to their negligence or otherwise, the total expenses for repair/replacement of property/equipment shall be borne by the bidder.
- 9.9 In case any accident occurs causing injury or casualty to any of Bidder's workforce while carrying out the work, the complete <u>responsibility lies with the Bidder</u>. Bidder shall ensure to provide immediate medical help to their injured worker/workers and shall provide compensation as per Workmen's Compensation Act' 1923.

10. TAXES AND DUTIES:

The bidder shall clearly indicate the HSN code and respective GST rates applicable for the services rendered under this contract. The Bidder shall submit to VSSC documentary evidence of GST registration certificate specifying name of services covered under this contract. The Bidder shall submit serially numbered GST invoice, signed by him or a person authorized by him in respect of taxable services provided, and shall contain the following, namely,

- a) The name, address and the registration number of the bidder
- b) The name and address of the bidder receiving taxable service
- c) Description, classification and value of taxable service provided
- d) The GST payable thereon.

All the four conditions shall be fulfilled in the invoice before release of GST payment.

11. REJECTION OF TENDER & OTHER CONDITIONS:

The acceptance of tender shall rest with VSSC, which does not bind itself to accept any tender and reserves to itself full rights for the following: -

- a) To reject any or all tenders.
- b) To award the work in part.
- c) Conditional tenders, tender containing unrealistic rates, tenders which are incomplete or otherwise defective, partly quoted tenders and tenders not in accordance with the tender conditions, ANNEXURES, specifications, etc., are liable to be rejected.

12. SECURITY DEPOSIT:

The bidder shall deposit a sum equivalent of 3% of annual cost of maintenance as interest free security deposit in the form of bank guarantee or Fixed Deposit Receipt valid till the contract period towards performance of contract. In case cancellation of contract due to default bidder, the security deposit shall be forfeited. In case of successful completion of contract, the security deposit will be refunded/adjusted without any interest.

13. DOWN-TIME COMPENSATION:

In case the maintenance/breakdown is not attended to in time, down-time compensation at the rate of 0.5% of the order value per week shall be recovered from the bidder. The reasons for not-attending the maintenance calls in time shall be informed to the division within 12 hours and if the reasons are genuine and

convincing, the Engineer in-charge of AMC and Facility In-charge of Pressure Vessel/Pressure Vessel custodian shall mutually certify service report condoning the delay with the approval of Division Head. The total amount of compensation for delay to be paid under this condition shall not exceed 10% of the maintenance value of the particular Pressure Vessel. i.e., In case the break-down calls are not attended in time, i.e., within 24 hours of our intimation, down-time compensation at the rate of 0.5% of the Annual Maintenance Charges per day shall be recovered from you subject to a maximum of 5%.

14. PAYMENT TERMS:

- 14.1 Payment shall be made on pro-rata basis after the completion of maintenance with pressure testing of each Pressure Vessel& calibration of safety relief valves & pressure gauges. The bills shall be certified by the Engineer in-charge of the facility and duly approved by concern Division Head.
- 14.2 Pro-rata payment shall be made after satisfactory completion of maintenance & pressure testing work for each Pressure Vessels or calibration of safety relief valves/pressure gauges.
- 14.3 The Bidder should <u>submit the monthly status</u> of the works carried out to the Engineer in-charge/focal point, safety division.
- 14.4 For **arranging payment**, the bidder shall submit invoice, service call report, to Accounts officer through Engineer in-charge/focal point, safety division after duly certified and approved by the Engineer In-charge of the facility, Pressure Vessel custodian and concerned Division Head. The invoice shall include the following:
 - a. Maintenance works attended in detail.
 - b. Spare parts supplied if any
 - c. Optional works carried out if any
 - d. Pressure test certificate as per Annexure-6
 - e. Calibration certificate as per Annexure-5
- 14.5 The invoice shall be submitted to user division within 15 days of completion of the work.
- 14.6 The feedback form (Form-1) certified by the user division and the pressure test certificate duly signed by the Engineer in-charge and Division Head of the concerned division shall be forwarded to the Engineer in-charge/focal Point, Safety Division after completion of maintenance. The feedback form will be provided to

the user division after the award of the contract.

