

Environmental Impact Assessment and Water Use License Application for the proposed construction of a railway line and associated infrastructure to connect Kusile Power Station to the national railway grid, west of Witbank along the N4

DEAT Ref No 12/12/20/1488

BACKGROUND INFORMATION DOCUMENT

June 2009

PURPOSE OF THIS DOCUMENT

The purpose of this Background Information Document (BID) is to brief Interested and Affected Parties (I&APs) about the Environmental Impact Assessment (EIA) and the Water Use License Application (WULA) that are being conducted for the proposed construction of a railway line and associated infrastructure, for the transportation of sorbent, to the Kusile Power Station, west of Witbank.

In addition to supplying information about the proposed project, the EIA and the WULA, this BID also provides I&APs with the opportunity to:

- Register as stakeholders in the public participation process; and
- Comment on and make contributions to the proposed project.

The EIA and WULA decision-making authority is the national Department of Water and Environmental Affairs (DWEA) in accordance with section 24(5) of the National Environmental Management Act (NEMA), 107 of 1998.

The Mpumalanga Department of Agriculture and Land Affairs and the Gauteng Department of Agriculture, Conservation and Environment are the commenting authorities on the study, because the proposed development is situated in these two provinces.

Please register by 13 July 2009

Stakeholders can register and comment at any time during this process. The date mentioned above is to ensure that all your comments are included in the Draft Scoping Report. When you register you will be included in the database and receive further documents for comment when they become available.

Complete and submit the enclosed registration/comment sheet, write a letter, call or e-mail the public participation office. All EIA documents will be available on www.eskom.co.za.

BACKGROUND

Eskom Holdings Ltd is responsible for the generation, transmission and distribution of electricity in South Africa.

It supplies approximately 95 % of the country's electricity.

Current shortages in power supply in the country have necessitated the construction of new power generation stations, of which the Kusile power station is one.

The Kusile power station, and its infrastructure, including a rail and road transport network, received an Environmental Authorisation in March 2008.

However, during the design phase of the infrastructure, the authorised rail route was deemed not feasible due to technical challenges.

Eskom is now required to carry out an Environmental Impact Assessment (EIA) for the revised rail route.

The planning process also showed that the rail construction and operation would not be ready for sorbent transportation for the third generation unit.

In the interim, road transportation was deemed an appropriate temporary alternative until the railway line is in operation. The road network to be used was approved in the power station's Environmental Authorisation.

The railway line to be assessed in this project will connect the existing rail route along the N4 to the Kusile power station.

Three alternative routes for the railway line will be investigated during the EIA to identify the most appropriate route. **(See map for more detail).**

The proposed rail transport will be used for the transportation of lime or limestone, a sorbent used in Flue Gas Desulphurisation (FGD) technology for the reduction of sulphur dioxide. The source will be finalised through a commercial process.

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DESCRIPTION OF THE PROPOSED PROJECT

The proposed Kusile railway line project entails the construction of a railway line and associated infrastructure, for the transportation of lime or limestone from the existing railway line two kilometres north of the N4 highway to the power station, situated west of Witbank.

The anticipated supplementary infrastructure includes:

- Electricity supply for both the construction and operational phases;
- Sub-station(s);
- Maintenance/Access road;
- Shunting yard; and

- Communication mast.

According to South African environmental legislation, an Environmental Impact Assessment (EIA) must be carried out for a development of this magnitude.

In order for Eskom to begin with the construction of the proposed development, an application for a Water Use License (WUL) must also be submitted in terms of the National Water Act (Act No 36 of 1998), because the proposed railway line will cross a river.

The WUL process will run concurrently with the EIA process.

ENVIRONMENTAL IMPACT ASSESSMENT

An Environmental Impact Assessment (EIA) is a planning and decision-making process undertaken in terms of Section 24 (5) of the NEMA, Act No 107 of 1998.

What is an EIA?

An EIA has two parallel and integrated processes namely, a technical and public participation process. The technical process investigates "hard" information: facts based on scientific and technical studies, statistics or technical data. It identifies the potential negative and positive consequences of a proposed project or development at an early stage, and recommends ways to enhance positive impacts and to avoid, reduce or mitigate negative impacts.

The findings of an EIA also guide the technical and financial investigations. The EIA regulations require that an Environmental Management Plan (EMP) be developed. The EMP provides recommendations on how to operate and implement the project. The provisions of the EMP are legally binding on the developer and on its contractors.

Public participation is a cornerstone of any EIA. It ensures that the process is fair, open, transparent, and inclusive. It also provides stakeholders with sufficient information and affords them ample opportunity to contribute. The contributions of stakeholders are valued.

The process for negotiations with landowners for land and servitudes and compensation will be shared with the stakeholders during the public participation process for an EIA.

