

**APPLICATION FOR AN INTEGRATED ENVIRONMENTAL AUTHORISATION AND WASTE MANAGEMENT LICENCE IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AS AMENDED AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS 2012 AND NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT 59 OF 2008) FOR THE WASTE ACTIVITIES AT THE KUSILE POWER STATION IN THE WITBANK AREA. MPUMALANGA PROVINCE**



**BACKGROUND INFORMATION DOCUMENT (BID)**



**APRIL 2013**

**PROJECT BACKGROUND**

**PURPOSE OF THIS DOCUMENT**

The aim of this document is to inform you that Eskom Holdings is applying for an integrated environmental authorisation and waste management licence for the waste activities at the Kusile Power Station. Thus the aim of this document is to provide you with:

- An opportunity to register as an Interested and Affected Party (I&AP);
- The necessary background information regarding the proposed project;
- Background to the Waste Management Licence Application; and
- An opportunity to raise issues and concerns regarding the project and to request information.

Eskom initiated an Environmental Impact Assessment (EIA), undertaken by Ninham Shand (Pty) Ltd, for the construction of a 4 800 MW Kusile Coal-Fired Power Station and associated infrastructure in the Witbank area, on approximately 2 500 ha of land on the Farm Hartebeesfontein 537 JR and the Farm Klipfontein 566 JR (See **Figure 1**). The power station precinct includes the power station building, administration buildings (administrative, medical, maintenance, services) and the high voltage yard. The associated infrastructure applied for included water treatment works, wastewater treatment works, access roads, railway line, water supply pipelines, a coal stockyard, an ash disposal facility, a coal and ash conveyor system and water storage facilities.

Ninham Shand concluded that the proposed development will not conflict with the principles of the National Environmental Management Act (Act 107 of 1998) (NEMA), that the Public Participation Process (PPP) was undertaken as per NEMA and the issues of the Interested and Affected Parties (I&APs) were adequately addressed. Ninham Shand therefore recommended that the proposed development should be authorised subject to the implementation and enforcement of the recommendations and mitigation measures contained in the EIA Report and Environmental Management Programme (EMPr).

In June 2007, the Department of Environmental Affairs (DEA) issued a positive Record of Decision (RoD) for the construction of the Kusile Coal Fired Power Station and Associated Infrastructure in the Witbank Area, Mpumalanga Province. This June 2007 RoD was appealed and a revised RoD was issued in March 2008. In terms of this environmental authorisation, Eskom can construct the power station and operate ash disposal systems. Kusile power station will have Flue Gas Desulphurisation (FGD) technology to minimize particulate emissions. As a result of FGD technology, gypsum shall be produced as a by-product during operation of the power station.

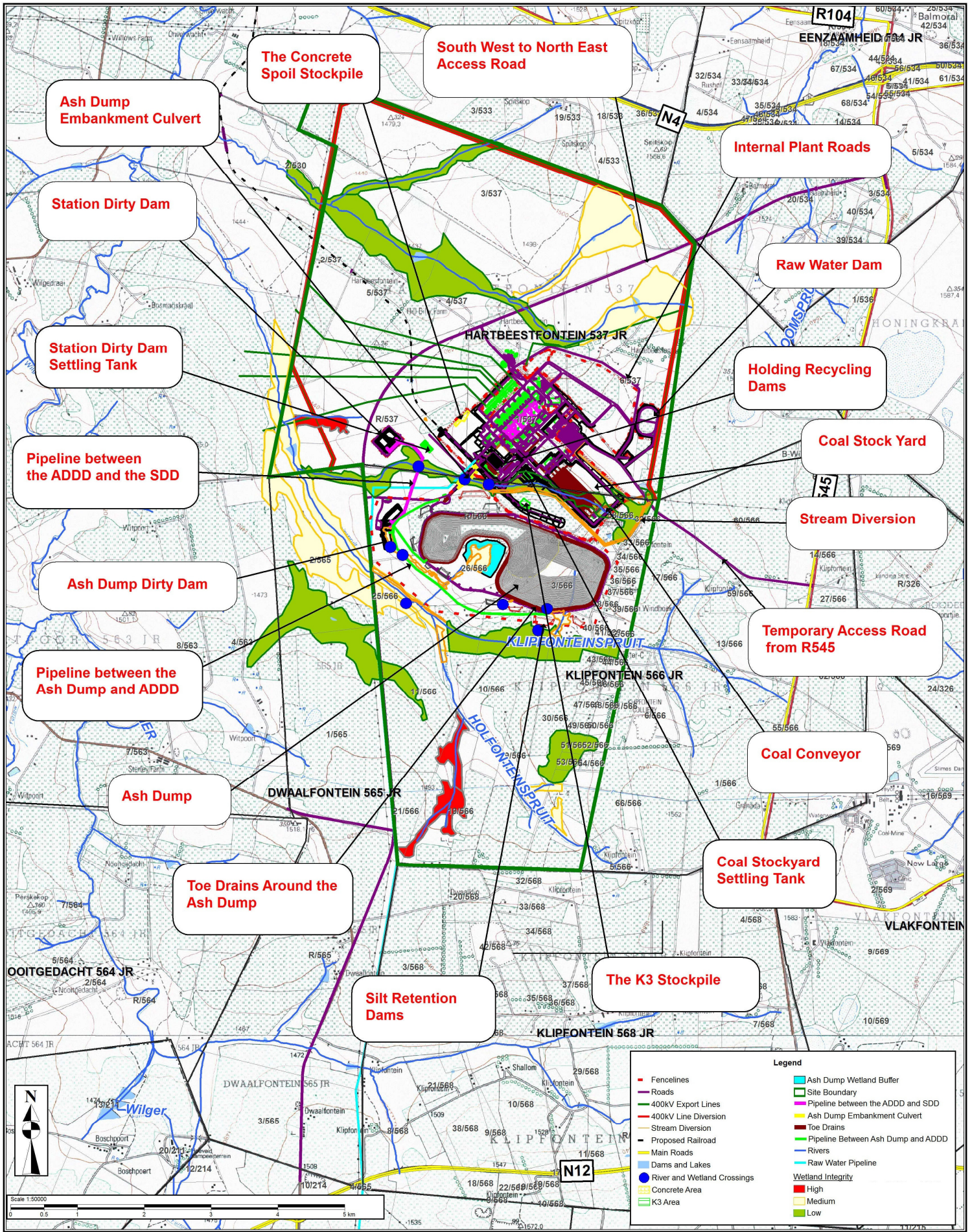
At the time of the EIA, Eskom's intention was to dispose of ash only at the ash disposal facility and initiated an investigation to determine existing potential opportunities in the market which would result in the use of gypsum. Although the possibility of gypsum being generated through the FGD process and the commercial value related to it was discussed in the final EIA Report, the disposal of it on the ash dump was not included. The co-disposal of gypsum with ash is therefore not authorised.

