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Mr Dumisan Sıbayl Executive Officer: Heritage Branch South African Heritage Resource Agency (SAHRA) P O Box 4637 Ŵ

NORTH-WEST UNIVERSITY YUNIBESITI YA BOKONE-BOPHIRIMA NOORDWES-UNIVERSITEIT POTCHEFSTROOM CAMPUS

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13 August 2012

**CAPE TOWN** 8000

(021) 462 4509 dsibayi@sahra.org.za

Dear Mr Sibayi

## APPLICATION BY ESKOM HOLDINGS LTD (CAMDEN POWER STATION), IN TERMS OF SECTION 24G OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (NO. 107) FOR RECTIFICATION OF COMMENCEMENT WITH THE REVERSE OSMOSIS PLANT, AS LISTED IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, (NO. 59 OF 2008)

### DEA Reference Number: (12/9/11/L488/6/24G)

The South African Heritage Resource Agency (SAHRA) was identified as a potential commenting authority on the NEMA S24(G) rectification application for ESKOM Camden Power Station's Reverse Osmosis Plant listed above.

Relevant documentation will be provided to you in order to afford you an opportunity to submit comments on both the process and project.

### Nomination of Relevant Person

Please indicate to me at your earliest convenience who the relevant person(s) is/are with whom we may correspond.

### Target Date to Submit Documents to DEA

The target date to submit the relevant documentation to the DEA is Friday, the 16<sup>th</sup> of November 2012.

### The Public Meeting

A public meeting is scheduled for Tuesday, the 11<sup>th</sup> of September, 2012, 10h00-12h00 at Highveld Information Centre, Corner of Kerk and Taute Streets, Ermelo, Mpumalanga.

You are hereby cordially invited to attend the meeting as well.

# The Background Information (BID)

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A Background Information Document (BID) with information on both the constructed facility and the S24(G) process is attached to this letter.

The BID provides:



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- an overview of the project;
- an overview of the S24(G) rectification and EIA process to assess the actual and potential environmental impacts of the RO Plant;
- information on the public participation process.

The BID is attached for your convenience.

### Background to the Project

ESKOM Holdings Ltd. Camden Power Station has constructed and operates a Reverse Osmosis Plant (RO Plant) producing three mega litres a day of good quality process water. The plant has two sections: a pre-treatment and a reverse osmosis, desalination process section.

The development covers approximately 1 200 m<sup>3</sup> on the remainder of the farm Camden, ERF 329, near Ermelo in the Mpumalanga Province. The site is located at 26°37'14.09"S and 30°04'44.13"E, just west of the Camden Power Station.

### Motivation for the Project

The Camden Power Station Reverse Osmosis plant was constructed and is operated to treat water from the De Jagers pan to reduce the water level in the pan to safe operating levels, as well as to treat the water to meet operational specifications for use in the Camden cooling tower system. Management of the De Jagers Pan as an integral part of the Power Station's ash water management system is authorised in the power station's current water use license.

Construction and use of the RO plant is required to control the rising water levels of the De Jagers Pan to

- · prevent pollution of other water resources,
- reduce the power station's demand for raw water and to
- · protect physical assets from potential water damage.

### The Need for this Process and Application

The RO Plant was constructed without a waste management license as required in terms of Section 20 of the National Environmental Management: Waste Act (No. 59 of 2008) (NEMWA).

In the interim ESKOM Camden Power Station received a Directive from the Department of Environmental Affairs to commence with the operation of the RO Plant and to proceed with the Section 24G rectification application in terms of the National Environmental Management Act No. 107 of 1998 (NEMA).

### The activities for which a S24G rectification are sought

Rectification and granting of an environmental authorisation in terms of S24(G) of the NEMA are sought for the following activities listed in terms of the GNR 718 of the National Environmental Management: Waste Act (No. 59 of 2008) Categories A and B:

- Activity (7) The treatment of effluent, wastewater or sewage with an annual throughput capacity of 15 000 cubic meters or more;
- Activity (9) The disposal of any quantity of hazardous waste to land; and
- Activity (11) The construction of facilities for activities listed in Category B of this schedule (GN 718)

### Status of the Water Use License

Camden Power Station is currently operating under Permit 1203N, which was issued in terms of the Water Act, 1956 (Act 54 of 1956).

