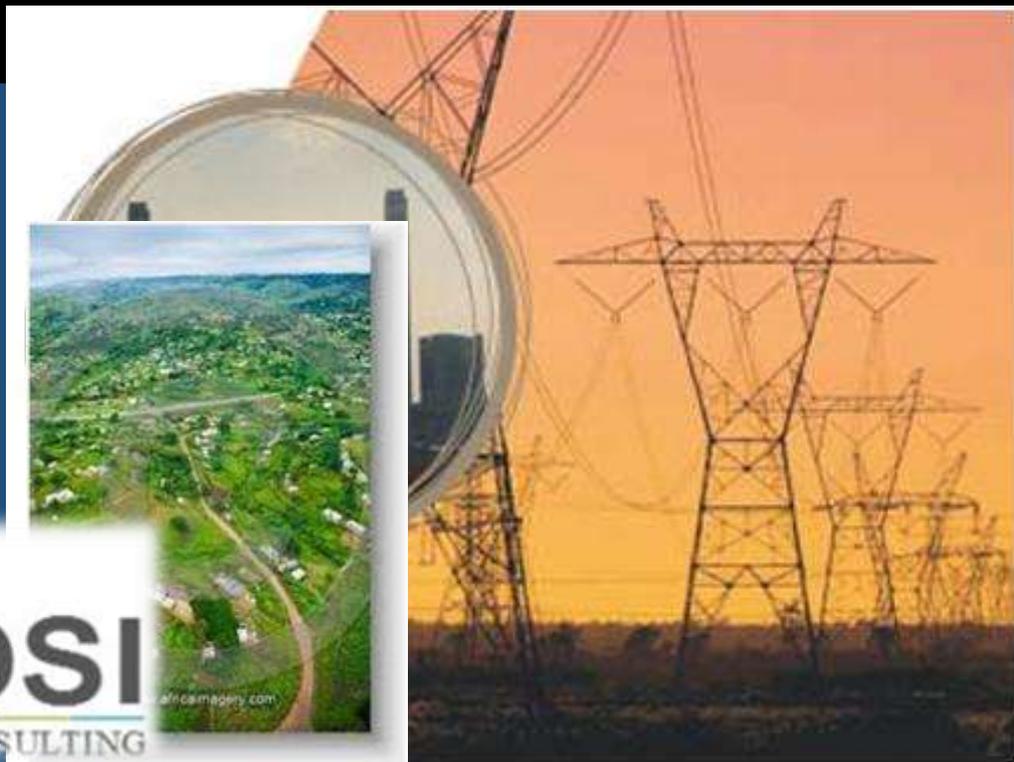




**FINAL SCOPING REPORT FOR THE PROPOSED CONSTRUCTION OF THE LETHABO POWER
STATION EAST COOLING WATER TREATMENT PLANT
DEA REFERENCE NO.: 14/12/16/3/3/2/895**



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EXECUTIVE SUMMARY

Introduction

The Lethabo power station, which is situated in the Northern Free State Province, is currently serviced by one Cooling Water Treatment Plant (CWTP) which is located on the western side of the station. This system treats the entire power station's cooling water to maintain the water management and cooling water chemistry for the station. With only one CWTP the following challenges are experienced:

- The current plant cannot be taken out for maintenance because there is no spare capacity for treatment. The plant is therefore being operated at maximum availability, which may impact negatively on the Long Term Plant Health (LTPH).
- In the event of a half-station shutdown, the cooling water chemistry on the east side of the power station cannot be maintained as the transfer system is taken offline. This will make the salt and scale concentrations to increase thus reducing the thermal efficiency of the units and will put the LTPH of the condensers at risk.
- The west side lime softening clarifiers are stressed as they are operating at maximum capacity when the station is on full load.

The above challenges, therefore, necessitates the construction of a CWTP on the east side of the station. The proposed facility will improve the overall cooling water availability and reliability by sharing the total quantity of water treated. The overall quantity of cooling water will remain the same, the treatment load will be shared between plants, thus providing opportunity for critical and routine maintenance.

Description of CWTP

The proposed CWTP will be built within the footprint of the power station. The plant will remove dissolved and suspended solids using lime softening and reverse osmosis with pre-treatment from a fraction of the cooling water to reduce blow down and ensure compliance of the cooling water chemistry with cooling water standards. The required footprint of CWTP is between 6400m² & 10000m².

A maximum of 17MI/day of water shall be extracted for lime softening treatment from the cooling water circulating system. A maximum of 10MI/day of clarified water will be sent through to ultrafiltration with the remainder sent to cooling tower ponds on the eastern side of the power station. The ultra-filtered water will then be fed to the reverse osmosis section and permeate generated will be removed to the cooling tower ponds. The desalination plant is designed for a total permeate flow of 7.5 MI/day at a recovery rate of 75-80%. The effluent

from this process will be sent via pipeline to the existing ash conditioning system where the effluent will be mixed with the ash generated by the power station in order to dampen the ash before it is disposed of at the ash disposal site.

ALTERNATIVES CONSIDERED

While the requirement for assessment of alternatives includes siting, process, technology, etc., the EIA process for this project could only focus on siting alternatives.

Siting alternatives

There are four (4) siting alternatives proposed for the location of the CWTP. The 'no go' alternative will also be assessed.

Legislative environment

The proposed construction of the CWTP will undergo a Scoping and EIA process in terms of the National Environmental Management Act (Act No. 107 of 1998) Environmental Impact Assessment (EIA) Regulations of 2014, as published in Government Notices No. R 982, 983, 984 and 985. In addition, the legislative requirements pertaining to waste and water management were considered as the CWTP may have an impact in terms of waste generation and disposal and impacts on water resources.

Pre-application meetings were held with the Department of Environmental Affairs (DEA) and the Department of Water and Sanitation (DWS). It was confirmed at these meetings that Water Use Licence (WUL) and Waste Management Licence (WML) were not required. Therefore, only an application for environmental authorisation was required for this project.

The application for this project was submitted to DEA on 14 December 2015 and was acknowledged by the DEA on 18 January 2016 with reference No. 14/12/16/3/3/2/895.

Public participation

Site notices were placed at the Lethabo power station and interested and affected parties were informed about the project with document packs, including the Background Information Document (BID), being sent to all stakeholders on the database that was compiled for this project.

The Draft Scoping Report (DSR) was advertised in the Citizen Newspaper on 20 November 2015. The DSR was made available for public comment from 23 November 2015 to 15 January 2016 at the Vereeniging and Sasolburg Public Libraries.

A Focus Group meeting was held on 20 January 2016 at Metsimaholo Local Municipality offices where the project was presented and several issues regarding the project were discussed.

Environmental impacts of CWTP

Details on the baseline receiving environment were investigated and potential impacts on the receiving environment that may occur as a result of the project were identified. The potential impacts related to the construction, operation and decommissioning of the CWTP and included geology and soil impacts relating to the soil conditions of the project area; impacts on fauna and flora, heritage resources, water resources as well as socio-economic impacts and visual impacts of the proposed CWTP.

Plan of Study for EIA

The Plan of Study for EIA describes how the EIA phase will proceed and includes details of the specialist studies to be undertaken during the EIA phase. The recommended specialist studies to be undertaken in the EIA phase of the project are:

- Hydrological assessment;
- Geology and soil assessment;
- Desktop biodiversity assessment;
- Desktop heritage impact assessment; and,
- Desktop socio-economic study.

The EIA report will be undertaken in accordance with the approved Plan of Study for EIA, and an Environmental Management Programme (EMPr) will be prepared for the management and mitigation of potential impacts during the construction, operation and decommissioning phases of the CWTP.

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LIST OF ABBREVIATIONS

CCR	Comments and Response Report
CWTP	Cooling Water Treatment Plant
DEA	Department of Environmental Affairs
DEIAR	Draft Environmental Impact Assessment Report
DM	District Municipality
DPSH	Dynamic Probe Super Heavy
DSR	Draft Scoping Report
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
FSR	Final Scoping Report
GN	Government Notice
IDP	Integrated Development Plan
IWWMP	Integrated Water and Waste Management Plan
HIA	Heritage Impact Assessment
LM	Local Municipality
LTPH	Long Term Plant Health
NEMA	National Environmental Management Act
NHRA	National Heritage Resources Act
NEMWA	National Environmental Management: Waste Act
NWA	National Water Act
PGDS	Provincial Growth and Development Strategy
PoS	Plan of Study
PPP	Public Participation Process
PSDF	Provincial Spatial Development Framework
RO	Reverse Osmosis
SANBI	South African National Biodiversity Institute
WML	Waste Management Licence
WUL	Water Use Licence

1. INTRODUCTION

Lethabo power station operates an open cooling system consisting of six concrete, wet and hyperbolic cooling towers. Cooling towers 1, 2 and 3 are situated on the west side of the station and cooling towers 4, 5 and 6 are located on the east side of the station. The power station is currently serviced by one cooling water treatment plant (CWTP) which is located on the western side of the station. This system treats the entire power station's cooling water as well as maintaining the water management and cooling water chemistry for the station.

1.1 Need and desirability of project

The new CWTP is required for the following reasons:

- With only west side treatment the current treatment plant cannot be taken out for maintenance because there is no redundancy. Therefore the plant is being operated at maximum capacity, which will impact negatively on the Long Term Plant Health (LTPH).
- In the event of a half station shutdown, the cooling water chemistry on the east side of the power station cannot be maintained as the transfer system will be offline. This will put the LTPH of the condensers at risk because the dissolved salt increase which can cause corrosion to metal components, aggression of concrete components and scale in the condenser tubes thus reducing thermal efficiency.
- The west side lime softening clarifiers are stressed as they are operating at maximum capacity when the station is on full load. This presents several operational and maintenance challenges.

This inadequacy, therefore, necessitated the installation/building of a cooling water treatment facility on the east side of the station. The proposed facility will improve the overall cooling water availability and reliability by providing opportunity for critical and routine availability.

2. LOCATION OF PROJECT

The Lethabo Power Station was built in the 1980s in the Northern Free State Province. It is situated on portion 1814 of Farm Bankfontein within the Metsimaholo Local Municipality which forms part of the Fezile Dabi District Municipality. The power station is located east of Viljoensdrif and south-east of Vereeniging and is situated close to the Vaal River at the following co-ordinates S26°44'24.94" and E27°58'29.89"; SG Code: F0160000000181400000. See **Figures 1 and 2** below.

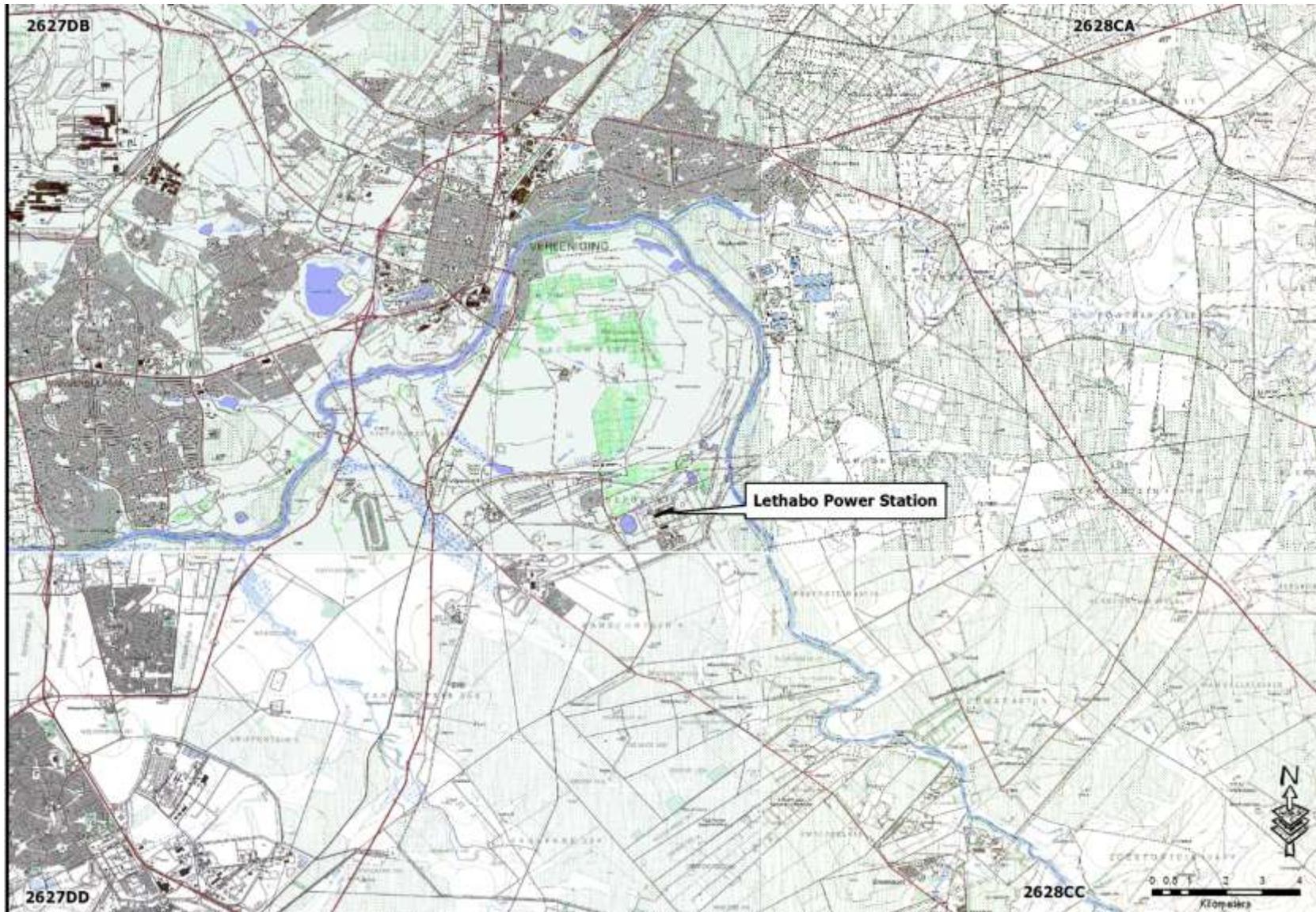


Figure 1: Location of Lethabo power station relative to Vereeniging

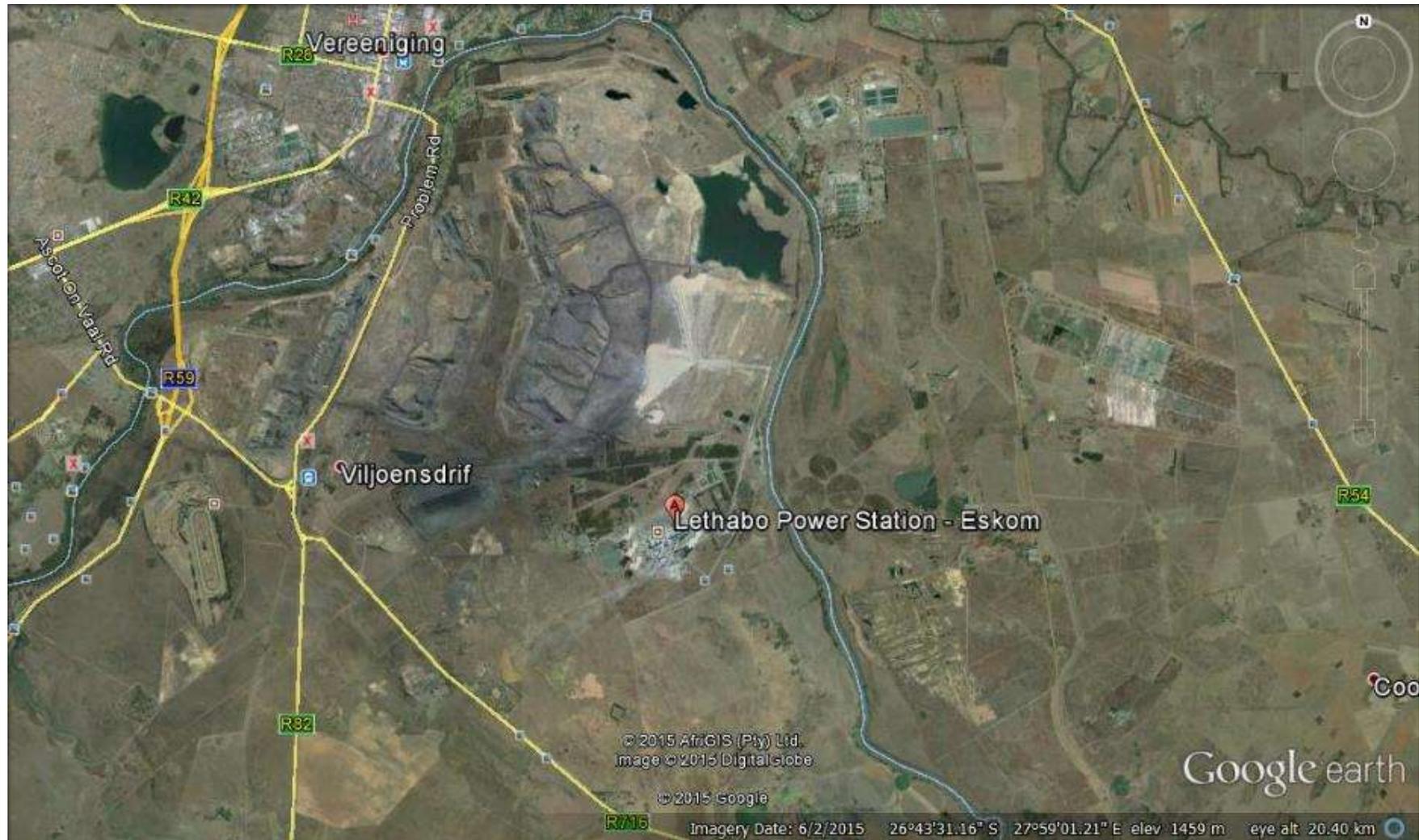


Figure 2: Google Earth image of Lethabo power station and surrounding area

3. DESCRIPTION OF PROPOSED ACTIVITY

The Applicant, Eskom, proposes to construct a CWTP on the east side of the Lethabo power station within the footprint of the power station (see **Figure 3** below) to augment the cooling water treatment facilities for the power station, thus allowing for maintenance of the existing CWTP whilst continuing with the treating of cooling water. The plant will remove the salt load equivalent of the maximum make-up to the system, so that the cycles of concentration are maintained at the constant level. Overall, the eastern and western plants will be operated so that the total volume of effluent will remain the same as what is currently generated.

When Lethabo power station was originally built in the 1980s, it was planned that a CWTP would be built on the east side of the station together with the existing CWTP on the west side. However, due to a number of limitations the east plant was never constructed. Eskom proposes to build the new CWTP on the site.

The proposed CWTP will remove dissolved and suspended material using lime softening and reverse osmosis from a fraction of the cooling water to reduce blow down and ensure compliance of the cooling water chemistry with the cooling water standards.

The required footprint of CWTP is between 6400 m² & 10000 m². A maximum of 17MI/day of water shall be extracted for lime softening treatment from the cooling water circulating system and existing pipelines will remove a maximum of 10MI/day of clarified water through ultrafiltration with the remainder sent to cooling water tower ponds on the eastern side of the power station.

The ultra-filtered water will then be fed to the reverse osmosis section and permeate generated will be removed to the cooling tower ponds. The desalination plant is designed for a total permeate flow of 7.5 MI/day at a recovery rate of 75-80%.

Reject and salt concentrated water are in the same stream. The other stream is chemical effluent generated during the maintenance procedures of the desalination plant. The effluent from this process (reverse osmosis reject) will be sent via pipeline to the existing ash conditioning system at the power station where the effluent will be mixed with the ash generated by the power station in order to dampen the ash and act as a form of dust suppression before it is disposed of at the ash disposal site.

