

MPUMALANGA PROVINCIAL GOVERNMENT

Cnr Botha & Northey Str
Pavilion Building
Next to Boston College
WITBANK
1035
[E-mail:cnmthimunye@wit.mpg.gov.za](mailto:cnmthimunye@wit.mpg.gov.za)



P.O. Box 383
WITBANK
1035
Tel: (013) 690 2595
International Tel: +27 13 690 2595
Fax: (013) 690 3704
International Fax: +27 13 690 3704

Department of Economic Development ,Environment and Tourism

Litiko letekutfufukiswa kwemnotfo
nekuhlelwa

UmNyango wezokuthuthukiswa
komnotho nezokutlanywa

Department Ekonomieseontwikkeling en
beplanning

Enquiries: Ms. Charity Mthimunye
Telephone: (013) 690 2595
E-mail: cnmthimunye@mpg.gov.za

Attention: Anelle Lotter
Zitholele Consulting
P.O Box 6002
HALFWAY HOUSE
1685
Fax No: 086 674 6121
Tel No: 011 207 2060

RE: DRAFT BASIC ASSESSMENT REPORT FOR THE PROPOSED REPLACEMENT OF ELECTRO-STATIC PRECIPITATOR FOR UNIT 4, WITH FABRIC FILTER PLANT AT DUVHA POWER STATION.

The Draft Basic Assessment Report for the Environmental Impact Assessment dated August 2011 and received by the Department on 15 August 2011 refers.

The department has reviewed the submitted Draft Basic Assessment Report and is satisfied that the report complies with the Minimum Requirements of the Environmental Impact Assessment Regulations, 2010. The Draft Basic Assessment Report is hereby accepted by the Department, you may therefore proceed with the compilation of the Final Basic Assessment Report. Please ensure that the proposed new road for the compressor house to be established is not more than 50m long.

In terms of air quality aspects, it must be ensured that the particulate emission license limits are not exceeded.

The Department is of the view that, environmental impacts associated with the proposed activity are of minimal significance as the installation of fabric filter plant would result in reduced emissions.

MS.DINEO TSWAI
DEPUTY DIRECTOR (EIM)
ECONOMIC DEVELOPMENT, ENVIRONMENT AND TOURISM

DATE: _____



PROPOSED REPLACEMENT OF ELECTRO-STATIC PRECIPITATOR (ESP) FOR UNIT 4, WITH A FABRIC FILTER PLANT (FFP) AT DUVHA POWER STATION

BACKGROUND INFORMATION DOCUMENT

JULY 2011

Purpose of this document

This document provides background information on the proposed project, the receiving environment, affected properties and details of the environmental processes that are required.

The purpose of the document is to assist people to:

- Determine if they have an interest in the project and/or if they could potentially be affected;
- Provide comments on and contributions to the proposed project and available documentation; and
- Register as interested and affected parties (I&APs) to be kept informed about the EIA process.

Comments may be submitted at any time during the Environmental Impact Assessment process and comments received before 18 August 2011 will be included in the Final Basic Assessment Report.

You are urged to submit comments to ensure that any issues and concerns you may have are considered and addressed appropriately. Please complete and return the enclosed response sheet, write a letter, send a fax or email, or call the public participation office.

Public Participation Office

Anelle Lötter and
Patiswa Mngqokoyi
PO Box 6002, Halfway House, 1685
Tel: 011 207 2076 / 2074
Fax: 086 676 9950
E-mail: alotter@zitholele.co.za or
patiswam@zitholele.co.za



BACKGROUND AND DESCRIPTION OF THE PROJECT

Eskom's Duvha Power Station, situated just outside Witbank proposes to replace its existing Electro-Static Precipitator (at Unit 4) with a Fabric Filter Plant. The main purpose is to reduce the air quality emissions to ensure that the plant complies with the new Emission Standards for Particulate Matter.

Eskom Holding Limited is the South African utility that generates, transmits and distributed electricity, and supplies about 95% of the country's electricity. A large portion of the power is generated through coal-fired power stations. Duvha power station is one of Eskom's fleet of power generation facilities in the Eastern Highveld. The power station is situated at least 15km east of Witbank, in Mpumalanga.

