Eskom	Instructions	Hendrina Power Station

Title: **Tender Technical Evaluation Strategy for the Supply and Delivery of Coagulant and Flocculant Chemicals for a period of 5 years as and when required at Hendrina Power Station**

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1. Introduction

An open enquiry invite will be issued calling for tenderers to participate in the tender process for the supply and delivery of coagulant and flocculant chemicals for water treatment and cooling water systems purposes as and when required for a period of 5 years at Hendrina Power Station. This document sets out the method and criteria that will be used to evaluate the tenders that will result from this open enquiry invite.

2. Supporting Clauses

2.1. Scope

This document covers the technical requirements for the Purpose Supply, delivery of Bulk Chemicals. Chemicals are used at Hendrina Power Station for a wide range of reasons including but not limited to treating of water throughout the energy generation process. The availability of such chemicals is important in energy generation. It uses demineralized water to produce steam which turns the turbine and produce power. The demineralized water produced needs to undergo through pre-treatment process to remove turbidity and TOC to prolong life span of the resin installed in the Cation, Anion and Mixed bed vessels and consequently prevent fouling, erosion, scaling and the corrosion of the turbine and boiler plant.

The scope covers the supply, delivery of bulk chemicals for water treatment plant (coagulant and flocculant) and chemicals for cooling water system process for the flocculation control in cooling water system. The supplier must make sure that the chemicals must not run out on site and the plants must have enough chemical stored for back up or emergency use.

2.1.1. Purpose.

The purpose of this tender technical evaluation strategy is to define the mandatory Evaluation Criteria, Qualitative Evaluation Criteria and TET member responsibilities for tender technical evaluation. The technical evaluation strategy serves as basis for the tender technical evaluation process.

2.1.2. Applicability

This document applies to the Tender Technical Evaluation Team for the supply and delivery of coagulant and flocculant chemicals for water treatment plant and cooling water systems as and when required for a period of 5 years at Hendrina Power Station.

2.2. Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1. Normative

[1] 240-150393224 Pre-treatment criteria guideline (WTP raw water treatment)

[2] 240-92139372 Guideline for Managing of bulk chemical deliveries.

[3] 240-55864764 Potable water standard

[4] 240-88257914 Chemistry Guideline for Demineralised Water Production Using Ion Exchange Resins

[5] 240-53113712 Demin Water Production using Ion Exchange Resins Chemistry Standard

2.2.2. Informative

[1] 240-150642762, Generation Plant Safety Regulations

[2] ISO 9001 Quality Management Systems.

[3] Handling of hazardous substances

[4] Occupational Health & Safety Act

[5] SANS 241-1:2015

[6] SANS 50881- Chemical used for treatment of water intended for human consumption – aluminium chloride hydroxide (monomeric) and aluminium chloride hydroxide sulphate (monomeric)

[7] SANS 51409 - Chemical used for treatment of water intended for human consumption – Polyamines.

2.3. Definitions

2.3.1. Classification

Controlled Disclosure: Controlled Disclosure to external parties (either enforced by law, or discretionary)

2.4. Abbreviations

Abbreviation	Description
HPS	Hendrina Power Station
QCP/QIP	Quality Control Plan / Quality Inspection Plan
PS	Power Station
SOW	Scope of Work
ISO	International Standards Organisation
QCP	Quality Control Plan
OHSA	Occupational Health and Safety Act
BMH	Bulk Materials Handling
L	Litres
Kg	Kilograms
WTP	Water Treatment Plant
NSF	National Sanitation Foundation – An accredited, independent third-party certification body that test and certify products to verify they meet the public health and safety standard

2.5. Roles and Responsibilities

As per 240-48929153: Tender Technical Evaluation Procedure.

2.6. Process for Monitoring

N/A

2.7. Related/Supporting Documents

None

3. Tender Technical Evaluation Strategy

3.1. Technical Evaluation Method

The technical evaluation criteria are divided into two, there is the qualitative criteria and the quantitative criteria.

