

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS AND



WASTE MANAGEMENT LICENSE APPLICATION

PROPOSED CONTINUOUS ASHING AT THE EXISTING ASH DISPOSAL FACILITIES, AT TUTUKA POWER STATION, MPUMALANGA PROVINCE

DEA Reference Number: 14/12/16/3/3/3/52 NEAS Reference: DEA/EIA/0001416/2012

BACKGROUND INFORMATION DOCUMENT

WHAT DOES THIS DOCUMENT TELL YOU?

The purpose of this Background Information Document (BID) is to provide Interested and/or Affected Parties (I&APs) with background information about the proposed continuous ashing at the existing ashing facilities at the Tutuka Power Station and the application processes to be undertaken (i.e. EIA process and Waste Management License Application process). It further explains how I&APs can become involved in the project, receive information as the EIA progresses, and raise comments and/or concerns regarding the potential impacts of the project on the environment. You are hereby invited to register as an I&AP by completing and submitting the attached "Comments and Registration" sheet.

This BID document will help you to:

- Determine if you are interested in and/or affected by the proposed project;
- Better understand the project in order to be able to provide comment; and
- Understand the environmental authorisation process so that you are able to participate effectively.

WHAT DOES THE TUTUKA CONTINUOUS ASHING PROJECT ENTAIL?

Eskom Holdings SOC Limited's (Eskom) core business is the generation, transmission and distribution of electricity throughout South Africa. Electricity by its nature cannot be stored and must be used as it is generated. Therefore electricity is generated according to supply-demand requirements. The reliable provision of electricity by Eskom is critical to industrial development and other poverty alleviation initiatives in the country.

Tutuka Power Station, a coal fired power generation facility commissioned between 1985 – 1990, is located 25 km North of Standerton in the province of Mpumalanga. Tutuka Power Station currently disposes of ash in a dry (20% moisture content) form by means of conveyors, spreader and a stacker system from the station terrace to the Ash Disposal site. The ash disposal site covers an area of 2500 ha (Existing & Remaining ash dump & pollution control canals) and is located approximately 4.5 km east of the station terrace.

Tutuka Power Station, envisages the continuation of dry ash disposal over Eskom owned land, which was purchased before the commencement of environmental laws, the Environment Conservation Act, in particular. As part of its planning processes, Eskom developed designs which were approved internally, during this time. With the promulgation of the environmental laws, and the National Environmental Management Waste Act, Act 59 of 2008, in particular, Eskom would like to align its continued ashing activities with the requirements of the waste licensing processes.

The proposed continuous development is an ash disposal site with the following specifications:

- Capacity of airspace of 353,1 million m³ (Existing and remaining); and
- Ground footprint of 2500 Ha (Existing & Remaining ash dump & pollution control canals)

This ash disposal facility shall be able to accommodate the ashing requirements of the power station for the next 44 years, from 2012 to 2055, which is the life of the station.

Figure 1 below illustrates the ash dump layout as currently constructed (Blue) and outlines the footprint of the proposed future extent of the facility (orange), which is also the Eskom land identified and purchased for ashing.

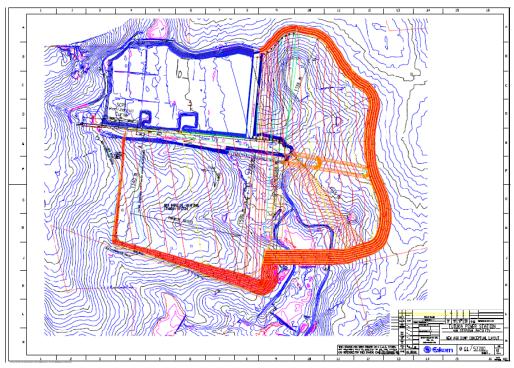


Figure 1: The ash dump layout (current and future)

WHAT ARE THE POTENTIAL ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT?

A number of potential environmental impacts associated with the project are anticipated. As part of the EIA, these potential impacts will be assessed through the following specialist studies, with the allocated specialists:

Specialist Study	Organisation Responsible for the Study				
Impacts on groundwater	Metago Water GeoSciences Consulting				
Impacts on surface water and aquatic fauna & flora	Ecotone Freshwater Consultants				
Impacts on terrestrial fauna & flora	Bathusi Environmental				
Impacts on soils & agricultural potential	Agricultural Research Council				
Impacts on heritage resources	Johnny van Schalkwyk				
Impacts on air quality	Airshed Planning Professionals				
Impacts due to noise	Francois Malherbe Acoustic Consultants				
Impacts on the social environment	Lidwala Consulting Engineers (SA)				
Impacts on avifauna	Endangered Wildlife Trust				
Visual impact assessment	MetroGIS				
Conceptual Design and Geotechnical Studies	Lidwala Consulting Engineers (SA) and				
	Alan Robinson				
GIS	Lidwala Consulting Engineers (SA)				

