CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

FINANCE
SUPPLY CHAIN MANAGEMENT

Tender Distribution Office

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11 August 2025

NOTICE TO TENDERERS NO: 12

TENDER NUMBER: 277Q/2024/25

DESCRIPTION: Construction of a 300Mℓ Reservoir, Bulk Pipelines and Associated Infrastructure near Muldersvlei

CLOSING DATE: 25 August 2025 at 10:00am

BOX NUMBER: 209

Dear Sir/Madam

In terms of Clause **C.3.2: Issue Addenda** in the Tender Data, the City of Cape Town may if necessary, issue addenda in writing that may amend or amplify the tender documents to each tenderer during the period from the date the tender documents are available until one week before the tender closing time stated in the Tender Data. The Employer reserves its rights to issue addenda **less than one week before the tender closing time in exceptional circumstances**.

Your attention is specifically drawn to the amendments, which are to be made to the tender document for the above in terms of this addendum, which is issued in terms of Clause 3.2 of the tender document.

This notice to tenderers is an integral part of the Tender. This notice/addendum is to be signed by the tenderer and attached and/or included to the tender document submission and recorded on **Schedule 22: Record of Addenda to tender documents.**

This notice contains the following:
1) Clarifications
2) Amendments to the tender document
3) Supporting documents

Tenderers should take note of the following:

1. CLARIFICATIONS
Requests for clarifications received since the issuing of Addendum number **11**, and which don't require an addendum to the tender documentation, are addressed hereunder for the benefit of all tenderers.

Query 1:
With reference to the **Calcium Hypochlorite System**, please clarify the following:

Query 1 a)

Q: *Total Page N0: 1235 – 7.10.2*: *"The peristaltic pumps shall be electric motor and gear driven and shall be selected to run at no more than 50% of the maximum design speed for that size of pump."*

Does this mean the pump must be able to do 50% more with a bigger motor gearbox meaning the pump current hose must be able to dose 50% more with some alteration on pump (motor and

gearbox) without changing the pump itself or must the pump be able to dose 19 000l/hr and we only running the pump at 50% of max dosing rate?

A: The target dose of 19000l/hr should be met with two pumps running, each pump being sized to 9500l/hr. At this dose of 9500l/hr, the dosing pump speed should not be more than 50% of the maximum speed. P&ID has been updated to reflect this. Please refer to Revision T1 of drawing 1001757-2000-PID-PP-2059, attached to this notice.

Query 1 b)
Q: *Total Page N0: 1236– 7.11: "Non-return valves shall be incorporated on the delivery side of each pump. The valves shall be an integral part of the pump and of the double-ball type. The balls shall be manufactured from glass or ceramic material, and the valve seats from PVC or other suitable and resistant material."*

Could you please explain a little more on this valve and maybe where this can be found? I am guessing you're a thinking off the double non-return ball valves on a diaphragm pump liquid end, this type off valves does not come on a peristaltic dosing pump.

A: Please refer the amendment to the specification included with this notice: "The non-return valves shall be incorporated on the delivery side of each pump can be of the spring type complying with clause D15.13.3 of Section D."

Query 1 c)
Q: *Total Page N0: 1240 – 7.21 - "Dosing cabinet enclosure – PVDF"*

I do not see they mention in detailed mechanical spec about an enclosure for each pump only in section 7.21. The material is PVDF, will Polypropylene be acceptable with plexiglass sliding doors? Both material is suitable for chemical, and your plexiglass does not fade during time?

A: PP and plexiglass materials are acceptable for the dosing cabinets. The first two rows of the table in section 7.21 are general clauses which do not refer specifically to the calcium hypo system, as these pumps will not be housed in dosing cabinets.

Query 1 d)
Q: *Total Page N0: 1237– 7.13 -"injection Lances"*

Could you please tell me where we can find something like this?

A: Refer to Clause 7.13 of the Detailed Mechanical Specification: "Injection lances offered by Prochem, Calibre Life Sciences, Metagroup, NND Oil and gas, Evoqua and Mazzei & Cumberland, or similar reputable manufacturers, shall be provided."

