To:

Sir

Sub: Inviting sealed quotations for entering AMC for the Cold Storage Plant installed in the campus of CSGRC, Hosur-reg.

The National Silkworm Seed Organization invites sealed bids (two bid system) from the firms who are in the field of Air-Conditioning & Refrigeration for awarding Comprehensive Annual Maintenance Contract for trouble free functioning of Cold Storage Plant installed in the campus of Central Sericultural Germplasm Resources Centre (CSGRC), Central Silk Board, Ministry of Textiles, Govt. of India, P.B.No.44, Thally Road, Hosur – 635109. The Particulars of Cold Storage and other Terms & conditions are enclosed herewith for your reference.

The Technical bid is to be accompanied with Earnest Money Deposit amount @ of Rs. 2% in the form of Crossed Demand Draft drawn in favour of Director, NSSO, CSB, Bangalore. Further, the sealed bid shall be super-scribed as "Quotation for awarding AMC for the Cold Storage Plant, CSGRC, Hosur" and should reach this Office on or before 19th December 2018 at 3.00 PM.

The sealed bids shall be opened on the same day at 3.30 PM in the presence of representatives of the Firms, who may wish to participate in the opening of the quotations. The interested parties may visit the Cold storage Plant, Hosur to know more about the Cold Storage and quote their lowest rate and submit to this Office before stipulated date & time.

Director, NSSO reserves the right to reject any or all bids without as signing any reasons whatsoever.

Yours faithfully,

DIRECTOR
Description of the Cold Storage Plant, Hosur

National Silkworm Seed Organization functioning under Central Silk Board, Ministry of Textiles, Govt. of India, is producing high quality silkworm seeds at various silkworm seed production centers. The Cold Storage Plant, CSGRC, Hosur was established for preservation of Silkworm Seeds. A live Silkworm Seeds are to be preserved systematically as per scientifically designed preservation schedules, the room temperature and relative humidity should be maintained accurately as per the requirements. Hence, the Firms which may be awarded with Annual Maintenance Contract of Cold Storage Plant, Hosur shall maintain with utmost accuracy and care without any breakdowns during the Contract Period.

Cold Storage Plant, CSGRC, Hosur was supplied, installed and commissioned during the year 2010 by M/s. Blue Star Limited, Bangalore. The total capacity of refrigeration system is **1,85,000 BTU/Hour**, consists of 11 chambers including Ante Chamber of different temperatures housed in one building with DX-Type Refrigeration System. Each Cold Room is having independent Refrigeration system consists of 2X100% capacity Air-Cooled condensing units with 2 compressors of Emerson make suitable for outdoor installation, Controls, 1X100% capacity forced draft DX-Type evaporator, Electrical Control Panels with BSL Make Digital Temperature Indicator and walls, ceiling and flooring are made of PUF panels. The size of the Cold Rooms, required temperature and relative Humidity etc, are indicated in design data for reference.

**EVAPORATOR:**

- 1X100% Capacity Blue Star Make forced draft DX-Type Evaporator Unit = 11Nos.
- Evaporator Coil
- Fan with Motor

**CONDENSING UNIT**

- 2X100% Capacity 3 phase condensing units of Emerson Make = 22Nos. (One condensing Unit in each Cold Room will be treated as standby)
- 2 Compressor in each Cold Room
- Condenser Coil
- Condenser Fan with Motor
- Controls

**Programmable Logical Control (PLC) = 1No.**

- PLC has been installed to monitor Temperature and Relative humidity of all the Cold Rooms.
PROCEDURE FOR SUBMISSION:

The process of tender shall involve submission of bids in TWO parts namely Technical bid and Financial bid:

Technical bid:

The sealed technical bid enclosing the following should be submitted:-

- A demand draft towards EMD.
- copies of certificate for establishing eligibility / qualification criteria
- A copy of the registration certificate of Service tax /GST/ value added tax.
- A self attested certificate declaring that the AMC company is not a defaulter in any of the previous transaction with the board /other govt. departments, not black listed / debarred by any govt. department and not executed similar nature of AMC work through another contract or as per format.

The Technical bid not in compliance with the above will be liable for rejection.

