

BARC, Trombay
Mumbai - 400 085
Phone no. 022-25594927

DUE DATE: 29/05/2017



Government of India
Bhabha Atomic Research Centre
Atomic Fuels Division
Technical Services Section

Ref: AFD/TSS/17/77393
09/05/2017

Date:

Tender Enquiry

To,

Sub: Works Contract for "Fabrication, Supply and Erection of an Enclosure for Oil Drums Storage as per specifications and attached drawings".

Sealed quotations are invited for & on behalf of the President of India for "Fabrication, Supply and Erection of an Enclosure for Oil Drums Storage as per specifications and attached drawings". The scope of work, general description and salient terms & conditions are as follow:

Scope of Work and Specifications

The scope of work involves fabrication, supply and erection of:

- a) An Enclosure constructed from Aluminium Composite Panels (ACP), Polycarbonate sheets, Aluminium Grills and FRP sheets.
- b) Main entry door and Side entry door to Enclosure (FRP).
- c) Secondary containment (SS304 lined Pit) for leakage collection.
- d) SS 304 collection Trays, oil flow Channels and interconnecting Header

GA drawings displaying the schematic arrangement of all components and site layout are attached herewith. However, the supplier shall make his own fabrication drawings and submit them for approval to the purchaser before commencing the work execution.

1. General Description

This enclosure is intended to be used for storage of 210 litres capacity oil drums. MS storage Racks shall be erected inside this enclosure. Main front entry door as well as right hand side entry door shall be used for transferring the oil drums. It is planned to construct the enclosure from Aluminium Composite Panels (ACP), Polycarbonate, Aluminium grills and FRP sheets.

The side walls of the enclosure shall be constructed in three segments using three distinct materials as shown in the attached drawings. The top segment (Aluminium Grills) shall facilitate natural ventilation. The middle segment (Polycarbonate) shall provide natural lighting inside the Enclosure. The bottom segment (ACP) shall provide structural integrity to the entire enclosure. The roof cover shall also be constructed from transparent FRP sheets to enhance natural light.

2. Technical Specifications

Technical specifications are meant for construction of Enclosure for Oil Drums Storage.

a) Side Walls

- i) The lowest segment of side walls (50mm thick) shall be constructed from 3mm thick Aluminum Composite Panels. An aluminum pipe (having rectangular cross section of 44 x 25 x 3mm) shall be sandwiched between outer panel and inner panel to maintain 44mm spacing throughout the length. The spacer (rectangular

- pipe) shall be inserted in 500x500mm square array as shown on the drawings. The ACP shall be fastened and clamped throughout the periphery in a 3mm thick aluminum channels frames in such a way that there shall be no projecting edges/surfaces.
- ii) The middle segment of side walls shall be constructed from 8mm thick Polycarbonate sheets / panels. These sheets shall be fastened and clamped throughout the periphery in a 3mm thick aluminum channels to prevent slackness.
 - iii) The top segment of side walls shall be constructed from 8mm thick and 50mm spaced diamond shaped aluminum grills. These grills shall be fastened and clamped throughout the periphery in a 3mm thick aluminum channels.
 - iv) The entire enclosure structure shall be supported on MS square pipe columns (75x75x5mm and 4500mm height) as shown on the drawings.

b) Main Door and Side Doors

The main front door as well as right hand side door of the enclosure shall be constructed from ACP suitably spaced through aluminum pipe array as described above. These doors shall be made in two parts, and each part shall slide independently on its respective tracks. The door halves shall be supported and guided on top and bottom tracks. The bottom track shall be leveled with floor. Provision shall have to be made for door locking from the outside.

c) Roof

The roof shall be constructed from 3mm thick transparent FRP panels and shall be supported on MS trusses as shown in the drawings.

d) SS 304 lined Pit

This storage facility shall have adequate capacity of secondary containment to store oil in case of leakage as per safety guidelines. Accordingly, a SS 304 tank (1000 x 1000 x 250mm size and 3mm thick) shall be installed in a pit as shown in the

drawings. The Pit shall be made with PCC from all sides before inserting the SS 304 tank.

e) SS 304 Trays, Interconnecting Channels and Header

The supplier shall provide the SS 304 Trays, interconnecting channels and Header for leakage collection as shown on the drawings. Five degree slope shall be maintained in each tray from RHS to LHS of the enclosure.

