

MARCH 2008

ENVIRONMENTAL BASIC ASSESSMENT PROCESS

NEW RAW WATER RESERVOIR & ASSOCIATED WATER PIPELINES FOR MEDUPI POWER STATION

LIMPOPO PROVINCE

AN ESKOM INITIATIVE

BACKGROUND INFORMATION DOCUMENT (BID)

In order to optimise operations at the Medupi Power Station complex (located near Lephalale in Limpopo Province), Eskom Holdings Limited is proposing the relocation of the planned new water reservoir from the Medupi Power Station complex to the adjacent farm Kuipersbult. The water reservoir is proposed to have a 400 000 m³ capacity. Pipelines from the water source to the new reservoir as well as from the new reservoir to Medupi Power Station are required to be constructed. The nature and extent of the project is explored in more detail in this background information document.



Aim of this background information document

This document aims to provide you, as an interested and/or affected party (I&AP), with:

- » an overview of the components comprising the new water reservoir and associated pipeline infrastructure proposed by Eskom.
- » an overview of the environmental Basic Assessment process and studies being undertaken to assess the environmental impacts associated with the project.
- » details of how you can become involved in the Basic Assessment process, receive information, or raise issues, which may concern and/or interest you.

Overview of the proposed project

Eskom have, since the start of the construction of the Medupi Power Station, reassessed the location of the planned new water reservoir. The reservoir was proposed to lie to the east of the power station terrace. Space is, however, limited in this area and in order to optimise operations within the power station complex, the relocation of the planned new water reservoir from the Medupi Power Station complex to the adjacent farm Kuipersbult is proposed.

The raw water reservoir is proposed to be located approximately 1600 m to the south west of the Medupi Power Station at an elevation of 915 m amsl. The reservoir is required to supply raw water to the Medupi Power Station, and will have a total capacity of 400 000 m³ which will provide storage capacity for a period of 19 days.

Raw water will be supplied to the new raw water reservoir from the existing pipeline from Wolfenfontein Reservoir which is supplied from the Mokolo dam. This pipeline currently supplies Matimba Power Station, the Grootegeluk Mine and the local Municipality. Provision for future supply of raw water from Crocodile West will also be made available. Therefore two pipelines are proposed to be constructed in parallel to the new raw water reservoir in a permanent ~ 12 m wide servitude.

The pipelines will be buried, and will cross under all railway line and/or road crossings. A pressure reducing station will be required at the start of this pipeline to reduce the water pressure to the required working pressure, and will be housed in a building. Each inlet pipeline to the reservoir will have an inline flow meter and valves, which will be housed in one building.

An outlet pipeline from the new water reservoir to the Medupi Power Station is proposed to closely follow the alignment of the pipelines feeding the reservoir. Where three pipelines are required to be constructed in parallel, a permanent ~ 15 m wide servitude is required.

All pipelines are to be constructed as underground pipelines. During construction, temporary disturbance to the surface will be restricted to a 45 m wide area for the length of the pipeline. The pipelines are proposed to run at a slope of not less than 5° to allow for free draining, and therefore pumping stations are not required.

Application for authorisation is being made for the following:

- » Construction of a 400 000 m³ capacity water reservoir (covering an area of ~6.9 ha in extent) on the Farm Kuipersbult.
- » Construction and operation of an underground pipeline from the water source to the new reservoir (< 10 km in length), including pressure-reducing station and a flow meter house.
- » Construction and operation of an underground pipeline from the new reservoir to the Medupi Power Station (<5 km in length).

Feasible alternatives are required to be equally considered and evaluated in the Basic Assessment process. Three alternative pipeline routing options between the water source and the proposed new reservoir have been proposed and are illustrated on the map included.

Environmental Basic Assessment Process

In terms of sections 24 and 24D of the National Environmental Management Act (Act No 107 of 1998), as read with Government Notices R385 (Regulations 22–26) and R386, certain 'listed activities' require environmental authorisation by means of a Basic Assessment. A Basic Assessment process is required to be undertaken for the construction of facilities or infrastructure, including associated structures or infrastructure for:

- Item 1(n): the off-stream storage of water, including dams and reservoirs, with a capacity of 50 000 m³ or more

- Item 1(k): the bulk transportation of water in pipelines with (i) an internal diameter of 0,36 metres or more; or (ii) a peak throughput of 120 litres per second or more
- Item 1(p): the temporary storage of hazardous waste

Eskom requires authorisation from the National Department of Environmental Affairs and Tourism (DEAT) (in consultation with the Limpopo DEDET) for the undertaking of the proposed project. This project has been registered with National DEAT under reference number 12/12/20/1139.

Eskom has appointed Savannah Environmental, as independent environmental consultants, to undertake an Environmental Assessment in the form of a Basic Assessment to identify and assess all potential environmental impacts associated with the proposed project. As part of these environmental studies, I&APs will be actively involved through the public involvement process being undertaken by MasterQ Research.

Public Involvement Process

The sharing of information forms the basis of the public involvement process and offers you the opportunity to provide input and comment on the project. Comments and inputs from I&APs are encouraged in order to ensure that potential impacts are considered within the ambit of the study.

All comments will be included in a Comments & Response Report that will be included in the Basic Assessment Report (to be prepared by Savannah Environmental). Interested and affected parties will be given the opportunity to view the report prior to submission to DEAT (who will consider the application).

Your responsibilities as an I & AP

In terms of the EIA Regulations, your attention is drawn to your responsibilities as an I&AP:

- » In order to participate in this EIA process, you must register yourself on the project database.
- » You must ensure that any comments regarding the proposed project are submitted within the stipulated timeframes.
- » You are required to disclose any direct business, financial, personal or other interest which that you may have in the approval or refusal of the application for the proposed project.

How to become involved

1. By responding (by phone, fax or e-mail) to our invitation for your involvement which has been advertised in the MogulPos.
2. By returning the attached Reply Form to the relevant contact person.
3. By attending the project meetings to be held. Dates for public meeting/s will be advertised in the local newspaper.
4. By contacting the consultants with queries or comments.
5. By reviewing and commenting on the draft Basic Assessment Report within the stipulated 30-day review period.

If you consider yourself an I&AP for this proposed project, we urge you to make use of the opportunities created by the public involvement process to provide comment, or raise those issues and concerns which affect and/or interest you, and about which you would like more information. Your input into this process forms a key element of the Basic Assessment process.

By completing and submitting the accompanying Reply Form, you automatically register yourself as an I&AP for this project, and are ensured that your comments, concerns or queries raised regarding the project will be noted.

Comments and queries

Direct all comments, queries or responses to:
Nonka Byker or Ingrid Snyman of MasterQ Research
PO Box 148, Sunninghill, 2157
Tel: 011 477 3265, Fax: 086 612 8122
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To view project documentation, visit www.savannahsa.com