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RFQ Number	NLM-QUO-25/081
Request for Quotation Date	01 July 2025
RFQ Closing Date	31 July 2025
RFQ Closing Time	12:00
Compulsory Site Briefing	Not compulsory but if more information required can be arranged
Contact Person	Catherine Matima
Quotation Validity	90 Days from the closing date
Submission Details	RFQ Response must be sent to: catherine.matima@necsa.co.za
RFQ Description	To supply gas sampling pump as per the attached specification sheets

Dear Service Provider

Kindly provide a quotation for goods and or services as outlined in section 3 of this document.

1. Introduction

The South African Nuclear Energy Corporation Limited (Necsa) is a state-owned public company (SOC), registered in terms of the Companies Act, (Act No. 61 of 1973), registration number 2000/003735/06.

The Necsa Group engages in commercial business mainly through its wholly-owned commercial subsidiaries: NTP Radioisotopes SOC Ltd (NTP), which is responsible for a range of radiation-based products and services for healthcare, life sciences and industry, and Pelchem SOC Ltd (Pelchem), which supplies fluorine and fluorine-based products. Both subsidiaries, together with their subsidiaries, supply local and global markets, earning valuable foreign exchange for South Africa and are among the best in their field in their respective world markets.

Necsa's safety, health, environment and quality policies provides for top management commitment to compliance with regulatory requirements of ISO 14001, OHSAS 18001 and RD 0034 (Quality and Safety Management Requirements for Nuclear Installations), ISO 9001 and ISO 17025.

Necsa promotes the science, technology and engineering expertise of South Africa and improves the public understanding of these through regular communications at various forums and outreach programmes to the community. We are a proudly South African company continuously striving, and succeeding in many respects, to be at the edge of science,

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technology and engineering related to the safe use of nuclear knowledge to improve our world.

For more information on Necsa, please visit: www.Necsa.co.za

2. Background

Necsa plans to establish a plasma gasification demonstration facility in a laboratory on-site to volumetrically reduce uranium-containing PTFE candle filters. The facility incorporates a wet KOH scrubber, S83123, to clean the process gas stream, before the gas is discharged to atmosphere via the process ventilation system. To monitor the functioning and performance of the process, gas samples are drawn at various points upstream and downstream of the scrubber. The sampling points are identified as S01, S07, S08 and S09 in the attached Piping and Instrumentation Diagram (P&ID) [02]. An electrically-operated gas sampling pump, P83459, is used to transfer the gas from the sampling points to a gas sampling U-tube, Y83460, in which the samples drawn are collected and captured for analysis. The gas sampling system containing the gas sampling pump, P83459, is shown in the attached P&ID [03]. Material exiting the gas sampling system discharges into the process ventilation system of the Facility.

Details for the gas sampling pump, P83459, are given in the attached Specification Sheet [01].

3. Scope of Work

Item Description	Quantity
To supply and deliver to NECSA site the required gas sampling pump, P83459 as per the attached Specification Sheet [01]; and service (+diaphragm) kit(s)	1
All other equipment and components identified in Section 2 and/or shown in the P&IDs [02] and [03] are outside the scope of work considered here.	

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4. Attachments

Ref #	DOCUMENT NAME	DESCRIPTION
01	ENS-FDP-SPE-25002, Rev. 1	Specification Sheet for Gas Sampling Pump (P83459)
02	ENS-FDP-PID-24003, Rev. 5	PTFE Filter Destruction Project P&I Diagram – KOH Scrubber System 831
03	ENS-FDP-PID-24006, Rev. 2	PTFE Filter Destruction Project P&I Diagram – Gas Sampling Subsystem 834

5. Pricing

- All price quoted to include all applicable taxes.
- Price must be fixed and firm.
- Price should include additional cost elements such as freight, delivery to site, insurance until acceptance, duty where applicable, disbursements etc.
- Quotation must be completed in full, incomplete quote could result in a quote being disqualified.
- Payment will be according to Necsa's General Conditions of Purchase.

6. Evaluation

6.1. Phase 1- Functionality Evaluation / Technical Evaluation

Where functional or technical evaluation criterion is applicable, assessment will be performed in terms of the criterion listed below and the criterion may include Technical, Performance, Quality and Risk.

If the Bidder's response to the Technical templates does not indicate that the Bidder can support an acceptable technical solution, the Bidder's response will be rejected and not evaluated further.

Together the Technical, Performance & Quality and Risk criteria make up the functionality criterion and a Bidder's Proposal will be evaluated for functionality out of a possible 100 points. Only RFQ responses achieving an evaluation score of greater than the set threshold points out of the possible 100 points and which score a number of points for functionality that is greater than or equal to the set threshold points of the number of points achieved by the highest scoring Bid for functionality will be selected to progress to the second stage.