The current water use license issued to ESKOM Camden Power Station allows for the use of De Jagers Pan as an integral part of Camden Power Station's ash water management system.

A new Integrated Water Use License Application (IWULA) is being generated by Eskom Camden Power Station and it will be submitted to the Department of Water Affairs when finalised. The new IWULA does include the water uses as required in terms of S21 of the National Water Act No 36 of 1998.

### Appointment of the CEM

The Centre for Environmental Management (CEM) at the North-West University, has been appointed to undertake the Section 24(G) application, and to generate an environmental impact report (EIR), an environmental management plan (EMP) and to facilitate the public participation process in support of the application process.

### Contact details

If you have any enquiries or comments, please do not hesitate to contact Jurie Moolman.

Jurie Moolman Tel: 018 299 1588 Fax: 018 299 4266

E-mail: 20035551@nwu.ac.za

Centre for Environmental Management, North-West University, **Potchefstroom** Postal address: (Internal Box 150) Private Bag X6001, **Potchefstroom**, 2520 © Centre for Environmental Management

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#### General

Please do not hesitate to contact me should you have inquiries regarding the NEMA S 24(G) application, or should have any comments to be considered during the process.

Kind regards

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Jurie Moolman CENTRE FOR ENVIRONMENTAL MANAGEMENT

Background Information Document for the S24 (G) Rectification Process for the Constructed and Operational Reverse Osmosis Plant (RO plant) at ESKOM Camden Power Station – Ermelo, Mpumalanga

Purpose of this Background Information Document (BID)

The purpose of this BID is to inform interested and affected parties (I&APs) of:

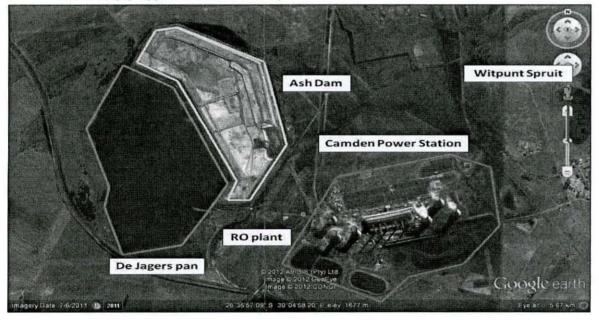
• The S 24(G) application submitted by

(DEA) for having constructed and commissioned a RO plant;

- The S24 (G) process undertaken in terms of the National Environmental Management Act (NEMA); and
- Engagement opportunities afforded to I&APs.

#### Description of and need for the project

ESKOM Holdings (PTY) Ltd. CPS constructed a



Camden Power Station (CPS) to the Department of Environmental Affairs

RO plant to treat water from the De Jagers Pan to control the water level of the pan.

CPS is authorised in terms of its water use license to use the storage capacity of the pan as an integral element of its ash water management facility.

Since the power station's return to service, the water level of the pan continued to rise, threatening infrastructure and posing a threat to water quality should the pan decant into the Witpunt Spruit.

The purpose of the RO-plant is to treat the water in De Jagers Pan to process water quality specifications. The nett benefits of the RO-plant are:

- a reduction of the water level of the De Jagers Pan;
- prevention of potential pollution from the pan and;
- a reduction of raw consumption by the power station, while
- risks to infrastructure are also mitigated.

The RO-plant covers approximately 1 200 m<sup>2</sup>. As illustrated in the Figure, the proposed site is located at  $26^{\circ}37'14.09''S$  and  $30^{\circ}04'44.13''E$ , just west of the Camden Power Station and directly south east of the ash dam, 15 km southeast of Ermelo in Mpumalanga.

The RO-plant is designed to produce 3 ML/day of good quality water and consists of a pre-

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treatment and a reverse osmosis desalination process section.

Water is pumped from a floating jetty in the De Jagers pan to the RO-plant pretreatment section. This section consists of pH adjustment unit, granular activated carbon (GAC) filters and Maddox filtration. The filtered water from the Maddox filtration units is fed to two RO desalination skids.