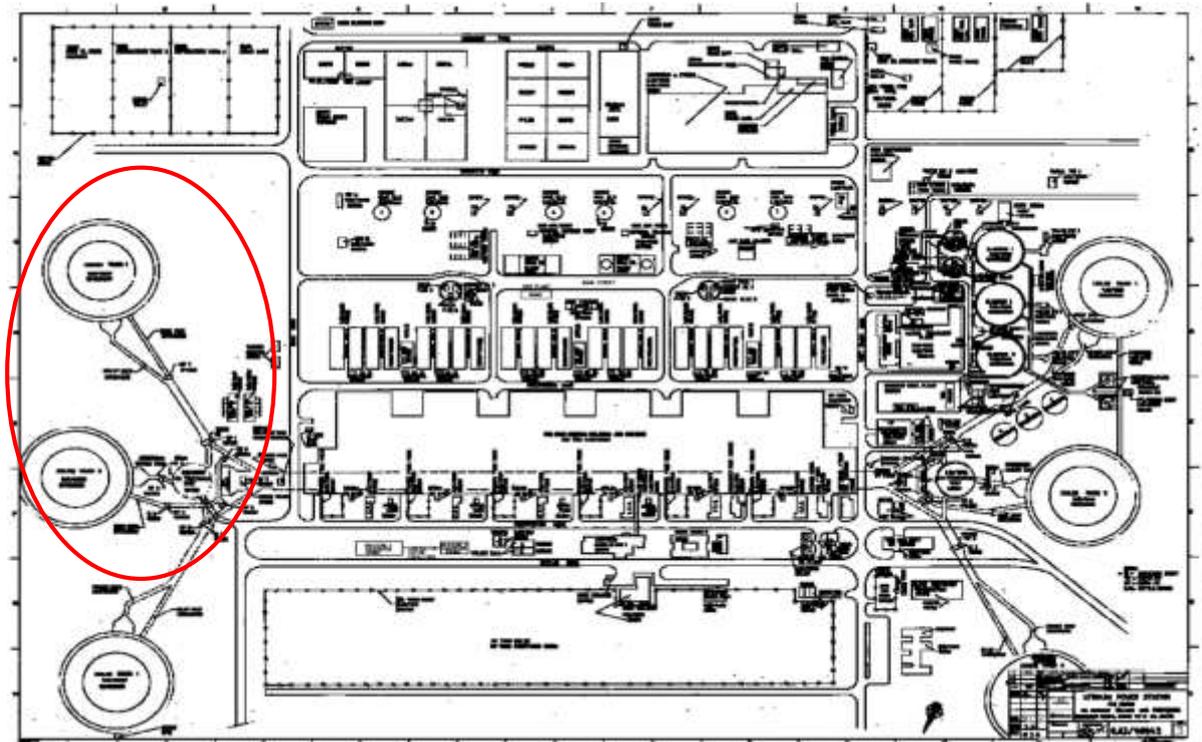


Figure 3: Circled area in red indicates potential area where new CWTP is to be constructed

3.1 Siting alternatives for CWTP

The criteria used to identify the siting alternatives were as follows:

- An area that could meet the required footprint of between 6400m² and 10000m².
- Capital Cost
- Operational Cost
- Expandability
- Ability to use existing infrastructure, i.e. integration with existing infrastructure
- Existing access proximity to required interface points

There are four siting alternatives for the proposed CWTP. **Figure 4** below shows an overall view of the project showing the proposed siting alternatives for the CWTP. **Figures 5 to 8** indicate that specific location of each of the sites.

3.1.1 Siting alternatives for CWTP

The siting alternatives all fall within the precinct of Lethabo Power Station.



Figure 4: Location of siting alternatives for CWTP

3.1.2 Siting alternative 1

This site is situated between cooling towers 4 and 5 and south of an access road as depicted below in **Figure 5**.

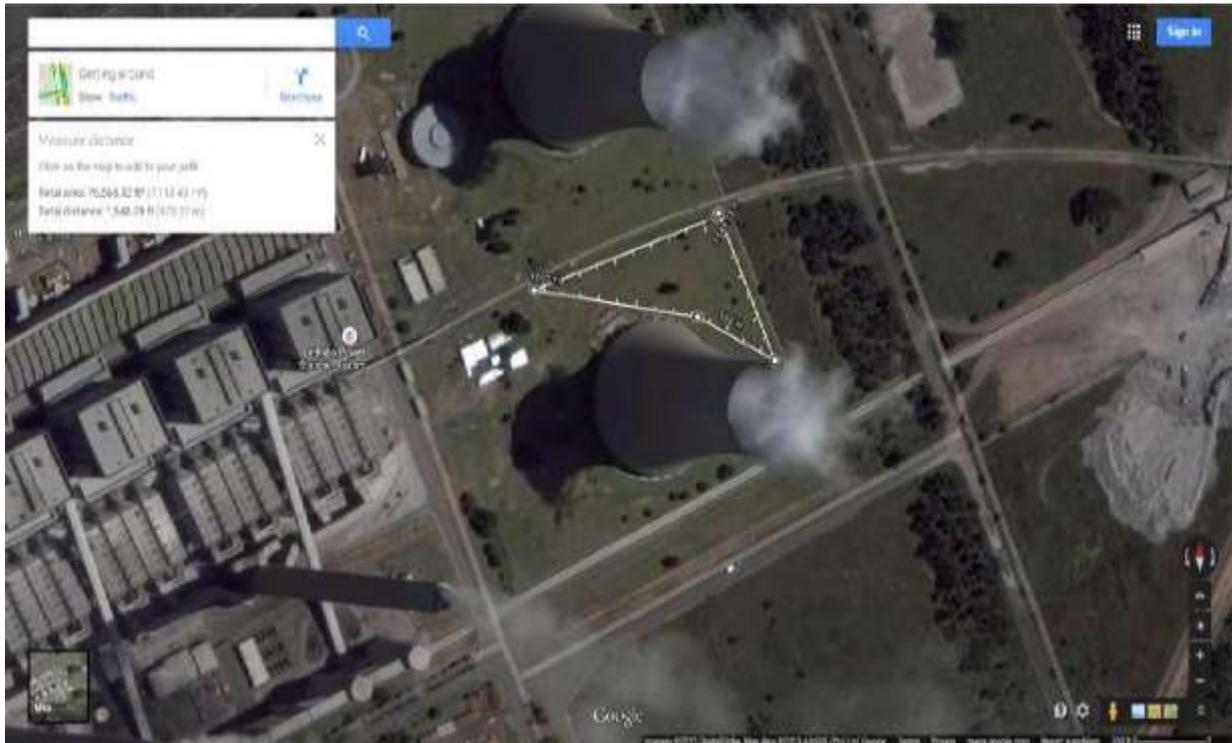


Figure 5: Siting alternative 1

3.1.3 Siting alternative 2

Siting alternative 2 is also situated between cooling towers 4 and 5 but north of and adjacent to alternative site 1 (see **Figure 6** below).

3.1.4 Siting alternative 3

Siting alternative 3 is situated between cooling towers 5 and 6 of Lethabo power station as indicated in **Figure 7** below.



Figure 6: Siting alternative 2



Figure 7: Siting alternative 3

3.1.5 Siting alternative 4

Alternative site 4 is situated to the west of cooling tower 4 (see **Figure 8** below). There is existing infrastructure for the CWTP. The infrastructure was constructed when the power station was built as the original plan was to have CWTPs on both the eastern and western side of the station but due to various reasons, only the western CWTP was built. Detailed geotechnical information is available for siting alternative 4.

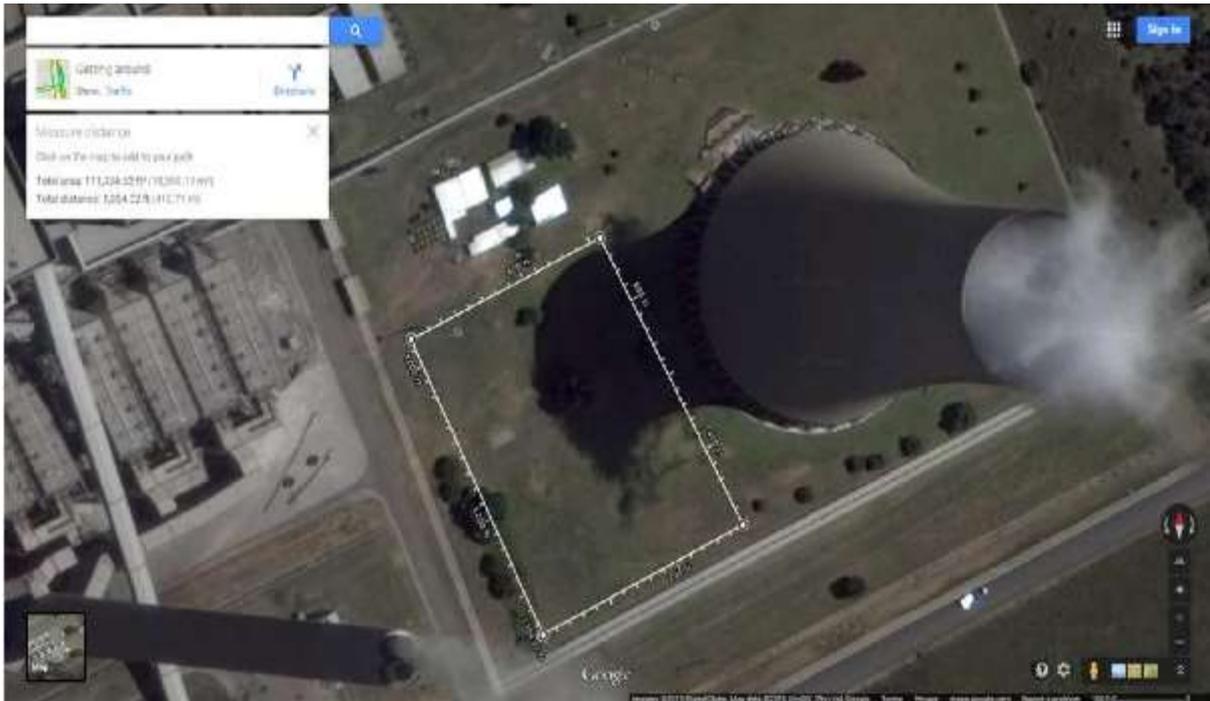


Figure 8: Siting alternative 4

3.1.6 “No go” alternative

If the CWTP is not constructed, then the area where it is proposed to be built will remain undeveloped and infrastructure previously built for it will remain unutilised. Without the additional CWTP, the existing CWTP on the western side of the power station, which is running at maximum availability, will remain the only plant servicing the entire station. Without a second CWTP, the existing plant, including the lime softening clarifiers cannot be maintained and this will result in operational issues for the power station and impact negatively on the LTPH of the equipment and infrastructure.

4. LEGISLATIVE ENVIRONMENT

The proposed construction of the Lethabo East CWTP will undergo a Scoping and EIA process that will be undertaken in terms of the National Environmental Management Act (Act No. 107 of 1998) Environmental Impact Assessment (EIA) Regulations of 2014 that were promulgated on 04 December 2014, which were published in Government Notices (GN) No. R 982, 983, 984 and 985. In addition, the legislative requirements pertaining to waste and water management will be considered as the proposed activity may have an impact on the environment in terms of waste disposal and impacts on water resources.

Pertinent legislation regarding the proposed development is captured below.

4.1 Constitution of the Republic of South Africa (Act No. 108 of 1996)

The Constitution of South Africa states that everyone has the right to an environment that is not harmful to their health or wellbeing and to have the environment protected for the benefit of present and future generations, through reasonable legislation and other measures that: (i) prevent pollution and ecological degradation, (ii) promote conservation, and (iii) secure sustainable development and use of natural resources while promoting justifiable economic and social development.

This is interpreted to mean that all developments should not infringe on or undermine the constitutional right to a safe and healthy environment of all citizens, as well as the ability of future generations to enjoy the same right.

4.2 National Environmental Management Act (No. 107 of 1998)

The EIA Regulations, 2014, promulgated in terms of Section 24(5) of the National Environmental Management Act (NEMA) are divided into four Schedules: R982, R 983 and R 984 and R 985.

Schedule R 982 describes the procedures, requirements and timeframes for the undertaking of Environmental Impact Assessments. Schedule R983 identifies activities which will trigger a Basic Assessment and R 984 identifies activities which trigger a Scoping and EIA process. If activities from both schedules are triggered, then a Scoping and EIA process will be required. Regulation 985 identifies certain additional listed activities per province for which a Basic Assessment would be required.

Listed activities from these Regulations which are triggered by the proposed project are provided in the table below. In terms of the EIA Regulations of 2014, a Scoping and EIA process is required for the proposed development.

Table 1: List of activities applicable to Lethabo East CWTP

Listed activity as described in GN R. 983 and GN R. 984	Description of project activity that may trigger the listed activity
GN R.983 Item 16: The development and related operation of facilities for the desalination of water with a design capacity to produce more than 100 cubic metres of treated water per day.	The proposed desalination plant will transfer a permeate flow of 100 000 cubic metres per day of treated water
GN R.983 Item 45: The expansion of infrastructure for the bulk transportation of water or storm water where the existing infrastructure- (i)has an internal diameter of 0,36 metres or more; or (ii)has a peak throughput of 120 litres per second or more; and (a)where the facility or infrastructure is expanded by more than 1000 metres in length;	The project will include the expansion of pipelines from the cooling towers to the clarifiers. The pipelines will have an internal diameter of 0.4 metres and a peak throughput of 196 litres per second
GN R.984 Item 25: The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of 15000 cubic metres or more.	The proposed water treatment work is expected to treat 17 000 cubic metres of water per day

4.3 National Water Act (Act No. 36 of 1998)

The National Water Act (NWA) identifies consumptive and non-consumptive water uses which must be authorised under a tiered authorisation system. Section 27 of the NWA specifies that the following factors regarding water use authorisation must be taken into consideration:

- The efficient and beneficial use of water in the public interest;
- The socio-economic impact of the decision whether or not to issue a licence;
- Alignment with the catchment management strategy;
- The impact of the water use, resource directed measures; and
- Investments made by the applicant in respect of the water use in question.

Section 21 of the National Water Act identifies listed activities for which a Water Use License (WUL) should be obtained. The Section 21 listed activities are:

- (a) Taking water from a water resource;
- (b) Storing water;
- (c) Impeding or diverting the flow of water in a water course;
- (d) Engaging in a stream flow reduction activity contemplated in Section 36;
- (e) Engaging in a controlled activity identified as such in section 37(1) or declared under Section 38(1);
- (f) Discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit;
- (g) Disposing of waste in a manner which may detrimentally impact on a water resource;
- (h) Disposing in any manner water which contains waste from, or which has been heated in any industrial or power generation process;
- (i) Altering the bed, banks, course or characteristics of a watercourse;
- (j) Removing, discharging, or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people; and
- (k) Using water for recreational purposes.

A pre-application meeting was held with the Gauteng Department of Water and Sanitation (DWS) on 23 September 2015 where the proposed project was discussed with DWS officials. DWS was informed that the Lethabo power station has an existing Water Use Licence (WUL) that was issued in 2011 and that applies to sections 21(a), 21(b) and 21(g) of the NWA. The proposed CWTP will not result in an increased abstraction of water from the Vaal River or an increase in volume of waste generated as the water volume treated will not increase with the new plant, the new plant will merely share the load and allow redundancy.

At the meeting, the DWS confirmed that:

- **A WUL was not required**
- **The power station's existing Integrated Water and Waste Management Plan (IWWMP) would need to be updated with the information of the proposed east CWTP in order to document the potential impacts and mitigation measures associated with the CWTP prior to the commencement of project construction**

4.4 National Environmental Management: Waste Act 2008 (Act No. 59 of 2008)

The purpose of the National Environmental Management: Waste Act (NEMWA) is to regulate waste management in order to:

- protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development;
- to provide for institutional arrangements and planning matters;
- to provide for national norms and standards for regulating the management of waste by all spheres of government and to provide for specific waste management measures;
- to provide for the licensing and control of waste management activities;
- to provide for the remediation of contaminated land;
- to provide for the national waste information system;
- to provide for compliance and enforcement and to provide for matters connected therewith.

In 2013, the list of waste management activities that have, or are likely to have, a detrimental effect on the environment was promulgated in terms of GN 921 in terms of section 19(2) of NEMWA. These activities require a waste management licence (WML) in accordance with section 20(B) of NEMWA.

The CWTP will produce sludge, reverse osmosis (RO) reject and chemical effluent. The RO reject and sludge will result from normal operation of the CWTP and the chemical effluent will be produced during routine maintenance of the CWTP.

A pre-application meeting was held on 16 October 2015 with the Integrated Authorisation Unit of DEA to discuss, amongst others, the requirements of DEA in terms of waste management. After discussion, the official from the waste section of DEA advised that:

- **A WML would not be required and that only an environmental authorisation was required because the proposed CWTP triggers activities listed in the 2014 EIA Regulations.**
- **A WML was not required because the Lethabo power station was operating with a pre-existing lawful use permit that permits the facility to dispose waste through the incorporation of waste issues in the power station's integrated water and waste management plan (IWWMP).**
- **The DEA advised that the power station's IWWMP be updated with relevant information regarding the proposed CWTPs waste activities.**
- **It was also noted that both plants will be operated so that the volume of waste generated will remain the same as per current operations.**

4.5 National Heritage Resource Act 1999 (No. 25 of 1999)

According to section 38(1) of the National Heritage Resources Act (NHRA), any person who intends to undertake a development categorised as—

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50 m in length;
- (c) any development or other activity which will change the character of a site—
 - (i) exceeding 5 000 m² in extent; or
 - (ii) involving three or more existing erven or subdivisions thereof; or
 - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
 - (iv) the costs of which will exceed a sum set in terms of regulations by the South African Heritage Resources Agency (SAHRA) or a provincial heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000 m² in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority - must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

The character of the site is industrial as it is situated within an operational power station especially siting alternative 4 that has existing infrastructure beneath it. However, a desktop HIA study will be done to ensure that no heritage resources will be impacted and for due diligence purposes.

4.6 Regional plans

The following regional plans will be considered during the execution of the EIA:

- Spatial Development Frameworks
- Integrated Development Plans

4.6.1 Free State Provincial Spatial Development Framework (PSDF)

The Free State PSDF is a provincial spatial and strategic planning policy that responds to and complies with the National Development Plan Vision of 2030 and the National Spatial Perspective. Amongst others, the PSDF is a:

- A policy for ensuring environmental sustainability and for the aligning/integrating of land use activities in accordance with defined sustainability objectives; and
- A strategy towards enhancing the well-being of the people and environment of the province.
- Together with the Provincial Growth and Development Strategy (PGDS), the PSDF is a critical instrument in guiding the use of the resources of the provinces that will ensure sustainable outcomes based on the development needs and priorities of the province

Throughout the document provision of electricity remains a core objective. For example, Pillar 2 of the PGDS refers to education, innovation and skills development with one of the objectives being the provision of new basic infrastructure at local level including electricity and sanitation.

4.6.2 Fezile Dabi District Municipality Integrated Development Plan

The Integrated Development Plan (IDP) (2014-2015) articulates the short-term, medium, and long-term approach in discharging the Municipality's responsibility to accelerate service delivery. It lists the achievements and goals of the Municipality for the coming financial year including the creation of decent work and elimination of poverty through the growth of the municipal economy.

According to the IDP, the average unemployment rate in 2007 within Fezile Dabi District Municipality was 33.6% hence there is an urgent need to create employment opportunities, in order to reduce unemployment and associated poverty. The Fezile Dabi DM is the district where households have the highest access (91.7%) to electricity in the Free State.

4.6.3 Metsimaholo Local Municipality Integrated Development Plan (2014/2015)

The IDP is the master plan for the LM which provides an integrated and sound framework for the development of the municipal area by improving coordination of development programmes of the municipality and other spheres of government to improve the lives of the people living in this area. The unemployment rate in the LM is slightly lower than the DM at 32.1% hence one of the programmes is to improve the economy of the municipality in order to improve work opportunities.

5. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

Senkosi Environmental Consulting cc was appointed by Eskom to undertake the Environmental Impact Authorisation (EIA) process for the proposed Lethabo CWTP. Senkosi Environmental Consulting is a wholly black owned closed corporation, officially registered in 2007. The company is led by young, dynamic black South Africans from previously disadvantaged communities. Senkosi Consulting has a vision of becoming the preferred professional service provider of choice within South Africa and beyond and strives for active involvement and participation in the main stream economy of South Africa by providing opportunities to historically marginalized individuals through increased participation of technical expertise within the fields of engineering, environment and natural sciences.

Senkosi Consulting has conducted several studies and obtained authorisations in the environmental field. In 2010 Senkosi Consulting was appointed by Eskom to conduct a Scoping and EIA for the SOL B 400/123kV substation and associated 3x 400kV turn-in turn-out power lines near Secunda in Mpumalanga Province. The organisation also developed a number of Environmental Management Programmes (EMPrs) for Eskom substations including Olien, Ferrum, Snowdon and Mercury. In 2013, Senkosi Consulting was appointed to conduct the specialist walk down and compile the associated EMPr for the first 120km of the Masa-Ngwedi 765kV and 400kV power lines in the Limpopo Province. During the same year, Senkosi Consulting was appointed by Eskom Distribution to undertake the Water Use Licence Application (WULA) and EMPr for the Glen Austin and President Park 11kV feeder upgrade in Gauteng.