15. CANCELLATION OF ANNUAL MAINTENANCE CONTRACT:

- 15.1 The <u>scope of work cannot be split into parts</u>, as the resources for executing the contract are shared over a period of execution of contract uniformly. Tenderer shall complete the maintenance of pressure vessels as per the schedule given by the Department in a year. As per the scope of the tendered works viz. maintenance works, load testing and supply & installation of spares etc., are not separable.
- 15.2 In case the <u>bidder does not carry out the work as per terms and conditions</u> of the Contract or their services are not satisfactory, the <u>Department reserves the right to cancel</u> the Annual Maintenance Contract with the bidder by giving an advance notice of two weeks.
- 15.3 The bidder shall be bound by the <u>details furnished by them</u> to the Purchaser while submitting the Bid or at any subsequent stage. In case, any of the documents furnished by them is <u>found to be false at any stage</u>, it would be deemed to be a breach of the Terms and conditions of the Work order making the Vendor liable for legal action besides <u>termination of Work order/blacklisted</u> and forfeiture of Security deposit.
- 15.4 The department shall <u>reserve the right to terminate the contract</u> in the circumstances detailed here under:
 - a. If the Bidder fails to rectify, re-construct or replace any defective system/sub-system/equipment within a specified period after the Department having given a notice to the Bidder to rectify, re-construct or replace the said defective system/subsystem/equipment or the Bidder delays, suspends or is unable to complete the system/sub-system/equipment by the date mutually agreed upon.
 - b. If the Bidder commits breach of any of the terms and conditions of the contract.
 - c. If the government of India decides to terminate the contract in public interest.
- 15.5 When the Bidder makes themselves liable for action under the circumstances mentioned above, the <u>Department will have power to forfeit the security deposit</u> of the Bidder and the Bidder shall have no claim for damages whatsoever on such for future.

16. REPLACED COMPONENTS/SPARES:

- 16.1 All components/spares replaced during the maintenance work shall be <u>returned to</u> the concerned user division of VSSC on completion of each work and to obtain a certificate for payment terms from user facility as per checklist.
- 16.2 Bidder shall provide the rates for the spare parts required for any replacement during AMC as per **Annexure–C**. The bidder shall supply the item based on need basis only. VSSC shall also provide the spares in case of availability and bidder shall replace the spares asper the AMC terms & conditions.
- 16.3 Bidder shall be <u>paid only for the spares included in **Annexure–C**, which is replaced during the AMC period.</u>
- 16.4 Bidder shall obtain approval from the Engineer In-charge of user facility before replacement of any spare parts.
- 16.5 For all the items regarding this scope, the delivery point is at VSSC.
- 16.6 All the <u>materials supplied or used shall be new and of first quality</u> and manufactured and tested in accordance with the latest editions of the relevant Indian/International standards. Wherever imported components are used, they shall be manufactured in accordance with the relevant standards published in the country of manufacture after allowing for specific aspects under Indian conditions such as tropical climate, etc. Any material or work, where no specific standard is applicable, shall be fabricated as per the instructions and directions of the Department.
- 16.7 All the <u>electrical equipments used shall conform to the latest Indian Electricity Rules</u> as regards safety, earthing and other essential provisions specified there in for installation and operation of electrical parts.

17. SCHEDULE OF WORK:

- 17.1. On receipt of the AMC purchase order, the bidder shall contact the AMC focal point, Safety Division for the details of the pressure vessels which are due for maintenance& pressure testing.
- 17.2. The actual work schedule shall be confirmed by the AMC focal point, Safety Division in consultation with Engineer-in-charge of user facility based on the field requirements and will be informed to the bidder well in advance for planning the resources.

- 17.3. The maintenance work shall be executed by the bidder as per the instructions of the AMC focal point, safety division.
- 17.4. No optional works as mentioned in Annexure-B shall be carried out by the bidder without the approval of Engineer in charge, User Division, VSSC and AMC Focal Point Safety Division.

