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**Addendum - 2**

**To**

**MRPL Tender No. 96750000C1A dated 31.05.2021**

**TENDER FOR CONSTRUCTION FOR CCR-1 REGENERATOR REVAMP PROJECT AT MRPL,  
MANGALURU, KARNATAKA**

With reference to the above tender, bidders are requested to note the following:

Bidders are requested to refer below enclosed response to Pre-bid queries.

Bidders shall submit copy of these documents along with the technical-commercial bid, duly signed and stamped, as a token of having read and understood the same.

**Queries for CCR - 1 Regenerator Revamp Project at MRPL Mangaluru Karnataka**

Sl. No.	Ref.	Description	Query	TES Reply
1	Technical Vol 7	SOQ - Mechanical, Piping, Civil, Structural, Electrical and Instrumentation	Kindly confirm whether all the items and quantities mentioned in the SOQ shall be provided as free issue material to the bidder, only the items mentioned under bulk items shall be in the scope of supply of the bidder viz. gaskets, nuts and bolts etc.	<p><b>Electrical Response</b> Electrical Heat tracing system, Additional vertical panel, MV power and control cables shall be provided as free issue material to the bidder. All other electrical bulk items like Earthing material, LCS, Cable trays, Cable glands etc. are in bidder's scope of supply.</p> <p><b>Piping Response</b> Yes it is Free Issue Material (FIM) except Gasket, Bolts, nuts, insulation and paintings, pipe supports such as L post, T post channel, shoes, guide plates, shim/base plate, teflon &amp; graphite pads etc &amp; items require which need to complete total pipe support arrangements (expect springs).</p> <p><b>Civil / Structural Response</b> Supply scope of materials for Civil-Structural works is clearly mentioned in the item descriptions of Civil-Structural SOQ.</p>
2	Technical Vol 7	SOQ - Mechanical, Piping, Civil, Structural, Electrical and Instrumentation	As the Design and Engineering is being carried out by M/s. MRPL / TESPL kindly confirm that work executed beyond the mentioned quantities in SOQ shall be paid separately on pro-rata basis	Bidder to note this is a lumpsum fixed contract, any increase in bill of quantities in SOQ upto 10% has to be part of lumpsum price. Any changes beyond 10% will be as per tender.
3	Note 4 of SP-0	This Lumpsum Price is inclusive of Pre-commissioning / Commissioning Spares, Mandatory Spares, and Engineering Spares and first fill & 6 months Consumables / Catalysts / Chemicals and Operation Spares during Defect Liability Period. However, the Lumpsum Price shall be exclusive of 2 Years Recommended Spares for Operation and Maintenance required beyond the Defect Liability Period.	As the required equipments is being supplied by M/s. MRPL / TESPL, supply of all kinds of spares, first fill of equipments, 6 months consumables / catalysts / Chemicals etc should be in the scope of the supplier and the lumpsum price quoted by the bidder shall be exclusive of supply of the above. Kindly confirm	Refer Sno 2 above
4	Technical Vol 1 Scope of work Mechanical Cl. No. 6.2, 6.3 and 6.4	Installation of New Equipments, Replacement of Equipments, Dismantling of Equipments	Kindly furnish equipment wise details viz weight of equipment, dimensions and elevation to be installed on / removed from	Information not mentioned in TBP shall be collected by Bidder from MRPL site.
5	Technical Vol 1 Scope of work Mechanical Annexure 1	Modification of equipments	The scope of work shall be limited to the work mentioned in Annexure 1 of the respective equipments. Any other work required shall be carried out by the bidder and shall be paid separately. Kindly confirm	Bidder understanding is correct
6	9675-10-CL-001 (Technical Check List)	Equipment work	As per point no.1.4 of technical checklist , "Bidder understands that modification, rectification, replacement erection, installation and construction work shall be carried out as per the specifications and drawings included herein this tender." At this stage it is not possible to confirm all the rectifications / modifications so bidder will quote on the basis of quantities stated in SOQ only. Any further addition of quantity has to be taken care by client / consultant with respect to quantity of material / cost.	Bidder to confirm as asked in Technical Bid Package by referring the specifications mentioned in the clause 1.4.