The treated water from the RO skids is discharged into a product water buffer tank from where it is pumped to and discharged into the south side cooling towers of the power station. This make-up water reduces raw water demand.

The brine generated during the water treatment process is blended into the ash water streams and co-disposed with the ash on the ash dam.

# The need for Authorisations of some activities

Construction and operation of an RO-plant, including disposal of brine on the ash dam are listed activities in terms of the National Environmental Management Waste Act, 2008 (No. 58 of 2008) (NEM:WA). All listed activities require an authorisation prior to commencement of the activity.

# What if a listed activity is commenced with, without the required authorisation?

S 24(G) of the NEMA provides for rectification of any activity listed in terms of NEMA or related sector legislation such as NEM:WA that was commenced with without an environmental authorisation.

#### The NEMA S24 (G) Rectification Process

The DEA instructed CPS to apply for an Environmental Authorisation (EA) rectification in terms of S 24(G) of the NEMA (No. 107 of 1998) to authorise the construction and operation of RO-plant as well as disposal of brine on the ash dam.

The DEA instructed CPS to generate an Environmental Impact Report (EIR) with an Environmental Management Plan (EMP) to support the S 24(G) application. The CPS was also instructed to ensure that a public participation process as required by Regulations 56 and 57 of GN R 543 supports and informs the EIR.

#### The Independent Environmental Impact Assessment Practitioner

The Centre for Environmental Management (CEM) of the North-West University (NWU) is appointed by CPS to act as the independent Environmental Assessment Practitioner (EAP) to conduct the S 24(G) application and related processes for the purpose of obtaining the required rectification and authorisation for the project.

The requirements as defined in S 24(G) of the NEMA as well as relevant regulations from the NEMA and the National Environmental Management Waste Act (NEM:WA) and those requirements specified by the DEA in correspondences with CPS, as well as generally available guideline documents are used to guide this process.

# The S 24(G) rectification process involves the following steps:

- · engaging with competent authorities;
- · generation and distribution of a BID;
- generation and publication or display of a advertisement notices (newspaper & site notices);
- I&AP registration & circulation of BID to registered I&APs;
- a public participation meeting;
- drafting of EIR with an EMP;
- circulation of the draft EIR and EMP to registered I&APs for review and comment;
- revision of the EIR and EMP, based on I&AP comments;
- submission of the EIR and EMP to authorities; and
- informing registered I&APs of the decisions by competent authorities (letter & newspaper advertisement).

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#### What is the role of I&APs in the EIA process?

One of the most important elements parts of any environmental authorisation processes is public consultation and participation, which provides I&APs with an opportunity

- to gain a better understanding of the development including the identified environmental impacts and mitigation plans;
- to raise any environmental issues or concerns they may have;
- to review and comment to any reports submitted; and
- to be informed about the decision of the competent authority.

You are invited to register as an I&AP for the S 24(G) rectification processes of the RO-plant.

**Please note** that a written application is required to register as an I&AP.

Please complete the attached registration form and fax it to the CEM.

Future correspondences will only be distributed to registered I&APs.

Details of the EAP: Johan Gerhard Nel

Centre for Environmental Management

Telephone: 018 299 1448 Fax: 018 299 4266

E-mail: johan.nel@nwu.ac.za

**Contact** person for I&AP registration and all correspondence regarding the S24 (G) Rectification Process, please contact:

#### Jurie Moolman

Centre for Environmental Management Private Bag X6001, Potchefstroom, 2520 Telephone: 018 299 1588 Fax: 018 299 4266 E-mail: 20035551@nwu.ac.za

I&AP registration (Please provide the following details)

1. Name and surname:

2. Physical Address:

3. Language preference:

4. Communication preference?

Letter Fax

| x | E-mail |  |
|---|--------|--|

Postal address:

Fax number:

E-mail address:

5. Do you wish to receive future communications regarding this project?

Please indicate any initial issues of concern regarding this project:

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 Please indicate any suggestions to improve the proposed project and the public participation process: