## PRE BID REPLIES (LOT 3)— Fire Fighting System M/s TALCHER FERTILIZERS LIMITED



PROJECT : FIRE FIGHTING SYSTEM FOR OSBL FACILITIES ON PACKAGE BASIS

TENDER ID : 2022\_PDIL\_674308\_1

TENDER REF NO. : PNMM/PC-183/E- 4012/NCB
OWNER : M/s TALCHER FERTILIZERS LIMITED



SL. NO	DOCUMENT NO	PAGE NO.	CI. No	ITB REQUIREMENT	BIDDERS QUERIES	PMC REPLIES on 24.03.2022
1	PC183-TFL-4012-603-SEC VI-7.0 DESIGN PHILOSOPHY - ELECTRICAL	SHEET 38 OF 89	13.2	Fire Alarm Panel of above plants shall be located in respective Control rooms and Repeater Panels shall be located in Fire Station Building and control room. LSTK Contractor shall consider sufficient space in Fire Station Building for these Repeater Panels. Connection of all FACP and repeater panel in FO ring network with supply, laying of FO cable in Conduit shall be in LSTK contractor's scope.  Hook-up & integration of above Plants' Fire Detection & Alarm System with Centralised Fire Detection & Alarm System shall be in scope of LSTK Contractor in FO ring connection. Connection shall be such that all fire alarm system panel and repeater panel shall be connected in the same FO ring network. Necessary hardware, graphics and other software as required shall be considered for hook up and integration	experience this arrangement is practically not feasible due to make of FDS system supplied by other package vendor.  As per tender approved makes are Honeywell, Siemens & Securiton but Siemens&Securiton are not having redundency as per tender please provide more vendors to meet the redundancy. Networking of our scope of FACP & RP Panel are in FO ring and integration of other package FACP&RP system shall be through Modbus communication using BMS/PLC software and graphic of the system shall be done through	FO Ring Network shall be provided.  Interface & integration shall be as per NIT.  For more vendors, Amendments may be issued, if required.
2	PRE BID QUERIES REPLY (LOT 1) – Fire Fighting System		7	ammonia/toxic service equipment/areas, TSPL Query: Kindly provide the GA & Sectional drawings. AS per P&ID it is shown in ISBL scope. Kindy clarify the scope PDIL Reply: Flange joints of piping system for Toxic/flammable service in piping/equipment system in OSBL area. (Ex. OSBL pipe rack	Kindly provide the No. of flanged joints & locations of flanges	Details shall be provided during detail engineering.
3	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	8 of 14	4.4	etc.,). Furher details shall be provided during detail engineering  4.4 Clean agent flooding system Gas flooding system with clean agent, diverter valve (if feasible), detectors & accessories for Control Room, Computer room Computer console room, UPS room, Battery room, server/database rack room etc. shall be protected by clean agent system as per NFPA- 2001(Inergen/ Argonite/ Novec 1230).		Gas flooding system shall be as per bidders Enggineering. Major facilities covered in attachement 5 in NIT. However any other facilities required to complete the fire fighting sytem sh be done by bidder, and same shall be finalize during detail engineering.
4	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	8 of 14	4.4	Dump Test for Clean agent System	We have not considered Dump Test for clean agent protected areas.	bidder is advice to visit the site for more details.  Bidder shall consider separate filled cylinder (s) required for dump testing of the system
5	Isolation Valve			Isolation Valve	We have considered Isolation Valves as per the Conceptual Fire Water Layout.	As per detail engineering by bidder
6	Conceptual Fire Water Layout			Pedestal spacing 5m indicated in the typical detail of gate valve in the Conceptual Fire Water layout	We understand that the pedestal spacing 5m indicated in the typical detail of gate valve in the Conceptual Fire Water layout is for sizes 150NB, 200NB & 250NB ( as per TAC ) . The Pedestal spacing for all other pipe sizes shall also be as per TAC . Kindly confirm / clarify our understanding.	Supporting requirements of piping/ equipments shall be as p engineering by bidder to fulfill NIT condition.
7	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	6 of 14	4.1.2	4.1.2 Piping in Trenches The following points to be considered in designing of trench pipes: vii) The trenches shall be lined with RCC, then provided with 150mm sand bed and also shall be covered with RCC cover after laying of wrapped and coated pipes in them. Top of pipe shall be at min one meter depth.	Kindly clarify, for which areas RCC Trench to be considered.	As per detail engineering by bidder