As part of the Scoping Study, desktop specialist studies will identify potential issues which require further investigation within the EIA phase including potential additional studies that may be required. In order to comply with the minimum requirements as set out by DEA in terms of waste facilities, the scoping study will also include an environmental screening of the surrounding areas to identify whether any alternative sites exist. Input from I&APs through the public participation process also provides valuable input in the identification of issues requiring investigation within this EIA process. More detailed studies on potentially significant impacts will be investigated within the EIA phase of the project for each aspect.

WHY ARE ENVIRONMENTAL STUDIES NEEDED?

In terms of the Environmental Impact Assessment (EIA) Regulations (2010) and the National Environmental Management Waste Act (Act 59 of 2008), Eskom Holdings Limited requires authorisation from the National Department of Environmental Affairs (DEA) for the undertaking of the proposed project. The EIA Regulations are published in Government Notice R543 of 2 August 2010 in terms of Section 24 (5) of the National Environmental Management Act (Act No. 107 of 1998), the listed activities are set out in Government Notices R544 to R546 and the National Environmental Management: Waste Act (NEMWA) activities are listed in GN 718. In order to obtain an environmental authorisation and the relevant waste management license for this project, comprehensive, independent environmental studies must be undertaken in accordance with the EIA Regulations.

An EIA is a legislative tool that is used to ensure that potential impacts that may occur due to any proposed development are identified before execution, and can therefore either be avoided or mitigated (minimised). In South African legislation the environment includes social, economic and bio-physical aspects (and their interactions) and the EIA must assess these equitably.

Table 1 below shows the listed activities that are triggered by the development. Should you wish to obtain a detailed description of these activities, please contact the Public Participation office (with details provided below).

Table 1: Listed Activities

NEMA	No. R. 544	9	11	18	22	24	28	37	39	40	47	49
	No. R. 545	6	15	26								
	No. R. 546	4	16	19	24							
NEMWA	GN 718 - Category A	19										
	GN 718 - Category B	9	11									

Eskom has appointed Lidwala Consulting Engineers (SA) (Pty) Ltd, as Environmental Assessment Practitioners (EAP), to undertake the environmental studies to identify and assess all potential environmental impacts associated with the proposed project. As part of these environmental studies, all I&APs are invited to become actively involved through the public participation process.

The EIA process can be divided into 4 distinct phases:

Application and initial notification

During this phase an integrated application for authorisation has been sumitted to the National Department of Environmental Affairs (DEA). Once DEA acknowledges the EIA and waste license application (within 14 days of submission of application), an initial notification process takes place whereby the public is informed of the proposed development through *inter alia*, newspaper adverts, notification letters, BIDs and site notices.

Scoping phase

The purpose of the scoping phase is:

- To undertake an environmental screening of the surrounding area in order to identify whether suitable alternative sites exist;
- To investigate and gather information on the proposed alternative sites, technologies and the study area in order to establish an understanding of the area;
- To establish how the proposed development activities will potentially impact on the surrounding environment;
- To identify I&APs and relevant authorities by conducting a Public Participation Process (PPP);
- To identify potential environmental impacts that require detailed assessment at EIA phase, through investigation and PPP; and
- To describe and investigate the alternatives that may be considered.

EIA phase

During this phase all issues and proposed alternatives identified in the scoping phase are assessed and rated in terms of their significance. Where necessary, mitigation measures are recommended to reduce the significance of potential impacts. An Environmental Management Programme will then be compiled that will prescribe environmental specifications to be adhered to during the construction, operational and decommissioning phases of the project, should the environmental authorisation be granted. As with the scoping phase, the PPP is an integral and important part of the assessment phase. Once the Final Environmental Impact Report has been submitted to DEA, the decision making process will commence.

Environmental Authorisation and Waste Management License

Due to the fact that the proposed project encompasses listed activities in NEMA and NEMWA, both an Environmental Authorisation (EA) in term of NEMA and a Waste Management License (WML) in terms of NEMWA are required. However, Eskom will receive an integrated environmental authorisation due to the fact that they have submitted an integrated application. The EIA process to be undertaken is represented diagrammatically in **Figure 2**.