Since gypsum is considered to be a hazardous waste (classified as a medium hazardous waste), a Waste Management Licence (WML) must be applied for to co-dispose ash and gypsum as a listed activity 9, Category B of GN718 and the construction of the facility (Ash/gypsum dump, the Ash Dump Dirty Water Dam (ADDD), the Station Dirty Water Dam (SDD) and the station dirty dam settling tanks (SDD ST)) will trigger activity 11, Category B of GN 718.

In addition to the hazardous waste that will be disposed of at Kusile, rock spoils (the concrete rock spoil and K 3 spoils) produced during construction will also be temporarily stored on site.

**Summary of NEMA Listed Activities being applied for: Government Notice 543 of 3 July 2009**

<b>Activity No</b>	<b>Description of each listed activity</b>
11	The construction, within a watercourse, of an Ash Dump Dirty Dam (ADDD)
18	Removal of soil located in a wetland for the construction of an ADDD and depositing ash/gypsum waste material exceeding 5 m <sup>3</sup> into the wetland for storage purposes using a waste management facility



**KUSILE POWER STATION**  
**SITE LAYOUT PLAN**



Date: 26 February 2013

System: Hartebeeshoek94

# WASTE MANAGEMENT LICENCE APPLICATION

Summary of NEMWA Listed Activities being applied for: Government Gazette R718 of 3 July 2009

Activity No	Description of Listed Activity
<b>Category A 3 (1)</b>	The temporary storage of silty soils and degradable rock which is not suitable for use as general backfill within the project (classified as general waste) at the K 3 spoil stockpile that has the capacity to store in excess of 100 m <sup>3</sup> .
	The temporary storage of construction waste (mainly concrete, unusable soil, rebar and unwanted material, classified as general waste) at the Concrete spoil stockpile that has the capacity to store in excess of 100 m <sup>3</sup> .
<b>Category B (9)</b>	The co-disposal and storage of ash and gypsum which has been classified as a moderate hazardous waste to land.
	The disposal of the belt filter press sludge (gypsum) from the FDG process to land.
<b>Category B (11)</b>	The construction of a hazardous waste facility (Ash/Gypsum Dump) and its associated dams (Ash Dump Dirty Water Dam, Station Dirty Water Dam and Station Dirty Water Dam Settling Tank).

The co-disposal of ash and gypsum as well as the ADDD, the SDD and the SDD ST also formed part of the Integrated Water Use Licence Application (IWULA) (Section 2.6 of the April 2011 Section 21 (g) Application), which authorises a maximum of 4 921 295 tons/a of ash/gypsum to be disposed of into the ash dump.