Construction of Duvha Power Station started in November 1975 and the last unit came into operation in 1984. Duvha consist of six 600MW units.

In 1993 Duvha became the first power station in the world to be retrofitted with pulse jet fabric filter plants on three of its six units. These plants contribute largely to the reduction of air pollution by removing 99.99% of the fly ash which otherwise would be released into the air through the station's chimneys.

Units 1,2,& 3 at Duvha power station have already been retrofitted with FFP and Eskom is in process of retrofitting the remaining units.

Currently Unit 4 of the Duvha power station is not operating due to maintenance. This poses the ideal opportunity to retrofit a Fabric Filter Plant, replacing the Electro-Static Precipitator technology, in Unit 4. This project is to be accelerated for Eskom to try and meet the high demand of electricity in the country.

AFFECTED ENVIRONMENT

Duvha power station is situated in the Highveld Air Quality Priority Area. The Department of Environmental Affairs have announced this priority area to ensure the improvement of air quality in the area. Eskom's proposed retrofitting is part of their commitment to meet the new emission standards for particulate matter (PM10) and to join the national drive to improve air quality in the eastern Highveld. The National Environmental Management – Air Quality Act, 2004 (NEMA: AQA), Notice 248: 31 March 2010 Minimum Emission standards requires that all existing power stations should conform to a standard of 100mg/Nm³ by 2015. The current design of the ESP will not be able to meet the more stringent particulate emission limits, therefore the need to replace the installed particulate capturing technology.

NEMA AND EIA REGULATIONS

This project requires a Basic Assessment (BA) in terms of the National Environmental Management Act (No 107 of 1998) (NEMA) and the new EIA regulations (Government Notice Regulation (GNR) 543 to 546, published 18 June 2010; and amended on 10 December 2011). The Department of Environmental Affairs (DEA) is the competent authority for this BA.

Activities listed in GNR 544 apply to the proposed replacement of the ESP technology and thus a Basic Assessment will be conducted. The following listed activities are the basis of the application:

- Activity 27: The decommissioning of existing facilities or infrastructure for :-
(i) Electricity generation with a threshold of more than 10 MW.

This activity applies to any decommissioning work to the existing ESP plant required as part of the refurbishment.

- Activity 28: The expansion of or changes to existing facilities for any process or activity where such an expansion or changes to will result in the need for a permit or license in terms of national or provincial legislation governing the release of emissions or pollution, excluding where the facility process or activity is included in the list of waste management activities published in terms of the NEM: WA in which case that Act will apply.

This activity applies to any refurbishment work regarding the installation of the FFP technology, as this triggers an amendment to the emissions license of the power station.

BASIC ASSESSMENT PROCESS

What is a Basic Assessment and why is it necessary

A Basic Assessment (BA) is used to obtain an objective view of the potential environmental and social impacts that could arise during the investigation, construction and operation of a proposed project. A critical element of the BA is the public participation process that gives interested and affected parties (I&APs) an opportunity to provide comments on a proposed development.

The information contained in the Basic Assessment Report (BAR) must provide the competent authority with adequate information for informed decision-making. The BAR, which is the final stage of investigation and recommendation, must:

- Identify the potential impacts of the proposed project;
- Record the issues, concerns and suggestions raised by I&APs; and;
- Outline the measures to be taken to avoid or reduce negative impacts and enhance positive impacts.

The Basic Assessment process has a technical and a public participation component which run parallel to each other.

TECHNICAL COMPONENT

The technical component is divided into two phases: The Inception Phase and the Basic Assessment and Investigation Phase.

Inception Phase

In the Inception Phase an application form is submitted to the competent authority to confirm whether the technical and public participation processes and measures suggested, are in accordance with its requirements. During this phase the proposal to retrofit Unit 4 with fabric filter plants is screened for potential environmental and social impacts. As part of the process to refine the recommendation a field inspection of the site is undertaken together with independent specialists.