18. SUB-CONTRACT:

- 18.1. The <u>bidder **shall not** subcontract</u> the job or part of it to any other agency without the written permission of VSSC. <u>In case VSSC permits to employ a subbidder, competent enough</u> and in the interest of the work, <u>it shall not imply any limitation of bidder's liability to fulfil the work order</u>. The sub-contractor shall also abide by the terms & conditions of the contract.
- 18.2. All the works carried-out by such sub-bidders shall also be scrutinized, inspected and approved by the Department. However, the responsibility of the performance of such sub-contracted systems shall lie with the Bidder. Any delay in carrying out the work by the sub-bidder which affects the overall schedule of the work does not absolve the Bidder from payment of compensation for the delays. All terms and conditions applicable to the Bidder shall also be applicable to the sub-bidder who has been assigned the activities relevant to systems / sub systems.

19. COMPLIANCE OF STATUTORY REQUIREMENT:

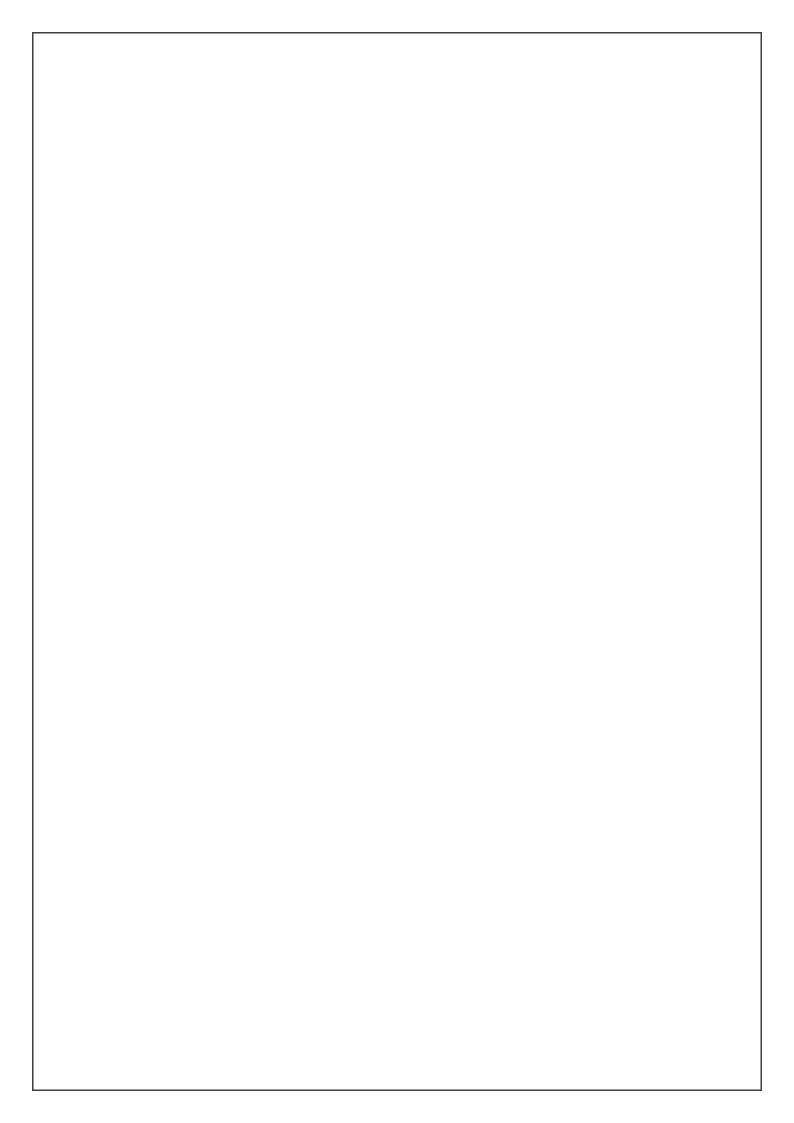
- 21.1. The bidder shall abide by the statutory provisions, rules and regulations of Government of India and Government of Kerala in force from time to time for their workforce such as ensuring of minimum wages, remittance of PF, insurance, etc., The bidder shall furnish the documentary proof to that effect to the satisfaction of the Department as and when demanded. The proof of remittance of PF subscription and the employee's contributions etc. shall be submitted from time to time as and when demanded.
- 21.2. All statutory requirements as per labour laws, ESI, PF etc. shall be met by the bidder.