Financial Bid:

The Financial bid shall be submitted in the price schedule format of Annexure- 9

The Technical and Financial Bids should be sealed by the bidder in separate covers appropriately superscribing as "Technical bid" and "Financial bid" as the case may be. The sealed covers containing technical bid and Financial bid are to be put in a bigger cover which should also be sealed and duly superscribed on the cover as "Tender for Annual Maintenance Contract for Cold Storage Plant".
# TECHNICAL BID

Format of Technical Bid of the tender for Annual Maintenance Contract for Cold Storage Plant installed in the campus of CSGRC, Hosur

## Profile of the Company

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Name of the Tenderer (in Block letters), his/her full postal address, phone / fax and mobile No.</td>
</tr>
<tr>
<td>2</td>
<td>Whether it is Registered Company or partnership company or proprietorship company.</td>
</tr>
<tr>
<td>3</td>
<td>If Registered Company, copy of the Registered Certificate should be enclosed. In case of partnership concern, copy of the partnership deed should be closed.</td>
</tr>
<tr>
<td>4</td>
<td>Certificate to establish satisfactory completion of at least three years experience in AMC Services with Central / State Government/ Autonomous Govt. Bodies / Public Sector Undertakings.</td>
</tr>
<tr>
<td>5</td>
<td>EMD enclosed. If yes, DD No., and Date.</td>
</tr>
</tbody>
</table>
| 7 | Brief profile of company (year of establishment/ No. of service personnel (attach separate sheet)  
   a) Year of establishment  
   b) No. of service personnel working and their qualification/ experience. |
| 8 | Has your company defaulted / been blacklisted by any Govt. agency in the past. Yes/ No |
| 9 | Any other information. |

## DECLARATION

I/We hereby declare that the information furnished in this statement is true and correct to the best of my knowledge and I/we am/are aware that in case of any information is found to be incorrect at a later date my/our company will be liable for disqualification from the tender.

Place:                                                                                                 (Signature)
Date: Name & Designation with Company seal
FINANCIAL BID

Format of Financial Bid of the tender for Comprehensive Annual Maintenance Contract for the Cold Storage Plant installed in the campus of CSGRC, Hosur for a period of 3 years.

**Price Schedule**

<table>
<thead>
<tr>
<th>#</th>
<th>Particulars</th>
<th>Rate per Cold Room for one year</th>
<th>No.of Cold Rooms installed</th>
<th>Total amount for one year</th>
<th>Total amount for THREE years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Comprehensive Annual Maintenance Contract for the Cold Storage Plant as indicated in Commercial terms (Sl.No.8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Cold Room No.1 to 6 (20,000 btu/hr for each room)</td>
<td></td>
<td>6Nos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Cold Room No.7 &amp; 8 and ante chamber (15,000 btu/hr for each room)</td>
<td></td>
<td>3Nos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Cold Room No.9 &amp; 10 (10,000 btu/hr for each room)</td>
<td></td>
<td>2Nos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total (Taxes extra as applicable)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total price= (in Rupees &amp; words)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
- Incase of discrepancy between unit price and total price, the unit price shall prevail
- The rate quoted shall be on Comprehensive basis which inclusive of all parts as indicated in Commercial terms (Sl. No.8) and only basic rates shall be quoted. Taxes is extra as applicable.

**DECLARATION**

I/We hereby declare that the above AMC Charges for the period of THREE years are for the Cold Rooms mentioned in the tender document. I/we abide by all the terms and conditions of tender for the AMC of Cold Rooms.

Place:                                                                                       (Signature)
Date:                                                                                       Name & Designation

(company seal)
## DESIGN DATA FOR THE DX TYPE REFRIGERATION SYSTEM (COLD ROOM) AT, CSGRC, HOSUR

### COLD ROOMS

<table>
<thead>
<tr>
<th>#</th>
<th>Particulars</th>
<th>Unit</th>
<th>No. 1</th>
<th>No. 2</th>
<th>No. 3</th>
<th>No. 4</th>
<th>No. 5</th>
<th>No. 6</th>
<th>Ante</th>
<th>No. 7</th>
<th>No. 8</th>
<th>No. 9</th>
<th>No. 10</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Dimensions (Approx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Room</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Width</td>
<td>m</td>
<td>2.10</td>
<td>2.10</td>
<td>2.10</td>
<td>2.10</td>
<td>2.10</td>
<td>2.23</td>
<td>2.50</td>
<td>2.23</td>
<td>2.10</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>2</td>
<td>Length</td>
<td>m</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>6.50</td>
<td>3.00</td>
<td>3.00</td>
<td>4.56</td>
<td>4.00</td>
</tr>
</tbody>
</table>