The curriculum vitae of the team members as listed below is attached as Appendix 1.

Table 2: Project team members

Name	Qualifications	Experience	Duties
Mr. S. Nkambule	<ul style="list-style-type: none"> BSc (Environmental Management) 	15 years	Project Leader
Ms J. Beater	<ul style="list-style-type: none"> MA (Heritage Studies) MSc (Env. Management – dissertation outstanding) 	20 years	EAP
Mr. M. Mahlangu	<ul style="list-style-type: none"> BSc Honours (Botany and Plant Ecology) 	20 years	Public Participation

6. SCOPING AND EIA PROCESS

The EIA process comprises two main phases: i.e. Scoping Phase and EIA Phase. The EIA process culminates in the submission of an EIA Report and an Environmental Management Programme (EMPr) to the competent authority for decision making. A simplified diagram of the authorisation process is depicted in **Figure 9** below.

The Scoping Phase for the proposed Lethabo East CWTP has been undertaken in accordance with GNR. 982 of 4 December 2014 in terms of sections 24(5) and 44 of NEMA (Act No. 107 of 1998). This Scoping process is aimed at identifying potential issues and impacts associated with the proposed project, and defining the extent of studies required that will take place during the EIA phase.

6.1 Scoping and EIA process

The Scoping and EIA process has commenced. A pre-application meeting was held on 16 October 2015 with the Integrated Authorisation Unit of the National Department of Environmental Affairs (DEA) to discuss the environmental process to be followed and waste management requirements for the proposed Lethabo CWTP. The result of the meeting was that a waste management licence was not required hence only an environmental authorisation was required and that the EIA unit of the Department would deal the project. The minutes of the meeting are attached to this report as Appendix 2-1 (see Public Participation section of this report).

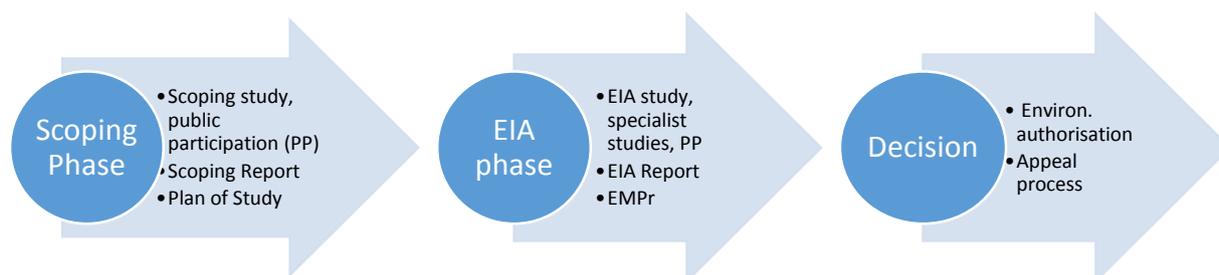


Figure 9: Simple depiction of Scoping and EIA process.

An application was submitted to the DEA; a draft scoping report (DSR) was compiled, and the public participation process for the project commenced with advertising the project in a regional newspaper; the placement of notices on site and distribution of site notices and BIDs

to directly affected landowners as well as other interested and affected parties (I&APs). A Focus Group meeting was held with stakeholders and this report, the Final Scoping Report (FSR) is submitted to DEA for acceptance.

6.2 Commenting authorities

Copies of the reports generated for this project will be sent to the following authorities for their comment and input:

- Free State Department of Economic Development, Tourism and Environmental Affairs (DETEA) as the power station is situated within the Free State Province.
- Free State Department of Water and Sanitation.
- Free State Provincial Heritage Resources Agency (PHRA) / South African Heritage Resources Agency (SAHRA): The PHRA is responsible for commenting on heritage issues, however, due to capacity issues the PHRA may refer the project to SAHRA for comment.
- Metsimaholo Local Municipality (LM) in which the power station and proposed project fall
- Fezile Dabi District Municipality (DM).

7. PUBLIC PARTICIPATION PROCESS

7.1 Introduction

Public participation forms a continuous part of the EIA process; starting from the beginning of the EIA up until the end of the appeal period after a decision has been given by the authority. To this effect, Interested and Affected Parties (I&APs) are given the opportunity to be part of the decision-making process for the proposed development. The main objective of public participation process is to provide I&APs with information to allow them to meaningfully contribute to the study process by way of:

- Identifying issues of concern, providing suggestions for enhanced benefits and alternatives;
- Contributing local knowledge and experience; and
- Verifying that their issues have been accurately captured.

This section outlines the activities undertaken to date and the way forward until the environmental authorisation is provided and through the appeal period. The aim of this PPP report is therefore to:

- Provide a description of the public participation process conducted;
- Provide a list of comments and issues raised;
- Give feedback to I&AP's on the process' findings during the Scoping Phase and recommendations; and
- Outline the way forward.

7.2 Pre-consultation meetings

Senkosi Consulting had pre-consultation meetings with the DEA and the DWS (see Appendix 2-1 for minutes of these meetings and associated attendance registers).

- The meeting with DWS concluded that an application for a WUL was not required for this project;
- The purpose of the meeting with DEA was to get clarity on whether to submit an integrated application form (waste and EIA application) or only EIA application form. It was advised that only an environmental authorization was required and that an application for a waste management licence was not required as the power station has a pre-existing lawful use permit that permits the facility to dispose waste through the incorporation of waste issues in the power station's IWWMP.

7.3 Database establishment

NEMA defines I&APs as those people, groups of people or organizations that have an interest in or are affected by the proposed activity, and any organ of state that may have jurisdiction over any aspect of the activity. Names and details of identified I&AP's are recorded in a register of stakeholders.

For this project, the database of I&APs will be generated after a fair and transparent registration process and will be continuously updated during the EIA process until the end of appeal period. The database consists of the following stakeholders:

- Adjacent Landowners
- NGOs
- Local Municipality
- District Municipality
- Provincial Authorities; and
- Government Departments.

See Appendix 2-2 for the stakeholder database.

7.4 Notification of and communication with I&APs

Information relating to the project was sent to all registered I&APs via email on 30 October 2015. The information included a Background Information Document (BID), Comment Sheet, and letter that encouraged stakeholders to participate in the project. See Appendix 2-6 for a copy of documents distributed to I&APs.

Senkosi Consulting telephonically contacted stakeholders to confirm that they had received the information documents package and encouraged them to respond. A request to stakeholders that they must acknowledge receipt of information documents package was also sent out to stakeholders via emails. All responses received will be adequately addressed in the Comments and Responses Report (see Appendix 2-3).

7.5 Site notices

Several site notices were placed at different strategic locations within the premises of Lethabo power station (see Appendix 2-4).

7.6 Advertising of project

It is required by law (NEMA 2014 EIA Regulations) that the project must be advertised in one of the local and in one of the provincial / regional newspapers. The availability of Draft Scoping Report (DSR) was advertised in the Citizen Newspaper on 23 November 2015. The advertisement was to have been appeared in the Sasolburg Ster and Vereeniging Ster News newspapers on 27 November 2015 but due to technical difficulties experienced by the newspapers, the advertisement was not featured although payment had been made. I&APs were given 30 days to comment on the project (see Appendix 2-5 for a copy of the advertisement).

7.7 Focus group meetings

The new development is to be constructed inside the premises of the Lethabo power station where access is strictly controlled. The PP Team is of the opinion that the general public is unlikely to be affected by the project and the general public will not easily notice the new development. Hence, stakeholder consultation meetings will take the form of Focus Group meetings and if necessary one-on-one meetings including public meetings.

A Focus Group meeting was held with stakeholders on 20 January 2016 at the Metsimaholo Local Municipality. Minutes of meetings were circulated to all attendees and the minutes are appended to this report (see Appendix 2-7) as well as the Comments and Response Report (Appendix 2-3) that contains all comments and issues raised during the meeting and during the public review of the DSR.

7.8 Review of Draft Scoping Report and Final Scoping Report

The public review period for the DSR was from 23 November 2015 to 15 of January 2016.

Newspaper advertisement and emails were used to notify stakeholders of the opportunity to review the document and to attend meetings. The DSR was placed at the Sasolburg and Vereeniging Public Libraries where they were easily accessed by the public. An electronic version of the DSR was distributed to I&APs on request.

Both the DSR and FSR and associated appendices can be found on the Eskom website at:

http://www.eskom.co.za/OurCompany/SustainableDevelopment/EnvironmentalImpactAssessments/Pages/Environment_Impact_Assessments.aspx

Copies of the FSR will be made available to the public at the Sasolburg and Vereeniging Public Libraries when the FSR is submitted to the DEA for acceptance. Registered I&APs will be informed about the availability of the FSR and provided with a copy of the Executive Summary of the FSR. They will also be informed that they can submit any comments they have directly to the DEA.

7.9 Comments and response report

The comments received in response to the announcement via the distribution of the BIDs, placement of site notices and advertisements, as well as comments received at the focus group meeting was captured in the Comments and Response Report (CRR). The EAP and Eskom addressed all concerns received before incorporating the CRR into the Final Scoping Report. The CRR is attached as Appendix 2-3.

The consultation process to be followed in the study will be guided by Chapter 6 of NEMA and the main focus will always be but not limited to the involvement of all I&AP's and key government departments. Based on the consultation process undertaken to date, the public participation team is confident that a robust and transparent public consultation process has been followed.

8. ENVIRONMENTAL ATTRIBUTES OF PROJECT AREA

Details on the baseline receiving environment in which this project occurs and potential environmental issues are addressed in this section. Possible impacts on the receiving environment which may occur as a result of the project are also addressed in this section.

The potential impacts identified during the Scoping Phase will be assessed during the EIA Phase to determine the significance of these impacts and potential mitigation measures will be provided to avoid the impact, or to minimise the impact. Potential rehabilitation measures will also be provided for impacts which cannot be avoided. All mitigation and rehabilitation measures will be incorporated into the EMP which should be implemented during the construction, operation and decommissioning phases of the proposed project.

8.1 Climate

The area receives about 650 - 750 mm of rain on average per year. From May to September, rainfall is minimal, with most rainfall occurring from late October to March, peaking between November and January. Temperatures in summer peak during December and January at a daily average of 26°C, with an average daytime temperature of 17°C for June. During July, night temperatures are on average -1°C, with frosts during winter common. (Mucina and Rutherford, 2006). According to the draft 2014/2015 IDP of the Fezile Dabi DM, the area has an evaporation rate of 1600mm to 2100mm per annum.

8.2 Geology and soils

According to the published 1:250 000 Geological Map of Wes-Rand (Sheet number 2626) (see **Figure 10** below), the area is predominantly underlain by sandstone, shale and coal of the Vryheid Formation, Ecca Group, Karoo Supergroup. Dolerite is, also, indicated and was intruded into the Karoo Supergroup rocks during the Jurassic Period. Aeolian sand has subsequently, during the Cenozoic Era, been deposited over the dolerite and Karoo rocks (BKS 2012:2).

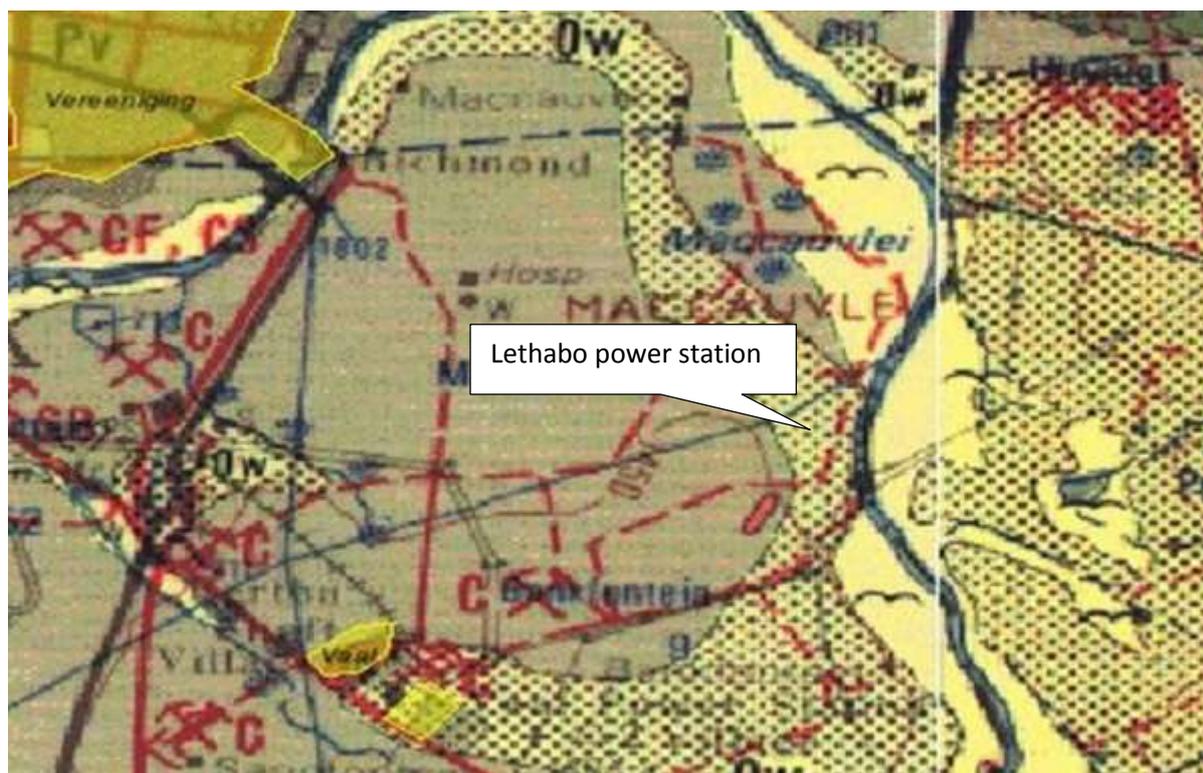


Figure 10: Copy of section of geological map

In addition, the presence of medium to highly expansive clays across the site was also highlighted as a matter of concern. Expansive clays exhibit volumetric change with a change in moisture content. Such materials expand, or heave, when wet and shrink when dry. The design of any structures, and their foundations, on such material needs to take cognisance of the movement which could occur. The calculated heave is in the order of 40mm to 65mm (BKS 2012:2).

8.3 Vegetation

The study sites fall within the original extent of the Central Free State Grassland as defined by Mucina and Rutherford (2006). The Central Free State Grassland (Unit Gh 6) is a relatively short grassland on undulating plains. In its original form, it is dominated by *Themeda triandra* whilst *Eragrostis curvula* and *E. chloromelas* become more dominant in degraded habitats. Severely degraded clayey bottomlands are often dominated by dwarf karroid shrubs, whilst riverine areas and severely overgrazed/trampled low-lying areas are prone to encroachment by *Acacia karroo* (Mucina and Rutherford 2006). This vegetation type is not officially listed as a threatened ecosystem, but it is regarded as vulnerable (Mucina and Rutherford 2006) as large portions have been transformed through cultivation or by the construction of dams, with only small portions protected such as in the Rustfontein Dam Nature Reserve.

A total of 1432 plant species have been recorded in the Sasolburg/Vereeniging Area according to the SANBI database. It is unlikely that many of these species will occur within the project area due to the highly disturbed nature of the project area. Of the recorded species, 32 species have a red-data status. It is highly unlikely that the presence of these species will occur on site due to the disturbed nature of the area. Alien invasive species may be present as a result of previous disturbance to the area. The current condition of the project area is one of sparse grass cover and several invasive tree species together with existing infrastructure including cooling towers (see **Figure 11** below).



Figure 11: Vegetation in project area

A list of all vertebrate species (reptiles, birds, and mammals) that could occur in the subject study area according to the ADU and SANBI databases is presented in Table 3 below. Due to the transformation and disturbance of the proposed project site, it is not expected that any of the listed species breed or depend on the proposed project area for survival.

Table 3: Red data terrestrial vertebrates that could occur (ADU database)

Common name	Species name	Conservation status
<i>Reptiles - Serpents</i>		
<i>Chiroptera - Bats</i>		
<i>Myotis tricolor</i>	Temminck's Myotis	Near Threatened
<i>Rodentia - Rodents</i>		
<i>Lemniscomys rosalia</i>	Single-Striped Grass Mouse	Data Deficient
<i>Rhinolophus blasii</i>	Blasius's Horseshoe Bat	Vulnerable

Although it is not anticipated that the proposed development will impact on sensitive or protected biodiversity due to the highly disturbed nature of the project area, an assessment will confirm this.

8.4 Surrounding land uses and visual aspects

The proposed CWTP falls within the footprint of the Lethabo power station. The Vaal River is situated approximately 1 km from the project area. To the west of the power station is the small settlement of Viljoensdrif and to the north-west the industrial town of Vereeniging.

The surrounding areas especially to the north and north-west are heavily industrialised together with sprawling urban/residential development. East and south of the power station agricultural activities still take place. Water from the Vaal River is used to irrigate farm lands. To the south-west of the power station, the industrial town of Sasolburg can be found where the Sasol petrochemical refinery is located. See **Figure 12** below.

To the immediate west and south of the power station, a number of roads are located including the R82 that goes to the town of Koppies and the R716 that goes to Deneysville and to the Vaal Dam.

The proposed CWTP is situated in an area especially to the south east of the main Power Station building that is highly industrialised and urbanised as well as being situated close to the cooling towers that are 164m in height effectively dwarfing the CWTP. In addition, the location of the CWTP on the eastern side of the power station away from access roads and between the power station and Vaal River, the closest activities take place east of the Vaal River thereby limiting its impact to the power station.

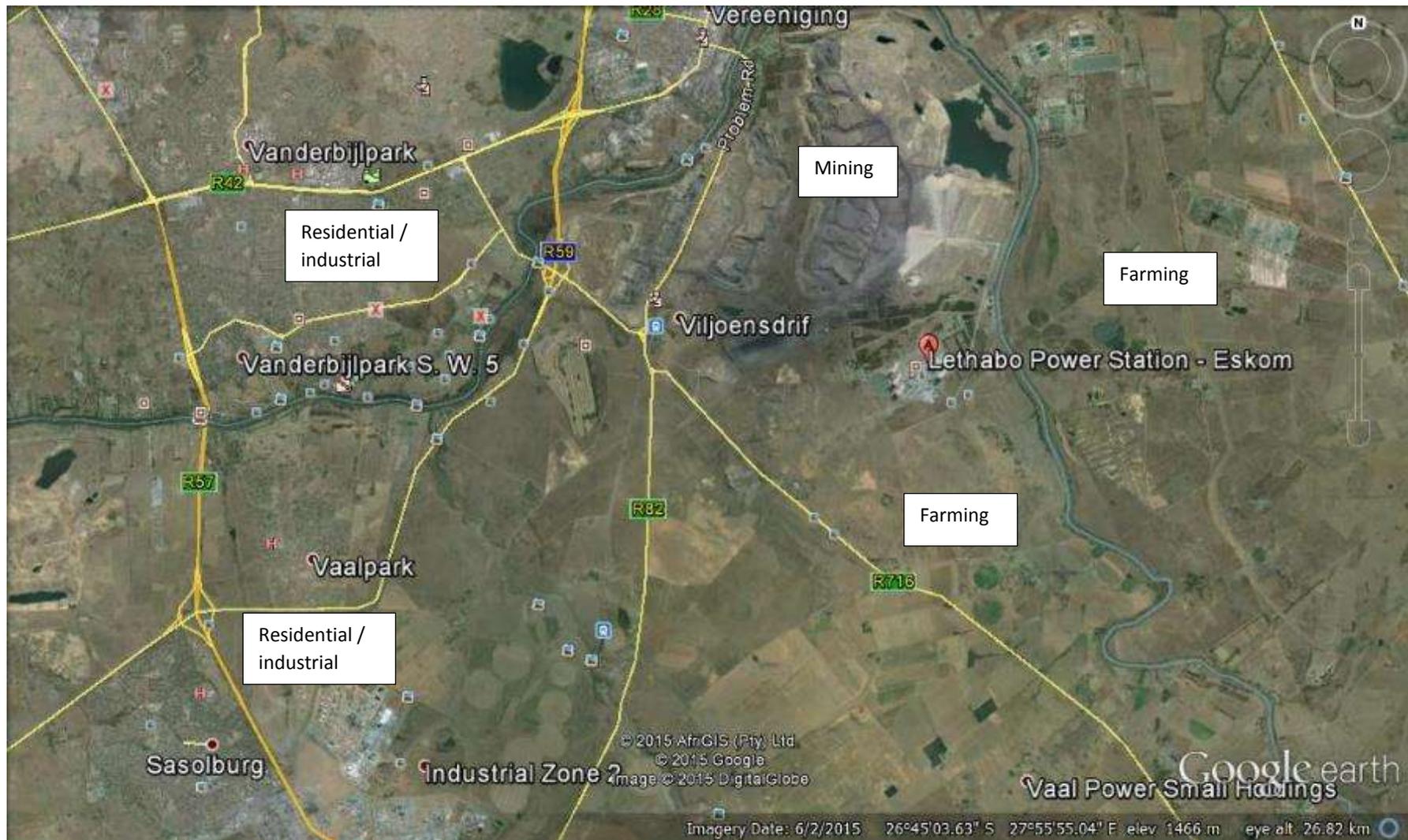


Figure 12: Land uses around Lethabo power station

8.5 Heritage

The wider area surrounding the project area has extensive history. During the Anglo-Boer War of 1899-1902, all the Boer forces engaged in the then Orange Free State withdrew to Vereeniging and by 26 May 1900, the town had been evacuated and the railway bridge crossing the Vaal River had been blown up by the Boer forces to hinder the movement of the British forces. The British crossed the Vaal River at Viljoensdrift which is situated just west of the power station. Representatives of the Boers met at Vereeniging on 15 May 1902 to elect a commission to discuss peace terms with the British and on 31 May 1902, the terms were accepted and the treaty is known as the Treaty of Vereeniging (Jones and Jones 1999:233).