Basic Assessment and Investigation Phase

Once the Inception Phase has been concluded the terms of reference for specialist studies will be confirmed and investigations will continue. It is foreseen that as a minimum the following studies will be undertaken: air quality assessment and a biophysical environmental screening. The findings of these studies, together with input from the public participation process will be incorporated into a Basic Assessment Report, which is the outcome of this phase. A Draft Basic Assessment Report will be available for public comment before the document is finalised and submitted to the competent authority – the Department of Environmental Affairs (DEA).

PUBLIC PARTICIPATION COMPONENT

As an important element in undertaking the BA for the proposed project, Zitholele Consulting will also conduct the public participation. This component will enable stakeholders to influence the course of the investigations and to review the findings of the independent studies that are to be undertaken. The steps of the public participation component are outlined below.

The following activities will be implemented to achieve the aforementioned objectives:

- Advertising - public notice in regional and local newspapers;
- Placement of site notice boards around the Duvha power station being investigated;
- Supplying adjacent landowners with this Background Information Document (BID);
- Contacting stakeholders and notifying them of the process;
- Documenting stakeholder correspondence within the Draft Basic Assessment Report that will be made available for public review; and
- Notifying stakeholders when the Environmental Authorisation is issued.

BASIC ASSESSMENT REPORTS

Draft Basic Assessment Report and Environmental Management Plan

The Draft Basic Assessment Report, together with a draft Environmental Management Programme will be made available for comment by I&APs during July 2011. The public commenting period on the DBAR will be a period of four

weeks. The registered I&APs will be notified of the public comment period in advance.

Final Basic Assessment Report

The Final Basic Assessment Report will be prepared, incorporating all additional inputs received during the public comment period. This final report will then be submitted to the DEA for authorisation.

FINAL NOTIFICATION FROM AUTHORITIES

Once the DEA, has issued the Environmental Authorisation, I&APs will be notified of the decision and what procedure to follow should they wish to appeal the Environmental Authorisation.

<p>PROPOSED REPLACEMENT OF ELECTRO-STATIC PRECIPITATOR (ESP) FOR UNIT 4, WITH A FABRIC FILTER PLANT (FFP) AT DUVHA POWER STATION</p> <p>ENVIRONMENTAL IMPACT ASSESSMENT</p> <p>Reply sheet to register for this project</p>	<p>EIA Public Participation Office Anelle Lötter / Patiswa Mngokoyi Zitholele Consulting (Pty) Ltd, P O Box 6002, Halfway House, 1685 Tel: 011 207 2076/2074, Fax: 086-676-9950 Email: alotter@zitholele.co.za or patiswam@zitholele.co.za</p>
---	--

Please complete by 18 August 2011 and return to the EIA Public Participation Office (as above)

TITLE		FIRST NAME	
INITIALS		SURNAME	
ORGANISATION		EMAIL	
POSTAL ADDRESS			
		POSTAL CODE	
TEL NO		FAX NO	

COMMENTS (please use separate sheets if you wish)

Any comments you may have at this stage:

.....

.....

.....

.....

.....

.....

.....

.....

Please ask the following of my colleagues/friends/neighbours to register for this project:

.....

.....

.....

THANK YOU FOR YOUR CONTRIBUTION

Adverts for the announcement phase were placed in the following newspapers:

PUBLICATION	INSERTION DATE
Middelburg Observer	18 July 2011
Citizen	18 July 2011
The Star	18 July 2011
Beeld	18 July 2011

**PROPOSED REPLACEMENT OF THE ELECTRO-STATIC
PRESIPITATOR (ESP) FOR UNIT 4 WITH A FABRIC FILTER
PLANT (FFP) AT DUVHA POWER STATION**

ENVIRONMENTAL IMPACT ASSESSMENT

Eskom's Duvha Power Station, situated just outside Witbank proposes to replace its existing Electro-Static Precipitator (ESP) at Unit 4 with a Fabric Filter Plant (FFP). The main purpose is to reduce the air quality emissions to ensure compliance with the new Emission Standards for Particulate Matter.

Environmental authorisation from the Department of Environmental Affairs (DEA) in terms of the National Environmental Management Act (No 107 of 1998), and Government Notice R 543 to 546 (June 2010) is required for this activity to commence.