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If the Bidder's response to the Technical templates does not indicate that the Bidder can support an acceptable technical solution, the Bidder's response will be rejected and not evaluated further:

Item	Requirement	Weight	Points	Criteria
1	ISO 9001: 2015 (or latest) accredited Supplier must provide evidence (ISO 9001 certificate)	25	25	ISO 9001 accreditation of supplier of the required products. OR ISO 9001 accreditation of OEM and OEM letter listing local supplier as authorised supplier and service agent
2	Supplier must provide letter referencing after sales service and maintenance	25	25	Supplier having a service and repair workshop Supplier holds critical spares as stock items
			15	Supplier having a service and repair workshop
			10	Supplier outsources service and repair
3	Supplier lead-time Supplier must specify lead-time	25	25	Product available within 4 weeks of issue of Purchase Order
			15	Product available within 6 weeks of issue of Purchase Order
			10	Product available within 8 weeks of issue of Purchase Order
4	Suitability of Product	25	25	Supplier adequately demonstrates how the recommended product meets the user's requirements or specifications
Total		100		

Note: Bidders that score <80 out of 100 in respect of Technical/Functional evaluation criteria will be regarded as submitting a non-responsive bid and will not be evaluated further.

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6.2. **Phase 2 - Evaluation In Terms Of Preferential Procurement Policy Framework Act, 2022**

This bid will be evaluated and adjudicated according to the 80/20 point system, in terms of which a maximum of 80 points will be awarded for price and 20 points will be allocated based on the specific goals (B-BBE status level).

	POINTS
PRICE	80
SPECIFIC GOALS (B-BBEE status level)	20
Total points for Price and SPECIFIC GOALS	100

Preference goal
B-BBEE status level contributor

B-BBEE Status Level of Contributor	Number of points (80/20 system)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

7. **Required Documentation**

- Tax Clearance Certificate (Tax pin issued by SARS)
- Declaration of interest (SBD 4)
- BEE Certificate / Applicable Affidavit if classified as EME
- Letter of Good Standing (COID) only if Applicable due to the nature of work required
- Any other document or certification that might have been requested on this RFQ

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8. Important

- 8.1. Quotation must be submitted on or before the RFQ closing date and time stated above.
- 8.2. Orders above R 30 000 will be evaluated according to the PPPFA 80/20-point system and a functionality scorecard where applicable and the ones above R 1 Million will be subjected to the tender process.
- 8.3. This RFQ is subjected to the Necsa's General Conditions of Purchase, Preferential Procurement Policy Framework Act 2000 and the Preferential Procurement Regulations, 2022, the General Conditions of Contract (GCC) and, if applicable, any other legislation or special conditions of contract.
- 8.4. Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for specific goals are not claimed.
- 8.5. The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to specific goals, in any manner required by the purchaser.
- 8.6. For a Bidder to obtain clarity on any matter arising from or referred to in this document, please refer queries, in writing, to the contact details provided above. Under no circumstances may any other employee within Necsa be approached for any information. Any such action might result in a disqualification of a response submitted in competition to this RFQ.
- 8.7. No goods and/or services should be delivered to Necsa without an official Necsa Purchase order.
- 8.8. Necsa reserves the right to; cancel or reject any quote and not to award the RFQ to the lowest Bidder or award parts of the RFQ to different Bidders, or not to award the RFQ at all.
- 8.9. The supplier shall under no circumstances offer, promise or make any gift, payment, loan, reward, inducement, benefit or other advantage, which may be construed as being made to solicit any favour, to any Necsa employee or its representatives. Such

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an act shall constitute a material breach of the Agreement and the Necsa shall be entitled to terminate the Agreement forthwith, without prejudice to any of its rights

- 8.10. By responding to this request, it shall be construed that: the bidder, hereby acknowledge to be fully conversant with the details and conditions set out in the Necsa's General Conditions of Purchase, Preferential Procurement Policy Framework Act 2000 and the Preferential Procurement Regulations, 2022, the General Conditions of Contract (GCC), Technical Information and Specifications attached, and hereby agree to supply, render services or perform works in accordance therewith.