Query 1 e)
Q: *Total Page N0: 1236– 7.12 -"The common discharge line shall be fitted with a Coriolis mass flow meter which shall be used to measure the flow rate from each dosing pump accurately."*

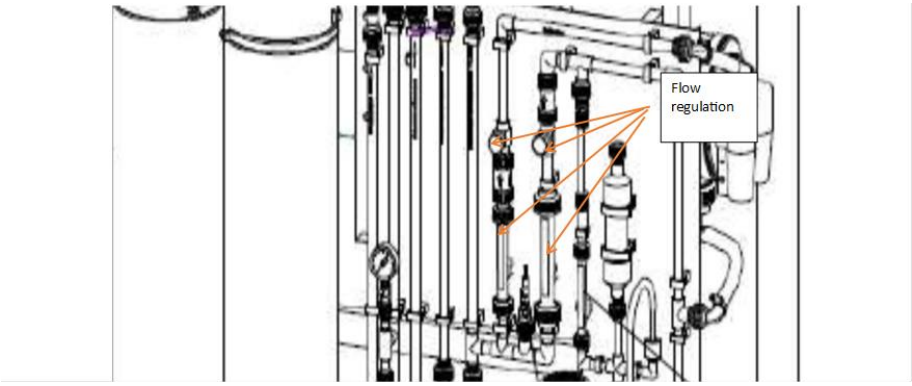
In detailed mechanical spec you say a Coriolis mass flow meter, but on BOQ it states a DN80 Turbine Flow Transmitter. Please let us know which one must be used. –

A: This should be a Coriolis mass flow meter. Please refer to the amendment to the specification and BOQ included with this notice.

Query 2:

With reference to the **OSEC System (Volume 1B)**, please clarify the following:

Query 2 a)
Q: *Total page number 1180* – Super Duplex Stainless steel volume flow regulator is not an option as a supply from the manufacturer, our units are PVC as shown below and we believe it is sufficient corrosion resistant; will this be acceptable?



A: The volume flow regulator is part of the OEM package and the default material supplied is acceptable, whether PVC or a different material. Please refer to the amendment to the specification included in this notice.

Query 2 b)
Q: Total page number 1191 – Hypo tanks need a ladder and platform on top of tank, GA drawing does not show this but spec does request ladder, cage, handrails and platform for each tank, do we follow spec or GA drawing.

A: The sodium hypo tanks should be fitted with the necessary cat ladder and platforms as required by the mechanical spec. The tanks could share a common cat ladder with a platform interlinking the tanks together for easy access to the instrumentation. This forms part of the contractor's design.

Query 2 c)
Q: Total page number 1193 – Each tank needs as per spec: 2 x Tuning fork type level switches, magnetic indicator and ultrasonic level meter. Tuning forks will be in contact with product and we do not recommend using this type of level sensor

A: The tuning fork level switches material selection should allow for the corrosive environment in the tanks. Materials such as Hastelloy-C, Titanium, or PTFE coated forks should be considered.

Query 2 d)
Q: Total page number 1193 – On P&ID 1001757 -2000- PID-PP-2055 item shown at "note 3" shows separately from the sight glass, we assume the sight glass and item under Note 3 the "magnetic level gauge" will all be one unit? –

A: Instruments "46 LG 001-4" are all magnetic level indicators that should be installed on the side of each of the sodium hypo storage tanks. The P&ID does not necessarily show the final installation.

Query 2 e)
Q: Total page number 1201 – "A flow meter or Coriolis mass flow meter can be supplied" We want to supply an ultrasonic clamp on meter for the hypo dosing pumps but it is measured under the BOQ H4.9 and H4.10 as turbine flow meters, will ultrasonic clamp on be acceptable?

A: A clamp on ultrasonic flow meter will not be acceptable.

Query 2 f)
Q: Total Page number 1202 – Dosing cabinet enclosure – PVDF - The material is PVDF, will Polypropylene be acceptable with plexiglass sliding doors? Both material is suitable for chemical, and your plexiglass does not fade during time? Industry standard is Polypropylene or HDPE, we have not seen PVDF used before.

A: PP and plexiglass materials are acceptable for the dosing cabinets.

Query 2 g)
Q: Total page number 1202 and 1203 – Dosing pump similar to Alldos Smart series. The DME 940 can only do 940 l/hr at 4 Bar and not 950 l/hr at 5 Bar as requested. The Milton Roy range can do up to 3.5 Bar @ 1120 l/hr. Can the delivery pressure of pump be reduced to 3.5 Bar?

2. Technical data

2.1 Mechanical data

US

	DME 60	DME 150	DME 375	DME 940
Maximum capacity*[1] [gph (l/h)]	15.9 (60)	39.6 (150)	99.1 (376)	248.3 (940)
Maximum capacity with anti-cavitation 75%*[1] [gph (l/h)]	11.9 (45)	29.6 (112)	74.2 (281)	186.2 (705)
Maximum capacity with anti-cavitation 50%*[1] [gph (l/h)]	7.9 (30)	19.8 (75)	49.7 (188)	124.2 (470)
Maximum capacity with anti-cavitation 25%*[1] [gph (l/h)]	4.0 (15)	10.0 (38)	24.8 (94)	62.1 (235)
Maximum pressure [psi (bar)]	145 (10)	58 (4)	145 (10)	58 (4)

A: The head requirement shown for the dosing pumps is an indicative duty point. The Contractor will be responsible for the sizing of the dosing lines, calculating the pressure drop and sizing the pumps accordingly.