On 21 March 1960, the Sharpsville massacre took place. Sharpsville is a township situated in Vereeniging and was established in 1942 and named after the then mayor of Vereeniging, John Sharpe (Reader's Digest 1992:398). The Pan Africanist Congress called for a work stoppage in the Vereeniging area to protest against the pass system that forced Black South Africans to carry passes with them wherever they went. The police opened fire on the crowd near the police station and 69 people died in the ensuing gun fire (Reader's Digest 1992:403). Sharpsville is still commemorated today with 21 March declared a public holiday which is called Human Rights Day.

During the anti-apartheid protests of the 1980s, the Vaal Triangle was a hive of activity and unrest. Due to this, on 23 October 1984, 7 000 army troops moved into Sebokeng township near Vereeniging where they undertook door-to-door searches looking for instigators of the unrest before moving on to Sharpsville and Boipatong. At the same time some 800 000 workers at key parastatal industries such as Iscor in Vereeniging stayed away from work as part of the unrest (Reader's Digest: 476-477). This unrest continued until 1994.

The construction of the power station started in 1980 and the first set of six generating units went into commercial operation in December 1985. During site clearing, 350 hectares of Blue gum plantation had to be removed with 190,000 trees cleared over a period of five months. The removal of the Blue Gum trees saw a significant increase in the underground water table hence a piling foundation system for all the major structures was required (Lethabo Power Station 2015: Online). This indicates that the site is heavily impacted by previous and current activities and the possibility of finding intact significant heritage resources is highly unlikely.

The SAHRA fossil sensitivity map (**Figure 13** below) indicates that the site is situated in an area of very high fossil sensitivity.

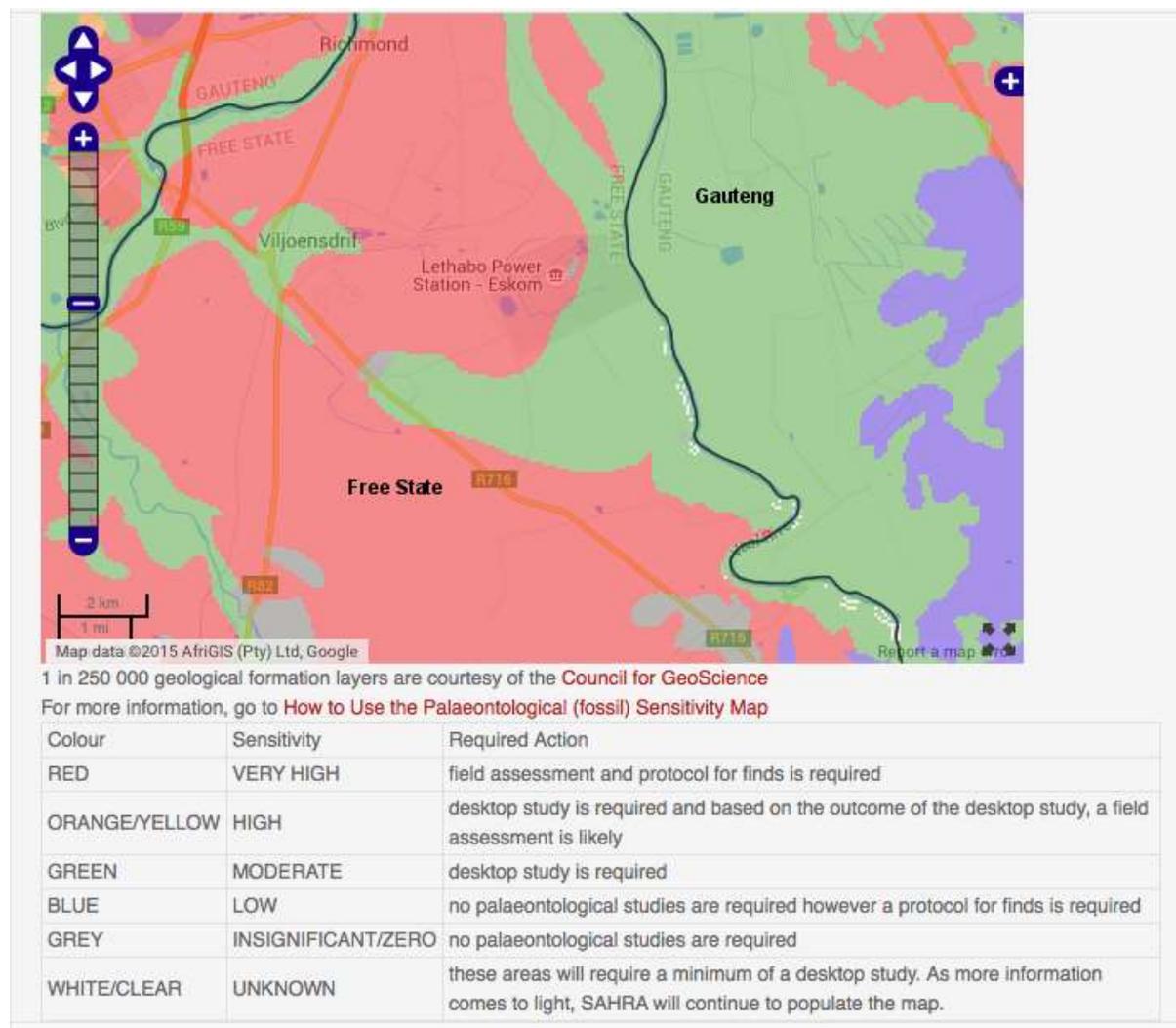


Figure 13: Fossil sensitivity of power station and surrounding area

Due to the proposed size of the CTWP, it triggers section 38 (1) of the NHRA which states that any person who intends to undertake a development categorised as—

(c) any development or other activity which will change the character of a site;

(i) **exceeding 5 000m² in extent**

must notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

It is highly unlikely that intact and significant heritage resources, including fossils, will be present due to the highly degraded nature of the project area with existing cooling towers, conveyer belts and previous excavations that took place in the area.

8.6 Water resources

The study area falls within Water Management Area 8 (Upper Vaal) in quaternary catchment C21G. The proposed sites for the CWTP are situated over 1km from the Vaal River. No obvious drainage lines or wetlands could be found within 500 m of the potential sites.

As the current volume of water abstracted from the Vaal River will not increase, there is no impact by the proposed project on this water resource.

It was stated that once the gum trees had been removed to make way for the power station, there was a significant increase in the underground water table hence a piling foundation system for all the major structures was required (Lethabo Power Station 2015: Online).

The geotechnical report by BKS compiled in 2012 stated that in terms of groundwater no seepage was evident in any of the test pits even though the investigation was carried out in January which is within the wet season. However, it was recommended that normal site precautions should be taken to ensure that water does not pond across the site or stand at the base of excavations. The report also stated that a water table is often encountered at the top of the rock level but in the case of the siting alternative 4, the rock was well jointed and blocky in appearance therefore it was likely that the water table is situated at depth.

8.7 Social

This section provides contextual information regarding the socio-economic environment and profile of the region in which the proposed project will take place.

The Lethabo power station is situated within the Metsimaholo LM that falls in the Fezile Dabi DM. The information provided below comes from the 2014/2015 Integrated Development Plans (IDPs) of the LM and DM.

The Metsimaholo LM came into existence after the elections that took place in December 2000. It is a Category B municipality and is situated in the northern part of the Fezile Dabi DM Region. The former Sasolburg, Deneysville and Oranjeville Transitional Local Councils and a section of the Vaal Dam Transitional Rural Council are included in the Metsimaholo Region. The largest urban unit is Sasolburg followed by Deneysville and Oranjeville. Population distribution in the municipality is heavily urbanized (91% urban and 9% rural). This tendency

is directly related to the strong industrial and manufacturing character of the region with the majority of the rural population active within the agricultural sector.

The Vaal River and Vaal Dam form the northern boundary of the area, which also serve as the boundary between the Free State and Gauteng Provinces. A significant portion of the Metsimaholo region is included in the Vaal River Complex Regional Structure Plan, 1996. This plan is a statutory land use control document, which is applicable to other land located along important water resources such as the Vaal Dam, Vaal River and Barrage.

The official statistics according to Statistics South Africa's Census 2001, Community Survey 2007 and Census 2011 were used to provide an overview of the municipality's demographic and socio-economic profile. The population of the LM showed an increase of 28.6% (33 154) from 2001 to 2011 whilst the number of households increased by 41.8% (13 495) over the same period.

The annual personal income levels (Census 2011) reveals that 43% of the residents of the LM do not have any income with another 17.7% having an income of less than R 5 000 per month indicating that just over 60% of the population have little or no income. The unemployment rate is 32.1% hence the need for creation of work opportunities is crucial for the LM that has as one of its strategic priorities, the building of the local economy to create more employment, decent work and sustainable livelihoods.

The proposed construction of the CWTP will require the services of skilled people; however, the initial construction phase should be used as an opportunity to create work even if it is short-term for local people such as the clearing of the footprint of the CWTP, excavations, trenching for pipelines, etc.

Access by households to potable piped water inside the dwelling and yard increased from 81.0% in 2001 to 93.8% in 2011, whilst piped water outside the yard decreased from 17.8% to 5.3% over the same period. 2011 Census information showed that more households used electricity for heating, lighting and cooking compared to the status quo in 2001. 67.7% of households used electricity for heating, 86.4% for lighting and 83.1% for cooking in 2011. The uninterrupted supply of electricity therefore remains an important service delivery by the LM.

The Fezile Dabi DM contributes 31.4% to the Free State GGP, contributing 34.7%, followed. Motheo and Fezile Dabi districts' contributions have increased from 32.3% and 25.2% in 1996 to 34.7% and 31.4% in 2007 respectively. Fezile Dabi DM is expected to be the highest

growing district in the Free State province, averaging 3.8% between 2008 and 2012, followed closely by Motheo (3.3%) and Thabo Mofutsanyane (3.0%). Fezile Dabi and Motheo districts are the drivers of the Free State economy, together contributing 66.1% to the provincial GGP in 2007, while they are expected to grow by 3.6% on average from 2008 to 2012, which is above the provincial average of 3.1% forecast for the same period.

9. POTENTIAL IMPACTS OF LETHABO EAST CWTP

This chapter presents the potential impacts identified for the proposed CWTP and recommends specialist studies that need to be undertaken in the EIA phase. The phases associated with the proposed CWTP are the construction phase; operational phase and decommissioning of the plant, each of which may result in impacts on the environment.

9.1 Construction phase

Activities expected to occur during this phase are:

- Disturbed land
- Topsoil stripping
- Access roads and tracks
- All waste generated on the site will fit into the current waste management procedure at Lethabo Power Station.
- Bulk earthworks
- Concrete batch plant
- Building and plant construction
- Installation of temporary and permanent services (water, sewage, power)
- Laying of pipes
- Stormwater drainage and effluent management
- Storage of hazardous goods

Potential impacts during this phase include the potential for erosion, generation of dust and noise; spillage of fuel and concrete; littering, etc.

9.2 Operational phase

Activities expected to occur during this phase are:

- Regular maintenance of CWTP
- Supply of lime and other chemicals for treatment of water
- Ongoing removal of alien species on disturbed areas

9.3 Decommissioning phase

Activities resulting from this phase are:

- Removal of all structures and waste
- Rehabilitation of footprint of CWTP

Potential impacts for the decommission phase are similar to the construction phase and include the potential of invasive species occupying the disturbed footprint of the CWTP; dust; noise and litter, etc.

Table 4: List of environmental issues and potential impacts: construction phase

Environmental Issues	Potential Impacts	Recommendations	Reasons
Biodiversity: Construction			
Clearance of land cover / vegetation	<ul style="list-style-type: none"> • Dust and noise • Loss of topsoil • Erosion of cleared area • Spread of invasive species 	Desktop flora and fauna assessment	Site is highly disturbed by existing activities
Impacts on fauna including avifauna	<ul style="list-style-type: none"> • Construction vehicles colliding with animals and birds • Loss of local species 	Existing disturbance – desktop flora and fauna assessment recommended	Location of CWTP in operational power station and amongst cooling towers will not be attractive to neither birds or animals
Biodiversity: Operational phase			
Lack of rehabilitation of disturbed areas	<ul style="list-style-type: none"> • Spread of invasive species in disturbed areas • Erosion 	Desktop flora and fauna assessment	
Biodiversity: Decommissioning			
Footprint of CWTP not rehabilitated	<ul style="list-style-type: none"> • Spread of invasive species in disturbed areas • Erosion 	Desktop flora and fauna assessment	

Environmental Issues	Potential Impacts	Recommendations	Reasons
Geotechnical			
Pre-construction			
Site conditions Safety concerns	<ul style="list-style-type: none"> • Instability of foundations due to heaving soils • Risk of cracks developing in CWTP due to heaving soils • Previous excavations undertaken could compromise safety of site • Flooding of area due to high water table 	Geology and soil assessment of site alternatives 1, 2 & 3	Assessment of siting alternative 4 raised a number of issues
Water resources: Construction			
Contamination of groundwater	<ul style="list-style-type: none"> • Contamination through poor management of waste including spillage of oil, fuel, cement, etc. 	Hydrological assessment of all sites	High water table could be polluted
Water resources Operational phase			
Contamination of groundwater	<ul style="list-style-type: none"> • Poor management of waste generated by CWTP • Spillage of waste when transferred to ash disposal facility 	Hydrological assessment	
Heritage: Construction			
Destruction of heritage resources	<ul style="list-style-type: none"> • Damage or destruction of heritage sites 	Desktop heritage impact assessment	Highly disturbed nature of project with current and

Environmental Issues	Potential Impacts	Recommendations	Reasons
Damage of heritage resources	including archaeological sites, fossils, graves, etc.		previous activities would have resulted in the destruction of heritage sites
Socio-economic: Construction			
Job creation Health & safety issues Increased economic activity	<ul style="list-style-type: none"> • Employment of local people to undertake unskilled or semi-skilled work • Construction workers may interact with surrounding communities that could result in increased levels of crime, spread of HIVAids, etc, • Construction workers will need to be housed and fed; workers will make purchases from local businesses, etc. 	<ul style="list-style-type: none"> • Desktop socio-economic study 	Probable that construction of CWTP will benefit area
Visual: Construction			
Change in outlook of neighbouring receptors	<ul style="list-style-type: none"> • Potential negative visual impact of CWTP 	No study	CWTP will hardly be visible; dwarfed by 164m high cooling water towers

10 PLAN OF STUDY FOR EIA

The Plan of Study (PoS) describes how the EIA phase will proceed and includes details of the specialist studies required to be undertaken during the EIA phase. The PoS will meet the requirements of the NEMA EIA Regulations of December 2014.

The purpose of the EIA is to:

- Address issues that have been raised during the Scoping Phase;
- Assess alternatives to the proposed activity in a comparative manner;
- Assess all identified impacts and determine the significance for each impact; and
- Formulate mitigation measures.

The EIA Phase will consist of the following activities:

- Public participation including stakeholder engagement;
- Specialist studies
- Identification potential impacts and mitigation measures
- Impact Assessment;
- Assessment of alternatives;
- Reporting and decision making.

The EIA report will address environmental impacts and benefits as well as cumulative impacts associated the construction, operation and decommissioning of the CWTP in order to provide the environmental authorities with sufficient information to make an informed decision regarding the proposed project. All feasible alternatives (including the 'no go' alternative) will be assessed.

10.1 Authority consultation

Consultation with the regulating authority (i.e. DEA) was undertaken and will continue throughout the EIA phase of the project. On-going consultation and input from DEA will include the following:

- Submission of a Final Scoping Report following a 30-day public review period of the DSR (and consideration of comments received);
- A consultation meeting and site visit (if necessary) with DEA in order to discuss the findings and conclusions of the EIA Report.

Should there be substantive changes between any draft reports and final reports, the final reports will be made available for public review for an additional 14 days prior to the submission to DEA.

10.2 Public participation

10.2.1 Introduction

The purpose of public participation during the Impact Assessment phase is to present the findings of the EIA phase and to avail the Draft EIAR to the public for comment. A thirty days (30) comment/review period will be allowed. Once the review is completed, the DEAIR will be submitted to the DEA for a decision. The Authority may decide to request additional information on matters that may not be clear from the report; authorise the application with certain conditions to be compiled with by the applicant or reject the report. A decision of the Authority reflecting the outcome of the application will be issued to the applicant.

10.2.2 Methodology

Registered I&APs will be advised in good time of the availability of Draft EIR Reports, how to obtain them, and the dates and venues of focus group meetings and where the contents of the Reports will be placed for comment. The public participation process for the EIR Phase will involve the following proposed steps:

10.2.3 Announcement of the availability and public review of the Draft EIR

A letter will be circulated to all registered I&APs, informing them in terms of progress made with the study and that the Draft EIAR and EMPr are available for comment. The Report will be distributed to public places (**Vereeniging library and Sasolburg Public Library**) and also presented at focus group meeting/s. Advertisements will be placed in the following newspapers (**Sasolburg Ster Newspaper, the Vereeniging Ster Newspaper and the Citizen Newspaper**) used in the Scoping phase to announce the public review period of the Draft EIAR.

10.2.4 Public review of Draft EIAR and EMPr

The EIA Guidelines specify that registered stakeholders must have the opportunity to verify that their issues have been captured and assessed before the EIA Report is submitted to the DEA. The findings of the specialist assessment will be integrated into the Draft EIR. The EIA Report will further include the Comments and Responses Report, which will list every issue

raised by I&APs and the responses by the EAP. The findings of the assessment and recommended mitigation measures will also be incorporated into the EIR.

As part of the process to review the Draft EIAR and EMPr, the focus group meeting will be arranged to afford registered stakeholders the opportunity to obtain first-hand information from the project team members and also to discuss their issues and concerns. Contributions at this meeting will be considered in the Final EIAR.

10.2.5 Progress feedback

Once comments from I&APs have been incorporated, all registered stakeholders on the database will receive a letter to report on the status of the process, to thank those who commented to date and to inform them that the Final EIAR and EMPr have been submitted to the authority for consideration.

10.2.6 Submission of Final EIR and Decision making

The final EIAR and EMPr will be submitted to the Authority including specialist's studies. I&APs will be given an opportunity to comment on Final EIAR, and they can submit their comments on the FEIR to the DEA.

10.2.7 Announce Authority Decision

Registered I&APs will be notified of the decision from the authorities. The Environmental Authorisation (EA) will be advertised in The Citizen Newspaper, Sasolburg Ster Newspaper and the Vereeniging Ster Newspaper. The details for appeals will also be included in the advertisement.