3.1.1. Mandatory Criteria

The tenderer needs to pass the mandatory evaluation before being evaluated qualitatively.

Mandatory Technical Criteria Description	**Reference to Technical Specification / Tender Returnable**	**Motivation to use criteria**
Transportation of Dangerous Goods Certificate	Driver certificate for dangerous goods transportation **Submission = YES/NO**	Required by law
The chemical shall comply with the NSF And it shall be registered in the database (NSF database)	Provide certified and valid copy of **NSF certificate**. (**National Sanitation Foundation** – An accredited, independent third-party certification body that test and certify products to verify they meet the public health and safety standard)	Compliance to the **National Sanitation Foundation** as required by law

3.1.2. Qualitative Criteria

The weighted score-card approach is used to evaluate the technical compliance of the tenders against the specifications.

The technical criteria and weighting are broken down as follows:

- Criteria 1: Company Experience = 35%
- Criteria 3: Quality Control Plan = 10%
- Criteria 4: Lead Times = 5%
- Criteria 5: Chemical Performance = 40%
- Criteria 6: MSDS = 10%

The evaluation of the tender submission will be based on the tenderer's ability to meet the above requirements. Tenderers need to have an overall weighted score of 70% or more to technically qualify for further evaluation, which are not covered in this scope. However, in a case where no tenderer meets the 70% threshold, tenders who obtain 65% will qualify for further evaluation.
A weighted score-card approach is used to evaluate the technical compliance of the tenders against the specifications.

The scoring method will be as follows for the qualitative evaluation criteria:

Score	Percentage	Description
5	100	**Compliant** • Meet technical requirement(s) AND; • No foreseen technical risk(s) in meeting technical requirements.
4	80	**Compliant with Associated Qualifications** • Meet technical requirement(s) with. • Acceptable technical risk(s) AND/OR. • Acceptable exceptions AND/OR. • Acceptable conditions.
2	40	**Non-Compliant** • Does not meet technical requirement(s) AND/OR Unacceptable technical risk(s) AND/OR. • Unacceptable exceptions AND/OR. • Unacceptable conditions.
0	0	**Totally Deficient or Non-Responsive**
Note 1: The scoring table does not allow for scoring of 1 and 3. **Note 2**: Foreseen acceptable and unacceptable risk(s), exceptions and conditions shall be unambiguously defined in the relevant Tender Technical Evaluation Strategy		

Table 3: Criteria 1: Qualitative technical evaluation criteria

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
1.	**Criteria 1: Company Experience**			**35**	
	1.1	**Previous experience on supplying and delivering of chemical.** Scoring Criteria: • X ≥ 5 number of completed work = **5 points** • 2< X ≤ 4 number of completed work = **4 points** • 0< X ≤ 2 number of completed work = **2 points** • X = 0 number of completed work = **0 points** *Note: 'x' is the number of completed work.	Signed, completion certificate of previous work of similar scope with the following information: Name of company where work was executed, Project, Description, Contract period & Contact person. NB!! PO number without the PO document will not be accepted		**35**

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
2.	**Criteria 3: Quality Control Plan**			**10**	
	2.1	**Quality Control Plan (QCP) Showing all the points** Scoring criteria: • QCP includes all necessary steps to evaluate quality and includes reference to supporting documents and intervention points (i.e. hold, witness etc.) = **5 Points** • QCP include all steps but no does not reference supporting documents and intervention points (i.e. hold, witness etc.) = **4 Points** • QCP is generic (does not include all steps) = **2 Points** • QCP is not submitted, or documents submitted does not qualify as QCP = **0 Points** NB: QCP shall indicate the chemical performance,	Drafted QCP indicating all hold points and steps taken to ensure that quality is controlled.		**10**