Query 2 h)
Q: Total page number 1203 – Control is via a VSD with frequency variation, but an Alldos Smart pump can only be controlled by 4-20 ma. Milton Roy is controlled via a VSD with frequency variation.

A: The selected pump should comply with the mechanical specification and be VSD controlled.

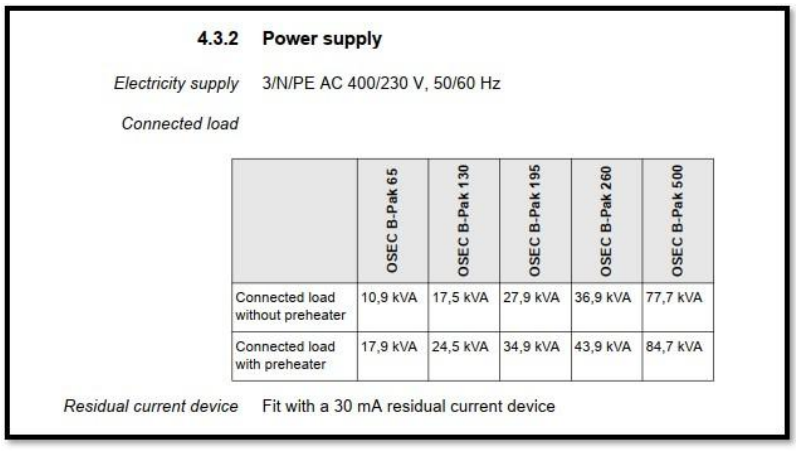
Query 2 i)
Q: Total page number 1202 – Alldos smart with display of flow rate – This is covered by the flow meter or Coriolis flow meter. Can this be omitted as it prevents us looking at other dosing pump suppliers.

A: Considering that a Coriolis mass flow meter will be provided, this smart flowrate display can be omitted. The requirement has been removed from the specification in the amendment included with this notice.

Query 2 j)
Q: Total page number 1205 – Transparent UHMWPE tube – Will Clear PVC reinforced hose be acceptable as an alternative. We have used this on other systems with great success and know it last with the intended chemicals.

A: We acknowledge the alternative. At this stage, the contractor should cost for the UHMWPE tubing as specified.

Query 2 k)
Q: Total page number 1182 section 2.13.2 - Connected load indicated as 37kVA, detail in manufacture data sheet is a miss print, and the actual load is 77.7KVA. Will this be a problem in quoting stage or can this be rectified when tender is awarded?



4.3.2 Power supply

Electricity supply 3/N/PE AC 400/230 V, 50/60 Hz

Connected load

	OSEC B-Pak 65	OSEC B-Pak 130	OSEC B-Pak 195	OSEC B-Pak 260	OSEC B-Pak 500
Connected load without preheater	10,9 kVA	17,5 kVA	27,9 kVA	36,9 kVA	77,7 kVA
Connected load with preheater	17,9 kVA	24,5 kVA	34,9 kVA	43,9 kVA	84,7 kVA

Residual current device Fit with a 30 mA residual current device

A: The 77.7 kVA rating is acceptable.

Query 2 l)
Q: Total page number 1182 section 2.14 – "Rectifier housed NEMA 3R" Only option that is available is the IP20 as per below:

POWER STATION pe3000-8, back view

Cooling

Optimized cooling air guiding, air consumption max. 1000m³/h
Cooling air outlet at DC bus bars
Ambient temperature 35°C (other on request)

Design

Stainless steel casing, optional coated, protection grade IP20
DC connection via screw terminals or tin plated copper bus bars
High voltage proof DC terminals (above 60 V)

A: The rectifier will be housed in an area of the building that will be exposed to splashing water from time to time and the protection grade of the unit should accommodate this. As such the rectifier shall adhere to an enclosure rating of IP 44 or higher. Please refer to the amendment to the specification included with this notice.

Query 3:
Q: The Installation of the mechanical equipment will only occur +-2028, can you please help us how will we be protected from price increases or where can I find this information in the documentation?

A: Contract Price Adjustment will be applicable as per Clause 6.8.2 of the Contract Data.