10.3 Assessment of alternatives

The site alternatives to be considered for the location of the CWTP are described in more detail in Chapter 3 of this report. However, a brief summary below is provided:

- **Alternative site 1:** this site is situated on the northern side of cooling tower 4.
- **Alternative site 2:** this site is situated between cooling towers 4 and 5 and immediately north of alternative site 1.
- **Alternative site 3:** this site is situated immediately north of cooling tower 5.
- **Alternative site 4:** the site that is situated immediately west of cooling tower 4.
- **'No go' alternative:** this option will also be investigated to determine what will occur if the CWTP is not built.

10.4 Summary of specialist studies

A summary of the identified specialist studies to be undertaken in the EIA phase of the project is tabulated below:

Table 5: Summary of specialist studies

Specialist Study	Activities to be undertaken	Specialist
Hydrological study	<ul style="list-style-type: none"> ➤ Describe and assess groundwater resources within the study area. ➤ Identify any 'no-go' areas ➤ Identify potential impacts of CWTP ➤ Provide mitigation measures ➤ Assess site alternatives and recommend preferred site alternative ➤ Rank sites in order of preference 	IWR Water Resources (Stephen Mallory)
Geology and soils assessment	<ul style="list-style-type: none"> ➤ Assess expected bedrock geology and soil cover within the study area based on available data ➤ Findings on foundation stability, presence of active soils, etc. ➤ Information on excavation potential ➤ Provide mitigation measures ➤ Assess site alternatives and recommend preferred site alternative ➤ Rank sites in order of preference 	To be announced
Desktop biodiversity study	<ul style="list-style-type: none"> ➤ Describe the fauna and flora in the study area. ➤ Describe the habitat integrity. ➤ Identify the presence of or likelihood of occurrence of Red Data species. ➤ Provide an ecological sensitivity map. ➤ Assess site alternatives and recommend preferred site ➤ Rank sites in order of preference ➤ Provide mitigation measures 	Plantago Lanceolata Pty Ltd (Divhani Mulaudzi)
Desktop Heritage Impact Assessment	<ul style="list-style-type: none"> ➤ Determine if there are any heritage resources of significance on the project area 	Vungandze Projects (Khosi Mngomezulu)

Specialist Study	Activities to be undertaken	Specialist
	<ul style="list-style-type: none"> ➤ Map any heritage resources found ➤ Provide mitigation measures ➤ Submit HIA to relevant authority ➤ Assess sites alternatives and recommend preferred site ➤ Rank sites in order of preference 	
Desktop Socio-economic Impact Assessment	<ul style="list-style-type: none"> ➤ Describe socio-economic environment of study area highlighting those attributes and components which may influence or be influenced by the proposed CWTP ➤ Identify and discuss the opportunities provided by the proposed project ➤ Identify and discuss negative impacts (if any) including health and safety risks ➤ Provide mitigation measures where feasible ➤ Assess site alternatives and recommend preferred site ➤ Rank sites in order of preference 	Master Q (Anita Bron)

10.5 Assessment of impacts

During the EIA phase, the significance of impacts identified will be assessed according to the methodology described below. Where possible, mitigation measures will be provided to manage impacts.

Extent of the impact: the extent of the impact will be assessed according to the following parameters:

- (1) Limited to the site and its immediate surroundings.
- (2) Local/ Municipal extending only as far as the local community or urban area.
- (3) Provincial/Regional.
- (4) National i.e. South Africa.
- (5) Across International borders.

Duration of the impact: the lifespan of the impact will be assessed in terms of the duration of the impact, i.e.:

- (1) Immediate (less than 1 year).
- (2) Short term (1-5 years).
- (3) Medium term (6-15 years).
- (4) Long term (the impact will cease after the operational life span of the project).
- (5) Permanent (no mitigation measures or natural process will reduce impact after construction).

Magnitude of the impact: the magnitude or severity of the impacts will be indicated as either:

- (0) None (where the aspect will have no impact on the environment).
- (1) Minor (where the impact affects the environment in such a way that natural, cultural and social functions and processes are not affected).
- (2) Low (where the impact affects the environment in such a way that natural, cultural and social functions and processes are slightly affected).
- (3) Moderate (where the affected environment is altered but natural, cultural and social functions and processes continue albeit in a modified way).
- (4) High (where natural, cultural or social functions or processes are altered to the extent that it will temporarily cease)
- (5) Very high / don't know (where natural, cultural or social functions or processes are altered to the extent that it will permanently cease).

Probability of occurrence: likelihood of impact actually occurring will be indicated as either:

- (0) None (impact will not occur).
- (1) Improbable (the possibility of the impact materializing is very low as a result of design, historic experience or implementation of adequate mitigation measures).
- (2) Low probability (there is a possibility that the impact will occur).
- (3) Medium probability (the impact may occur).
- (4) High probability (it is most likely that the impact will occur).
- (5) Definite / do not know (the impact will occur regardless of the implementation of any prevention or corrective actions or if the specialist does not know what the probability will be based on too little published information).

Status of the impact: the impacts will be assessed as either having a:

- Negative effect (i.e. at a cost to the environment).
- Positive effect (i.e. at a benefit to the environment).
- Neutral effect on the environment.

Reversibility

The degree to which the impact can be reversed.

Cumulative impact: the impact of the development is considered together with additional developments of the same or similar nature and magnitude. The combined impacts may be:

- Negligible – i.e. the net effect is the same as the single development
- Marginal – i.e. the impact of two developments of a similar nature is less than twice the impact of a single development. This implies it is better to place the two developments in the same environment rather than in separate environments.
- Compounding – the impact of two developments is more than twice the impact of two single developments therefore it is better to split the two developments into separate environments.

Significance of the impact:

Based on a synthesis of the information contained in the points above, the potential impacts will be assigned a significance weighting (S). The weighting is formulated by adding the sum of the numbers assigned to extent (E), duration (D) and magnitude (M) and multiplying this sum by the probability (P) of the impact hence $S=(E+D+M)*P$.

Table 6: Significance score and description

Average Score	Significance	Significance Score	Description
0	Negligible	0	There is no impact
1	Low	1-15	Impact is of a low order, mitigation measures are easy and simple or not required
2	Low-Medium	16-30	Impact is higher but with limited effect, mitigation measures are feasible and easily achieved
3	Medium	31-45	Impact is real but not substantial and mitigation is both feasible and fairly easily possible
4	Medium-High	46-60	Impact is substantial and mitigation measures are difficult, expensive and time consuming
5	High/Fatal Flaw	>60	Impact is of the highest order and there are few, if any, mitigation measures to offset impact

10.6 Environmental Impact Assessment Report

The EIA report will contain all the information as set out in Appendix 3 of GNR 982 of the 2014 EIA Regulations and will also be undertaken in accordance with the approved Plan of Study.

10.7 Environmental Management Programme

With the results of specialist studies and recommendations and input from I&APs and stakeholders, an EMPr will be prepared for the management and mitigation of potential impacts during the construction, operation and decommissioning of the CWTP.

The EMPr will be undertaken in accordance with Appendix 4 of the EIA Regulations in terms of GNR 982 as well as complying with section 24N of NEMA.

10.8 Timeframes for EIA process

The table below presents the proposed timeframes for the EIA process, which takes cognisance of authority review timeframes. Note that these dates are subject to change.

Table 7: Timeframes for EIA process

	Activities	Timeframe
Scoping phase	Public review of Draft Scoping Report (newspaper advert on DSR available on 23 November 2015)	23 November 2015 - 15 January 2016
	Close of commenting period for the public	15 January 2016
	Update and finalise Draft Scoping Report	25 January – 05 February 2016
	Comment on the submitted application, DSR and Plan of Study by the Competent Authority	27 November -11 February 2016 (44 days)
	Update and finalise DSR into FSR; submit for decision by the Competent Authority	17 February - 04 April 2016 (43 days)
EIR Phase	Specialist studies	22 February – 18 March 2016
	Development of DEIR	22 March – 22 April 2016

	Public review of DEIAR and EMPr	26 April 2016 – 30 May (31 days)
	Update and finalise DEIAR and EMPr	06 – 10 June 2016
	Submit FEIAR and EMPr to DEA	13 June 2016
Authorisation Phase	DEA review period and decision-making	03 October 2016 (107 days)

11 UNDERTAKING

I, Jean Beater, hereby confirm that the information provided in this report is correct at the time of compilation and was compiled with input provided by the Applicant, Eskom Holdings SOC Limited.

I, hereby, also confirm that the comments received from I&APs will be included in the Final Scoping Report that will be submitted to DEA. Hereafter, a record will be kept of any comments and these will again be submitted with the final EIAR to the DEA. This will be in the form of a Comments and Response Report. I also undertake that the Plan of Study for EIA will be implemented and the findings presented in the EIAR report.

12 ASSUMPTIONS, LIMITATIONS AND GAPS IN KNOWLEDGE

The following assumptions, limitations and gaps in knowledge accompany the scoping exercise for the proposed project:

- It is accepted that the project motivation and description, as obtained from the applicant, is accurate.
- It is assumed that the baseline information from previous reports scrutinised and used to explain the environmental profile is accurate.

13 CONCLUSION

The scoping process has provided a better understanding of the study area and the nature and extent of the proposed CWTP on the project area as well as identifying potential issues and defining the scope of the studies required within the EIA phase of the project.

A number of potential environmental impacts have been highlighted for further investigation in the next phase of the EIA so that their significance can be established as well as identifying mitigation measures for the management and minimization of these impacts.

Through a public consultation process, every effort has been made to include representatives of all stakeholder groupings in the study area. Recommendations regarding investigations required to be undertaken in the EIA phase are provided within the PoS for EIA contained within Chapter 10 of this report.

As indicated in Chapter 3 of this report, four siting alternatives are under consideration for the location of the CWTP. Once the specialist studies have been completed and the EIA process undertaken, the preferred site will be selected.

Following the comments period for the DSR, issues raised by I&APs and the regulatory authorities have been captured in the FSR that will be submitted to the competent authority for consideration. The EIA phase will follow the acceptance of the Scoping report.

14 REFERENCES

BKS. 2012. Foundation investigation report for the proposed water treatment plant and brine management plant at Lethabo power station. (Unpublished paper.) Pretoria.

Eskom. 2015. Lethabo power station.

(http://www.eskom.co.za/Whatweredoing/ElectricityGeneration/PowerStations/Pages/Lethabo_Power_Station.aspx). Retrieved 21 October 2015

Savannah Environmental Pty Ltd. 2015. Final scoping report. Proposed Lethabo PV solar energy facility near Sasolburg, Free State Province. (Unpublished paper.) Johannesburg

APPENDIX 1

CURRICULUM VITAE OF EAP TEAM

The Curriculum Vitae of Siphon Nkambule

PERSONAL DETAILS	CONTACTS
Full Names: Siphon Thomas	Physical Address: 45 Striga Street, Doornpoort
Surname: Nkambule	Postal Address: P.O Box 100130, Moreleta Plaza, 0167
Gender: Male	Cell No: +27 (0) 71 297 3830
Race & Nationality: African South African	E/Facsimile: +27(0) 86 315 5484
Driver's Code: Code 8	E-mail1: siphon@senkosi.com
Marital status: Married	E-mail2: mhluzist@gmail.com
PMSA No: 17383381	

Academic Background

- PMP Exam Preparation Course: PM Academy-Completed August 2013
- Advance Programme in Project Management: UP (NQF level 7)-Completed 2011
- Certificate-Business Communication: UNISA: Distinction-Completed-2006
- Diploma-Project Management: Varsity College: Distinction-Completed- 2004
- Bachelor of Science Degree: UWC Completed - 1999
- High School Matriculation (Standard 10): Mphanama Comprehensive Completed: 1992

SHORT COURSES ATTENDED:

- Microsoft Project 2010 Systems Administrator Training: TPG Completed 2013
- People Management Course: Astro Tech- Completed 2012
- Microsoft Project management (Managing and Execution Phases1&2)- Learn fast- completed 2012
- Environmental Impact Assessment (EIA)-Practical approach- (UNW)- Potchefstroom Campus 2010
- Environmental Law-University of Northwest (UNW) -Potchefstroom Campus, 2010
- Stakeholder Participation - {International Association for Public Participation (IAP2)},2003

- Professional English and Business Presentations- GC Corporate Training and Consulting,2003
- Received short course training in the following areas:
 - Basic Conflict Resolution and Conflict Management; Organisational Development;
 - Workshop Planning and Facilitation; Time and Pressure Management;
 - Public Speaking and Presentation; Group and People Dynamics.

PERSONAL ATTRIBUTES

Professional Attributes:

- Fifteen years' experience seasoned Project Manager with qualification and background in Environmental Management Science;
- Good interpersonal skills, strong leadership, excellent human relations and impeccable emotional intelligence and negotiation skills.

Communication and Leadership:

- Excellent communicator and articulate speaker
- Well rounded individual with good general awareness of current affairs, very good public speaking and presentation expertise, with strong report writing ability.

Problem Solving Attributes

- Innovative, independent thinker, self-starter and analytical and attention to details.
- Pro-active and results oriented team player, with a creative problem solving approach.
- Courageous and decisive individual taking informed decisions with minimal supervision.
- Ability to understand briefs and project scope leading to excellent implementation of projects.

PROFESSIONAL EXPERIENCE

Organization 1: Senkosi Consulting

Position: Environmental Practitioner and Chief Executive Officer (December 2014 to date)

Roles and Responsibilities

- Managed and led the project team as project director for Several Environmental Projects;
- Provided a project leader role to various projects ranging from the development of Environmental Management plan (EMPr) for some 120 km Masa-Ngwedi walk down, Water Use License Application (WULA) to full EIA in Secunda for a new Sol B Substation and Lethabo Power Station for a new Water Cooling Water Treatment plan;

- Provided strategic planning, marketing and financial insight as well as human resourcing for the company
- Developed business concepts for various units within the organisation and provided daily management;
- Provided project management services to various project units within Water, Waste and Environmental as well as Socio-Economic Surveys services
- Performed general managerial roles including drawing up of budgets and remuneration packages for the staff;
- Identified project resource team members to projects in line with required deliverables;
- Provided coaching and mentoring of team members, through project implementation;
- Compiled all project scheduling and monitoring controls;
- Managed Budgets and controls of all projects for the successful completion within scope.
- Ensured proper labour relations regulations and laws are adhered to at all times;
- Performed appraisals and assessments of staff to identify gaps and need of development;
- Performed stakeholder management, public participation function to projects both private and public;
- Identify and implement IT relevant systems for project based, and for the day to day office operation;
- Oversaw SLA for the general operations of the company as well as those based on certain projects;
- Performed an oversight role in developing policies for the company to protect resources in the office, including telephone, printing resources, internet usages and other consumables in the office;
- Set up a project team to implement each and every project as awarded to the company.

Organization 2:	Government Communication and Information System (GCIS)
Position:	Director: Project Management Office (2011 to November 2014)

Roles and Responsibilities:

- Provided leadership, guidance and support to the project management community within GCIS;
- Managed the implementation of new project management system (EPMS) to enhance project quality output;
- Supported the organisation with effective leadership guidance in response to the Adhoc projects;
- Refining and promoting best practice project management processes and procedures;

- Performed human and financial resource management functions for the directorate to effectively implement its business plans as mandated;
- Provided project management strategic support to Government Communications Campaigns through the Seven Clusters of Government;
- Managed and supervised 8 staff members composed of four project managers and their support personnel;
- Ensured quality of project documentation including monthly, quarterly and annual reports submitted by project managers;
- Revised and enhanced the project management methodology hand book for the organisation regarding project management practice;
- Responsible for project resourcing through negotiating with internal line function managers for team members for effective balance project team;
- Conceptualised communication related projects and campaigns from inception through all the stages of project life cycle to closure;
- Provided continued liaison with internal and external client in assisting and supporting their projects for better management and effective delivery of government programs;
- Provided support to the project management office team through coaching and mentoring of my peers and project administrators;
- Developed all critical and necessary project documents to enhance and ensure professional project management best practice are adhered to;
- Adhere to best practice regarding information and record keeping for projects resulting to an efficient knowledge management system for the organisation;
- Provided reports to Management Committee (Manco) for project progress and escalate issues for unblocking by the Executive;
- Provided advice to client departments on the various services and platforms available at GCIS for their campaigns and better media space;
- Negotiated with line function managers for the availability of relevant and adequate team members on all project for professional and smooth implementation of all projects;
- Provided impeccable leadership to all team members throughout projects;
- Provided good project management governance through adhering to best practise of project management by following PMBOK methodology;
- Provided well written and articulate reports to PMO leadership on all projects, using GCP dash board and other available reporting tools for project integration and tracking purposes;
- Developed and implement PMO Master plan Project Document for the entire Directorate; and
- Drafted the marketing and promotion of the project management unit within and outside GCIS

Organization 3: Senkosi Consulting

Position: Environmental Practitioner and Chief Executive Officer (2007- 2011)

Roles and Responsibilities

- Drawing up of budgets and remuneration packages for the staff;
- Identified project resource team members to projects in line with required deliverables;
- Provided coaching and mentoring of team members, through project implementation;
- Compiled all project scheduling and monitoring controls;
- Managed Budgets and controls of all projects for the successful completion within scope.
- Ensure proper labour relations regulations and laws are adhered to at all times;
- Perform appraisals and assessments to staff to identify gaps and need of development;
- Perform stakeholder management, public participation function to projects both private and public;
- Identify and implement IT relevant systems for project based, and for the day to day office operation;
- Oversee SLA for the general operations of the company as well as those based on certain projects;
- Perform an oversight role in developing policies for the company to protect resources in the office, including telephone, printing resources, internet usages and other consumables in the office;
- Set up a project team to implement each and every project as awarded to the company;

Project 1- Sanitation Awareness Creation Campaign

- Facilitated the formation of the team for sanitation awareness creation campaign for Department of Water Affairs and Forestry (DWAF);
- Member of the PMT that designed the stakeholder identification and participation process toolkit;
- Liaised with community media houses especially local newspapers and radio stations in the area of the sanitation awareness campaign for a DWAF project
- Oversee stakeholder identification and data compilation for various Media houses and negotiated collaboration between radio and the team regarding time slots for the promotion of the campaign;
- Liaised with local government regarding their challenges towards the implementation of the sanitation project; and
- Conducted surveys on issues pertaining to sanitation and compiled a report of issues raised;

Project 2- New Shaft Sinking at Impala Platinum Mine:

- Interpreted the policies of Public Participation its legality and translated to the community members and beneficiaries;
- Wrote briefs for the simplified process of Public Participation Process for non-science background community members;
- Facilitated public meetings with the aim of acquiring issues of concern from various stakeholders;

Project 3-Environmental and Waste Engineering Project:

- Supported the management and facilitation of stakeholder engagement for the National Strategy for Biodiversity and Conservation Project on behalf the Department of Environmental Affairs and Tourism;
- Managed relations between the clients (Eskom, City of Johannesburg, and Mogale City) and the company regarding environmental and waste management projects;
- Perform all Project Management functions to all projects allocated to the business unit;
- Facilitated the Waste Management data base for the City of Johannesburg and supervised the construction of two major buy back centres;
- Developed systems used to conduct the socio economic survey project for the Mogale City Local Municipality;
- Supporting technical projects on social and capacity building within communities
- Designed and implemented communication strategies to communicate strategic projects to Key Stakeholders; and
- Provided overall project leadership to the sanitation and water rural backlog Project for Mogale City Local Municipality;

Project 4-Water Engineering Related and Water Allocation Reform (WAR):

The aim of the project was to identify water needs for businesses and domestic users pertaining to water scarcity within the Inkomati Catchment area.

- Identified emerging water users for the new reallocation in relation to the new regulation to distribute water equally to all users across the regulated schedules;
- Conceptualised project documents, including, charter, scope, work breakdown structure, plan, monitoring and control;
- Provided continued and simple communication to interested and affected parties or communities and general stakeholder;
- Performed a mediatory negotiating role between the commercial and emerging farmers, and then DWS regarding needs and the new approach of the Minister to water reallocation;
- Supported the formation of the governing structures such as Catchment Management Agencies (CMA) and Water User Associations (WUA);

- Provided stakeholder mobilisation in the Inkomati Catchment Management Agency during the WAR (Water Allocation Resource) framework development; and
- Provided project support in various avenues of the project, including research, community interviews, public meetings and stakeholder engagements.