3. General Technical Requirements

- i) Supplier shall carry out actual measurements at site and suggest deviations if any to make necessary changes if required.
- ii) Supplier shall prepare its own fabrication drawings as per actual site conditions and should get it approved from concerned authority before commencement of work.
- iii) All fabrication work shall be carried out as per approved drawings only.
- iv) All material supply is in the scope supplier. Supplier shall use all relevant IS standard material for this work. Material testing reports (Chemical, Mechanical etc.) from govt. approved labs should be submitted for approval. Material identification and stamping shall be witnessed by departmental representative.
- v) In case of any technical doubts, supplier shall contact concerned authority for clarifications.
- vi) Supplier shall have to arrange for Arc/TIG welding m/c. along with all consumables (welding electrodes etc) required for this work.
- vii) Gas cutting, arc welding, grinding work etc. shall be carried out with utmost care. Supplier shall follow all safety measures while carrying out such work. Department shall provide gas cylinders for gas cutting purpose if required.

- viii) Burrs, sharp edges, projections etc. shall be removed to maintain smooth surface. Supplier shall maintain best quality workmanship.

4. Inspection and final acceptance

- i) Physical verification of all items as per technical specifications.
- ii) Supplier shall clear off all left out material at the end of the work and ensure clean work area before handing over.

5. Suppliers having knowledge and experiences of preparing above mentioned documentations, BARC procedures, standard welding procedures, safety procedures, material testing and inspection facilities, calibrated equipments etc. shall be preferred for the work contract.

Terms & Conditions

1. Taxes, if any, shall be specified separately.
2. Necessary Excise Duty Certificate / Octroi Exemption Certificate shall be issued by the purchaser, if required.
3. The offer should also contain the work completion period.
4. Percentage of VAT /CST payable or included in your offer may be shown separately, i.e., Basic cost. Rs. XXXXX/- plus ED / CST / VAT / Rs. YYYYY/- = Total cost Rs. ZZZZZ/- . Cost of materials and installation charges along with ED / VAT / CST and Service Tax applicable respectively may be specified.
5. Any delay which is attributable to the contractor is liable for penalty @ ½ % per week (max. 5%) to be imposed on the contractor.
6. In case of delay in work completion, supplier may send request letter to concerned authority for extension in work completion period with proper justification for delay in work. Concerned authority may or may not give extension with or without penalty depending on the justification for delay.
7. Income tax @2% will be deducted from the Suppliers bill.
8. Work completion period is 120 days from the date of issue of the work order.
9. Supplier should give guarantee for a minimum period of One Year for the materials, workmanship and satisfactory performance of the system.
10. Contractor may furnish their PAN no. & copy of Sales Tax/ Service Tax Registration Certificate.
11. 100% payment will be arranged after satisfactory completion of work at AFD and on submission of:
12. a) Bills in triplicate, b) Advanced stamped receipt, c) Delivery Challan, d) Guarantee Certificate
13. Min. two workers & a supervisor shall be present at site during the work. During erection & commissioning of the furnace. The supervisor shall be experienced enough for safety (fire & personal) to oversee the site activities

14. The upkeep of area is the responsibility of contractor. Any unwanted or extra materials shall be kept at designated area which will be shown by departmental supervisor. For elevated jobs proper Safety Belts shall be used by all workers.
15. Contractor shall obtain police verification certificate (PVC) for all his employees including his supervisors and workers engaged in the work.
16. Supplier shall obtain Medical Fitness certificates for all his workers involved in this work.

17. Confidentiality clause

- No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as "Proprietary" in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party. This clause shall apply to the sub-contractors, consultants, advisers or the employees engaged by a party with equal force.
- "Restricted information" categories under Section 18 of the Atomic Energy Act 1962 and "Official Secrets" under Section 5 of the Official Secrets Act 1923. :-
- Any contravention of the above-mentioned provisions by any contractor, sub-contractor, consultant adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation
- Prohibition against use of BARC's name without permission for publicity purposes. :-The contractor or sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC's name for any publicity purpose through any public media like Press, T.V. or Internet without the prior written approval of BARC.

18. Site Visit

The contractor shall have to visit the site to comprehend the scope of work. The same will be arranged by the undersigned. The site can be visited from 22/05/2017 to 24/05/2017 between 10.00 hrs to 14.00 hrs on working days only. However, for site visit, prior intimation of at least two working days is necessary for arranging the entry permits.

The quotations submitted without site visit will NOT be considered.

19. Contractor shall have to carry valid Photo identity card (Driving license, passport, Adhaar card) while visiting this premises. Failing to bring valid identity cards, vendors will not get access into our premises. Further, entry permits will not be arranged for

next dates if vendors unable to visit the site on permitted dates for any reasons. Contractor should not carry any type of electronic items such as mobile, pen drive, camera etc with him/her at the time of visit.

