

January 10, 2024
 Ref.: 307844

To: All Tender Participants

Dear Sir / Madam,

Re: Public Tender No. PD23001945 (the "Tender") – Clarifications

The Company has received certain requests for clarification regarding the Tender, in accordance with Section 5.1 thereof, provided below (the "Questions"). Next to each Question is the Company's answer, which shall be considered by the Company as authoritative.

		<u>Question</u>	<u>Answer</u>
1	Lead time	Lead time 40 weeks for both pumps	Accepted
3.	Technical - Pump datasheet 3rd Fuel Transfer Booster	Pump datasheet 3rd Fuel Transfer Booster	We attached all relevant document regarding to the technical specification.
4.	Technical - Pump datasheet Distillates Transfer Pump	NPSHA mentioned in datasheet is not clear (-8 m or + 8 m). Please confirm.	NPSHA=-6M (minus 6m)
5.	Technical - Connections Pump's Bowl Assembly together with the suction well to be installed in existing casing of the following dimensions: Inner Diameter: 750mm Depth: 1650mm	1. For this tag Pump type in datasheet is mentioned as VS6 means vertically suspended pumps with barrel. Such pumps usually installed in Pit, not in Casing. We are unable to understand the requirement. 2. Does this clause means we have to Supply the Bowl Assembly only (Without barrel) and same will be installed inside existing pump's barrel. If this is so then please share the Existing pump General Arrangement drawing.	1. In Israel most of these types of pumps are installed in casing. See the attached picture of the existing site for the future pump. 2. The existing casing is not part of the pumping assembly. It hosts the volume in which the pump can will be installed in. The scope of supply includes all all the pumping parts, including the

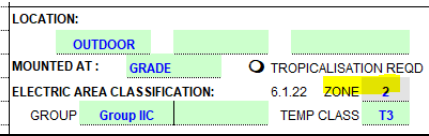


			motor, bowl assembly, pump can, and all the required internal connections and connections to process.
6.	Technical	Ashdod Vertical pump: Below you will find extraction from the vertical pump specification related to Ashdod pumping station but then when you see in one of the excel files you will see they refer to Ashkelon pump. Is this only a typo error?	YES
7.	Technical	In the extraction below, they mention that this pump for Ashdod PS will operate in parallel with two other existing pumps and they reference to Attachment A of the existing pumps drawings and pump performance diagram but I have not found this document. Can you please check with PEI?	Attached is the missing data We like to clear that no pump shall work simultaneously with an existing pump to one common destination; Two of the pumps shall work at the same time but to different place.
8.	Technical	Please check with PEI if they can accept manufacture in India or China raw materials	Only OECD countries or EU manufactures
9.	Technical	In technical specification 2 – Ashdod, paragraph 5.1, there is reference to “drawings of the existing pumps as well as pumps performance diagrams – Attachments A”. This attachment is missing.	Attached is the missing data
10.	Technical	<p>1. Haifa Boosting Station. Distillates Transfer (Vertical Centrifugal Pump with electrical motor)</p> <p>1) Please check if below inner diameter and depth is mandatory to be followed. We may have better selection if this size can be deviated.</p> <p><u>Connections</u> Pump's Bowl Assembly together with the suction well to be installed in existing casing of the following dimensions:</p> <p>Inner Diameter: 750mm Depth: 1650mm</p>	The above dimensions are of the existing casing in which the pump can will be installed. Please see the existing casing in the picture