Sl. No.	Ref.	Description	Query	TES Reply
7	9675-02-SOW-201 Cl. No. 6	Equipment work	<p>Bidder understands that modifications are to be done for following equipments only:</p> <ol style="list-style-type: none"> <li>1. Lock Hopper No. 1 &amp;2</li> <li>2. Lift Engager No. 1&amp;2</li> <li>3. Surge Hopper</li> <li>4. Regeneration Tower</li> </ol> <p><b>Free issued new equipments for installation are:</b></p> <ol style="list-style-type: none"> <li>1. Preheat gas Heater</li> <li>2. Air Heater</li> <li>3. Vent Gas Cooler</li> <li>4. Regeneration cooler</li> <li>5. Vent Drums</li> </ol> <p><b>Dismantling and Replacing with new equipments involve following:</b></p> <ol style="list-style-type: none"> <li>1. Electric heater</li> <li>2. Flow control hopper</li> <li>3. 2 Nos. Coalescers</li> <li>4. 6 Nos. Filters</li> <li>5. Lift gas blower</li> <li>6. Air dryer package</li> <li>7. Dust collector</li> <li>8. Disengaging hopper</li> <li>9. Organic chloride injection pump</li> <li>10. Packinox</li> </ol> <p><b>Kindly confirm</b></p>	Bidder understanding is correct
8	9675-02-SOW-201 Cl. 6.3 <i>Note-1</i>	Dismantling work	<p>Removal and demolition of existing items includes the removal of complete associated piping with the equipments under supervision of alpha level.</p> <p>Kindly provide us with the necessary details to enable us to account for this demolished piping.</p>	It will be provided by Alpha level to a successful bidder. However, bidder is free to visit site to collect first hand information.
9		New Equipments	<p>There are many new items like regeneration coolers/ coalescers etc which will be supplied from client end. But as per tender requirements bidder to advise some design specifications, size etc. and same has been marked as VTA (Vendor to advise) for respective items. We understand that design of any equipment is not under the scope of bidder.</p> <p>So bidder will quote based on items considered in SOQ only but if any new item/ equipment is to be added as per technical requirements arising during construction same will be taken care by client/ consultant regarding material/ cost.</p>	Bidder understanding is correct
10	9675-03-SOQ-001/02/03	Supply Items	<p>There are many small pipe lengths, pipe fitting components (Valves, Nut, Bolts etc.) to be supplied from contractor's end as per SOQ of piping works and as per document no. 9675-10-CL-001(Technical Check List) point no. 3 bidder to supply items according to SOQ provided after ensuring the quantity provided in SOQ.</p> <p>At this stage it will not be possible to exactly validate the quantity and applicability of such items only from P&amp;IDs attached with tender. Hence Bidder will quote based on SOQ only but if any new item is to be added as per technical requirements arising during construction same will be taken care by client/ consultant regarding material/ cost.</p> <p><b>Kindly confirm</b></p>	<p>All items mentioned as Free Issue Material (FIM) will be provided by EPMC/MRPL.except Bulk items and items required for hydrotest, installation commission which need to complete the work is in contractor's scope.</p> <p>Latest Piping SOQ provided as Addendum1</p>

Sl. No.	Ref.	Description	Query	TES Reply
11		Civil	<p>We are unable to understand the complete scope of work and check the BOQ provided along with the tender document under Civil head in absence of the following documents:</p> <ol style="list-style-type: none"> <li>1. Plot plan drawing (Dwg. No.-9675-00-04-A0-4001-A)</li> <li>2. Dwg. No.-9675-05-OT-001-SOW referred to the Schedule of Quantities for Civil &amp; Structural Works (Doc. No. 9675-05-SOQ-001).</li> <li>3. Foundation drawing for new Organic Chloride Injection Pump along with Pump GA (GA-2452 A/B).</li> <li>4. Foundation drawing for Modification/Strengthening for Lift Gas Blower along with GA.</li> <li>5. Total set of drawing for Removal/Dismantling of structural steel work for safe removal of existing equipments and installation of new equipments at different elevation from the CCR-1 structure including Demolition drawing of CCR-1 structure.</li> <li>6. Modified steel drawing of CCR-1 structure.</li> <li>7. Equipment support location plan and details.</li> <li>8. MRPL Civil/Structural design Basis.</li> <li>9. Paving drawing clearly indicating the Demolition part and the new paving to be constructed.</li> <li>10. All the Foundation Location Plan required to be constructed including foundation GA and detail.</li> <li>11. This may please be clarified if any area filling is required for new pavement / road construction.</li> <li>12. In absence of the detail information in tender, bidder will quote quantity of steel reinforcements as mentioned in SOQ only but if any extra quantity of reinforcement for RCC is to be added as per technical requirements arising during construction same will be taken care by client/ consultant regarding supply of material material/ cost.</li> </ol> <p><b>You are kindly requested to kindly provide the above mentioned documents / Drawings and confirmations to enable us to proceed further.</b></p>	<p>Point No. 1: Please read the Plot Plan draing no. as 9675-00-04-A0-4001-0, which is already included in the bid document (page 857 of 1194).</p> <p>Point No. 2: Please read the Scope of work document no. as 9675-05-SOW-001 (CONSTRUCTION SCOPE OF WORK (CIVIL/STRUCTURAL &amp; GENERAL CIVIL), which is already included in the bid document (page 96 of 1194), instead of 9675-05-OT-001-SOW.</p> <p>Point Nos. 3 to 10: All such drawings and details are meant for post award stage. Refer clause no. 5 of Civil Structural scope of work document no. 9675-05-SOW-001 (page no. 100 of 1194 of technical bid document). However, SOQ is inclusive of relevant quantities.</p> <p>Point Nos. 11: The existing area is paved, and local demolition and backfilling only is envisaged for foundations and trenches etc. No, overall area filling is envisaged.</p> <p>Point Nos. 12: Refer response given in Sno 2 above</p>
12		Time Extension	<p>Considering the present pandemic situation PAN India, we would request you to kindly extend the date of submission of the bid till 19.07.2021 to enable us to obtain rates of the bought out items and to have a detailed understanding of the job involvement which shall help us in preparing and submission of a competitive offer from our end.</p>	<p><b>Bid Submission date extended up to 05.08.2021</b></p>