However the negotiations will take place in a separate process. The findings of the EIA will assist landowners and Eskom to determine the extent of local impacts in support of any negotiations that might be necessary.

The public participation process is designed to provide sufficient and accessible information to interested and affected parties in an objective manner to assist them to:

- Raise issues of concern and make suggestions for alternatives and enhanced benefits;
- Contribute local knowledge;
- Verify that their issues have been captured and considered by the technical investigations; and
- Comment on the findings of the EIA.

Activities assessed during this EIA

Among others, the following activities listed in terms of Sections 24 and 24D of NEMA (Government Notice 386 and 387 of 21 April 2006) will be assessed in the EIA for the proposed project:

- Fuel storage tanks
- Emissions, pollution, effluent or waste
- General waste of more than 50 tons per day
- Electricity transmission of 120 kV or more
- Effluent treatment
- Facilities and infrastructure for rail transportation
- Development of more than 20 ha
- Reconnaissance, production and mining
- Permits and rights for mining related activities
- Activities identified in terms of section 53(1) of the NEM: Biodiversity Act, 2004
- Electricity transmission of more than 33 kilovolts and less than 120 kilovolts
- Activities within the 1:10 flood line
- Facilities for the recycling, re-use and handling of general hazardous waste
- Facilities for the temporary storage of hazardous waste
- The treatment of effluent, wastewater or sewerage
- The excavation of soil, sand or rock from a river or wetland
- The storage of fuel
- Reconnaissance, prospecting and mining operations
- The transformation or removal of indigenous vegetation
- Large abstraction of groundwater
- The construction of masts of any material or type
- Road construction
- The transformation of underdeveloped land
- The amendment of a permit for emissions or pollution.

Approach to the EIA

An EIA is conducted in phases, as outlined below. The provisional scheduling of these phases is also indicated.

Scoping Phase of the EIA

The first phase is the Scoping Phase, which is conducted to gain understanding of the potential environmental issues that are relevant to the project and to determine where further information is required, in the form of specialist studies/investigations.

The Scoping Report and Plan of Study for the EIA are submitted to the Department of Water and Environmental Affairs (DWEA), for their review and to approve the proposed approach to the detailed investigation required in the next phase.

Activities involved in the Scoping Phase include:

- Meetings with authorities to agree on process and study requirements;
- Distribution of this Background Information Document and an invitation to contribute to the EIA process to Interested and Affected Parties in the project area and beyond;

- Advertisements in local and regional newspapers to announce opportunities to participate;
- Stakeholder meetings with relevant representatives to announce the project;
- Progress feedback letter to be issued and announcements to be made of the availability of the Draft Scoping Report (DSR) and Issues and Response Report (IRR);
- Distribution of a DSR, including IRR, for comment;
- Convening a stakeholder workshop in the project area to obtain comment on the DSR;
- Submission of a Final Scoping Report (FSR), capturing all issues raised for the impact assessment, to the DWEA;
- Submit the Plan of Study for the EIA to the DWEA;
- Distribution of the FSR for information; and
- Progress feedback letter to stakeholders.

Impact Assessment Phase of the EIA

The **second phase** of the EIA is an Impact Assessment Phase which entails undertaking various specialist studies, developing an Environmental Impact Report (EIR) and a Draft Environmental Management Plan (EMP).

As part of the assessment, an EMP for the project will also be submitted to the DWEA for their approval. Following the EMP, during and after construction, will ensure compliance to environmental regulations during and after the construction phase.

Specialist studies identified include among others: soil, land capability and wetland delineation; agricultural impacts; ecological assessment; noise impact assessment; geographic information systems (GIS) and visual assessment; social impact assessment; air and health quality assessment; traffic impact assessment; heritage impact assessment; avi-fauna study; groundwater impact assessment (including groundwater modelling); and geotechnical investigation.

The names of the specialists who will undertake these studies are available from the public participation office.

Specific activities will include:

- Specialist studies focused on outcomes of the Scoping Phase and issues raised by stakeholders;
- Progress feedback to stakeholders;
- Compilation of a Draft EIR indicating the potential positive and negative impacts and measures to enhance positive impacts and to reduce or avoid negative impacts;
- Advertise the availability of the Draft EIR in local and regional newspapers;
- Distribution of the Draft EIR, including Issues and Response Report, for comment; and
- Stakeholder meeting in the project area to present the findings of the EIA for stakeholder comment.

The EIR and Draft EMP will then be finalised and submit to the DWEA.

Decision-making Phase of the EIA

The **third phase** involves a decision by the decision-making authority, the DWEA in this case. The DWEA must accept or reject this report within 115 days.

Should Environmental Authorisation be granted, stakeholders will be advised of the decision as well as the opportunity to appeal the decision, should they have a reason to appeal.