### Inside Design Condition

<table>
<thead>
<tr>
<th>#</th>
<th>Dry Bulb Temp. &amp; Tolerance</th>
<th>°C</th>
<th>2.5±1°C</th>
<th>2.5±1°C</th>
<th>2.5±1°C</th>
<th>5±1°C</th>
<th>5±1°C</th>
<th>5±1°C</th>
<th>10±1°C</th>
<th>15±1°C</th>
<th>15±1°C</th>
<th>20±1°C</th>
<th>25±1°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>85±5%</td>
</tr>
<tr>
<td>6</td>
<td>Relative Humidity and R.H. Tolerance</td>
<td>%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>75±5%</td>
<td>85±5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#</th>
<th>Condenser Model</th>
<th></th>
<th>ZX030E-TFD 400</th>
<th>ZX020E-TFD 400</th>
<th>KHM511PBL</th>
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<tbody>
<tr>
<td>7</td>
<td>Evaporator Model</td>
<td></td>
<td>RUAH 2014 KP1</td>
<td>RUAH 1514 KP1</td>
<td>RUAH 1015 KP1</td>
</tr>
<tr>
<td>8</td>
<td>Refrigerant</td>
<td></td>
<td>R-404a</td>
<td>R-404a</td>
<td>R-404a</td>
</tr>
<tr>
<td>9</td>
<td>Capacity of Refrigeration system</td>
<td></td>
<td>20,000 BTU/Hr</td>
<td>20,000 BTU/Hr</td>
<td>20,000 BTU/Hr</td>
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<tr>
<td>10</td>
<td></td>
<td></td>
<td>15,000 BTU/Hr</td>
<td>15,000 BTU/Hr</td>
<td>15,000 BTU/Hr</td>
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<td></td>
<td></td>
<td></td>
<td>10,000 BTU/Hr</td>
<td>10,000 BTU/Hr</td>
<td>10,000 BTU/Hr</td>
</tr>
</tbody>
</table>
TERMS & CONDITIONS:

TECHNICAL:

1) The Firms /Companies, who submit the bids, should have at least 5 years experience in undertaking erection / maintenance of Centralized Air-conditioning and Cold Storage Plants. A certificate to this effect may be enclosed.

2) The firms shall furnish the number of technical personnel available, their qualification and experience in the maintenance of related equipments over a period of 3 years.

3) The Cold Storage Plant consisting of 11 Chambers including Ante Chamber of different temperatures i.e, 2.5°C (3 Nos.), 5°C (3Nos.),10°C (1No.),15°C (2Nos.), 20°C (1No) & 25°C (1No) in one building.

4) All the Cold Rooms are provided with TWO Compressors. The Timers are programmed in such a way that the Compressors are operational alternately once in every 24 hours automatically. The Firms awarded with the AMC are required to maintain functioning of both the compressors. It is also informed that if one of the Compressors get burnt /goes defective, the same shall be repaired and re-installed in the system, within 15 days time. The time is essence of not only the repairs & reinstallation of the compressor in the system but also working of both the compressors. The Firms will not be permitted to pull on the AMC period just by maintaining only one Compressor and also stating that the functioning of the Cold Room has not been hampered due to defect in one of the Compressors.

5) The Firms which submit the Quotations shall render at least minimum 4 Quarterly AMC Services during one year period of the Contract, irrespective of its proper functioning or otherwise.

6) Apart from 4 Quarterly AMC Services mentioned in point No.5, the Firms shall attend to all break down repairs of the Cold Storage Plant including stabilizer as and when intimated by the In charge Officer of the unit.

7) During the Quarterly checkup of the Cold Storage Plant, the technician of the Firm shall carry out the following routine services for smooth functioning of the Cold Rooms:
   a. Checking of the incoming voltage/output voltage, current drawn on individual phases at the time of running of Cold Storage Plant.
   b. Checking of the working pressures in the system.
   c. Checking of the room Temperatures and Relative Humidity in all the Cold Rooms.
   d. Cleaning of the outdoor unit, including air cooled condensers, fins, Fans, cabinets, electrical circuits etc.,
e. Cleaning of Evaporator coils, fins, fans, motors, etc.,
f. Checking of all safety cutouts, refrigerant controls etc., for proper functioning.
g. Checking and arresting of any abnormal sound noise in the system.
h. Leak testing of the entire system and arresting the leaks, if any, found in the system.
i. Attending to any other points defects that may be instructed by the Incharge-Officer of the Unit.

