



September 3, 2018

Clarification minute No. 1, of Invitation to Bid (ITB)

No. 2018/CSAPC/FNJOR/100231

“Design, construction and commissioning of a co-digesting sludge/ biowaste biogas plant (50 kW CHP) in Mafraq, Jordan”

I. SITE VISIT INFORMATION:

1. In order to perform a visit to the site of works, interested bidders shall provide the following information through UNGM:

- Copy of identity card (Jordanian Citizens).
- Copy of valid passport and visa (foreigners).

Site visit is mandatory according to the tender documents (paragraph 3.2 a) of the ITB).

2. Please note that the time required to obtain entry passes from the Syrian Refugee Affairs Directorate is of **two (2) working days for Jordanian citizens** and from **two (2) to four (4) weeks for foreigners**. Please indicate the preferred date(s) for the site visit(s). FAO cannot guarantee that the required permit will be granted or the preferred date will be available. Tentatively the site visits will be scheduled as follows:

Required documents (item 1 above) submitted via UNGM not later than:	Tentative Site Visit	Meeting point
September 9	September 16, 2018	Meeting point at Zaatari Refugee camp gate at 10:30 AM.
September 16	September 23, 2018	
September 23	September 30, 2018	

II. MODIFICATION TO THE TENDER CALENDAR:

A. Paragraph 8.2 of the ITB is amended to read as follows:

8.2 *Your offer should reach this Organization no later than:*

CLOSING DATE: October 14, 2018 – 20:00 hrs. (Rome, Italy time)

B. Paragraph 9 of the ITB is amended to read as follows:

9.1 *All communications concerning this tender (questions, comments, requests) should mention the tender number (2018/CSAPC/FNJOR/100231). Bidders may request clarification of any of the tender documents described in paragraph 2 above. Such request must be sent in writing through UNGM only.*

IMPORTANT: Deadline for questions is October 2, 2018.



9.2 *FAO shall endeavour to provide answers to clarifications in an expeditious manner and **not later than five (5) calendar days** before the closing date of the tender. Any delay in such response shall not cause an obligation on the part of FAO to extend the submission date of the Bid, unless FAO deems that such an extension is necessary.*

III. ANSWERS TO QUESTIONS RECEIVED:

1. *Preparation of co-substrate. It has been asked to shred the organic wastes 4 ton per day, on weekends they are probably not working. Also asked for a belt conveyor to deliver the organic wastes to shredder. It does not mention how the organic waste is delivered, Will it be delivered in bucket?, or tip from back of truck, How will they scoop organic wastes onto conveyor? 4 ton is small but for human is tiresome? So, how do you store and feed organic wastes to shredder.*

Answer.

You may consider a front loader to be used by the Biogas plant and the Sorting station for such movement of feedstock. The Bidder should consider that the biogas station needs a holding bin of sorted waste to cover Fridays and Saturdays and any public holidays.

2. *Shredder. It asked for shredder to cut organic particle to less than 5.0 mm. size. We do not think the two-shaft thing that you ask for will do the job. The only thing that will work is a pulper style, high-speed shredder. Maybe even a hammer mill will be necessary to cut to less than 5.0 mm the size you require.*

Answer.

The Shredder will cut organic particles to pump-able 15mm instead of 5mm. Hammer mill has a higher electrical consumption and will not be suitable for this kind of plant.

3. *Digester bottom. The ground shall be in concrete in order for us to fix the pipes. Page 29, 8.5.5, say something like ground should be lined with a foil to prevent seepage into the ground. We do not know what you mean by foil, but we propose to have concrete slab. If they have only liner on the ground when we fix pipes the liner will tear off. There is some uplift force on the air mixing pipe also, it needs to be fixed onto something strong, otherwise it will float. So, civil works should quote on solids ground instead. Please advise.*

Answer.

Foil is a sealing plastic film (mostly PE or HPDE or LDPE) welded membrane that is keeping all the liquids and avoids seeping in the ground. Usually, it is managed on rolls that are welded and assembled on site. For bottom and side liners, HDPE is mostly used. The same techniques as for sealing landfill sites against leachate discharge are applied.

4. *Covering of Digester. We use PVC sheets which have to be welded on site, but if you want higher spec. it has to be PE sheets. There are many thickness to choose from. They all have to be welded onsite. The side of the tank will have to be air tight, something like water seal. The PE cover will have to be strengthened with rope, or mesh of rope.*

Answer. Considering the harsh environmental conditions (temperature variation, UV radiation, strong winds) the risks of “wear and tear” are higher, hence the bidder should propose good resistance sheets.



IV. Additional questions to be answered in the minute to be answered by September 5, 2018:

5. *Did the land appointed by FAO already receive authorization, which allows the construction of the biogas plant? Has there any soil analysis been done for this land?*
6. *Is it correct that as an importer and goods consignee, FAO will deal with import procedures under the support of the contractor? This includes that FAO will provide VAT and tariff free documents, is that correct?*
7. *Is the contractor able to get 3-phase 380V electricity power from FAO at site for construction? If yes, how much kW capacity? Otherwise, how much is the price if electricity need to be bought from the WWTP?*
8. *As civil work construction requires some water, is it possible to get tap water on site? Or from the WWTP? What is the price for water?*
9. *Point vi of 6.8 in the tender document mentions a transformer which might be needed for extra electricity feeding to the grid, but grid feeding facilities are not listed in the price list. Considering the small capacity, we assume at this stage that feeding to the grid is not mandatory, is that correct?*
10. *Is it possible to give us an acceptance point in the WWTP for the liquid discharged by the biogas system? How does the existing FAO compost station receive materials from the biogas plant?*
11. *As the contractor is asked to prepare a business plan for the plant – the transportation of the organic substrate will be done by the responsible of the sorting, is that correct?*
12. *According to our experiences, some basic laboratory equipment and tools are useful for a biogas plant. Should we include those items in the price list or separately add the components to the list? Or should we follow the provided template for the price list and ignore points such as laboratory equipment and other items such as a flocculant adding facility?*
13. *Do you have a list of local civil work companies?*

V. Additional questions.

You may submit additional questions regarding this tender through UNGM only. **IMPORTANT: Deadline for questions is October 2, 2018.**

Thank you and kind regards,

FAO Procurement Service