PUBLIC PARTICIPATION PROCESS

It is important that relevant I&APs are identified and involved in the public participation process from the outset of the proposed project. The inputs received from I&APs form an integral part of the EIA process and will also assist the decision-making authority, DEA, with their decision-making. To ensure effective public participation, the process includes the following steps:

- STEP 1: Advertise the EIA Process (local/community newspapers)
- STEP 2: Register I&APs and key stakeholders on the database (on-going)
- STEP 3: Consultation with, and transfer of information to, I&APs through consultation, public meetings, focus group meetings and key stakeholder workshops
- STEP 4: Record and respond to all comments, issues and concerns raised by I&APs within an issues trail, which will form an integral part of EIA Reports
- STEP 5: Invite I&AP comment and input on the draft Scoping and EIA reports (30-day comment period)

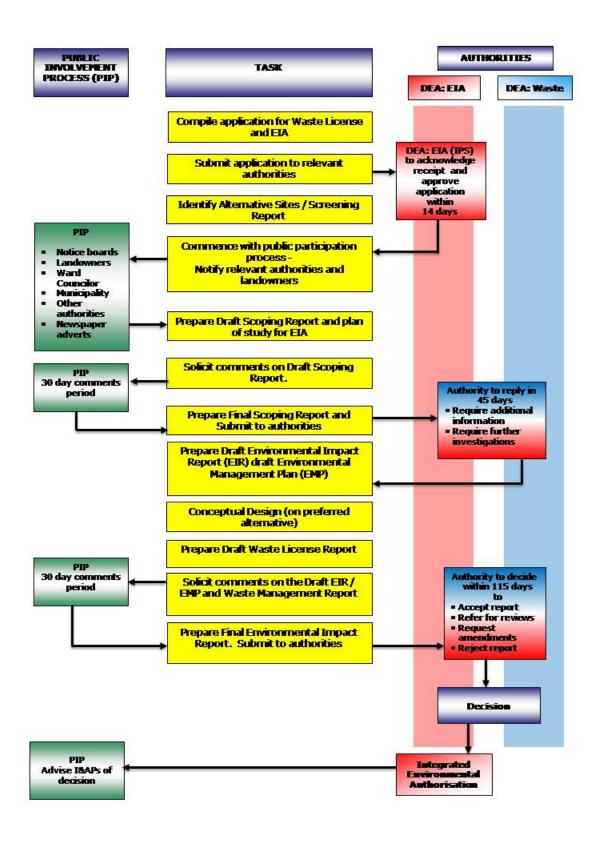


Figure 2: EIA Process

HOW CAN YOU GET INVOLVED?

- 1. By responding (by phone, fax or e-mail) to our invitation for your involvement which has been advertised in local newspapers.
- 2. By mailing, faxing or e-mail the attached comment form to Lidwala SA.
- 3. By attending the meetings to be held during the course of the project. Should you register as an I&AP you will be invited to attend these meetings. The meeting dates will also be advertised in local newspapers.
- 4. By telephonically contacting Lidwala if you have a query, comment or require further project information.
- 5. By reviewing the draft Scoping, EIA and Waste License Application Reports within the 30-day review periods and sending your comments to Lidwala (*It should be noted that one can still review the documentation outside this 30-day window*).

If you consider yourself an I&AP for this proposed project, we urge you to make use of the opportunities created by the public participation process to become involved in the process. Your input into this process forms a key part of the environmental studies and we would like to hear from you to obtain your views on the proposed project.

By completing and submitting the accompanying response form, you automatically register yourself as an I&AP for this project, and ensure that your comments, concerns or queries raised regarding the project will be addressed.

This BID is also available in Afrikaans and Zulu.

COMMENTS, QUERIES AND RESPONSES

Direct all comments, queries and responses to:

Lidwala Consulting Engineers (SA)

ATTENTION:

Nicolene Venter or Bongi Mhlanga

Phone: (0861) LIDWALA (0861 543 9252)

Fax: 086 764 9282

■ E-mail: tutukaeia@lidwala.com

→ Website: www.lidwala.co.za

Lidwala Consulting Engineers (SA) (Pty) Ltd



Bongi Mhlanga PO Box 32497, Waverley, 0135 **Tel** (0861) LIDWALA (0861 543 9252) **Fax** 086 764 9282 **Email** tutukaeia@lidwala.com

Signature

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REGISTRATION AND COMMENT FORM Accompanying Background Information Document September 2012

Imaginative Africa (Pty) Ltd



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Date

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COMMENTS (please u	se separate sheets	s if you wish)				
I suggest that the follow	ving issues of conc	ern be investigate	ed in the EIA:			
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			lic participation process:			
Please contact the fo	llowing colleague	s/friends to regi	ster as I&APs for this EIA (name and co	ontact details e.g. e-mail	1	
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		THANK YOU	FOR YOUR CONTRIBUTION ——			