11.	Technical	<p>NPSHav of Haifa pump is -8m which seems not correct. Please check the correct figures so that we can select the suitable pumps. This information is very important for decide the pump</p>	<p>The NPSHa has been updated to -6m and the Suction pressure to 0.4 Bar.</p>																								
12.	Technical	<p>Please confirm required seal plan is single or double. Wording below has conflict.</p> <p>→The pumps shall be supplied with single mechanical seals. The seals shall conform to API 610 seal plan 31. ←</p> <p>The pump shall be supplied with API 682 double type mechanical seal manufacturer by John Crane or equivalent .</p>	<p>As it is shown below there is no conflict, the requirement is for Plan 31 with single mechanical seals.</p>																								
13.	Technical	<p>F.2.1 General</p> <p>The steady-state temperature of the fluid in the seal chamber is a function of a simple thermodynamic balance. The heat flow into the seal chamber fluid minus the heat flow out of the seal chamber yields a net heat flow. The fluid temperature will either increase or decrease depending upon whether the net heat flow is positive or negative. This is deceptively simple. In actual applications, the heat flows into and out of the seal chamber fluids are extremely complex.</p> <p>There are several sources of heat flow into the fluid. These include heat generated due to friction and fluid shear at the seal faces, heat generated due to windage (or turbulence) caused by the rotating seal components, and heat conducted from the pump through the seal chamber and shaft (or positive heat soak). There are also several sources of heat flow out of the seal chamber. These include heat conducted back into the pump through the seal chamber or shaft (or negative heat soak) and heat lost to the atmosphere through convection and radiation.</p> <p>In some cases, assumptions can be made which simplify the model. For example, consider a single seal with Piping Plan 11, 12, 13, or 31. With these piping plans, the fluid injected into the seal chamber will be at pump</p> <p style="text-align: center;">153</p> <p style="text-align: center;">American Petroleum Institute ed by IHS under license with API</p> <p style="text-align: center;">License=Bechtel Corp/9999006100</p> <p style="text-align: center;">API Standard 682 / ISO 21049</p> <p>temperature and heat soak can be ignored. Unless the pump is at a very high temperature, heat loss to the atmosphere can also be ignored. Except in the case of large seals at high speeds, heat generation due to windage is usually insignificant and can be ignored. The increase in temperature can then be calculated if the following variables are known:</p> <p style="text-align: center;">4) Area classification</p> <p>Pump data sheet says "Non classified(non-hazard)" however, it is mentioning "Zone2" on the motor data sheet</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p style="text-align: center;">SITE CONDITION</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Temp. [°C]</td> <td>Max. 43</td> <td>Min. 5</td> </tr> <tr> <td>Rel. Hum.[%]</td> <td>Max. 75</td> <td>Min. 40</td> </tr> <tr> <td>Altitude [m]</td> <td colspan="2">5</td> </tr> <tr> <td><input type="radio"/> Indoor</td> <td><input type="radio"/> Heated</td> <td><input type="radio"/> Roof</td> </tr> <tr> <td><input checked="" type="radio"/> Outdoor</td> <td><input type="radio"/> Unheated</td> <td><input type="radio"/> Sun</td> </tr> <tr> <td colspan="3">Area Classification :</td> </tr> <tr> <td colspan="3">Non classified</td> </tr> <tr> <td colspan="3">Other Remarks :</td> </tr> </table> </div>	Temp. [°C]	Max. 43	Min. 5	Rel. Hum.[%]	Max. 75	Min. 40	Altitude [m]	5		<input type="radio"/> Indoor	<input type="radio"/> Heated	<input type="radio"/> Roof	<input checked="" type="radio"/> Outdoor	<input type="radio"/> Unheated	<input type="radio"/> Sun	Area Classification :			Non classified			Other Remarks :			<p>Comment is received and the pump data spec has been updated accordingly.</p>
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14.	Technical	<p>Ashdod (Pump P-30). Booster, storage tanks to transfer pump (Vertical suspended pump)</p> <p>Please confirm if the motor is for Zone 2 as specified on the pump data sheet</p>	<p>Confirmed</p>																								



		 <p>LOCATION: OUTDOOR</p> <p>MOUNTED AT: GRADE <input type="radio"/> TROPICALISATION REQD <input type="radio"/></p> <p>ELECTRIC AREA CLASSIFICATION: 6.1.22 ZONE 2</p> <p>GROUP: Group IIC TEMP CLASS: T3</p>	
15.	Technical	Please confirm if electric motor is in scope of supply	The electric motor along with the suction can and all the connections are within the scope of supply as part of the complete pumping unit, pump and motor
16.	Technical	<p>There is no attachment A, although SPEC says to design the pump as per existing pumps</p> <p><u>ATTACHMENTS:</u></p> <p>ATTACHMENT A: EXSISTING PUMPS DATA.</p>	There is no attachment A mentioned in the specification delivered by Marshal – Must be part of the documents attached by PEI



17.	Technical	<p>In Referring to your above tender please clarify:</p> <p>5. In technical specification 2 – Ashdod, paragraph 5.1, there is reference to “drawings of the existing pumps as well as pumps performance diagrams – Attachments A”. This attachment is missing.</p> <p>6. Please advise if you accept LCC (India or China) raw materials.</p>	<p>There is no attachment A mentioned in the specification delivered by Marshal – Must be part of the documents attached by PEI.</p> <p>In regard to inquiry 6, mandatory it is not approved by PEI.</p>
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Thank you for your continued interest in the Tender; we look forward to receiving your bids.

Sincerely,



Eran Rheinisch

Procurement and Engagements Department