WATER USE LICENSE APPLICATION

The development will result in undertaking of two water use activities, listed in Section 21 of the National Water Act, as: section 21(c) – impeding or diverting the flow of water in a watercourse; and section 21(i) – altering the bed, banks, course or characteristics of a watercourse.

For Eskom to lawfully continue with the associated water uses for the proposed railway line, the Department of Water and Environmental Affairs (DWEA) requires a Water Use License Application (WULA) to be submitted and approved for these water uses.

In terms of the National Water Act (NWA), Act 36 of 1998, National Government, acting through the Minister of Water and Environmental Affairs, is the public trustee of South Africa's water resources, and must ensure that water is protected, used, development, conserved, managed and controlled in a sustainable and equitable manner for the benefit of all persons.

The Minister is responsible to ensure that water is allocated equitably and used beneficially in the public interest, while

promoting environmental values. Government, acting through the Minister, has the power to regulate the use, flow and control of all water in South Africa.

The methodology and work programme will ensure a harmonised authorisation process addressing the DWEA's needs in terms of a WULA.

This part of the project will be completed in three phases:

The **first phase** will focus on determining the current uses, while determining the legal status of the current uses if there is any for the power station.

Any water uses that have not been registered or incorrectly registered will be brought to the attention of Eskom.

The **second phase** will focus on amending and or registering any water uses that have not been registered and/or that have been incorrectly registered.

A Draft Technical Report will be compiled, using existing information available and specialist investigations commissioned by Eskom.

This Draft Technical Report will then be made available to Interested and Affected Parties and the DWEA so that substantiated issues and comments can be made.

The **third phase** will focus on submitting the applications to the DWEA as well as addressing any comments raised by the Department.

Water uses to be licensed

In terms of the National Water Act the following water uses to be undertaken on site require licensing under the following sections of the Act:

- Section 21 (c): Impeding or Diverting the Flow of Water in a Watercourse; and
- Section 21 (i): Altering the Bed, Banks, Course or Characteristics of a Watercourse.

WULA Process

Legal Validation and Assessment

Legal Assessment in respect of the legal status of the existing water uses has to be undertaken. This report will have to be submitted to the Department of Water and Environmental Affairs (DWEA).

Application initiation discussion

A meeting between the applicant and the DWEA should be held to ensure that the DWEA agrees with the water uses being applied for.

Formal submission of application forms

In accordance with this legislation, the relevant WULA will be submitted to the DWEA with the final WULA report.

Public participation

The following activities will be utilised in the public participation process towards the application of the license:

- Advertising: Public notice in regional and local newspapers;
- Supplying all affected and interested parties with this Background Information Document;
- Contacting stakeholders, notifying them of the process;
- Documenting stakeholder correspondence within the Draft Technical Report, that will be made available for public review; and
- Notifying stakeholders when the WUL is issued.

Draft Technical Report

This Report will include, amongst others, the following:

- Introduction;
- Project Description;
- Environmental Status Quo;
- Quantitative Risk Assessment;
- Cost-benefit analysis;
- Integrated Environmental Management;
- Monitoring systems;
- Operational Management; and
- References and Specialist studies.

Stakeholder Review of the Draft Technical Report

Subsequent to the compilation of the draft report, the report will be made available for stakeholder comment, prior to submission to the DWEA.

Submission

All relevant documentation will be submitted to the DWEA to inform decision making in the license application.

Decision Making

Once all relevant documentation has been submitted to the DWEA, a decision will be made to approve or reject the WUL application. The decision will be made available to the stakeholders. A stakeholder or the applicant can appeal the decision through the correct channels.

Your registration as an I&AP and comments are important

The purpose of an Environmental Impact Assessment (EIA) and a Water Use License Application (WULA) is to provide the authorities with sufficient information on which to base a decision on whether to grant or refuse environmental authorisation for the proposed project, and if approved, under which conditions.

The contributions from stakeholders from all sectors of society will assist in informed decision-making. Zitholele Consulting invites all stakeholders to participate freely, and to submit any comments or information they feel may be useful. Your comments will ensure that all relevant issues are evaluated in the EIA and WULA. You can also contact the public participation office if you require a copy of the EIA Regulations, the User Guide to the NEMA or any other material that will assist you to comment.

Permission for access to land

Landowners are currently being requested permission for access to their land by Eskom negotiators and the EIA/WULA team. During the EIA/WULA, specialists will also request access to the land so as to assess the impacts of the proposed project. The team will work under a strict code of conduct which requires, for example, prior permission for access, not disturbing farm activities and restoring any damages they may cause. Individuals will inform landowners when they are leaving a particular property. Individuals will carry identification and a letter of appointment from Zitholele.

A locality map of the proposed project is enclosed