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
3.	**Criteria 4: Lead time for delivery of chemicals from the time the order is received.**			**5**	
	3.1	**Lead times** Scoring Criteria: • X ≤ 48 hours = **5 points** • 48 hours < X ≤72 hours = **4 Points** • 72 hours < X ≤ 96 hours = **2 Points** • X > 96 hours = **0 Points** *Note: 'x' is the lead time in hours.	Signed letter with company letterhead confirming that chemicals are to be delivered at Hendrina Power Station within 48 hours of the placing of an order. Confirmation letter to be used as a legal document forming part of the NEC.		**5**
4	**Criteria 5: Provide the required specification that shows performance of chemical treatment (Polyamine Flocculant and Coagulant) for raw water treatment. Collect raw water sample at water plant and CW at cw system.**			**40**	
	5.1	**1. <u>Raw Water</u>** **1.1 Total Organic Carbon (TOC) removal > 40%** 1.1.1 TOC removal of greater than 40% = 5 1.1.2 TOC removal >35% to 40% = 4 1.1.3 TOC removal < 25% to 35% = 2 1.1.4 TOC removal <25% = 0	Include the JAR TESTS REPORTS. (sample of such Chemicals, included in the report shall be provide to Eskom)		**20**

		1.2 Turbidity removal <2 (NTU) 1.2.1. Turbidity removal greater than 90% = 5 1.2.2. Turbidity removal >80% to 90% = 4 1.2.3. Turbidity removal >75 % to 80% = 2 1.2.4 Turbidity removal <75 = 0	Include the JAR TESTS REPORTS. (sample of such Chemicals, included in the report shall be provide to Eskom)		**10**
		1.3 <u>Cooling Water</u> 1.3.1 Turbidity removal on **<u>(Across Clarifier outlet)</u>** 1.3.2 Turbidity removal > 90% = 5 1.3.3 Turbidity removal > 80%<90 = 4 1.3.4 Turbidity removal > 75%< 80% = 2 1.3.5 Turbidity removal < 75 =0 1.3.6 Failure to submit the turbidity report = 0 **NB**: Indicate turbidity removal with both **LIME** and **SULPHURIC** acid dosing regimes separately. **If not shown like that (with both dosing regimes) on the report the tender will not be evaluated**.	Include the JAR TESTS REPORTS. (sample of such Chemicals, included in the report shall be provide to Eskom)		**10**
5.	**Criteria 5: MSDS (Material Safety datasheet)**			**10**	

	5.1	**MSDS (Material Safety Datasheet)** Scoring criteria: • MSDS includes all necessary information as stipulated in the OSH Act = **5 Points** • MSDS submitted in insufficient (does not include all information) = **4 Points** • MSDS is generic (does not indicate all chemical properties to verify the chemical to be supplied) = **2 Points** • QCP is not submitted, or documents submitted does not qualify as QCP = **0 Points** *Note: **ALL** material datasheet for chemicals in the scope must be submitted if the MSDS submitted are not complete tenderer will receive a score of zero (o) in this criterion.	MSDS with the company letterhead stipulating all the chemical properties as per the OSH Act,		**10**

3.2. Technical Evaluation Threshold

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%. However, in a case where no tenderer meets the 70% threshold, tenders who obtain 60% will qualify for further evaluation.

3.3. TET Member Responsibilities

Table 4: TET Member Responsibilities

No Mandatory Technical Evaluation			
Mandatory Criteria Number	**TET 1**	**TET 2**	**TET 3**
Qualitative Technical Evaluation			
Qualitative Criteria Number	**TET 1**	**TET 2**	**TET 3**
1.1	X	X	X
2.1	X	X	X
3.1	X	X	X
4.1	X	X	X
5.1	X	X	X

3.4. Foreseen Acceptable / Unacceptable Qualifications

3.4.1. Risks

Table 5: Acceptable Technical Risks

Risk	Description
1.	**N/A**

Table 6: Unacceptable Technical Risks

Risk	Description
1.	**Contractor not able to take accountability for contracted works**
2.	**Contractor unable to provide required certifications and hand-over**

3.4.2. Exceptions / Conditions

Table 7: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	**N/A**

Table 8: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	**Technical submission does not address entire scope of work required**