20. FALL CLAUSE:

The charges quoted by you (BIDDER) shall in no event exceed the lowest charges at which you undertake AMC of identical description to any other bidder during the period of this contract. If at any time, during the said period, you reduce such charges to any other customers, it shall be forthwith notified to us and the charges payable under the contract for servicing done after the date of coming into force of such reduction of charges shall stand correspondingly reduced.

LIST OF ANNEXURES

SI. No	Annexures	Contents/ Particulars
1.	Annexure 1	List of pressure vessels available at VSSC
2.	Annexure 2	Test procedure
3.	Annexure 3	Details of maintenance works to be carried out in compressors.
4.	Annexure 4	Report of examination of pressure vessel or plant
5.	Annexure 5	Calibration certificate for pressure gauge
6.	Annexure 6	Safety relief valve test report
7.	Annexure 7	Certificate for pipeline pressure test
8.	Annexure 8	Compliance statement



TEST PROCEDURE

PRECAUTIONS TO BE TAKEN DURING HYDRAULIC PRESSURE TESTING OF VESSELS: -

- 1. The safer method of pressure testing is the hydraulic method, rather than the pneumatic method, because in the latter, the energy available is large and any failure during the test may result into explosion.
- 2. All the pressure vessels (which terminology in the VSSC context includes compressors of different variety, autoclaves, air-receivers and pressure-reactors) should be pressure tested by the hydraulic method only.
- 3. Pneumatic testing can be carried out only on
 - a. Vessels of such design and construction that it is not practicable for them to be filled with liquid, or
 - b. Vessels for use on processes that cannot tolerate trace of liquids and where the removal of such liquids is impracticable.
 - c. In such cases also pneumatic pressure testing can be carried out only after getting a specific clearance from Centre safety committee.
 - d. Suitable NDT test shall be carried to ascertain the thickness of the vessel before the pneumatic test is carried out.
- 4. While carrying out the hydraulic pressure testing the following stipulations be observed/precautions be taken:
 - a. The pressure testing should be carried out under the direct supervision of the Divisional Safety Officer/Facility in charge. Necessary test certificates shall also be issued by bidder after testing as per the conditions specified in certificate of competency (Annexure 4).
 - b. The hydraulic medium should normally be water. Other liquids may be utilized instead, if necessary, if any liquid other than water is used, appropriate additional precautions should be observed in consultation with the Divisional Safety Officer. The liquid should be well below its boiling point and if flammable, should have a flash point above 45°C.
 - c. The possibility of over pressure due to liquid temperature and expansion should be considered and a liquid relief valve should be provided.
 - d. When water is used with austenite stainless steel it is essential to control the chloride and alkali content of the water. The use of demineralized water with chloride content less than 1 PPM is recommended.
 - e. Checks should be made on the effects of static head, on the ability of the vessel and structure to with-stand the weight of the hydraulic liquid, and on the strength of any temporary pipes, connections or blanks.
 - f. The hydraulic liquid shall be completely drained after completion of tests.
 - g. Wherever possible the pressure vessels should be cleaned internally, dried, inspected for corrosion, crack etc. and the internal and external surfaces, painted to protect it from corrosion.

