

	Request for Information (RFI)	Template Identifier	240-72663051	Rev	1	
		Document Identifier	N/A	Rev	N/A	
		Effective Date	01 August 2016			
		Review Date	September 2022			
		RFI No.				

PART A REQUEST FOR INFORMATION(RFI)			
Description of the works/goods/services	The Provision Of Information On Oil Removal Technologies That Can Be Used At Eskom's Kriel Power Station.		
Deadline for submission	19 April 2022	At (South African Standard Time)	10H00
Tender Office address	10 Smuts Avenue Witbank Tender Office		

Site Clarification Date;

13 April 2022 at 10H00

Send all emails for teams-application registration before the 12th April 2022 to: **mbenses@eskom.co.za**

Eskom Holdings SOC Ltd ("Eskom") invites you to submit a:

Request for information (RFI) to submit information for the works/goods/services as stated in the table. This RFI is a stand-alone information-gathering and market-testing exercise, intended only to inform and assist Eskom's further deliberation and development of a strategy for the **removal of oil from drain water**. Eskom may request indicative prices if so stated in this RFI. Responses to this RFI may be used to determine a shortlist of suppliers to be invited for a subsequent enquiry for the execution of the work.

Eskom has delegated the responsibility for this **RFI** to the signatory of this document, whose details can be found below.

We look forward to receipt of your response.

Yours faithfully

Name	Designation	Signature	Date
Siphesihle Mbense	Procurement Officer		22-03-2022
Telephone number	014 763 8842	E-mail address	mbenses@eskom.co.za

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1. INTRODUCTION

Eskom Holdings SOC Limited (“Eskom”) on behalf of Kriel power station invites you to submit information on technologies that are able to remove oil, soaps and greases from its deep drain water. The oil, soap and greases free water will then be transferred to the North Cooling Towers.

2. REQUEST FOR INFORMATION (RFI)

The intent of this RFI is strictly an information-gathering and market-testing exercise.

Respondents are requested to submit supplementary information which they may deem relevant to the information requested. The intention of this RFI is to encourage the provision of relevant information and obtain feedback from all potential Respondents regarding the topics raised hereunder.

3. SYSTEM OVERVIEW

Kriel power station currently makes use of the deep drains to capture any water losses on the power station. This water currently flows along with other drain water to the Vaal Pan (one of the dirty water collection dams) from where it is recovered to the power station’s North and South cooling systems. The water in the deep drains should consist of predominantly clean water as the water losses experienced are from the demineralised water circuit. The combination of the deep drains water with water from other sources will effectively decrease its quality and affect the cooling water system post recovery.

The system to recover deep drains water directly to the cooling systems without the water flowing to Vaal Pan is in place, however this system is used intermittently due to the oil contamination of the deep drains water. This system consists of two submersible pumps with flows of 30 and 60 litres/second each, an obsolete oil detector and a supply line to cooling tower 2 on the North side. In order to improve the availability of this system an oil

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removal technology needs to be incorporated post the transfer pumps and prior to the discharge to the cooling tower ponds.

4. THE SCOPE

The Scope of work involves the supply of information on technologies that are able to remove oil, soaps and greases from drain water. The quality of the drain water is shown in Table 1. The target oil concentration following treatment is 0.0mg/L however the supplier can indicate the limits of their technology. The volume to be treated is 144m³/hr.

TABLE 1: DRAIN WATER QUALITY

PARAMETER	UNITS	VALUES
Total Alkalinity	mg CaCO ₃ /L	54.0
Bicarbonate Alkalinity	mg CaCO ₃ /L	54.0
Carbonate Alkalinity	mg CaCO ₃ /L	0.00
M Alkalinity	mg CaCO ₃ /L	54.0
P Alkalinity	mg CaCO ₃ /L	0.00
Conductivity	uS/cm	1440
pH		7.53
Total Hardness	mg CaCO ₃ /L	247
Calcium Hardness	mg CaCO ₃ /L	87.2
Magnesium Hardness	mg CaCO ₃ /L	160
Total Dissolved Solids (TDS)	mg/L	886
Temperature	°C	21.0
Turbidity	NTU	9.61
Chemical Oxygen Demand (COD)	mg O ₂ /L	46.0
Oil, Soap and Grease (OSG)	mg/L	9.40
Oxygen Absorbed (OA4)	mg O ₂ /L	4.26
Oxygen Dissolved (DO)	mg O ₂ /L	6.57
Ammonia and Ammonium	mg N/L	0.55
Calcium	mg Ca/L	34.9
Chloride	mg Cl/L	119
Magnesium	mg Mg/L	38.8
Nitrate and Nitrite (TON)	mg N/L	4.51