J. After attending to the services, leaving the site in neat & clean condition.

8) All the controls in the refrigeration system like thermostats, Humidistats, expansion valves, solenoid valves, dual pressure controls and oil safety switches, etc., should be replaced as and when required.

9) Necessary R-404 a should be charged to the system as and when required during 3 years AMC period.

10) R-404 a and other emergency items are to be kept as stock for immediate use in case of exigency.

11) Attending the defects as & when called upon by the customer.

12) Replenishing refrigerant required as a result of exhaust, leak in the system arising out to wear & tear.

13) Lubricating the bearings of the Fan motors whenever found necessary.

14) Painting of equipments once in 3 years.

15) All the electrical items which are not related to refrigeration system can be excluded from the quotation.

16) The necessary equipments / materials for carrying out the cleaning etc, should be arranged by the Firm itself.

17) Whenever the technicians visit the site for attending to the repairs or rendering routine AMC services, he shall visit the site in the morning atleast before 11.00 A.M and spend a minimum period of 3-4 hours by carrying out all their pairs services and also to observe the performance of the Cold Rooms. After attending to the services repairs, he shall call either the In-charge Officer or his authorized staff and show the all the Cold Rooms in good working condition. He shall also submit necessary service reports for Incubation Chamber, Ante Room & Moth Room separately for the satisfactory AMC services rendered by him. He shall inform his visit to the unit In-charge Officer well in advance.
1. The Firms which submit the bids shall have at least a minimum period of 5 years experience in the centralized Cold Storage Plants Air-conditioning Plants, out of which 3 years should be connected with rendering Annual Maintenance Contract for the Cold Storage Plants of atleast 3 reputed clients having a minimum turnover of Rs.10.00 Lakhs per annum on Annual Maintenance Service Contracts.

2. The Firms shall enclose necessary proof, i.e, either work order copies or Credential Certificates from the concerned customers /Departments / Company for having rendered or undertaken AMC services of Cold Storages of similar type or much bigger magnitude. The Firms shall also enclose copies of Annual Turnover of the Firms, I.T Clearance Certificates, GST, etc., along with the bid.

3. The bidders are advised to accept and sign each page of the tender document with stamp / seal.

4. The Firms shall submit the Annual Maintenance Contract charges of the Cold Storage Plant for three years period. On no account, the quoted rates will be enhanced during the 3 years period of the Contract. The Annual Maintenance Contract charges will be released in advance on yearly basis against submission of Bank Guarantee for the total AMC Charges and Contract Agreement on Non-Judicial Stamp Paper.

5. The Director has got the rights to award or cancel Annual Maintenance Contract for a particular Region.

6. The Annual Maintenance Contract Charges will be released on yearly basis. However, the services rendered by the Firm during a particular year will be reviewed in the next year and based upon the services rendered by the Firm during the previous year, payment will be released in advance for the next year.

7. At the time of submission of Invoice for releasing yearly advance payment itself, the Firm shall submit Service Reports of the Cold Storage Plant counter signed by the In-Charge Officer in respect of the previous year. Based on the Service Reports, the AMC charges will be released for the next year.

8. The Firms shall submit AMC charges for the Cold Storage Plant on Comprehensive basis, which shall include the cost of all refrigeration machineries i.e Compressor, condenser & evaporator fans, copper piping, valves (Solenoid & expansion valves),
Hand shut off valves, filters, electrical contactors connected to refrigeration system, Temperature Controllers, Humidifiers, stabilizer etc. All the essential spares / components controls including gas charging and electrical spares / other components which are part of the refrigeration system that may be required for replacement during the contract period shall be included in the Quotation.

9. The Refrigeration Machineries / parts gone defective due to abnormal incoming voltage which is beyond the control of the contractor / firm and not involving the firm’s fault or negligence i.e fires, strike, earthquake, floods, epidemics and powers up plier fault. Such repairs will not come under the scope of AMC. However, the reason for such defects will be examined by the In-Charge Officer of the unit technical person from the customer.

10. The breakdown information of the defects in a particular Cold Room of Cold Storage Plant shall be initially intimated to the Firm, through Phone Call by the Incharge Officer / staff of the respective units. On receipt of the break-down information through telephonic message, a break-down complaint number should be intimated by the Firm to the person of the concerned Unit. This number is the proof of receipt of complaints and taking action for attending to the repairs. Further, communication will be given if necessary, through Letter/Fax Message/E-mail etc., depending upon the facilities available in the respective locations.

11. The Firms shall attend to the defects of the Cold Storage Plant at the earliest possible time, i.e, within 48 hours from the time of receipt of the breakdown complaint. If the Cold Room/s are not functioning for more than 5 days in a Quarter, a penalty of Rs.200/- per day per Cold Room shall be levied on the Firm for the exceeding days. For calculating the penalty, each Cold Room will be considered as One Unit and Ante Chamber will be considered as a separate Unit.

12. On no account, the Cold Rooms shall go idle due to break-downs for more than five days in a Quarter irrespective of the number of break downs occurred in a quarter.

13. The penalty will be calculated at the end of every quarter on the basis of number of days the Cold Rooms remained non-functional during that particular Quarter. The amount of penalty calculated, if any, will be deducted at the time of release of the AMC charges for the next year or otherwise by invoking the Bank Guarantee as the case may be.

14. The Service Engineers / technicians should not mishandle any items of machinery / equipments/electrical fittings etc, and should be careful when they perform maintenance work of the Cold Rooms. If any damage is caused to the departmental Property during the course of work, the cost will be recovered from the contract or from his bills due for payment.

15. The Firms interested to see the Cold Storage Plant before submission of Quotations can visit the place during Office working hours.
16. The Firms awarded with the Annual Maintenance Contract of Cold Storage Plant should not subcontract the Annual Maintenance Contract to a third party or abandon the work in the middle of the Contract period. In case of any breach of any of the terms, the Director, NSSO reserves right to take such action as deemed fit in the facts & circumstances of each of such case.

17. The Firms can submit the bids shall be accompanied with Earnest Money Deposit (EMD) @ 2% in the form of Demand Draft. The Demand Draft shall be drawn in favor of "The Director, National Silkworm Seed Organization, Bangalore".

18. No exemption from submission of EMD, on any grounds, will be allowed. Any bid not accompanied by EMD will be rejected, as non responsive.

19. The successful Firm who may be awarded with the Annual Maintenance Contract shall furnish Contract Agreement containing terms & conditions on non-judicial stamp paper of value Rs.200/- and 100% of the total quoted AMC Contract value in the form of Bank Guarantee towards performance security. This security shall have availability period of one year and three months and the Bank Guarantee will be renewed on yearly basis.

20. All the Quotations submitted shall have availability period of 6 months from the date of opening of the bids.

21. The envelope shall indicate the name and address of the party to enable the bid to be returned unopened in case it is declared "late".

22. If the envelope are not sealed and marked as required, the purchaser will assume no responsibility for the quotation misplacement.

23. The quotation received by email, facsimile will be summarily rejected.

24. The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the firm, in which case such corrections shall be initialed by the person or persons signing the quotation.

25. The purchaser may, at its discretion, extend this deadline for submission of quotations by amending the documents in which case all rights and obligations of the purchaser and parties previously subject to the deadline will thereafter be subject to the deadline as extended.

26. All the Sealed Quotations shall be superscripted as "Quotation for Annual Maintenance Contract of Cold Storage Plant installed in the campus of CSGRC, Hosur" and shall be addressed to "The Director, National Silkworm Seed
27. The last date for submission of Sealed bids at this Office will be on or before **3.00 P.M. on 19th December 2018.** The bids received after **3.00 PM** on the last date stipulated will be summarily rejected.

28. The purchaser will open the tender and the bids, in the presence of representatives of the firms who may wish to participate the quotation opening **at 3.30 pm on 19.12.2018 at National Silkworm Seed Organization, Central Silk Board, CSB Complex, 4th floor, B.T.M. Layout, Madiwala, Bangalore — 560068.** The Firms interested to be present at the time of opening of the bids can attend the tender opening.

29. The bid must be received by the Purchaser at the address specified not later than **3.00 p.m. on 19th December 2018.** In the event of the specified date for submission of quotations being declared as holiday for the purchaser, the quotations will be received up to the appointed time on the next working day.

30. The EMD of the unsuccessful bidders shall be refunded after awarding work order and acceptance of work order by the successful bidder. The E.M.D of the successful bidder shall be returned after acceptance and signing of the Annual Maintenance Service Contract and furnishing of the Bank Guarantee as mentioned above.

* * *