- h. Equipment that is not to be subjected to the pressure test shall be either disconnected from the system or isolated by a blank or similar device. Valves may be used for this purpose shall be provided with valve closure suitable for the proposed test pressure.
- 5. While doing these operations with vessels, which had contaminated flammable/toxic liquids or gases, necessary personal protective appliances as directed by the Divisional Safety Officer should be worn by the operators.
 - a. While emptying out and cleaning pressure vessels containing flammable/toxic liquids or gases, it should also be ensured that toxic/flammable liquids of gases do not get out of containment and get released into atmosphere posing health hazard and fire hazard. They should be suitably collected in appropriate containers, or vented into atmosphere at suitable heights after sufficiently diluting with an inert gas.
 - b. Whenever persons are required to enter into any vessel, necessary "Vessel Entry Permit" should be obtained. The permit will be issued jointly by the engineer-in-charge of the vessel and the Divisional Safety Officer after making sure that:-
 - The vessel has been disconnected from all sources of flammable/toxic/liquids/gases.
 - The Vessel has been thoroughly cleaned and is made free of any flammable toxic gases.
 - The oxygen concentration of the air inside the vessel is more than 20%.
 - c. Divisional Safety Officer will also suggest suitable personal protective appliances to be worn appropriate to the job to be done inside the vessel.
- 6. The test should normally be carried out at about ambient temperature. The hazard of brittle fracture should be considered and, if necessary, test temperature should be chosen so that it exceeds the ductile/brittle transition temperature.
- 7. Accurate and reliable means of measuring the pressure should be provided. This can be in the form of a pressure gauge.
 - a. The gauge should be indicating type and be connected directly to the vessel. The dial of the gauge should be readily visible to the operator controlling the pressure applied to the vessel. The range of the gauge should be as per IS: 2825 or ASME pressure Vessel code-section VIII. It is normally 2 times the test pressure but, in any case, not less than 1.5 times.
 - b. The pressure gauges shall be calibrated against standard dead weight tester or a calibrated master gauge (calibrated in a lab accredited by NABL at least every six months). At least two pressure gauge shall be used for ensuring the correct application and recording of pressure.
 - c. A test certificate shall be issued in the format (Annexure-5) enclosed
- 8. All filling lines and other fittings (such as pressure relief valve rupture disc etc) which are not intended to be subject to the test pressure, should be disconnected and the openings blinded before pressure is applied.

- 9. Suitable vents should be provided to the vessel at the highest point so that air can be completly removed. Pockets of air left in the vessel constitute a pneumatic explosion hazard.
- 10. While testing the pressure vessels which have removable cover plates heads or doors, the holdings bolts, cover plate bolts, slots and retaining rings should be checked for wear and hammer-tested for soundness. Since these parts are badly abused in service and receive considerable wear, it is advisable to replace them periodically.
- 11. All components of the pressure vessel should be secured to rigid support using adequate number of screws of bolts, hoses and tubing's should be firmly supported, and the ends secured to prevent whipping or lashing in case of the connection fails under pressure.
- 12. The pressure vessels should be tested behind a barricade. If barricading is impractical, the test controls and the operator(s) should be adequately shielded and the test area evacuated before applying pressure.
- 13. Warning signs such as "DANGER-PRESSURE TESTING IN PROGRESS KEEP OUT" shall be posted at all approaches to the test area. The access doors to the test area must be off or got locked so that unauthorized persons do not stray into the area.
- 14. Pressure tests should be conducted at the pressure designated by the appropriate code to which the vessel has been designed and fabricated.
- 15. The pressure, during testing, should be increased gradually to a value of 50% of the test pressure and thereafter in stages of approximately 10% of the test pressure until the test pressure is reached.
- 16. At each stage, it should be ensured that the pressure has been maintained without any drop for a period of at least 10 minutes before increasing the pressure to the next stage.
- 17. In case of pressure drop at any stage, it should be ensured that no person approaches the vessel for close inspection immediately. The pressure should be reduced to the previous lower stage where the pressure was maintained without any pressure drop, and then only close inspection to locate the leak can be carried out.
- 18. When the final test pressure is reached it should be maintained for 20 minutes with out any pressure drop.
- 19. Examination for leakage should be made at all joints and connections and all region of high stress as head, knuckles, regions around openings and thickness transition sections after reducing the hydrostatic test pressure not less than the MAWP of the vessel or system.
- 20. On completion of the test, the pressure should be reduced gradually, step by step. After the pressure is fully relieved and the vessel is brought to ambient pressure the test liquid should be drained out gradually such that no under pressure is created inside the vessel. The vessel shall also be thoroughly dried internally and shall be clearly stamped with the marks and figure indicating the person by whom the test has been carried out.