Organization 4:	Baloyi Quantity Surveyors (Pty) Ltd & NBI
Position:	Project Manager (April 2002 - February 2007)

Project Name: Zivuseni Poverty Alleviation/ EPWP Programme

Project Description: Social project, intended at alleviating poverty in the previously disadvantaged communities around Gauteng.

Project Cost: R 16 million.

Project Name: Potlaka Service Delivery

Project Description: Service delivery project aimed at designing, developing and implementation of the New Operating Model for the Department of Public Works and Transport in Gauteng Provincial Government

Project Cost: R 28 million.

Roles and Responsibilities

- Developed all project documents and function through all project phases, project initiation, scope definition and change control for envisaged projects;
- Full project management function underpinned by PMBOK focusing on, cost, quality, time and scope management;
- Ensured effective stakeholder Management, liaison and engagement for project success;
- Manage project cost estimates and control changes in line with allocated budgets;
- Plan and chair project status meetings throughout project phases;
- Took charge of compilation of processes, implement project administration processes according to client requirements;
- Managed and coordinated various construction teams in different spheres of the project phases;
- Ensure implementation of procurement activities and adherence to policies;
- Ensured all safety and health measures in place, understood and adhered to the possible maximum level by all on site;
- Provide support in implementing and assuring project execution in accordance to approved project norms and time schedules;
- Managed procurement of material and equipment for the various stages of project;
- Liaised with suppliers of different material for site supplies and ensuring punctual delivery to avoid project delays; and
- Manage project environment and activities to ensure achievement of project objectives.

Organization 5:	South African Centre for Organisational Development (SACORD)
Position:	Project Office Manager (200-2002)

Roles and Responsibilities

- Head of Business and Social units provided coaching, motivation as well as performance evaluation;
- Performed full project management responsibilities for the Mayihlome Graduate Alive program;
- Managed and ensured excellent client liaison between SACORD and clients;
- Designed systems to enhance business position of the company;
- Participated in the development of business analysis and strategic planning;
- Performed business managements duties including budget planning and financial control;
- Supervised and managed projects in Health, Communication and Organisational development; and
- Compiled concise reports on monthly basis to top management.

BRIEF NOTES ON THE PROJECTS MANAGED:

a) Environmental Impact assessment (EIA) for Eskom

- As a project director I provided project management services for the newly proposed Main Transmission substation in Secunda.

b) Walk down for Masa-Ngwedi 120 km power line

- I was a project leader providing the project coaching to the project manager and entire team involved in walk down for the new line form the Medupi power station to the consumers;

c) Basic Assessment

- Performed a role of a project leader in the understanding of the basic assessment study for a new substation to he established in Soweto;

d) Water Allocation Reform

- This project was driven by DWAF and funded by the British Government through its DFID program. The aim of the project was to establish framework through which water could be made available for a broader constituency of people for a commercial use.

e) Backlog Study Survey for Mogale City Local Municipality

- I was a project director in the Backlog study survey project for Mogale Local Municipality (former Krugersdorp Municipality) to determine the level of service delivery and to understand existing gap towards attaining a satisfactory service delivery at the Municipal level. During the project period we identified and trained young people to participate in the survey and thereby obtaining skills relevant to the survey.

f) Council for Built Environment Skill Audit Framework

- I developed a template used in the methodology to assess the situation of the grassroots and higher level technical skills in the Civil and Built Environment throughout the Country. The aim was to assess the demand of these skills as it links up to the growth and Development of the Country's economy.

g) National Asset Review and Management Strategy Development: DOJ&CD

- I was the project leader for this project focused on the assessment of the status quo of the National Assets of the DOJ&CD.

h) Mayihlome Graduate Alive

- This was a National Campaign aimed at raising awareness about HIV/AIDS in all tertiary institutions in South Africa, targeting student leadership. I was managing it from SACCORD's head office in Cape Town. I initiated an office structure and systems, with staff complement of 5 to support the project. My major role was to approach Rectors of tertiary institutions, including FET Colleges to take part in the Campaign. Primarily to obtain support from the SRC's to, amongst other things; dedicate at least 10% of their budget to activities related to HIV/Aids prevention.

i) Potlaka Service Delivery and Efficiency Project

- The aim of this project was to increase the efficiency in the way business was conducted within the Gauteng Provincial Government. There was a combination of all sectors in business to make this project a success. IT, Business Consultants, Supply chain management, communications, Stores as well as labour representatives.

j) Zivuseni Poverty Alleviation

- This project was one of the Extended Public Works Programs (EPWP) Programs, under the leadership of Independent Development Trust (IDT).
- The objective of the project was to alleviate Poverty in poor communities through the renovations and refurbishment of old buildings. Community members were heavily involved in the work to complete the project.

k) Waste Management Data Creation Project for SMEs within the City of Johannesburg

- The project was owned by the City of Johannesburg as a client. The aim was to register all SMMEs that are operating under the City and focusing on the collection, processing and selling or buying of waste in the City.
- The deliverable of the project was to produce a list of all SMMEs and their interests in the waste management sector, including their needs to improve their small businesses to facilitate growth.

l) Building of Buy Back Centres for Waste Management Facilities in City of Jo'burg

- Led and project managed the establishment of a waste management centre, from the drawings to the opening of the centres.

- These were used to assist SMMEs in the area of Orange Farm to benefit in the waste management sector, by selling and/or buying waste from others.

m) GCIS Major Government Communication Projects and Campaigns

- National Planning Commission (NPC) on the development of the Country’s 2030 vision;
- COP17/CMP7- supporting the Dirco and DEA Departments to plan and organise the United Nations Framework on Climate Change Conference (UNFCCC) event in Durban between 28 November and 9 December 2011;
- Human Resource Development Council of South Africa (HRDCSA) - Support the Council to achieve its objectives in skilling and assist in the providing job opportunities to greater South Africans.

LEADERSHIP EXPERIENCE	ACQUIRED SKILLS
<ul style="list-style-type: none"> ✓ Chairperson: Faith organisation eMalahleni 2010-2011 ✓ President: His People Christian Student Society, UWC 1998/9 ✓ Deputy President: Central House Committee- UWC1997/8 ✓ Chairperson: Debating Society- Ekulindeni High 1988/9 ✓ Treasurer: Student Christian Movement- Mphanama High 1989/90 	<ul style="list-style-type: none"> ✓ Public speaking and meeting sharing ✓ Project co-ordination and management ✓ Stakeholder management and Liaison ✓ Critical thinking, analysis and decision-making ✓ Business acumen and good business ethics ✓ Teamwork and leadership nurturing ✓ Workshop facilitation & presentation ✓ Record of proceeding compilation and report

COMPUTER PACKAGES

- Ms -Word
- Ms -Excel
- Ms -Power Point
- Ms –Project
- EPMS Administration
- Internet and E-mails
- Ms-Access

REFERENCES

- 1. Name:** Ms Penelope Ntuli
Position: Group Communications Director
Company: Tetra Pak Africa Cluster
Relationship: Former Chief Director: Cluster Supervisor at GCIS
Contact Number: 076 794 9120
- 2. Name:** Mr Oupa A. Masilela
Position: Executive Head: Credit and Debt Recovery Unit
Company: Standard Bank of South Africa
Relationship: Former-Manager at Baloyi Quantity Surveyors (Pty) Ltd
Contact Number: 011 227 4785 / 082 924 5078
- 3. Name:** Mr Nkosikhona Mahlangu
Position: Executive Chief of Staff: Information, Communication and Technology
Company: Department of International Relations and Cooperative
Relationship: Former Colleague at SACORD
Contact Number: 012 351 1000 / 082 375 3694

Curriculum Vitae

Name: Gembe Moses Mahlangu

Date of Birth: 22 December 1956

Nationality: South African

Education: [2012] - North-West University
(Centre for Environmental Management)

Post-decision Environmental Monitoring and Enforcement: An introduction to the role and responsibilities of an ECO

[2007] - North-West University
(Centre for Environmental Management)

EIA: The NEMA Regulations

[2004] - Golder & Associates
IAP2 Attendance Course in PPP

[2001] – Rhodes University
Industrial Environmental Management

[1986 – 1990] – University of South Africa
HED in Method of Teaching Science &

Biology

[1979 – 1986] – University of the North
B. Sc. Hons: Botany and Plant Ecology

Employment: [2002 – Current] – Margen Industrial Services
Responsible for day-to-day running of the

remediation of
sites.

*company, involved in EIA
(Public Participation)
oil spill cleanup and bio-
hydrocarbon contaminated*

sites.

[1998 – 2002] – Procon Environmental Technologies
*Managing environmental waste spillage
Cleanup and bio-remediation of contaminated*

and

[1996 – 2002] – Centurion Manufacturing
*Responsible for Safety, Health, Environment
Quality implementation.*

later

[1986 – 1996] – Department of Education and Training
*Science teacher; Head of Department and
school inspector.*

[1984 – 1986] – University of the North
Senior laboratory assistant (Botany Dept.)

CONTRACTS COMPLETED

(Served as Public Participation Team Leader)

WORK PERFORMED	FOR WHOM	CONTACT PERSON
Environmental Impact Assessment [EIA] for Water Reservoir (Two projects Completed)	Afri – Infra Consulting Engineers in Middelburg	Mr Stefan Schutte (013) 282 8426
<p>The following EIA projects have been completed for Eskom Transmission</p> <ul style="list-style-type: none"> ➤ Athene-Umfolozi 120 km long line (<u>year 2001</u>). ➤ Pegasus - Umfolozi 80 km line (<u>year 2002</u>) ➤ Adis – Phoebus 22 km line (year 2003) ➤ Braamhoek Transmission lines and Substation Integration Project. (<u>year 2004</u>) ➤ Zeus – Perseus Eskom project involving four provinces, viz Mpumalanga, Free State, North West and Gauteng (<u>year 2006</u>) ➤ Completed several projects associated with Medupi Power Station and Mmamabula Power Station Integration <ul style="list-style-type: none"> ○ <i>Mmamabula-Delta ±60km and Delta Substation (<u>year 2008</u>)</i> ○ <i>Delta-Epsilon line ±480km (year 2009)</i> ○ <i>Delta-Mogwase line ±180km (<u>year 2010</u>)</i> ○ <i>Epsilon Substation (<u>year 2011</u>)</i> ○ <i>Epsilon-Mercury line ±30km (<u>year 2011</u>)</i> 	<p>(All these projects were for 400 kV transmission power lines that included substations).</p>	<p>Mr. John Geeringh (011) 800 3917</p> <p>Ms. Mamokete Mafumo (011) 800 2621</p> <p>Ms. Carol Streaton 083 633 1545</p> <p>Ms Joyce Mashiteng (011) 800 4623</p> <p>Mr. Sebenzile Vilakazi (011) 800 4902</p>
<p>The following EIA projects have been completed for Eskom Distribution:</p> <ul style="list-style-type: none"> ➤ Simplon – Der Brochen 31 km long Distribution line and substations ➤ Steelpoort – Burgersfort 19 km long Distribution line and substations. 	<p>Eskom Distribution Northern Region</p>	<p>Mrs. Louise Human (012) 421 3150</p>

<ul style="list-style-type: none"> ➤ Amandla-Wolwekraal 33 km long Distribution line and ➤ Pelly – Babelegi 18 km long Distribution line ➤ Burgersfort – Steelpoort two 132 kV (22km) distribution line and substation ➤ Big Tree Substation and 18km, 132kV line ➤ Mamogale Substation and Makolokwe Substation and associated distribution power lines ➤ Phokeng Substation Strengthening and 88kV, 6km distribution line ➤ Nkomati Project involving four 132kV distribution lines in the area of Machadodorp [FEIR submitted, waiting for RoD] ➤ Zamokuhle Substation and ±30km line ➤ Hillside Substation and ±12km line ➤ Dennilton Substation and two lines; one from Groblersdal to Dennilton (±60km) and the other from Kwaggafontein to Dennilton (±80km) ➤ Witsieshoek Sorata-Diyatalawa 132kV Distribution Powerline (±30km) ➤ Khanyazwe-Buffelsruit Eskom Distribution 132kV Powerline (±43km) 		<p>Mr. Hannes van Rensburg 082 805 3480</p> <p>Angelina Shalang 083 743 6713</p> <p>Ms Mahlatsi Moeng (051 404 2287 or 079 1990679)</p> <p>Mr Josiah Zungu (084 622 5412)</p>
<p>± 3 km long Distribution line and a substation in the area of Muldersdrift</p>	<p>Eskom Distribution - Central Region</p>	<p>Jan Greyling (011) 711 2005</p>
<p>Conducted Photo survey for proposed mines in Welkom area and in Steelpoort/Burgersfort area</p>	<p>Fourth Element</p>	<p>Stuart Dunsmore 011 726 3130</p>

ECO CONTRACTS MONITORING

WORK PERFORMED	FOR WHOM	CONTACT PERSON
Ingula Project – ECO for 88km long 400KV power line construction	Eskom Transmission	Ms Mamokete Mafumo (082 906 7166)
ECO for Kendal 88KV power line construction ±18km long	Eskom Distribution	Ms Betty Ngobeni (013 693 3146)
ECO for Malelane-Boulders 88kV power line construction ±17km long	Eskom Distribution	Mr Josia Zungu (084 622 5412)
ECO for Kimberly Umtu Project 88kV power line construction ±12km long And ECO for Kimberly Klipkop Project 88KV power line construction ±7km long	Eskom Distribution	Mr Andrea van Gensen (051- 404 2040)
ECO for Ermelo Project(Lebo-Uitkoms Line) k88 power line construction ±18km long	Eskom Distribution	Mr Tebogo Chauke (076 012 0114)
ECO for Syldrifft Substation Construction Project	Eskom Distribution	Ms Oarabile 076 867 7065

LIST OF SPILLAGES CLEANED

Involved in several oil spill cleanup jobs and rehabilitation of contaminated sites as follows:

- Visited the affected sites and compiled the scope of work for each site
- Prepared quotations which resulted in Margen Industrial Services winning the projects that are listed below
- Compiled written safety working procedures for the jobs and
- Compiled reports of the completed jobs

SITE	SCOPE OF WORK	REFERENCE	PERIIOD
Alpha Substation	<ul style="list-style-type: none"> ○ Cleaned oil contaminated ballast stone and rehabilitation of underlying soil. ○ Removed oil contaminated sludge and cleaned dam walls and floor 	Ms. Ragolele 082 374 7954 or 013 693 3243	<ul style="list-style-type: none"> ○ May 2008 ○ June 2010
Merensky Substation	Cleaned oil catchments dams and trenches	Mr. Aubrey Phale	June 2008

Rockdale	Cleaned oil spill around transformer 22 (132/22kv) where 2000 liters of oil was spilled	Mr. Dannie Bekker 083 637 9264	February 2009
Kendal Power Station	Fuel (Diesel) storage area. Cleaned ballast stones and rehabilitation of diesel contaminated soil	Mr. Wonderboy Mahlalela 082 541 1954	August 2008
Eskom Transmission	Cleaned and rehabilitated several spillages on different Eskom Transmission substations in North East Region	Tovhowani	Ongoing and receiving call up whenever there is a need.
Eskom Distribution	Cleaned and rehabilitated several small spillages on pole mounted transformers along the farm lines in areas as indicated.	<ul style="list-style-type: none"> ○ Mr. Maseko 082 216 6060 (In the area of Lesile & Kinros) ○ Mr. Nkosi (Piet Retief area) 082 857 9373 ○ Mr. Mpontshane (Standerton area) 017 712 3341 	Several spillages attend in Mpumalanga since 2002 and the relationship is ongoing
Margen Industrial Services and Procon Environmental Technologies have worked together on cleaning and rehabilitating diesel contaminated sites (Transwerk) in Germiston: Springs and Sentralrand.		Mr. Tommy Stevens Mr. Francis Rahlapane	May 2008

Languages

Language	Reading	Speaking	Writing
English	Good	Fair	Fair
Afrikaans	Good	Fair	Poor
Nguni Languages (IsiZulu; IsiNdebele; IsiXhosa; IsiSwati)	Good	Good	Fair
SeSotho Languages (seTswana; sePedi; South-Sotho)	Poor	Fair	

CURRICULUM VITAE

JEAN LOIS BEATER

Nationality: South African

Qualifications & Membership with Professional societies:

International Association of Impact Assessment (SA Branch) (Membership No. 1538)

Accredited Heritage Professional: Amafa aKwazulu-Natali

Affiliate Member of the Association of Southern African Professional Archaeologists (ASAPA) (No. 349)

Contact Details: 084 4041118 / jean.beater@gmail.com

EMPLOYMENT RECORD

- April 2015 – present:** **JLB Consulting - Environmental & Heritage Consultant**
Environmental authorisation processes (S&EIRs, BARs); Water Use Licence Applications (WULAs); EMPRs, public participation process, etc. Undertake Heritage Impact Assessments (HIAs) and Heritage Management Plans (HMPs).
- February 2014 – March 2015:** **Senior Environmental Consultant with Nemaï Consulting cc**
Project management of various Basic Assessments and Scoping & Environmental Impact Assessments; EMFs
Undertake HIAs and WULAs for clients;
Manage clients, appoint & manage specialists, undertake public participation process;
Compile and manage budgets for projects
- March 2010 – January 2014:** **Environmental & Heritage Impact Consultant**
Undertake Heritage Impact Assessments (HIAs) for various clients;
Project management of environmental authorisation processes (S&EIRs, BARs); WULAs; EMPRs, public participation, etc
- June 2005 – February 2010:** **Senior Environmental Specialist with PBA International (South Africa) Pty Ltd (now called Fourth Element)**
Project management of various EIA studies (Basic Assessments and Scoping & Environmental Impact Assessments);
Undertake HIAs for various clients;
Manage clients, appoint & manage specialists, undertake public participation process;
Compile and manage budgets for projects
- 2004 – 2005** : **Assistant Director: Gauteng Department of Agriculture, Conservation & Environment Cradle of Humankind World Heritage Site**
Implement site management plans according to UNESCO standards; ensure management of resources includes an integrated environmental and conservation approach; monitor fossil sites and cultural resources; negotiate site management plans with landowners; engage with landowners and other key stakeholders
- 2003 – 2004** : **Heritage Management Consultancy**
Heritage impact assessments; conservation management plans; historical records management

PROJECTS UNDERTAKEN

Environmental Impact Assessments including:

- EIA for Eskom Zeus-Mercury-Persues 765kV Transmission power line project between Standerton and Vierfontein and Standerton and Dealesville
- EIA for Eskom Delta-Epsilon 6x 765kV transmission power line project between Lephalale and Potchefstroom (360km in length)
- EIA for Eskom Distribution Substation (Leloko) near Hartebeespoort Dam
- EIA for Eskom Distribution Bighorn-Makolokwe-Mamogale 88kV power line project and associated substations between Rustenburg and Brits
- EIA for Eskom Distribution Simthabi substation & 132kV power line project near Thabazimbi
- EIA for Sol B Main Transmission Substation & 400kV power lines, Secunda, Mpumalanga
- Management of Specialist Walk-Through of Masa-Ngwedi 765kV and 400kV power lines (120 km) and compilation of EMPr construction of these power lines
- Assist with Environmental Management Framework (EMF) for the Mapungubwe Cultural Landscape World Heritage Site
- EIA for the installation of bulk infrastructure at Phase 1F of the Richards Bay Industrial Development Zone
- EIA for the construction of a medical waste facility near Rustenburg, North West Province

Heritage Management including:

- Cultural heritage survey of several farms in Northern and Eastern Cape for proposed photovoltaic developments (solar power)
- Heritage Impact Assessment for Ndulinde substation and power lines near Utrecht, KZN
- Compile heritage component: Environmental Management Framework for Thukela DM
- Heritage Impact Assessment for the Sunninghill sewer pipeline, Adams Mission, Amanzimtoti
- Heritage Impact Assessments for the Raw Water and Potable Water components of the uMkhomazi Water Supply Project.
- Heritage Impact Assessment for Quha River Bridge, Umzumbe area
- Heritage Impact Assessment for Barton Place Housing Project, Durban
- Heritage Impact Assessment for Bloukrans and Qabango River crossings near Frere in Umtshezi Local Municipality

POST-GRADUATE EDUCATION

2002 : University of the Witwatersrand MA (Heritage Studies)

2012 – 2015 : University of the Free State MSc (Environmental Management) (dissertation submitted)

REFERENCES:

Mr Stuart Dunsmore
Fourth Element Consulting

Mr Moses Mahlangu
Margen Industrial Services

Mr. Donovan Henning
Nemai Consulting cc

APPENDIX 2: PUBLIC PARTICIPATION PROCESS

APPENDIX 2-1

**MINUTES OF MEETING WITH DEPARTMENT OF WATER AND SANITATION AND
ATTENDANCE REGISTER**

Minutes of the Pre-application Meeting held with DWS Officials

Date and Time: 23 September 2015 at 10:00 am

The Aim of the meeting was to present the intention of the Lethabo powers station to construct a Cooling Water Treatment Plant on its Eastern site

Venue of Meeting: Department of Water and Sanitation- Regional Office, Francis Baard Street

Present: (see the attached attendance register for more detail of attendees)

- a) S. Nkambule-Senkosi Consulting
- b) P. Matjila-Senkosi Consulting
- c) H. Ndou-Eskom
- d) B. Masela-Department of Water and Sanitation
- e) N. Mitani- Eskom
- f) W. De Klerk- Eskom
- g) S. Wilson- Eskom
- h) C. Woodhouse- Eskom
- i) R. Govender SubramoneySubramoney- Eskom
- j) L. Mabota- Eskom

Apologies: Ms. Jean Beater- Senkosi Consulting Project Manager.