Sebata Institute applied for the integrated Environmental Authorisation and Waste Management Licence on behalf of Eskom. The WML was submitted to the Department of Environmental Affairs (DEA) on 17 August 2012 and an amended application was submitted on 28 February 2013 (**DEA Ref: 14/12/16/3/3/51 and NEAS Ref: DEA/EIA/0001413/2012**). In response to this application, the DEA requested that an EIA be conducted, taking into account all the applicable Departmental Guidelines throughout the application process. Eskom therefore appointed Sebata Institute to conduct an EIA in support of the WMLA. The EIA will be conducted in terms of the Regulations published under the NEMWA and will consist of authority consultation and Environmental Impact Assessment Application, Scoping Phase, EIA Phase, Authorisation and Appeals.

## AUTHORITY CONSULTATION AND ENVIRONMENTAL IMPACT ASSESSMENT APPLICATION

Application for environmental authorisation was made to DEA. The application included information regarding the proponent, and the proposed waste activities and was submitted together with a declaration of independence from the environmental consultants.

Initial consultation with the environmental authorities will be undertaken to confirm the specialist studies and to determine specific authority requirements regarding the proposed project. This consultation with the authorities will be used to agree on the process to be followed and timeframes.



*Example of Construction at Kusile Power Station*

## SCOPING PHASE

The objectives of the scoping phase are to identify the key issues to be addressed in the WMLA and to ensure that a common understanding of the evaluation of issues and impacts is used by the project team. The compilation of the Scoping Report will include input derived during the stakeholder consultation process. The Draft Scoping Report (DSR) is now available at the Kusile Power Station as well as the Sebata and Eskom websites ([www.sebatagroup.com](http://www.sebatagroup.com) or [www.eskom.co.za](http://www.eskom.co.za)) for a 40 day public review and comment period. Alternatively, electronic copies of the DSR can be obtained from Ms Ndomupe Dhemba at the contact details at the back of this BID.

After the public comment period has closed, all comments received will be incorporated into a final Scoping Report which will be submitted to the DEA. The final Scoping Report will be made available at the Kusile Power Station and the Sebata and Eskom websites for a 21-day public review, to confirm that all the issues and concerns raised during the 40-day comment period on the draft reports have been captured accurately. Electronic copies of the report will be made available to I&APs on request.

## SPECIALIST STUDIES

The following specialist studies are expected to be required:

- Groundwater Quality;
- Aquatic Ecology;
- Surface Water Quality;
- Air Quality; and
- Terrestrial Ecology.

All specialist studies required will be undertaken in a manner that fulfils the requirements of the EIA Regulations, 2010 and the findings will be made available to the stakeholders for comment.

### IMPACT ASSESSMENT PHASE

The EIA phase will commence once approval of the Scoping Report has been received from the DEA. The draft and Final EIA Reports will also include the record of the public participation activities undertaken during the Scoping Phase. The focus of the impact assessment phase will be to investigate the issues that were raised during the Scoping Phase. A Draft Environmental Impact Report (DEIR) that incorporates the outcome of the specialist studies/ impact assessment and the EMPr to address the impacts will be compiled.

The draft EIA Report and EMPr will be made available at public places for a 40 -day public review and comment period, as required by the regulations. Interested and Affected Parties (I&APs) registered on the project database will be notified of the availability of these reports. Comments from the I&APs will be obtained and integrated into the documents that will then be submitted to the authorities for approval.

The final EIR and EMPr will be made available at the Kusile Power Station and the Sebata and Eskom websites for a 21-day public review, to confirm that all the issues and concerns raised during the 40-day comment period on the draft reports have been captured accurately.



*Construction at Kusile Power Station*

### AUTHORISATION PHASE

A letter will be distributed to all the stakeholders informing them of the decision, and any associated condition that the DEA makes regarding the application.

### APPEAL PHASE

Once the DEA has made a decision, notification letters will be sent to all the registered I&APs informing them of the decision. All I&APs will be provided with an opportunity to appeal the decision.

## PUBLIC PARTICIPATION PROCESS

The public participation process will be conducted by Sebata Institute in accordance with Chapter 6 of the EIA Regulation 543, 2010. The process will include the following:

- On-Site Notices;
- Advertisements in local or regional papers;
- 40-day public comment periods for draft reports (Draft Scoping Report, Draft EMPr and Draft EIR);
- 21-day public comment periods for final reports (Final Scoping Report, Final EMPr and Final EIR); and
- Progress feedback letters which will be sent to all stakeholders (including notification letters).

In order to ensure that your concerns are considered during the WMLA you are invited to register as an I&AP by completing the attached registration form and submitting it to Ms Ndomupe Dhemba of Sebata Institute (details below) within **14 days** of receipt of this Background Information Document (BID). You are welcome to contact Sebata Institute to ask questions, raise issues and request information.

All issues and comments received during public participation process will be captured in an Issues and Responses Report that will be updated as the project commences and will form an Appendix to the EIA Report and submitted to the DEA. A copy of the Issues and Responses Report will also be sent to stakeholders that submit comments in the public comment period for the draft reports in order for them to confirm that their issues have been accurately captured and understood.

**If you wish to register as an I&AP please complete the attached registration form and send it to Sebata Institute.**



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