- 21. The pressure relief valve shall be tested in a separate work bench over the required operational range before the same is fitted onto the vessel. The reseat pressure shall also be checked during the testing of safety valve. The pop-up pressure of Safety Relief Valve shall be within ± 5 % of set pressure or marked pressure and reseat pressure shall be above 95% of the pop-up pressure. A separate test certificate (Annexure-6) shall be issued after the test.
- 22. Procedure for thickness measurement of pressure vessel.
 - a. Minimum eight readings shall be taken on both top and bottom end cover.
 - b. Minimum four readings on each nozzle weld joint in four directions shall be taken.
 - c. Shell plate shall be checked for any corrosion and erosion by measuring thickness at four points in four directions.
 - d. Nozzle pipe shall be checked by ultrasonic thickness survey for corrosion and erosion.
 - e. Thickness of dome and shell near the shell and dome welding shall be taken in all four directions (E, W, N and S).
 - f. The details of thickness survey shall be furnished on a line sketch of vessel along with the testing certificate asper Annexure-4. The preparation of line sketch for vessels shall be in the scope of bidder.
- 23. Testing of Pipelines and associated systems before painting

 Pressure test of pipelines and associated systems includes valves, flanges etc.

Test Procedure:

- a. Before testing all pipelines shall be cleaned internally and externally by fresh potable water or blown with compressed air where water flushing is not desirable to make it free from dirt, loose scale, debris and other loose foreign material.
- b. The minimum hydrostatic test pressure shall be 1.25 times the operating pressure or as per instructions of the user division.
- c. All vents and other connections used as vents shall be left open while filling the line with test fluid for complete removal of air.
- d. Pressure shall be applied only after the system / line is ready and approved by the user division.
- e. Pressure shall be applied by means of a suitable test pump or other pressure source which shall be isolated from the system, as soon as test pressure is reached.
- f. Piping systems shall be pressurized slowly and evenly to prevent vibrations.
- g. The test pressure shall be retained long enough to facilitate inspection of the complete system. Duration of the test in each case shall be fixed up by the user division but in no case, it will be less than 2 hours. Leakage of any kind will not be permissible. The glands of the valves in the system being tested shall be tightened by the party, so as to stop the leakage or leakage is within the leakage specification.

- h. After completion of hydrotest, the pressure shall be released gradually. All vents and drains shall be kept open till the lines are fully drained. After draining, lines / systems shall be dried by air.
- i. Pressure test shall be considered, complete only after approval by the Divisional Safety Officer.
- j. Defects, if any noticed during testing shall be rectified immediately and retesting of the system / line shall be done by the party at his own cost.
- k. Party shall reassemble all the accessories and mountings after completion of the test.

24. Procedure for pneumatic testing of pressure vessel.

The test must be carried out following the requirements of the construction code as applicable.

Precautions:

- 1. Parts of mechanically assembled systems must not be adjusted while the system is under pressure.
- 2. Adequate anchoring of equipment if required shall be ensured before the test.
- 3. Calibrated pressure gauges shall be used during the test.
- 4. Valves shall be used to isolate the system equipment from the pressure source.
- 5. A PRD shall be provided
- 6. The set point of the PRD shall not be greater than the test pressure or shall not exceed 10% of the test pressure.

Test Fluid:

1. If not air, the gas shall be nonflammable and nontoxic.

Test Pressure:

1. The test pressure shall be in accordance with the code of construction (usually 110% of the design pressure)

Preparation:

- 1. The safe distance, shall be identified by placing appropriate barriers.
- 2. All staff associated with or conducting a pneumatic pressure test shall be deemed competent by the party conducting the test.
- A pre-test safety meeting should be conducted by the user division to ensure all
 personnel present on the site that may be exposed are aware of the hazards and
 mitigations
- 4. All visual inspections and non-destructive examinations required by the code of construction shall be completed and evaluated as acceptable.
- 5. A pre-test inspection shall be made to all connections to verify proper assembly and tightness, positioning of valves, overpressure protection, and control of the test medium.

