

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



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

(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

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 m². As illustrated in the Figure, the proposed site is located at 26°37’14.09”S and 30°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-

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).

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 E-mail

Postal address:

Fax number:

E-mail address:

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

6. Please indicate any initial issues of concern regarding this project:

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