20. For preparing entry permit, you can contact the undersigned on ph. No. 25594927 or can mail to hsharma@barc.gov.in giving complete details of Firm, name of visitors, occupation/designation, identity proof, PVC details, probable date of visit etc.
21. Quotations are to be in printed letter head / quotation format which should consists of sales tax registration number registered with local ST authority / CST authority, PAN of the firm, service tax registration number etc. Quotations that are received in computer generated form will be considered as invalid & rejected.
22. Sealed quotations must be forwarded by Registered Post or Speed Post ONLY. Quotations forwarded through any other routes will not be considered.
23. Sealed quotations should be super scribed on the envelope with the reference number of this letter, and should be addressed to and reached by 29/05/2017 (16.00 hrs) to:

Shri Hariom Sharma

TO/D, Technical Services Section,
Atomic Fuels Division, Bhabha Atomic Research Centre,
Trombay, Mumbai-400085

(Hariom Sharma)

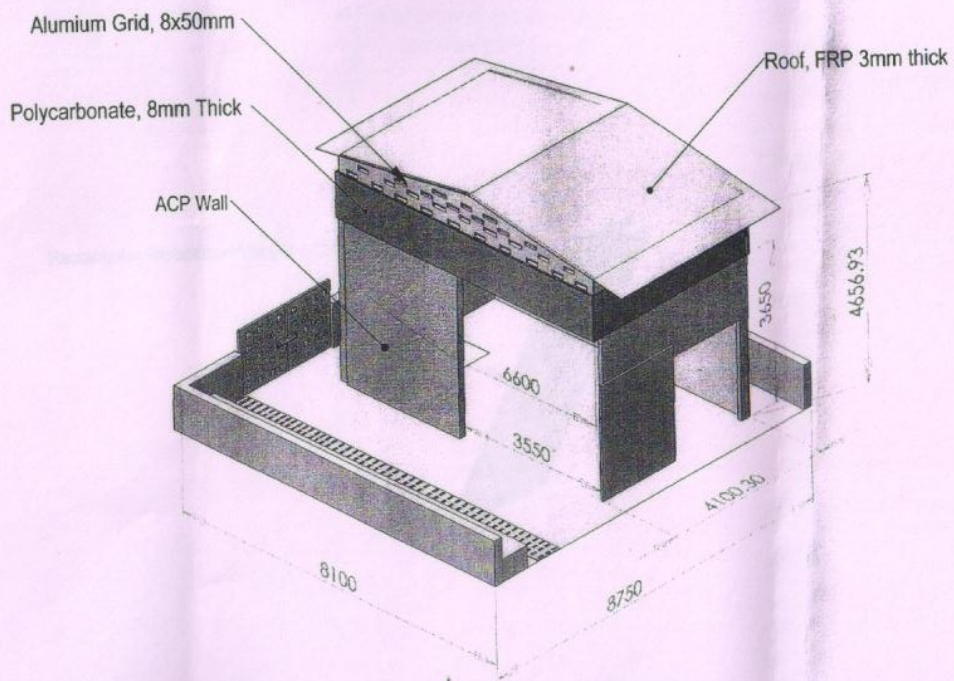
TO/D, TSS, AFD

(Surendra Kumar)

SO/H, TSS, AFD

(For & on behalf of The President of India)

Copy to: Head, AFD
encl: as above



Enclosure for Mechanised Drums Storage & Retrival System



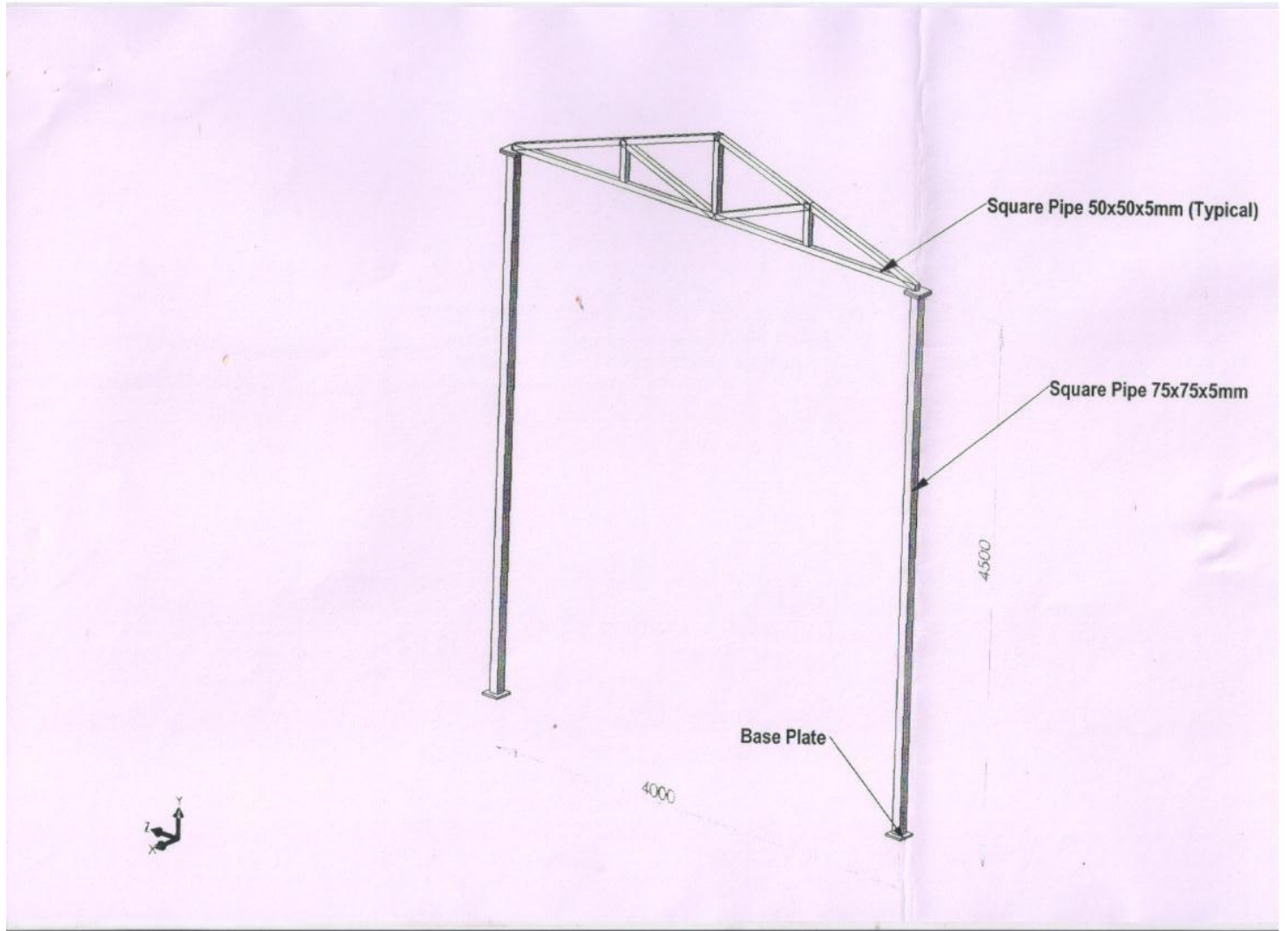
Rectangular Aluminium Pipe (44 x 25 x 3mm)