Pressurization Procedure:

1. The pressure shall be gradually increased until the pressure reaches the lesser of 170 kPa (25 psi) of the test pressure. At this time a preliminary check shall be

- made. If leaks are identified, the system shall be de-pressured immediately and repairs made prior to proceeding of further pressurization.
- 2. Thereafter, the pressure shall be gradually increased in steps until the test pressure is reached. (that is pressure after 50% shall be increased in steps of approximately one-tenth of the test pressure until the required test pressure has been reached). The pressure shall be held at each step long enough to equalize the vessel strains. The safe distance identified in the procedure must be observed during this portion of the test. If leaks are identified, the system shall be depressured immediately and repairs made prior to proceeding. Re-pressurization must follow all of the above steps.
- 3. The test pressure shall then be reduced to the design pressure before examining for leakage.
- 4. Depressurization must take place in a controlled manner to avoid cooling due to the refrigeration effect, to equalize vessel strains, and to be cautious about the vented test fluid.

Name, Signature and Seal of the Bidder:

DETAILS OF MAINTENANCE WORKS TO BE CARRIED OUT IN COMPRESSORS.

- 1. Cleaning of the complete air compressor including suction filter unit, oil filters, frame cylinders, valve assemblies, inter-coolers, after coolers and connected pipe lines etc.
- 2. Checking the operating condition of frame lubrication system, the condition of lubricating oil, oil level, oil pump and pressure of lubrication oil to be checked and maintained.
- 3. Visual examination of belts, pulleys, suction filters, drive system, water pumps, lubrication oil filters, pressure switches, safety valves, auxiliary valves, pressure gauges, water drain traps etc.,
- 4. If air leaks observed through pneumatic lines, cylinder joints etc., necessary rectification works are to be carried out.
- 5. All fasteners should be tightened to the required torque level.

Report of Examination of Pressure Vessel or Plant

1.	CSC Registration Number	
2.	Details of location	
3.	Type of vessel	
4.	Particulars of pressure vessel or plant. a) Date of construction b) Thickness of walls c) Date on which the pressure vessel or plant was first taken to use. d) Maximum permissible working pressure recommended by the manufacturer e) Design pressure, if known (The history should be briefly given, and the examiner should state whether he has seen the last previous report)	
5.	Date of last hydrostatic test (if any) and pressure applied.	
6.	Is the pressure vessel or plant in open, or otherwise exposed to weather or to damp	
7.	What parts (if any) were inaccessible?	
8.	What examination and test were made? (Specify pressure if hydrostatic test was carried out)	
9.	Condition of pressure vessel or plant (State any defects materially affecting the maximum permissible working pressure or the safe working of the pressure vessel or plant) External: Internal:	
10.	Are the required fittings and appliances properly maintained and in good condition? Have the pressure settings been checked and corrected?	
11.	Repairs (if any) required, and period within which they should be executed and any other condition which the person making the examination thinks it necessary to specify for securing safe working;	
12.	Maximum permissible working pressure, calculated from dimensions and from the thickness and other data ascertained by the present examination, due allowance being made for conditions of working if unusual or exceptionally severe. (State minimum thickness of walls measured during the examination);	

xamined this pressure v	for thorough examination and that on ressel or plant including its fittings and
y examination.	recees of plant including the littings and
Signature of the Date:	he Contractor:
	Signature
	Facility in charge, VSSC
	y examination. Signature of t

CALIBRATION CERTIFICATE FOR PRESSURE GAUGE

1. PRESSURE GAUGE DETAILS:

Type :

Make :

Range :

Identification No :

2. EQUIPMENTS USED FOR CALIBRATION

SI No	Equipments	Make & Model	Calibration Details

3. DETAILS OF CALIBRATION

Date of Calibration :

Next Calibration Due :

4. TEST RESULTS

SI No	Applied Pressure (Bar)	Obtained Output (Bar)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

SI No	Applied Pressure (Bar)	Obtained Output (Bar)
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		

Least Count	
Max. Error	

Remarks (If Any) :

Signature of the bidder:

Date:

Signature

Facility in charge, VSSC

SAFETY RELIEF VALVE TEST REPORT (Shall be tested once in a year)