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PARAMETER	UNITS	VALUES
Nitrite	mg N/L	0.14
Ortho Phosphate	mg P/L	<0.03
Potassium	mg K/L	47.0
Sodium	mg Na/L	168
Silicon	mg Si/L	1.19
Sulphate	mg SO ₄ /L	424
Aluminium	mg Al/L	0.06
Fluoride	mg F/L	0.67
Iron	mg Fe/L	0.45
Manganese	mg Mn/L	0.02

5. INFORMATION REQUIRED

The supplier is requested to supply the following information:

- 1) Details of technologies that are capable of reducing the oils, soaps and greases concentration as per the requirements in 4.
- 2) The footprint required for the technology.
- 3) The employers preference is that the proposed plant/technology system has its own feed tank.
- 4) The power supply requirements.
- 5) The control and instrumentation requirements. The Employers preference is for the plant to have its own local programmable logic controller.
- 6) Details of surface preparation or plinths required to lay down the plant
- 7) The volume of waste and waste effluent generated and methods to deal with such waste.
- 8) Any licensing requirements to enable the technology to be installed.
- 9) The availability of the plant taking into consideration aspects like maintenance.
- 10) Support for the technology viz. is there local support for the technology.
- 11) The capital and operating cost of the technology.

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6. SUBMISSION GUIDELINES

6.1 RFI Timetable

The expected timetable for the RFI process is provided below:

Action	Due Date
Issue RFI documentation to the market	
Closing date for submission of RFI	

6.2 Eskom contact details

All correspondence must be sent via e-mail to the following Eskom representative:

Name: **Siphesihle Mbense**
Email Address: **mbenses@eskom.co.za**
Telephone: **+27 14 763 8842**

6.3 Method of delivery

The information can be submitted in the following tender office:

Eskom Tender Office

10 Smuts Avenue
Witbank
Tender Office

6.4 Format of submission

Each RFI submission shall be supplied in printed format that includes Annexure A. All printed copies of each submission shall be identical to the original submission. The information shall be submitted as follows:

- X1 Original hard copy
- X1 Copy of the original
- 1 Electronic file in Adobe PDF format, generated off the original Annexures A and B as compiled by the respondent. Scanned copies of hard copy documents are

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not preferred unless subjected to Optical Character Recognition (OCR) before submission.

6.5 Important Notes

- (i) Due to the specific need that this RFI process has to fulfil, Eskom wishes to clarify that this invitation is not intended to impede, amend or replace any current or future procurement process that Eskom has engaged in or will engage in.
- (ii) Eskom reserves the right, in its absolute discretion, at any stage and without notice, to terminate further participation in the process by any Party, to select or disqualify any interested participant from further engagement, to amend and/or terminate this RFI process or any future process pursuant to this process.
- (iii) This RFI is a stand-alone information-gathering and market-testing exercise, intended only to inform and assist Eskom's plans regarding Chemical Regeneration Station repairs, replacements and refurbishments.
- (iv) Any and/or all information submitted by any and/or all respondents may be used without the necessity of acknowledging the source, and without such entity gaining any rights in respect of such a solution, including but not limited to any intellectual property rights.
- (v) No portion of any of the information submitted will be treated as confidential and respondents should NOT submit sensitive or confidential information.
- (vi) Any information provided pursuant to this RFI process and any subsequent processes and/or engagement is not confidential. Through making a submission a respondent accept the terms and conditions which governs this process.
- (vii) All participants responding to this RFI process need to ensure that they have received all information and remain solely responsible for satisfying themselves as to the information required in responding hereto and are fully responsible for all costs incurred in relation hereto and under no circumstances will any resultant cost be borne by Eskom.
- (viii) Based on the response and the suitability of the technologies submitted Eskom will use the list of the response for confined sourcing market.

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APPENDIX A – RETURNABLE

INFORMATION TO ESKOM

Respondents may use this form or expand it to include all the returnables. Kindly note, Eskom is requesting information and suggests that respondents strictly adhere to the returnable questions.

Respondent Contact Details:

N.B: This information is required merely to contact any of the respondents should further details be required on open ended questions.

Name and surname of respondent:	
Name of Company:	
Company Registration Number:	
Position in Company:	
Department:	
Telephone No.:	
Fax No.:	
Email:	
Date of questionnaire completion:	

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PART B RESPONSE SHEET IN TERMS OF A REQUEST FOR INFORMATION To be completed by the supplier			
To	Eskom Holdings SOC Ltd	Date	
Attention			
Tel no		Fax no and /or e-mail address	
From		Address	
Address			
Sender			
Description of the works/goods/services	The Provision Of Information On Oil Removal Technologies That Can Be Used At Eskom's Kriel Power Station.		

Yours faithfully

Name	Designation	Signature	Date
Telephone number		Fax and/or e-mail address	

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