<b>Additional Queries</b>				
<b>Sl. No.</b>	<b>Ref.</b>	<b>Description</b>	<b>Query</b>	<b>TES REPLY</b>
1	Technical Vol 1 CL. No.8.3 PG 7 of 1194	All the New Equipment GA Drawing as Per Note -2 shall be provided post award.	<p>1. Kindly confirm the Elevation, Size and Weight for calculation of Crane and Manpower requirement. Without the details quantum of work cannot be ascertained. The details are also not available in Mechanical Erection standard number 9675-02-SOQ-001. Kindly furnish the same.</p> <p>2. For erection of New Equipments, kindly confirm whether any structural platform is required to be extended further from the Existing structure.</p>	<p>1. Bidder has framed the query from table contents, bidder is requested to go through the entire construction tender to have comprehensive understanding of scope. However, for elevation of equipment, equipment lay out attached with construction tender shall be referred. Size and weight of some equipment are provided in MDS and shall be referred. For balance equipment GA with weight and size shall be provided on receipt of vendor input.</p> <p>2. Bidder to refer equipment lay out drawing / structural drawing attached with tender for the requirement of additional structure.</p>
2	Technical Vol 1 CL. No6.4 PG 70 of 1194	SL.no. 1 to 10 Nos Dismantling of Existing equipment remarks as "Deleted".	Bidder understands that all the Deleted listed items are not in scope of Bidder for dismantling.	Bidder's understanding to not correct Bidder to refer CI No 6.6 Point xiv. of document no 9675-02-SOW-201 attached with Contract for detail understanding of dismantling scope..
3	Technical Vol 1 CL. No6.4 PG 70 of 1194	Packinox Exchanger shall be replaced with new exchanger. Removal of existing exchanger (including spray bar) along with all the associated piping of the exchanger (Not limited to piping from exchanger to heater, heater to reactor and reactor to exchanger and supporting structure/ platform), Installation of new exchanger (including spray bar/conical strainer) will be carried out by the construction contractor under supervision of Alfa-Laval. Contractor scope includes removal of existing Packinox Exchanger and removal of existing structure/ platform and ensuring that the new structure /platform is ready in all respects for installation of new Packinox Exchanger.	<p>1.From the site visit Bidder understands that all the Structural Material required for Packinox Exchanger Installation on new structure &amp; platform such as Structural members, checkqured plate, handrail, gratings shall be free issued to Successful bidder.</p> <p>2. For Packinox Exchanger dismantling whether the same can be dismantled in pieces and disposed to the desired disposal yard within the refinery boundary of 5 KM Range (as informed by MRPL in pre bid meeting). Please note that there was no Lifting LUG available on the Existing exchanger hence we would request you to kindly advise on the methodology of dismantling of the same.</p> <p>3. Kindly confirm whether the quantum of Piping work related to installation of New Packinox exchanger (incl dismantling of the old equipment) is considered in the Piping SOQ.</p>	<p>1. Identical Packinox exchanger shall be replaced with new on existing structure having bolted connection. Required structural members / gratings/ hand rails shall be removed during the removal of Packinox and same structural members shall be reinstalled after the installation of Packinox.</p> <p>2. Dismantling of existing Packinox shall be carried out under the supervision of Alpha Level.</p> <p>3. Yes, this has been considered in Piping BOQ.</p>
4	Technical Vol 1 CL. No Q PG 25 of 1194	Construction of barricading during construction period and removal of the same after construction is over.	Kindly specify the unit barricading standard.	Bidder to submit their own barricading standard during construction for approval by EPCM/ MRPL.
5	Technical Vol 1 Annexure-1 PG 81 of 1194	Modification of equipments	Kindly confirm that all modification work shall be carried out on the existing installed equipments only. No work shall be carried out on dismantled equipments.	Bidder understanding is correct
6	Technical Vol 1 CL. No6.4 PG 875 of 1194	CIVIL	Demolishing of Concrete for electrical cable trench shown in tender but existing trench having live cables. Kindly confirm the scope of work to bidder.	<p>Bidder to note that there are two types of demolition markup identified with Note-2 and Note-3 in the demolition layout drawing (Ref. drawing No. 9675-00-04-A0-4002 included with the bid). Demolition scope is clearly mentioned in these notes. However it is again clarified as below: <u>Clarification:-</u></p> <p>(1) Demolition Marked with Note-2 is deolition of pavement for construction of new Instrumentation Cable trench by the side of existing Instrumentation cable trench. The existing instrumentation trench is NOT to be demolished (evident from cloud marking on the drawing).</p> <p>(2) Demolition Marked with Note-3 is only removal of screed concrete from the top of existing Electrical trench Cover. New additional electrical cables shall be laid in the existing trench after opening the precast RCC covers of trench. After completion of electrical work, the trench cover is to be reinstalled and new screed concrete shall be laid over the pre cast cover to maintain the level of pavement.</p>
7		<b>Equipment</b>	Kindly confirm whether new piping works and all new equipments can be erected during pre-shutdown duration or not. Alternatively kindly specify the quantum of pre-shutdown and shutdown works.	Bidder to propose list activities to be carried out during Pre Shutdown and during Shutdown in consultation with MRPL's operational Deptt.