(Silali be lested office ill a year)

1. Gene	eral
---------	------

User division :

Date of testing :

Date last tested :

2. Valve Specification

Valve SI. No. : Inlet/Outlet size with rating :

Valve Tag No : Orifice Designation :

Service : Set Pressure :

Make : Type of Seat :

3. Valve Test Result:

Set Pressure		Relief Valve Pe		
Specification (Required) Valve Performance (Observed)		Relief Valve Pop-up Pressure	Relief Valve Reseat Pressure	Remarks

Date:

Signature

Facility in charge, VSSC

PIPELINE PRESSURE TEST CERTIFICATE

CSC Pressure Vessel No:				Division:				
Length of the pipeline :								
Type of test: Hydrostatic				Pneumatic				
SI. Pipeline Dia.			essure (bar)	Test time	Dana	F ''		
No.	(in) Pressure (bar) Start Finish	(hr:min)	Pass	Fail	Remarks			

Signature of Bidder: Signature of facility in charge, VSSC:

CONFORMATION/COMPLIANCE STATEMENT

		Compliance		Reasons for deviation	
SI. No	Description of terms and conditions	Yes	No	If NO, explain the reason (if space is not sufficient separate sheet may be enclosed.)	
1.	BIDDER SCOPE OF WORK				
	The period of contract shall be of Two years as per the tender document and entire indent specification along with annexures.				
2.	List of pressure vessels and terms offered for maintenance as per Annexure-1 of tender document.				
3.	Acceptance of Cleaning, inspection and pressure testing of pressure vessels and its associated systems including the maintenance, pressure testing and repair/services of pressure vessels/ air receivers and its associated systems., as per the section 1.1 to 1.18 of tender document.				
4.	Acceptance of consumables supply as per section-1.8 of tender document.				
5.	Acceptance of periodicity of cleaning, inspection testing and maintenance of pressure vessels as per section-2 of tender document.				
6.	Acceptance of qualification criteria and terms as per section-3 of tender document				
7.	Acceptance of VSSC obligations & Arbitration and terms as per section-4 & 5 of tender document.				
8.	Acceptance of Workforce & Response time and terms asper section-6				
9.	Acceptance of general conditions as per section-7 of tender document.				
10.	Acceptance of entry passes and terms as per section-8 of tender document.				
11.	Acceptance of Compliance of Safety Regulation and terms as per section-9 of tender document.				
12.	Acceptance of Taxes & Duties and terms as per section-10 of tender document.				
13.	Acceptance of Rejection of Tender & Other Conditions and terms as per				

	section-11 of tender document.	
14.	Acceptance of Security Deposit and terms	
	as per section-12 of tender document.	
15.	Acceptance of Down-Time Compensation	
	and terms as per section-13 of tender	
	document.	
16.	Acceptance of Payment Terms as per	
17	section-14 of tender document.	
17.	Acceptance of Cancellation of Annual Maintenance Contract and terms as per	
	section-15 of tender document.	
18.		
	spares & Quantity Variation and terms as per section-16 of tender document.	
19.	•	
13.	terms as per section-17 of tender	
	document.	
20.	Acceptance of Sub-Contract and terms as	
	per section-18 of tender document.	
21.	Acceptance of Compliance of statutory	
	requirements and terms as per	
	section-19 of tender document.	
22.	Acceptance of Fall Clause and terms as per section-20 of tender document.	
23.	'	
20.	Acceptance of Information to Bidders and terms as per section-21 of tender	
	document.	
24.	Acceptance for List of Pressure Vessels	
	for AMC and terms as per Annexure-1 of	
25.	tender document.	
25.	Acceptance for Spares and terms asper annexure-C of tender document.	
26.	Bidder has to quote for Annexure – A,	
	B, & C of tender document.	
27.	Conformation of submission of the	
	experience in the maintenance and testing	
	of pressure vessels and list of clients & work orders / Purchase orders furnished	
	along with bid as per section-3	
28.	Confirmation/compliance statement	
	(Annexure-8 has duly filled and submitted	
	along with bid	