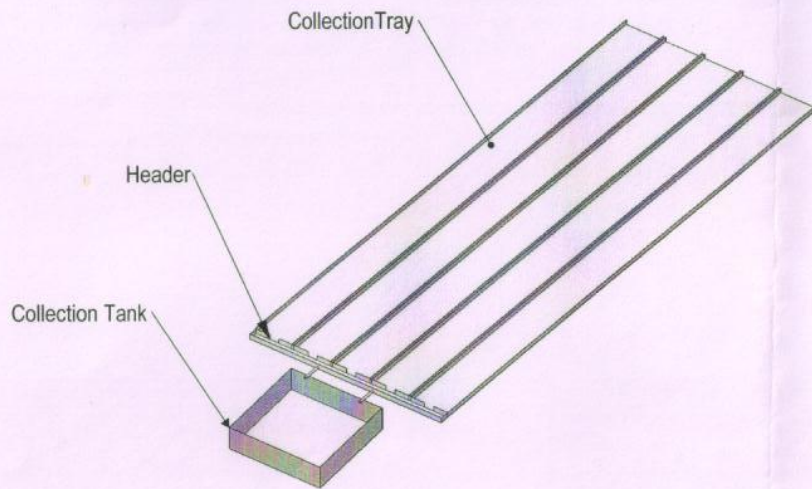
ACP 3mm Thick

50 ±0.50

ACP Side Wall with Rectangular pipe as Spacer



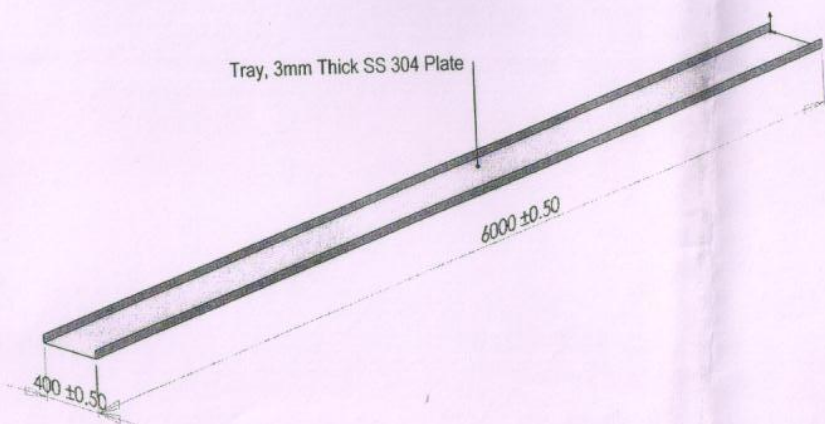




Leakage Collection System



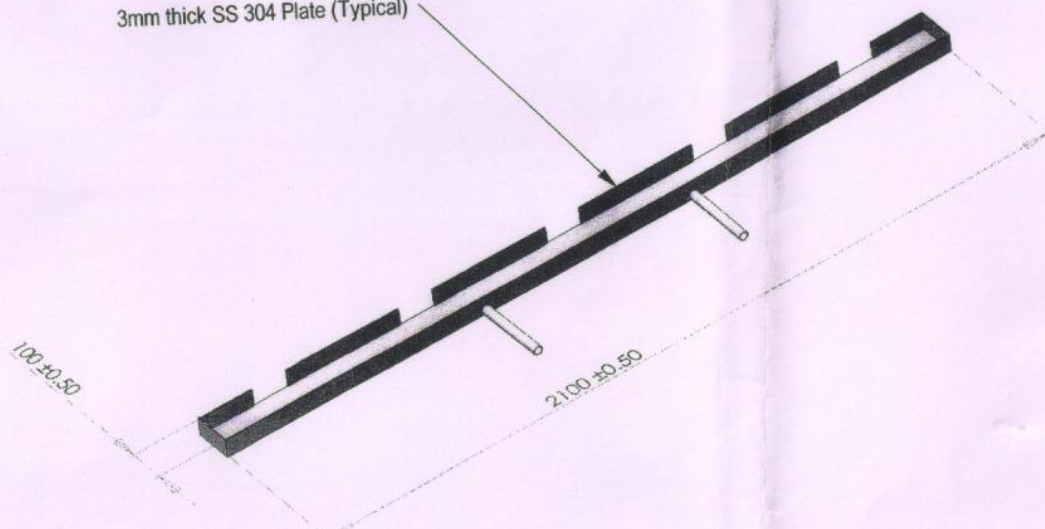
Tray, 3mm Thick SS 304 Plate



SS leakage Collection Tray (05 nos.)

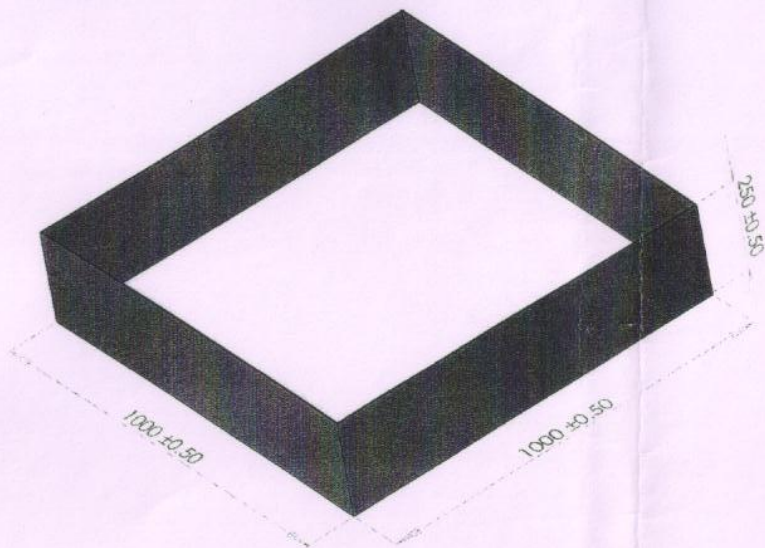


3mm thick SS 304 Plate (Typical)



Header for leakage collection





Leakage collection Tank, SS 304 3mm thick