8	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	11 of 14	5.6	5.6 Hose Box Hose boxes shall be made of M.S. material and painted red with dimensions 18 SWG thick M.S. sheet, size 750 mm x 600 mm x 250 mm. Each box shall contain 2 nos.x 15 m of 21/2" fire hose (IS-636 Type-B) with gun metal nozzle, coupling, universal branch pipe (IS-903), MS spanner. Tho. Hose Box with accessories shall be provided for each hydrant post and each fire brigade connection (3 Way, 4 Way with isolation gate valve).	As per this clause, it is specified to provide universal branch pipe Nozzle as per IS:903. However Universal branch pipe shall be As per IS:2871 and short branch pipe shall as per IS:903.  Hence kindly clarify whether we have to provide Universal branch pipe or short branch pipe.	Universal branch pipe IS:2871 is required for hose box. Amendment shall be issued, if required
9	Alarm Valve			Alarm Valve ( Installation Control Valve )	Kindly provide the Datasheet / Specification for Alarm Valve     Kindly clarify whether retard chamber is required in the Datasheet	As per OEM standard and based upon proven track record
10	PRE BID QUERIES REPLY (LOT 1) – Fire Fighting System		47	Clean agent flooding system TSPL Query: PMS is not provided for Clean agent system. Kindly provide PDIL Reply: As per code and standard mentioned in NIT.	We are considering the MOC of Pipes & fittings for Clean agent system as per NFPA / General Engineering Practice	As per OEM standard and based upon proven track record
11	PMS			Class: B24 - Elbows ELBOW 8 - 48, BW, ASTM A234 WPB-WLDD, ASME B16.9, ELBOW 8 - 48, BW ASTM A234 WPB-WLDD, PDIL-PDS-600, R=3D ELBOW 8 - 48, BW, ASTM A234 WPB-WLDD, PDIL-PDS-600, R=5D ELBOW 8 - 48, BW, ASTM A234 WPB-WLDD, PDIL-PDS-600, R=7D	We have considered 1.5D LR Elbow only. Kindly confirm	As per detail engineering by bidder
12	PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY-PIPING	4 of 14	4.1	4.1 Fire Hydrant System  Fire water network shall consist of mostly aboveground and/or underground, if required, piping systems.  Around units the fire water mains shall be laid aboveground and directly buried and/or in trenches, if it is laid underground. The underground ring main network system shall be laid at minimum one meter earth cushion. Top of casing pipe (RCC Hume pipe) of underground piping crossing roads (peripheral road, package unit road, access road/ways) shall be at min.		As per PC183-TFL-4012-603-SEC VI-4.0 DESIGN PHILOSOPHY- PIPING clause No. 4.1 of NIT.
13	PRE BID QUERIES REPLY (LOT 1) – Fire Fighting System		26	1.5 metre depth. Instrument air service Piping/ Tubing shall be SS304 TSPL Query: As per ATTACHMENT- 03, (PMS & VMS), Pipe Class D24 is mentioned for Instrument air ( wet ). But as per Clause No.4.2 of Design Philosophy Piping SS304 is used for Instrument air service piping. From the above details we understand the following 1) Instrument air ( wet) piping is to be used downstream of the Deluge Valve in the detection line 2) SS304 piping is to be used for tapping from existing air line point provided by client to the deluge valve Kindly confirm / clarify our understanding PDIL Reply: SS304 required for instrument air	Kindly note that as per PMS D24, MOC of Dry QB Detection pipe ( IAW ) is API 5L Gr.B Seamless Sch.80. However as per your reply SS304 is mentioned. Hence we request you to kindly clarify the MOC, Schedule & PMS of Air detection pipes & fittings upstream of Deluge Valve & Downstream of Deluge Valve separately	At upstream of deluge valve, SS304 shall be used for instrument air service.  At downstream of Deluge Valve for instrument air service, SMLS,API 5L GR.B,HOT DIP GALV. (PMS B 24G) can be used.
14	PRE BID QUERIES REPLY (LOT 1 & 2) – Fire Fighting System			TSPL Queries : Queries regarding Transformers, Cable Cellars, Attachment 05, etc. PDIL Reply : Amendment shall be issued, if required	We have not received the any Amendments with Technical details. Since we have to do estimation based on the technical details that you will provide, we request you to kindly provide the same.	Amendment shall be issued shortly, if reqiured