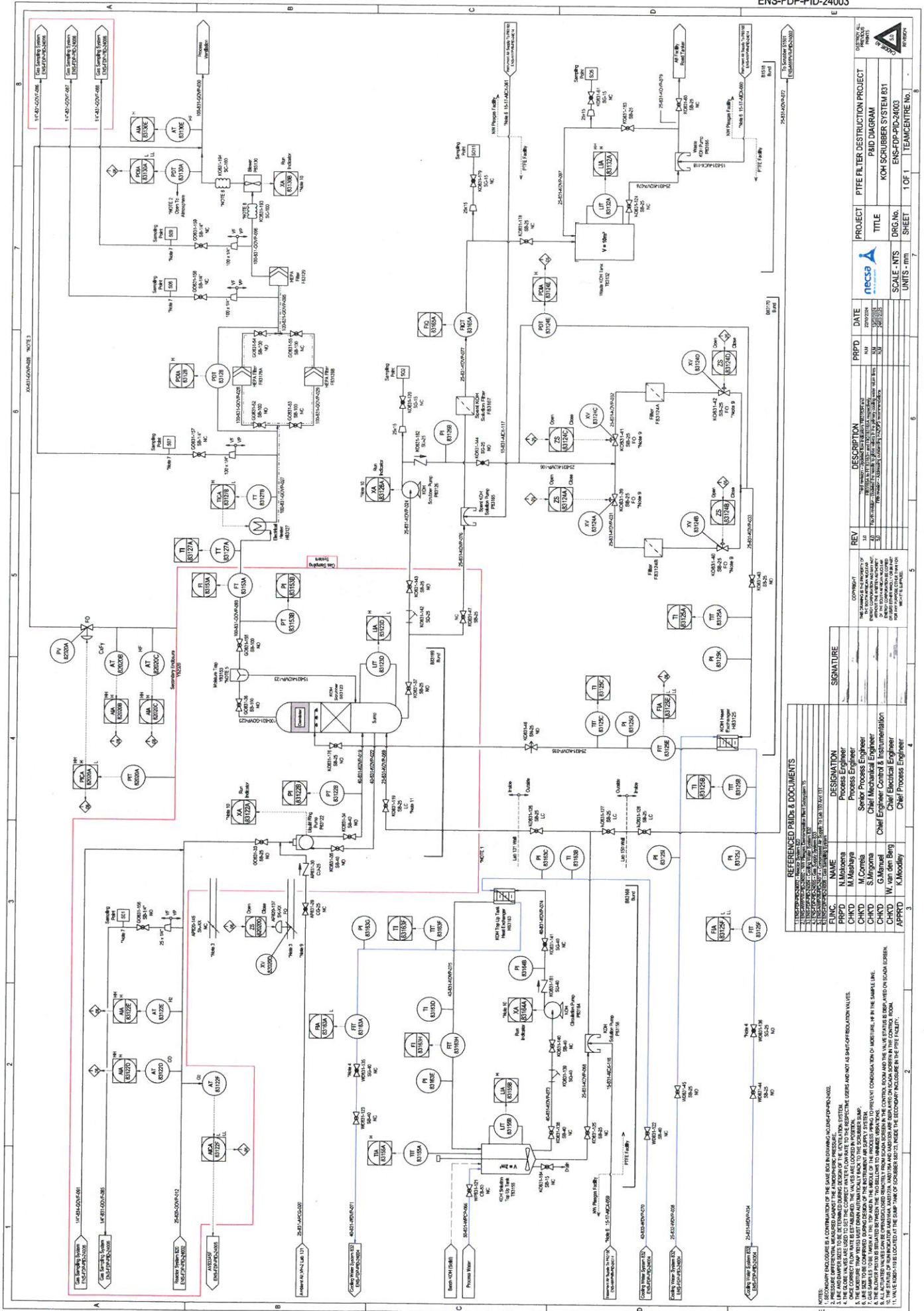
ENGINEERING SERVICES



SAMPLING PUMP P83459 SPECIFICATION SHEET

Project	PTFE Filter Destruction Project	Unit Tag Number	P83459
Datasheet Document No.	ENS-FDP-SPE-25002	Revision	1
Description	Pump P83459 will be required to periodically transfer material from the scrubber S83123 off-gas stream, through the gas sampling system in the PTFE Filter Destruction Demonstration Facility. Material exiting the gas sampling system will discharge into the process ventilation system of the Facility ^[4] .		
Plant Location	NECSA, Pelindaba, North-West Province		
Equipment Location	PTFE Filter Destruction Facility - Outside Laboratory 131, Building V-H2.		
Safety Classification	SC-3(N) & SC-2(C) ^[a]		
Quality Classification	QC-3(N) & QC-2(C) ^[b]		
Process fluid	Gas mixture containing CO ₂ , HF, O ₂ and N ₂ . Composition varies as per Note [d] below.		
Solids content	PTFE and solid uranium compound particulates may be present in the off-gas.		
Corrosive due to	Hydrogen Fluoride (HF) gas		
PROPERTIES	UNITS	NORMAL	
Operating temperature	°C	60	
Suction pressure	kPa(a)	45	
Discharge pressure	kPa(a)	96.7	
Flow rate	L/min	7.5	
Fluid density	kg/m ³	1.21 ^[1]	
Viscosity	Pa.s	1.7 x 10 ⁻⁵ ^[1]	
MECHANICAL PROPERTIES			
Pump type	Vacuum Gas Sampling Pump		
Process Connections			
Pipe Suction	Size	1/4"	Rating Class 150# Flange Spec. Supplier To Advise
Pipe Discharge	Size	1/4"	Rating Class 150# Flange Spec. Supplier To Advise
Seal Fluid	Supplier To Advise		
Material of Construction	Casing	Supplier To Advise	Diaphragm Supplier To Advise
	Shaft	Supplier To Advise	Seal Supplier To Advise
	Packing	Supplier To Advise	Other Supplier To Advise
ELECTRICAL PROPERTIES			
Electrical (Y/N)	Y	Volts	Supplier to advise Phase Supplier To Advise Hz Supplier to advise
VENDOR DATA REQUIRED WITH TENDER			
1 Pump technical data		3 Pump dimensions with baseplate	
2 Utility Requirements			
REFERENCE DRAWINGS AND DOCUMENTS			
[1] ENS-FDP-SPE-24022: Specification Sheet for Electrical Heater H83127			
[2] MES-DWG-DWG-0001: PTFE Filter Destruction Layout Drawing			
[3] ENS-FDP-CLC-24019: Pressure Balance across the PTFE Filter Destruction System			
[4] ENS-FDP-PID-24006: Filter Destruction Project - P&I Diagram: Gas Sampling Subsystem 833			