Query 4:
Q: Valves associated with mechanical installations incl. double union actuated ball valves – could you please clarify where the valves are measured under BOQ? As under each chemical BOQ it only states "Non-electronic instrumentation" but can't find the actual valves in BOQ.

A: Where not scheduled separately, valves must be included in the tendered rate for the supply and installation of the applicable pipework.

Query 5:
Q: The drawings mention a maximum fill layer of 150mm increments on the embankment but for the Geogrid areas the spec asks for and a minimum fill layer of 200mm before you can apply a load on the Grids. Please clarify the discrepancy.

A: Subclause 5.2.3.2 of SANS 1200 DE (amended) states that the maximum fill layer thickness is 150mm prior to compaction. The 200mm increment between geogrids can be achieved by constructing two thinner layers. Additionally, layers thicker than 150 mm, up to a maximum of 300 mm prior to compaction, will be permitted, provided the Contractor can consistently demonstrate compliance with the specified minimum compaction requirements.

Query 6:
Q: Does the maximum rate of rise for loading also apply to Stage 4 of the Earthworks?

A: The timelines apply to the full embankment height.

Query 7:
With reference to the project duration of 1249 days, please clarify the following:

Query 7a)
Q: We request you to extend the project duration of 1249 days to be 1450 days (plus all additional non-working days). There are numerous constraints within the specification that reduce the construction time. Upfront we have 61 days before we are allowed to access site. The backend of the

project requires a 28-day TOP after a realistic 28 days of works on completion (Dry and Wet Commissioning), which can only commence after you have filled, stabilised, and tested the reservoir (+ roof) which equates to about 64 days as per the specification. This equates to a total allowance of 181 days to the critical path, which is material for a project that has a critical path that runs through 1 structure with limited opportunities to expedite. Also, as per your comment in the specification, the markets' ability to supply the specialised G7 and G6 is a constraint on the fill operation which is magnified by the rate of rise limitations within the specification.

A: In addition to the response to Query 7b below, please note that:

- The time allowed for the Construction Work Permit and approval of contractor's documentation can be reduced should the contractor be prepared to submit, at risk, these documents during the S33 process.
- The commissioning of the disinfection facility can run concurrently with the reservoir's water tightness testing by using the bypass pipework.
- Note for clarity that the embankment consolidation times are in calendar days.

Based on the above, the current construction duration will not be extended.

Query 7b)
Q: Should you deny our request in point above, then we request that you revisit your rate of rise specification for the embankment fill by perhaps adapting a revised model to ensure founding stability but also allow for a more streamlined fill operation.

A: The possibility of increasing the rate at which the embankment can be raised is subject to piezometer measurements during the embankment fill operation and ensuring the monitored pore pressure levels remain within acceptable limits. This can only be assessed once construction has commenced.

Query 8:
Q: We are responsible for the Temporary Works designs, does that include Soil Improvements? The Soil Improvement Specification Reads that it is temporary work and need to last for 24 months. So it is, the design spec reads that all temporary works design is for the contractors' responsibility and then proceeds to list examples. The Soil Improvement may be interpreted as for our design; however, the Soil improvement spec only asks for the supply and installations of the soil improvement measures. So, the question is, is it Employers or Contractors design? Who is carrying the risk?

A: Although the soil improvement is only required for the temporary case, it is considered part of the permanent works, and the design responsibility will be with the Employer.

Query 9:
Q: From what we see on the pipeline route, all the lines cross and run parallel to a lot of power lines. Could you please send us the zinc ribbon requirements?

A: Zinc ribbons are not required. Due to the characteristics of the cement mortar sheathing, no cathodic protection measures are required. AC mitigation measures are as per drawing no. 1001757-0000-DRG-CC-4116 and specification *2221528-AppD* included in *3.7.5 Particular Specifications*.

Query 10:
Q: What is the assumed constant essential load? As per document C3.7.8.1 Detailed Electrical Specification section 11.3.6, the BESS system shall be designed for up to 10 hours. However, no assumed essential load is provided. This influences battery sizing.

A: The assumed essential load for tendering purposes may be taken as 16kVA. This corresponds to 40% of the total building electrical load for the administration building according to the tender-stage indicative designs. Tenderers shall note that the final battery configuration for installation is within the Contractor's design scope and will be dependent on the detailed design for the building electrical services.

2. AMENDMENTS TO TENDER DOCUMENT

ATD1 C2.2 Bills of Quantities

ATD1.1 In the description for items H4.9, H4.10, H4.12 and H4.13 on page 334, replace the word "Turbine" with "Coriolis Mass".

ATD1.2 In the description for item H4.46 on page 336, replace the words "DN25 Turbine" with "DN32 Coriolis Mass".

ATD1.3 Replace the description for item H4.47 on page 336, with "46-FT-002: DN32 Coriolis Mass Flow Transmitter complete".

ATD1.4 In the description for items H4.49 and H4.50 on page 336, replace the word "Turbine" with "Coriolis Mass".

ATD2 Volume 1B: C3.7 Specifications 2

ATD2.1 On page number 1180, replace the 2nd sentence in the 4th paragraph of Section 2.12 of *C3.7.7.1 Detailed Mechanical Specification* that reads "*A suitably sized flow regulator constructed of Super Duplex stainless steel (or better corrosion resistance) shall be used.*" with the following: "*A suitably sized flow regulator shall be used. The volume flow regulator is part of the OEM package and the default material supplied is acceptable, whether PVC or a different material.*"

ATD2.2 On page number 1182, delete the last sentence of Section 2.13.2 of *C3.7.7.1 Detailed Mechanical Specification* that reads "*The connected load of each reactor system shall not be greater than 37 kVA.*"

ATD2.3 Also on page number 1182, replace the 2nd sentence in the 2nd paragraph of Section 2.14 of *C3.7.7.1 Detailed Mechanical Specification* that reads "*The rectifier shall be housed in a NEMA 3R enclosure.*" with the following: "*The rectifier shall be housed in an enclosure with an IP 44 rating or higher.*"

ATD2.4 On page number 1202, delete the last sentence of Section 4.11.1 of *C3.7.7.1 Detailed Mechanical Specification* that reads "*In addition, the pumps shall be digital dosing with a LC display of the flow rate on the pump such as offered by the Alldoss SMART series or any other equivalent.*"

ATD2.5 Also on page number 1236, replace the 2nd last bullet point of Section 7.11 of *C3.7.7.1 Detailed Mechanical Specification* that reads "*Non-return valves shall be incorporated on the delivery side of each pump. The valves shall be an integral part of the pump and of the double-ball type. The balls shall be manufactured from glass or ceramic material, and the valve seats from PVC or other suitable and resistant material.*" with the following: "*The non-return valves shall be incorporated on the delivery side of each pump can be of the spring type complying with clause D15.13.3 of Section D.*"

ATD2.6 Under *3.7.9.2 Electronic Data Sheets,* for data sheet No. DST-II-0004: Instrumentation on page 1581, add new section no. 36 for the Coriolis Mass Flow meter and change the section number for "Supplementary Details" to 37 as per the table below.

	DESCRIPTION	**UNIT**	**SPECIFIED**	**OFFERED**
36	**CORIOLIS MASS FLOW METER**			
36.01	Manufacturer			
36.02	Model			
36.03	Flange Size	*mm / DN*		
36.04	Flow Rate	*m^3/hr*		
36.05	PN Rating		As indicated on the P&ID	

36.06	Number of Relay outputs	*No.*		
36.07	Fieldbus Enabled	*Yes / No*	No	
36.08	Local Indication Required	*Yes / No*	Yes	
36.09	Surge Protection Required	*Yes / No*	Yes	
37	**SUPPLEMENTARY DETAILS**			

ATD3 Volume 1C: Drawings

ATD3.1 Supersede and replace Revision T0 for drawing 1001757-2000-PID-PP-2059 with Revision T1.

ATD3.2 Supersede and replace Revision T0 for drawing 1001757-2000-PID-PP-2083 with Revision T1.

In the main document, remove and destroy pages 334 and 336 and replace with attached pages 334(R1) and 336(R1).

In the Volume 1B, remove and destroy pages 1180, 1182, 1202, 1236 and 1581 and replace with attached pages 1180(R1), 1182(R1), 1202(R1), 1236(R1) and 1581(R1).

3. SUPPORTING DOCUMENTATION

The following documents are attached for information purposes only:

a. Revised schedule of Rates in excel format

TENDERERS ARE THEREFORE REQUESTED TO:

1. Record receipt of this Notice on Schedule 22: Record of Addenda to Tender Documents.
2. Tenderers must sign and return this Notice (append to the relevant returnable schedule) together with their completed tender document.

Failure to return a signed copy of the Addendum may result in the Tender being declared Non-Responsive.

Yours faithfully,

p.p. SCM.Tender7
……

For: Director: Supply Chain Management

ACKNOWLEDGEMENT OF RECEIPT FOR AND ON BEHALF OF THE TENDERER: TENDER NO 277Q/2024/25

At……..on this……Day of ……..2024

Signature:……

Name of Signatory:……
(in ink and capitals)

TENDERER:……..
(Name of firm in ink and capitals)