8	<p>Construction contractor, during first three days of shutdown period shall collect from site &amp; provide health check report / corroded thickness report of following existing vessels wherein modification &amp; rectification work is envisaged as per specification and drawings to provide MAWP for each vessel for hydro testing.</p> <p>Regeneration Tower Nozzles &amp; internals modification (Eqpt. Tag No. DC-2451)  Lock Hopper No 1 (Eqpt. Tag No. FA-2451)  Lift Engager No 1 (Eqpt. Tag No. FA-2452)  Surge Hopper (Eqpt. Tag No. FA-2455)  Lock Hopper No 2 (Eqpt. Tag No. FA-2456)  Lift Engager No 2 (Eqpt. Tag No. FA-2457)</p>	<p>Kindly confirm whether thickness gauging is to be carried out for the following equipments only :</p> <p>Regeneration Tower (Eqpt. Tag No. DC-2451)  Lock Hopper No 1 (Eqpt. Tag No. FA-2451)  Lift Engager No 1 (Eqpt. Tag No. FA-2452)  Surge Hopper (Eqpt. Tag No. FA-2455)  Lock Hopper No 2 (Eqpt. Tag No. FA-2456)  Lift Engager No 2 (Eqpt. Tag No. FA-2457)</p>	Confirmed
9	<p>Identify the requirement of deck extension(s) as envisaged to carryout dismantling and removal of existing material, modification, rectification, replacement / fabrication work locally as required.</p>	<p>Kindly specify the quantum of job requirement or indicate the BOQ item wherein the same is considered.</p>	<p>Bidder to identify deck extension requirement if any during dismantling and removal of existing material and assess the quantum of work.</p>
10	<p>Contractor shall provide necessary barricading of the area of fabrication, construction, and erection for protection and safe installation of facilities complying with HSE requirements of MRPL.</p>	<p>Kindly specify the quantum of barricading area / works to be carried out at fabrication yard.  Kindly also specify whether the same is within the refinery premises or not.</p>	<p>Bidder to visit site decide quantum of barricading area in consultation with MRPL.</p>
11	<p>Chemical Cleaning</p>	<p>Kindly specify the quantum of chemical cleaning to be carried out and the required specification to be followed.</p>	<p>Bidder to refer specific clauses pertaining to requirement of chemical cleaning provided in Construction Tender.</p>
12	<p>Time extension</p>	<p>Please note that additional time is required for preparation and submission of a competitive offer from our end. Hence we request you to kindly <b>extend</b> the date of submission of the offer <b>till 05.08.2021</b>. We would also request you to kindly reply to our queries raised vide email dated 09.06.2021 as the same is unanswered till date.</p>	<p>Bid submission date is extended till 05.08.2021. No further extension shall be provided.</p>