[5] ENS-FDP-CLC-24014: Mass Balance Calculation for the PTFE Filter Destruction System			
NOTES			
[a] SC - Safety Class			
[b] QC - Quality Class			
[c] Supplier to advise on special requirements for installation of pump.			
[d] The composition of the scrubber off-gas, which passes through the heater, changes over time due to chemical reactions taking place in the scrubber. The gas compositions (% w/w) are as follows: - 53.59% CO ₂ , 28.74% HF, 7.80% H ₂ O, 5.86% O ₂ , 10.89% N ₂ , at the start of the process, and 79.1% CO ₂ , 0.04% HF, 7.3% O ₂ and 13.6% N ₂ at the end of the process ^[5] .			
[e] Critical spares for the pump must be supplied together with the pump			

ENGINEERING SERVICES			
SAMPLING PUMP P83459 SPECIFICATION SHEET			
Project		PTFE Filter Destruction Project	Unit Tag Number
Datasheet Document No.		ENS-FDP-SPE-25002	Revision
			1
	Name	Date and Signature	
Compiled by	M Mashaya (Process Engineer)		
Reviewed	N Mokoena (Process Engineer)		
Reviewed	M Correia (Senior Process Engineer)		
Reviewed	M Msane (Mechanical Engineer)		
Reviewed	W van den Berg (Chief Electrical Engineer)		
Reviewed	G Manuel (Chief C&I Engineer)		
Reviewed	S Mngoma (Chief Mechanical Engineer)		
Approved by	K Moodley (Chief Process Engineer)		



REFERENCES AND DOCUMENTS

NO.	DESCRIPTION	DATE
1	PTFE Filter Destruction Project	2020/01/15
2	PTFE Filter Destruction Project	2020/01/15
3	PTFE Filter Destruction Project	2020/01/15
4	PTFE Filter Destruction Project	2020/01/15
5	PTFE Filter Destruction Project	2020/01/15
6	PTFE Filter Destruction Project	2020/01/15
7	PTFE Filter Destruction Project	2020/01/15
8	PTFE Filter Destruction Project	2020/01/15
9	PTFE Filter Destruction Project	2020/01/15
10	PTFE Filter Destruction Project	2020/01/15

NO.	DESCRIPTION	DATE
1	PTFE Filter Destruction Project	2020/01/15
2	PTFE Filter Destruction Project	2020/01/15
3	PTFE Filter Destruction Project	2020/01/15
4	PTFE Filter Destruction Project	2020/01/15
5	PTFE Filter Destruction Project	2020/01/15
6	PTFE Filter Destruction Project	2020/01/15
7	PTFE Filter Destruction Project	2020/01/15
8	PTFE Filter Destruction Project	2020/01/15
9	PTFE Filter Destruction Project	2020/01/15
10	PTFE Filter Destruction Project	2020/01/15

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