PUBLIC COMMENT ENCOURAGED

Interested and Affected Parties (I&APs) are invited to participate by providing comments and raising issues of concern. A Draft Basic Assessment Report will be available for public review from 18 July 2011 to 18 August 2011 at the following public places:

Contact	Location	Contact
Printed Copies		
Mrs J Cathro	Emalaheni Public Library	013 653 3116
Mr Oloff Nel	Duvha Power Station reception	013 690 0345
Electronic Copies		
Mr Tobile Bokwe	www.eskom.co.za/eia	011 800 2303
Andre Joubert	www.zitholele.co.za	011 207 2077
Andre Joubert	Zitholele Consulting.	011 207 2077

To register as an I&AP, and to receive copies of the background information document and the Draft Basic Assessment Report, please contact:

Anelle Lötter / Patiswa Mnqokoyi
Zitholele Consulting, P O Box 6002, Halfway House, 1685
Tel: (011) 207 2076/2074, Fax: 086-676-9950
Email: alotter@zitholele.co.za or patiswam@zitholele.co.za



THIS ASSESSMENT IS CONDUCTED ON BEHALF OF ESKOM

**VOORGESTELDE VERVANGING VAN DIE
ELEKTROSTATIESE PRESIPITEERDER (ESP) VIR EENHEID 4
DEUR 'N MATERIAALFILTERAANLEG (MFA) BY DIE
DUVHA-KRAGSTASIE**

OMGEWINGSIMPAKBEPALING

Eskom se Duvha-kragstasie, geleë net buite Witbank, beoog om sy bestaande Elektrostatische Presipiteerder (ESP) by Eenheid 4 te vervang deur 'n Materiaalfilteraanleg (MFA). Die hoofdoel is om die luggehalte van emissies te verbeter om aan die nuwe Emissiestandaarde vir Deeltjiematerie te voldoen.

Omgewingsmagtiging van die Departement van Omgewingsake (DOS) ingevolge die Wet op Nasionale Omgewingsbestuur (No 107 van 1998) en Goewermenskennisgewings R.543 tot 546 (Junie 2010) word vereis voor hierdie aktiwiteit kan begin.

**OPENBARE KOMMENTAAR WORD
AANGEMOEDIG**

Belanghebbende en Geaffekteerde Partye (B&GP's) word genooi om deel te neem deur kommentaar te lewer en kwellende kwessies te opper. 'n Konsep Basiese Assesseringsverslag sal van 18 Julie 2011 tot 18 Augustus 2011 op die volgende plekke vir openbare insae beskikbaar wees:

KONTAK	LIGGING	TELEFOON
Gedrukte weergawes		
Me J Cathro	Emalahleni Openbare Biblioteek	013 653 3116
Mr Olf Nel	Duvha Duvha-kragstasie, Ontvangs	013 690 0345
Elektroniese weergawes		
Mnr Tobile Bokwe	www.eskom.co.za/eia	011 800 2303
Mnr Andre Joubert	www.zitholele.co.za	011 207 2077
Mnr Andre Joubert	Zitholele Consulting.	011 207 2077

Om as 'n B&GP te registreer en om eksemplare van die Agtergrondinligtingsdokument en die Konsep Basiese Assesseringsverslag te ontvang, skakel asb met:
Anelle Lötter / Patiswa Mnqokoyi
Zitholele Consulting, Posbus 6002, Halfweghuis, 1685
Tel: (011) 207 2076/2074, Faks: 086-676-9950
E-pos: alotter@zitholele.co.za of patiswam@zitholele.co.za



HIERDIE BEPALING WORD NAMENS ESKOM GEDOEN

PROPOSED REPLACEMENT ELECTRO-STATIC PRECIPITATOR (ESP) FOR UNIT 4 WITH A FABRIC FILTER PLANT (FFP) AT DUVHA POWER STATION

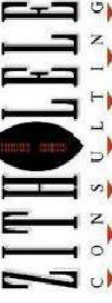
Eskom’s Duvha Power Station, situated just outside Witbank proposes to replace its existing Electro-Static Precipitator (ESP) at Unit 4 with a Fabric Filter Plant (FFP). The main purpose is to reduce the air quality emissions to ensure compliance with the new Emission Standards for Particulate Matter.

Interested and Affected Parties (I&APs) are invited to participate by providing comments and raising issues of concern. A Draft Basic Assessment Report will be available for public review from 18 July 2011 to 18 August 2011 at the following public places:

Contact	Location	Contact
Printed Copies		
Mrs J Cathro	Emalaheni Public Library	013 653 3116
Mr Oloff Nel	Duvha Power Station reception	013 690 0139
Electronic Copies		
Mr Tobile Bokwe	www.eskom.co.za/eia	011 800 2303
Andre Joubert	www.zitholele.co.za	011 207 2077
Andre Joubert	Zitholele Consulting.	011 207 2077

To register as an I&AP, and to receive copies of the background information document and the Draft Basic Assessment Report, please contact us.

Environmental
authorisation from the
Department of
Environmental Affairs
(DEA) in terms of the
National Environmental
Management Act (No
107 of 1998), and
Government Notice R
543 to 546 (June 2010)
is required for this
activity to commence.



PUBLIC COMMENT ENCOURAGED

Interested and Affected Parties (I&APs) are invited to participate by providing comments and raising any issues of concern they may have. To register as an I&AP, and to receive more information, please contact:

Anelle Lötter/Patswa Mhockoyi of Zitholele Consulting (Pty) Ltd, P O Box 6002, Halfway House, 1685
Tel: (011) 207 2076/20741 / Fax: 066-676-9960 / Email: alotter@zitholele.co.za or patswam@zitholele.co.za

12725 - BA FFP at Duvha Power Station – Stakeholder database

<u>Last Name</u>	<u>First Name</u>	<u>Company</u>	<u>City</u>
Batchelor	Garth	Department of Economic Development Environment and Tourism	NELSPRUIT
Bokwe	Tobile	Eskom	SUNNINGHILL
Botha	Amanda	Witbank News	WITBANK
Botha	Hannes	Mpumalanga Tourism and Parks Agency	GROBLERSDAL
Campbell	Graeme	Streeknuus	BRONKHORSTSPRUIT
Cogho	Vik	Optimum Coal Holdings	PULLENS HOPE
Duvenage	Annamie	Bronkhorstspuit and Wilge River Conservancy	BRONKHORSTSPRUIT
Euripidou	Rico	GroundWork - Friends of the Earth South Africa	PIETERMARITZBURG
Floyd	Brian	Witbank Chamber of Commerce	WITBANK
Greyling	Anique	Endangered Wildlife Trust	PARKVIEW
Hine	Phillip	South African Heritage Resources Agency (SAHRA)	CAPE TOWN
Hlatshwayo	Selby	Mpumalanga Department of Agriculture and Land	NELSPRUIT
Khan	Zaheeb	Middelburg Herald	MIDDELBURG
Laas	Hennie	Mpumalanga Landbou/Agriculture Union	ERMELO
Mabuza	Joe	Department of Agriculture and Land Administration	SILVERTON
Macevele	Stanford	Department of Water Affairs (DWA)	NELSPRUIT
Makena	John	Emalaheni Local Municipality	LERAATSFONTEIN
Makhubela	Dumisane	Department of Health	NELSPRUIT
Makola	TC	Nkangala District Municipality	MIDDELBURG
Maluleka	Sam	Department of Agriculture and Land Administration	NELSPRUIT
Msibi	Sam	Department of Environmental Affairs	
Nel	Yolandi	Streeknuus	SUNWARD PARK
Niewoudt	Marianna	Olifants River Forum	SECUNDA
Nkosi	John	Eskom Holdings Limited	
Nyalunga	Gezephi	Mpumalanga Department of Agriculture and Land	NELSPRUIT
Sibayi	Dumisani	South African Heritage Resource Agency (SAHRA)	CAPE TOWN
Sithole	Nelisiwe	Department of Agriculture, Rural Development and Land Administration	NELSPRUIT
Tswai	Dineo	Mpumalanga Department of Agriculture and Land Administration (MDALA)	WITBANK
van den Berg	Tobie	Middelburg Observer/Daller	MIDDELBURG