1. Opening and Welcoming

Ms. Blantina Masela from the Department of Water and Sanitation (DWS), chaired the meeting. She welcomed all in the meeting and declared the meeting opened. She further requested all attendees to introduce themselves.

2. Presentation

Sipho Nkambule, from Senkosi Consulting, made a presentation to the attendees. The aim of the meeting was to provide the DWS with the background of the proposed project, in particular to discuss whether it was necessary to apply for the Water Use License (WUL) on the proposed East Cooling Water Treatment Plant at Lethabo Power Station in the Free State Province

It was indicated that Lethabo Power station does have an existing WUL issued on 25 May 2011. It was also emphasized that the proposed Cooling Water Treatment Plant (CWTP) will not exceed the current abstraction from the Vaal River and it will not discharge any more than the current stipulated amount of water effluent.

The proponent submitted to the authority that in their view there was no need to apply for a new water use license while there was an existing one.

3. Discussion

A discussion was held and deliberation ensued. The authority representatives asked multiple questions to ascertain if there was no other activity that would impact on the current existing license. Further discussion points were made including the precaution that elements such as the groundwater should not be affected in any manner by the proposed activity. The meeting agreed that this and other issues that may arise must be fully addressed and covered in the revised Integrated Waste Water Management Plan (IWWMP).

4. Resolution

It was resolved that the authority is comfortable with the current existing water use license and its conditions as stipulated. However it was cautioned that the proponent needed to submit to a water license review process as it was already due. The authority indicated that they needed some record of information regarding the said request so that a proper understanding is maintained even in future as to why it was not necessary to submit a full application. In this regard, it was agreed that the IWWMP should be revised to add more issues that should cover the current request of constructing an additional water cooling water treatment plant.

5. Way forward

The meeting resolved that the revision of the IWWMP should be completed and presented to the authority no later than the end of November 2015, and official response will be provided to the applicant after submission of the IWWMP to the DWS.

6. Date of the next meeting

The date of the next meeting to discuss and finales the IWWMP will be end of November 2015. Details of an actual date will be communicated in due course.

7. Meeting adjournment

The Chairperson, declared the meeting closed. The meeting was adjourned around 12:00.

Ms. Masela, Chairperson

Ms. Phillipine Matjila, Scriber

.....

.....

Signature

Signature

Date:

Date:



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Eskom and DWS Meeting: Lethabo Power Station

Date: 23 September 2015

Venue: DWS Offices (Diphororo)

Time: 10:00-12:00

Name	Organisation	Contact Details	E-mail address	Signature
N. Mtshali	Lethabo P.S	0835123455	mitshali@eskom.co.za	
H. Ndlovu	SD: EM: Eskom	071 379 3319	Ndlovu.H@eskom.co.za	
W. De Klerk	Eskom	079 77 5228		
S. Wilson	Lethabo PS, Eskom	073 301 2236	wilsonso@eskom.co.za	
C WOODHOUSE	" "	016 457 5934	CARL.WOODHOUSE@ESKOM.CO.ZA	
R GOVENDER	Eskom	072 2106257	Govender@eskom.co.za	

Senkosi Environmental Consulting

Name	Organisation	Contact Details	E-mail address	Signature
Kerrin Mason Bloubaan Mank	DWS	082 476 4416 082 3292 706	kerrin.mason@dws.gov.za mank@bloubaan.gov.za	
Phumile Mphahlele	Senkosi Consulting	072 95 108340	phumile@senkosi.co.za	
Sybilo Ndlovu	Senkosi Consulting	071 297 5830 021 258 7559	sybil@senkosi.co.za ndlovu@senkosi.co.za	

Public Participation Report

Lethabo Power Station

**MINUTES OF MEETING WITH DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND
ATTENDANCE REGISTER**

Minutes of a Pre-consultation Meeting held with the Integrated Authorisation Unit, Department of Environmental Affairs

Date and Time: 16 October 2015 10:00 -11:00am

The Aim of the meeting was to:

- i. Present the proposed Cooling Water Treatment Plant (CWTP) EIA project for the Lethabo Power station
- ii. Get clarity on the waste management license regarding this development
- iii. To get clarity on the implementation of the specialists studies
- iv. Clarity on the submission of the application for the EIA Authorisation
- v. Ascertain if Department of Environmental Affairs (DEA) officials could undertake a site visit to the project site

Venue of Meeting: Department of Environmental Affairs, Steve Biko Street

Present: (see the attached attendance register for more detail of attendees)

Apologies: Mr. Humbulani Ndou-Eskom

8. Opening and Welcoming

Ms. Pumeza Skepe from the Department of Environmental Affairs (DEA), chaired the meeting. She welcomed all in the meeting and declared the meeting opened. She further requested all attendees to introduce themselves.

9. Presentation

Ms. Jean Beater from Senkosi Consulting delivered a presentation to the meeting after Mr. Siphso Nkambule gave a short background and objectives of the project.

The presentation provided background to the project as well as the need for the project. The existing cooling water treatment plant (CWTP) is running at maximum capacity and an additional CWTP is needed to take the load of the existing CWTP as well as allowing maintenance of the existing CWTP.

Site photographs were included in the presentation to show the meeting the type of the area on which the proposed CWTP would be constructed.

The presentation also submitted a request to reduce or downgrade the Environmental Impact Assessment (EIA) process into a Basic Assessment (BA) given the fact that the proposed activity is in the power station precinct that is already disturbed.

10. Discussion

After the presentation, a discussion was held regarding the project. The authority representatives asked multiple questions to ascertain if there was no other activity that would impact on the waste permit. The waste specialist also highlighted that the proponent needed to ensure that the waste is properly classified and is according to the existing permit.

Initially, it was understood that Lethabo Power station had an existing waste management license. However the situation was later clarified by the Environmental Officer at the Power

Station, Ms. Wilson. She indicated that the power station was operating with a pre-existing lawful use permit and they are also permitted to dispose waste through the incorporation of waste issues in the power station's integrated water and waste management plan (IWWMP). The waste management specialist also engaged with this information and affirmed that there was no need to apply for a waste management license.

There was also a concern in terms of the amount of volume of the effluent after the construction of this additional facility. It was explained that both CWT plants will be operated so that overall effluent generated will remain the same as per current operations

11. Resolution

It was resolved as follows:

- That the authority is comfortable with the current pre-existing lawful use waste permit therefore there is no need to apply for a new license until the Minister announces such a need.
- There will not be any site visit that the official can attend given that the proponent had not yet submitted an application form
- There proponent need to verify the classification of the waste effluent that will be produced in the new facility and keep of proper record for such
- That the proponent is advised to request for a meeting with the Strategic Infrastructure Development Unit given that the application will no longer be an integrated application but an application in terms of environmental authorization only.
- The application will not be downgraded to a BA but will remain a full EIA, as downgrades were no longer permitted.
- It was optional for the proponent to submit an application alone and then the scoping report, however it was advisable to do this simultaneously to maximize the time factor
- The public participation process must be undertaken in terms of the regulations
- The proposed specialist studies: hydrological studies, avifauna, biodiversity, visual impact, socio economic study, agricultural soil evaluation and heritage, would need to be discussed with the SID

12. Way forward

The proponent was advised to arrange a pre-consultation meeting with SID unit to get its input into the application since they will be the unit handling the application.

13. Date of the next meeting

The date of the next meeting with the relevant unit, shall be determined after a request is made to the relevant unit.

14. Meeting adjournment

The Chairperson declared the meeting closed. The meeting was adjourned around 11:10.

Ms. Pumeza Skepe, Chairperson
Scribe

Mr. Siphon Nkambule,

.....

Signature

Date:

.....

Signature

Date:

**LETHABO EAST COOLING WATER TREATMENT PLANT
ATTENDANCE REGISTER
MEETING WITH DEPARTMENT OF ENVIRONMENTAL AFFAIRS**

16 October 2015

NAME	COMPANY	TELEPHONE/ CELL NUMBER	EMAIL ADDRESS
HEITSHISAUU CAWIM	SENKOSI	076 240 8750	caiwitn@telkomsa.net
MAHLAISI G.M.	SENKOSI	0828549538	delno@telkomsa.net
Jean Beater	"	084 404 1118	jean.beater@gmail.com
SIPHO NKAMBUCE	SENKOSI CONSULTING	012-329 7569 071297 3830	sipho@senkosi.com
Mpho Muswubi	Estom	082 593 3339 011 200 2346	mpho.muswubi@ Estom.co.za

NAME	COMPANY	TELEPHONE/ CELL NUMBER	EMAIL ADDRESS
ITHLEWIKONI THI RAMAULTONA	DEA	082 301 0747	tramaulona@environment.gov.za
RUVESHNEE GOVENDER SUBRAMONEY	ESKOM	0722106254	Govendr@eskom.co.za
Bathandwa Ncube	DEA : IPS & SZAG	012 3999368	Bathandwa.ncube@ environment.gov.za
Samkeliswe Dlamini	DEA	012 3999379	SDlamini@environment.gov.za
Pumeza Stepe-Mngciba	DEA	012 = 3999374	PStepe@environment.gov.za
Sylvanne Nkomo	Environment. Of Lethabo FS	073 301 2236	wilsonso@eslan.co.za

APPENDIX 2-2

STAKEHOLDER DATABASE

STAKEHOLDER DATABASE FOR THE PROPOSED CONSTRUCTION OF LETHABO EAST COOLING WATER TREATMENT						
NAME AND SURNAME	POSITION	ORGANISATION	ADDRESS	TELEPHONE	FACSMAIL	EMAIL
Ms Tossy Mokhatla	Speaker Office	Fezile Dabi District Municipality	P.O.BOX 10, Sasolburg, 1947	T: 0169708770	F: 0169708733	secretaryspeaker@feziledabi.gov.za
Mr Khomoliileng Alexis Mare	Ward Chancellor	Metsimaholo Local Municipality	P.O.BOX 60, Sasolburg, 1947	C: 0832404156	F: 0169732191	
<u>Ms Molibe</u>	MM	Fezile Dabi District Municipality	P.O.BOX 10, Sasolburg, 1947	T:0169708770	F: 0169708733	rietieg@feziledabi.gov.za
Mr Andre	Environmental Officer (Environmental)	Fezile Dabi District Municipality	P.O.BOX 10, Sasolburg, 1947	T: 0169708770	F: 0169708733	andrevz@feziledabi.gov.za
Ms Elaine	Infrastructure Development	Fezile Dabi District Municipality	P.O.BOX 10, Sasolburg, 1947	T: 0169708770	F: 0169708733	elaineg@feziledabi.gov.za
Ms Portia Lerata	Speaker Office	Metsimaholo Local Municipality	P.O.BOX 60, Sasolburg, 1947	T: 0169738317	F: 0169732191	portia.lerata@metsimaholo.gov.za
Ms Keneuoe Chele	MM	Metsimaholo Local Municipality	P.O.BOX 60, Sasolburg, 1947	T: 0169738313	F: 0169732191	keneuoe.chele@metsimaholo.gov.za
Mr Luzisi Thile	Executive Manager (waste)	Metsimaholo Local Municipality	P.O.BOX 60, Sasolburg, 1947	T: 0169738333	F: 0169732191	lusizi.thile@metsimaholo.gov.za
Mr Tumelo Motaung	Infrastructure Development	Metsimaholo Local Municipality	P.O.BOX 60, Sasolburg, 1947	T: 0169738455	F: 0169732191	tumelo.motaung@metsimaholo.gov.za

STAKEHOLDER DATABASE FOR THE PROPOSED CONSTRUCTION OF LETHABO EAST COOLING WATER TREATMENT

Lilian Olisang	Speaker	Midvaal Local Municipality	P.O.BOX 09, Meyerton 1960	T: 0163607682/80	F: 0163607519	liliank@midvaal.gov.za
Albert De Cleck	MM	Midvaal Local Municipality	P.O.BOX 09, Meyerton 1960	T: 01636274///7142	F: 0163607519	municipalmanager@midvaal.gov.za
Jannetta	Secretary	Midvaal Local Municipality	P.O.BOX 09, Meyerton 1960	T: 0163607682	F: 0163607519	jannetta@midvaal.gov.za
David	Infrastructure and planning	Midvaal Local Municipality	P.O.BOX 09, Meyerton 1960	T: 0163607682	F: 0163607519	david@midvaal.gov.za
Mr Life Mukoni	Liaison Officer	Department of Agriculture	Private Bag x 01, Glen, Bloemfontein, 9300	T: 0518618451	F: 0518618451	imukoni@fs.agric.za
Ms Thokho Buthelezi	Environmental Officer	Agriculture, Forestry and Fisheries	Private Bag x 02, Bloemfontein, 9300	T: 0518618400	F: 0518618451	thokhob@daff.gov.za
Mr Mkhosana	Environmental Officer	DESTEA	Private Bag x 20801, Bloemfontein, 9300	T: 0514004794	F: 0514004842	mkhosana@detea.fs.gov.za
Mr William Grobler	Environmental Officer	Water and Sanitation	P.O.BOX 528, Bloemfontein, 9300	T: 0514059000	F: 0514308146	groblerw@dws.gov.za
Ms Mercy	Admin	Department of Labour	P.O.BOX 522, Bloemfontein, 9300	T: 0515056200	F: 0514479353	webmail@labour.gov.za

STAKEHOLDER DATABASE FOR THE PROPOSED CONSTRUCTION OF LETHABO EAST COOLING WATER TREATMENT

Ms Keke Letsea		Public works, Roads and Transport	P.O.BOX 690, Bloemfontein, 9300	T: 0514054490	F: 0514054490	hod@ssworks.gov.za
Mr Mbatha	Co-coordinator	Free State Provincial Heritage Resources Authority		T: 0514104750	F: 0864010431	mbatha.npz@sacr.fs.gov.za
Lesiba Mabotla		Water and Sanitation		C: 0824764040		mabotla@dws.gov.za
Blantina Masela		Water and Sanitation		C: 0823292736		maselab@dws.gov.za
Gregory Ontong	Environmental	SAHRA	111 Harrington Street, Cape Town	T: 0214652198		gontong@wc.sahra.co.za
Mr Ndlelenhle Zindela	Regional Manager (Freestate)	Minerals and Energy	Private Bag x 33, Welkom, 9460	T: 0573911300	F: 0573571241	ndlelenhle.zindela@dmr.gov.za
Ms M. Golding	WildLife and Energy programme manager	Endangered Wildlife Trust		T: 0113723600		marieanneg@ewt.co.za
Mr Humbulani Ndou	Senior Environmental Officer	Eskom		T: 0115167100	F: 0866606012	NdouHV@eskom.co.za
Mr Thomas Codradie	Station Manager	Eskom		T: 0164575953		ConradTA@eskom.co.za

APPENDIX 2-3

COMMENTS AND RESPONSE REPORT

This comment and response report only contains comments raised prior to submitting the Final Scoping Report to the Authorities.

QUESTION / ISSUE	DATE	RESPONSE
<ul style="list-style-type: none"> After some discussion during which it was conveyed by some members of the audience that they were unaware of the project, Mr Mahlangu explained how information about the project had been disseminated to both the District and Local Municipalities as well as the availability of the DSR, it was agreed that in future, a meeting should take place with the Speaker's office where projects are discussed in detail so that municipal officials are aware of the scope and content of projects in their area of jurisdiction. It was conveyed that especially local municipalities need assistance in understanding projects and their impacts The Fezile Dabi DM representative stated that the Public Participation process for the Lethabo project was being done so that it could meet legislative requirements but no more than this. He had sent an email to the PP team and had not got a response to this email. Discussion regarding how the PP process should go forward, it was suggested that more I&APs be contacted including NUM and other unions, Ward Councillors, etc. 	<p>Focus Meeting: January 2016</p> <p>Group 20</p>	<p>Mr Mahlangu explained how information about the project had been disseminated to both the District and Local Municipalities as well as the availability of the DSR, it was agreed that in future, a meeting should take place with the Speaker's office where projects are discussed in detail so that municipal officials are aware of the scope and content of projects in their area of jurisdiction. It was conveyed that especially local municipalities need assistance in understanding projects and their impacts</p> <p>Investigation by the PP team revealed that no email had been received and the representative confirmed that he had mistakenly thought that he had sent an email to the team</p> <p>Mr Bokwe from Eskom said that it would be important to establish how many jobs would be created by the proposed project so that the extent of interest in the project could be determined. It was recommended that a focussed public meeting is undertaken during the EIA phase of the project where issues such as jobs could be discussed. This meeting should include Ward Councillors, municipal officials, local NGOs, etc</p>

<p>During the presentation it was explained that effluent mixed with ash will be disposed of at the existing ash dumps. An attendee requested clarity on the following regarding the ash dumps:</p> <ul style="list-style-type: none"> • How far from the neighbouring community are the ash dumps • What is the lifespan of these dumps • Are the ash dump facilities licenced 	<p>Focus Group meeting 20 January 2016</p>	<ul style="list-style-type: none"> • Ms Wilson from Eskom stated that this will be provided after investigations by Eskom but it could be about 3km. It was also mentioned that effluent from the CWTP does not affect the neighbouring communities and the volume of effluent will not increase as it will be 'shared' amongst the existing and new CWTPs. Instead fugitive ash has the potential of affecting the environment but Eskom monitors and manages this so that it does not affect the environment <p>The dumps are closer to Three Rivers. Currently Eskom is in the process of decommissioning houses at Bertha and Vaal Valley villages</p> <ul style="list-style-type: none"> • The lifespan of the dumps is estimated to be until 2036 • Originally the ash disposal facility did not require a permit/licence for operation, as it was specifically excluded from waste activities requiring a waste permit. With the new regulations, it does need to be licenced, since it is deemed a waste management facility. <p>It is unlikely that the municipality will be affected because Eskom will not be abstracting more water as the current amount of water extracted will be used by both plants. This plant is meant to ensure reliability of the system that treats water at Lethabo Power Station</p>
<p>When will this plant be constructed and start operating?</p>	<p>Focus Group meeting 20 January 2016</p>	<p>The focus at this stage is to construct the plant in 2018.</p>

How is the project going to impact the municipality?	20 January 2016	The project will not have any impact to the municipality water supply system as the capacity of water to be treated will remain the same as it is currently. The new plant is meant to ensure reliability of waste water treatment capacity.
Was the ward councillors consulted?	20 January 2016	The ward councillor was contacted and encouraged to attend the meeting, however cannot attend due election campaigns.
Is the project going to create any employment for locals and how many jobs will be created?	20 January 2016	The project is very small and is within Eskom premises. At this stage, it is unknown how many jobs will be created. If jobs are created, the number of jobs is currently unknown.

APPENDIX 2-4

SITE NOTICES



APPENDIX 2-5

NEWSPAPER ADVERTISEMENT

APPENDIX 2-6
NOTIFICATION OF INTERESTED AND AFFECTED PARTIES REGARDING PROJECT
AND NOTIFICATION REGARDING AVAILABILITY OF DRAFT SCOPING REPORT

BACKGROUND INFORMATION DOCUMENT FOR FULL ENVIRONMENTAL IMPACT ASSESSMENT PROCESS (EIA) WITH ASSOCIATED ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR) FOR THE PROPOSED LETHABO EAST COOLING WATER TREATMENT PLANT

1. INTRODUCTION AND BACKGROUND

Lethabo Power Station operates an open Cooling system consisting of six concrete wet, hyperbolic cooling towers. Towers 1, 2 and 3 are located on the West side of the station and cooling towers 4, 5, and 6 are located on the East side of the station. The station is currently being serviced by a single cooling water treatment plant, which is located at the western side.

The existing cooling water treatment infrastructure is located on the west side of the power station and consists of a lime treatment plant and a desalination plant. This plant services the entire station's cooling water treatment requirements for cooling water chemistry for the station in order to maintain the water management via pipelines between the East and West cooling water systems. The existing treatment system also processes mine water for treatment and recovery to the main cooling system. The existing plant, however, is being operated at maximum capacity, with no opportunity for maintenance. Thus, there is a risk that the Eastern cooling water chemistry requirements cannot be guaranteed in an event of a half station outage (West).

To cater for redundancy, and allowing for maintenance of the existing plant, while continuing with treating cooling water, the station proposes constructing another cooling water treatment plant with a new desalination plant, on its eastern side. The proposed cooling water treatment plant will not process mine

water. Effluent/waste produced by the new plant will be lower than the present system and disposal will be linked and interlocked into the present pipelines, low conductivity re-cycled, medium effluents into the SSC system and high concentration effluents into Ash conditioning system. The station was commissioned with only the cooling water treatment located on its Western side.

2. PURPOSE OF THIS DOCUMENT

This document, the Background Information Document (BID), is intended to provide information about the EIA process being undertaken for the proposed development and provides:

- An overview of the project;
- An overview of the legislative context and a description of the manner in which the EIA will be undertaken;
- An indication of how interested and affected parties (I&APs) may become involved in the project; and
- Contact details of the person to whom I&APs may submit their issues and concerns associated with the project.

3. THE NEED AND THE DESIRABILITY OF THE PROJECT

The proposed East cooling water treatment is intended for the treatment of cooling water from the Eastern side of the station. The plant shall remove dissolved and suspended material from a fraction of the cooling water chemistry to the cooling water chemistry standard. Furthermore

the plant will improve the overall cooling water treatment plant availability and reliability by providing opportunity for critical and routing maintenance.

4. PROJECT SCOPE

The proposed project entails the construction of East cooling water treatment plant. The proposed project requires Scoping and EIA. The National Department of Environmental Affairs (DEA) is the Competent Authority and Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA) is the provincial commenting authority.

5. PROJECT LOCATION

Lethabo Power station is situated 10km south of Vereeniging in the Free State Province. The proposed Water Treatment Plant will be constructed inside the power station premises. Lethabo Power Station falls within the jurisdiction of the Metsimaholo Local Municipality which forms part of Fezile Dabi District Municipality in the Free State Province.

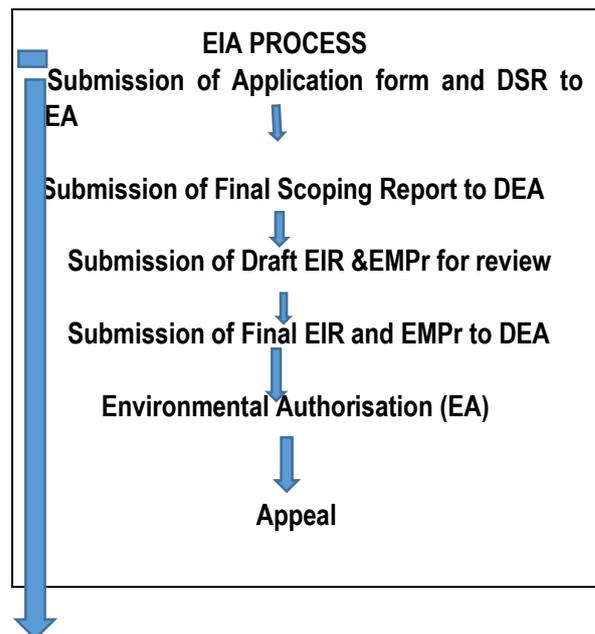
6. LEGISLATIVE REQUIREMENTS

The environmental impacts associated with the proposed project require investigation in compliance with the EIA Regulations (2014) published in Government Notice (GN) R.982 listed activities R.983 and R.984 as promulgated under the National Environmental Management Act (No 107 of 1998).

An Environmental Authorisation (EA) is required for the proposed project. The DEA, as the Competent Authority (CA), will issue a decision for the project. The proposed project triggers the following activities from NEMA EIA 2014 Regulation as amended:

- GNR 983: Activities 9, 10, 16 & 45
- GNR 984: Activities 11 & 25

7. THE EIA PROCESS FLOW



8. PUBLIC PARTICIPATION PROCESS

Public participation is an integral part of the EIA process and aims to involve I&APs in the process by notifying them of the proposed project and encouraging them to voice their issues and concerns.

Key activities to be undertaken as part of the public participation programme include:

- Identification of I&APs and development of a comprehensive and detailed I&APs database;
- Notification of I&APs by means of advertisements in newspapers and placement of Site Notices;
- Development of a Background Information Document (BID) (this document) for distribution to I&APs;
- Meetings (either one-on-one, key focus or public) and workshops with key identified stakeholders, as necessary;
- Recording and collation of correspondence received from I&APs (verbal and written);
- Responses to all I&APs who submit a verbal or written comment and/or issue regarding the project;
- Distribution of the all reports at designated locations (e.g. libraries).
- Interested and affected parties will have the opportunity to flag issues, and provide comments on the proposed activities.

The timeframes of the activities involved in the public participation process are as follows:

30 days for public participation process according to the Environmental Impact Assessment Regulations, 2014.

9. HOW TO GET INVOLVED

- By registering your interest in the project with the consultant indicated below.
- Respond to relevant newspaper advertisement that will be placed in local newspaper;

- By mailing or faxing a comment form to the participation consultant indicated below
-
- By telephonically contacting the participation consultant if you have query or comment, or require further project information.
- Attend the public participation events that will be held during the process; and should you be registered as I&APs you will be invited to attend these meetings.
- Review the project documentation that will be placed at appropriately identified venues in the area or that will be sent to you within 30-days comment period
- By reviewing various reports within 30-days comments period.

For any enquiries contact:

Consultant: Senkosi Environmental Consulting

458 Annie Botha Avenue

Rivonia, Pretoria

0084

Tel: 013 656 1212

Fax: 013 656 2233

Calvin Netshisaulu: calvinTN@telkomsa.net (All inquiries)

Or

Moses Mahlangu: delno@telkomsa.net (All inquiries)

**BACKGROUND INFORMATION DOCUMENT FOR FULL ENVIRONMENTAL IMPACT ASSESSMENT
PROCESS (EIA) WITH ASSOCIATED ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR) FOR THE
PROPOSED LETHABO EAST COOLING WATER TREATMENT PLANT**

In order to ensure that you are registered as an Interested and/or Affected Party for the above project and obtain information relating to the project, please submit your name and contact details to the consultant detailed below:

Senkosi Environmental Consultant, 458 Annie Botha Avenue, Rivonia, Pretoria, 0084

E-mail: delno@telkomsa.net OR calvinTN@telkomsa.net Fax: 013 656 2233 Tel: 013 656 1212

Attention: Calvin Netshisaulu

PERSONAL DETAILS:

TITLE (Prof, Dr, Mr, Mrs Ms)		FIRST NAME	
INITIALS		SURNAME	
ORGANISATION			
CAPACITY			
ADDRESS			
POSTAL CODE		TEL NO	
CELL NO		FAX NO	
E-MAIL ADDRESS			

1. WHAT IS YOUR MAIN INTEREST IN THIS PROJECT:

.....

2. What potential impacts (positive or negative) do you foresee with regards to the proposed project on your property?

.....

3. What are the potential impacts (positive or negative) of the project on your business or livelihood?

.....

Any other comments?

.....
.....
.....
.....

Thank you for your participation!



Dear Interested and/or Affected Party

Date: 30 October 2015

**BACKGROUND INFORMATION DOCUMENT FOR FULL ENVIRONMENTAL IMPACT ASSESSMENT PROCESS (EIA)
WITH ASSOCIATED ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR) FOR THE PROPOSED LETHABO
EAST COOLING WATER TREATMENT PLANT**

Lethabo Power Station operates an open Cooling system consisting of six concrete, wet, hyperbolic cooling towers with a single Cooling Water Treatment Plant (CWTP), which is located on the Western side of the station. The existing plant, however, is being operated at maximum capacity, with no opportunity for maintenance. Eskom SOC Limited, Lethabo Power Station proposes to improve the availability of the cooling water treatment system by constructing another Cooling Water Treatment Plant on the Eastern side of the station.

NEMA EIA Regulations (2014) requires public consultation for the project throughout the Environmental Impact Assessment process. Public Participation is regarded as an integral part of the EIA process. You have been identified as an Interested and/or Affected Party (I&AP) or regulatory authority for this project. A Background Information Document (BID) and the schematic representation of the proposed position of the new plant inside Lethabo Power Station premises are herewith forwarded to you to provide you with information about this project and the process being adopted for this study. Additionally a response sheet is also attached and you are requested to complete and return it by email, post or fax.

You can email your response to delno@telkomsa.net OR calvinTN@telkomsa.net

Yours faithfully

Ntshengedzeni Calvin Netshisaulu

Public Participation Officer



Calvin Netshisaulu

From: Calvin Netshisaulu <calvinTN@telkomsa.net>
Sent: 30 October 2015 11:01 AM
To: 'secretaryspeaker@feziledabi.gov.za'; 'tebogom@metsimaholo.gov.za';
'rietieg@feziledabi.gov.za'; 'andrevz@feziledabi.gov.za'; 'elaineg@feziledabi.gov.za';
'portia.lerata@metsimaholo.gov.za'; 'kenuoe.chele@metsimaholo.gov.za';
'lusizi.thile@metsimaholo.gov.za'; 'tumelo.motaung@metsimaholo.gov.za';
'imukoni@fs.agric.za'; 'thokhob@daff.gov.za'
Cc: 'mkhosana@detea.fs.co.za'; 'groblenw@dws.gov.za'; 'webmail@labour.gov.za';
'hod@ssworks.gov.za'; 'mbatha.npz@sacr.fs.gov.za'; 'gontong@wc.sahra.co.za';
'ndlelenhle.zindela@dmr.gov.za'; 'megand@ewt.org.za'; 'ConradTA@eskom.co.za';
'gams@telkomsa.net'; 'nicolatorley@angloamerican.co.za'; 'Moses Mahlangu'
Subject: PUBLIC PARTICIPATION PROCESS FOR THE PROPOSED LETHABO EAST COOLING
WATER TREATMENT PLANT
Attachments: BID.pdf; COMMENT SPREAD SHEET.pdf; LETTER.pdf

Good day

SeNkosi Environmental Consulting have been appointed by Eskom (Lethabo Power Station) to conduct an Environmental Impact Assessment for the proposed construction of East Cooling Water Treatment Plant. You have been identified as potential stakeholder for the proposed project. Please go through the attached documents (Background Information Document, Letter and Comments Sheet) and send us your comments regarding the projects.

Your input will be highly appreciated.

Regards

Calvin Netshisaulu
SeNkosi Environmental Consulting
Tel: 013 656 1212
Fax: 013 656 2233
Cell: 076 240 8750
Email: calvinTN@telkomsa.net

Calvin Netshisaulu

From: Calvin Netshisaulu <calvinTN@telkomsa.net>
Sent: 04 November 2015 12:22 PM
To: 'mabotlal@dws.gov.za'
Cc: 'maselab@dws.gov.za'
Subject: PUBLIC PARTICIPATION PROCESS (LETHABO EAST COOLING WATER TREATMENT)
Attachments: BID.pdf; COMMENT SPREAD SHEET.pdf; LETTER.pdf

Good day

SeNkosi Environmental Consulting have been appointed by Eskom (Lethabo Power Station) to conduct an Environmental Impact Assessment for the proposed construction of East Cooling Water Treatment Plant. You have been identified as potential stakeholder/Commenting authority for the proposed project. Please go through the attached documents (Background Information Document, Letter and Comments Sheet) and send us your comments regarding the project.

Your input will be highly appreciated

Calvin Netshisaulu
Margen Industrial Services
Tel: 013 656 1212
Fax: 013 656 2233
Cell: 076 240 8750
Email: calvinTN@telkomsa.net



Calvin Netshisaulu

From: Calvin Netshisaulu <calvinTN@telkomsa.net>
Sent: 09 November 2015 03:36 PM
To: 'municipalmanager@midvaal.gov.za'
Cc: 'liliank@midvaal.gov.za'; 'jannetta@midvaal.gov.za'; 'david@midvaal.gov.za'
Subject: PUBLIC PARTICIPATION PROCESS FOR THE PROPOSED LETHABO CONSTRUCTION OF EAST COOLING WATER TREATMENT PLANT
Attachments: BID.pdf; COMMENT SPREAD SHEET.pdf; LETTER ACCOMPANYING BID.pdf

Good day

SeNkosi Environmental Consulting have been appointed by Lethabo Power Station to Conduct an Environmental Impact Assessment (EIA) study for the proposed construction of East Cooling Water Treatment Plant. We have identified Midvaal Local Municipal as one of the potential stakeholders. Please go through the attached documents and give us comments regarding the proposed project.

Regards

Calvin Netshisaulu
SeNkosi Environmental Consulting
Tel: 013 656 1212
Fax: 013 656 2233
Cell: 076 240 8750
Email: calvinTN@telkomsa.net

Calvin Netshisaulu

From: Calvin Netshisaulu <calvinTN@telkomsa.net>
Sent: 26 November 2015 11:28 AM
To: 'hod@ssworks.gov.za'; 'mbatha.npz@sacr.fs.gov.za'; 'gontong@wc.sahra.co.za'; 'ndlelenhle.zindela@dmr.gov.za'; 'megand@ewt.org.za'
Cc: 'ConradTA@eskom.co.za'; 'gams@telkomsa.net'; 'nicolatorley@angloamerican.co.za'; 'Humbulani Ndou'; 'Moses Mahlangu'; 'siphonkambule'
Subject: AVAILABILITY OF DRAFT SCOPING REPORT FOR THE PROPOSED LETHABO COOLING WATER TREATMENT PLANT
Attachments: Executive Summary .pdf

Dear Stakeholders

Eskom, Lethabo power station is proposing to upgrade the water treatment plant. Environmental Impact Assessment is a requirement for the project. Senkosi Consulting is currently undertaking the necessary impact studies and related public consultation. A draft scoping report has been compiled and is now available for comment. The Draft Scoping Report will be available for review for a 30 days from 23rd November 2015 to 15th January 2016. Hard copies of the report are available from the following public places:

Name of the Library	Contact details
Sasolburg Public Library	Christiaan De Wet Rd & Limburg Street Tel: 016 973 8647 Fax: 016 973 2191 Email: Sasolburg@sacr.fs.gov.za
Vermeeging Library	Cnr Leslie & Market Street Tel: 016 450 1721/23/24

Should you wish to receive a full copy of the Draft Scoping Report (CD), please forward your request in writing to Senkosi Environmental Consulting to the contact details below

Calvin Netshisaulu
Senkosi Consulting
Tel: 013 656 1212
Fax: 013 656 2233
Cell: 076 240 8750
Email: calvinTN@telkomsa.net

Calvin Netshisaulu

From: Calvin Netshisaulu <calvinTN@telkomsa.net>
Sent: 26 November 2015 11:23 AM
To: 'speaker@feziledabi.gov.za'; 'tebogom@metsimaholo.gov.za';
'rietieg@feziledabi.gov.za'; 'andrevz@feziledabi.gov.za'; 'elaineg@feziledabi.gov.za';
'portia.lerata@metsimaholo.gov.za'; 'kenuoe.chele@metsimaholo.gov.za';
'lusizi.thile@metsimaholo.gov.za'; 'tumelo.motaung@metsimaholo.gov.za'
Cc: 'imukoni@fs.agric.za'; 'thokob@daff.gov.za'; 'sipho nkambule'; 'Moses Mahlangu';
'mkhosana@detea.fs.co.za'; 'Grobler Willem (BFN)'
Subject: AVAILABILITY OF DRAFT SCOPING REPORT FOR THE PROPOSED LETHABO EAST
COOLING WATER TREATMENT PLANT
Attachments: Executive Summary .pdf

Dear Stakeholders

Eskom, Lethabo power station is proposing to upgrade the water treatment plant. Environmental Impact Assessment is a requirement for the project. Senkosi Consulting is currently undertaking the necessary impact studies and related public consultation. A draft scoping report has been compiled and is now available for comment. The Draft Scoping Report will be available for review for a 30 days from 23rd November 2015 to 15th January 2016. Hard copies of the report are available from the following public places:

Name of the Library	Contact details
Sasolburg Public Library	Christiaan De Wet Rd & Limburg Street Tel: 016 973 8647 Fax: 016 973 2191 Email: Sasolburg@sacr.fs.gov.za
Vereëging Library	Cnr Leslie & Market Street Tel: 016 450 1721/23/24

Should you wish to receive a full copy of the Draft Scoping Report (CD), please forward your request in writing to Senkosi Environmental Consulting to the contact details below

Calvin Netshisaulu
Senkosi Consulting
Tel: 013 656 1212
Fax: 013 656 2233
Cell: 076 240 8750
Email: calvinTN@telkomsa.net

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2015.0.6176 / Virus Database: 4460/11061 - Release Date: 11/25/15

APPENDIX 2-7
INVITATION TO FOCUS GROUP MEETING; MINUTES OF FOCUS GROUP MEETING
AND ATTENDANCE REGISTER

SENKOSI

ENVIRONMENTAL CONSULTING

Conserving Tomorrow, Today

458 Anna Botha Avenue, Rivonia, Pretoria, 0084

012 529 5568

012 261 3638

086 113 5484

info@senkosi.com

www.senkosi.com

0203842100

senkosi-consulting

Dear Registered Stakeholder

Date: 13 January 2016

INVITATION TO PARTICIPATE: ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PROGRAMME FOR THE PROPOSED CONSTRUCTION OF COOLING WATER TREATMENT PLANT AT LETHABO POWER STATION IN METSIMAHOLO LOCAL MUNICIPALITY, FREE STATE PROVINCE

- AVAILABILITY OF DRAFT SCOPING REPORT FOR PUBLIC REVIEW
- INVITATION TO ATTEND FOCUS GROUP MEETING

You are hereby reminded that the DSR is currently available for public comment and review. The report was placed at public libraries and the comment period was announced to be as from **Monday 23 November 2015 to Friday, 15 January 2016** (end of business day). Hard copies of the DSR can be reviewed at any of the following public places

AREA	VENUE	STREET ADDRESS	TELEPHONE NUMBER
Sasolburg	Sasolburg Library	Cnr. Christiaan de Wet Road and Limburg Street Sasolburg	016 – 973 8647
Vereeniging	Vereeniging Library	Cnr. Leslie and Market Street Vereeniging	016 – 450 1721

We would also like to take this opportunity to invite you to attend the Focus Group Meeting that will be held for the above-mentioned proposed project in Sasolburg (Metsimaholo Local Municipality). Details of the meeting are as indicated in the table below:



SENKOSI

ENVIRONMENTAL CONSULTING

Conserving Tomorrow, Today

45B Anson Butha Avenue, Rivonia, Pretoria, 0054
017 529 7569
011 297 8830
086 115 7484
info@senkosi.com
www.senkosi.com
@senkosi_c
senkosi_consulting

DATE	TIME	VENUE
Wednesday 20 January 2016	10h00 - 12h00	Metsimaholo Local Municipality, Council Foyer, 2 nd Floor, Finance Building.

The purpose of the Focus Group meeting is to discuss the findings of the scoping report and to receive input from stakeholders. Your inputs into this EIA process are highly valued as they will help ensure that any environmental impact that could be associated with this proposed project are identified and addressed. We therefore encourage your attendance and participation at the planned Focus Group meeting.

Yours faithfully

Calvin Netshisaulu

PUBLIC OPEN DAYS INFORMATION

Mr Ngqoboseni Nkomo



Focus Group Meeting

Proposed Lethabo East Cooling Water Treatment Plant

20 January 2016

10H00

Opening and Welcoming:

Mr Moses Mahlangu [MM] facilitated the meeting. He declared the meeting opened and welcomed all in attendance

Safety Evacuation/Briefing:

Bathrooms and evacuation point were identified.

Introductions & Apologies:

MM called for a round of introductions and each attendee introduced himself/herself.

Apologies received were pronounced. It was mentioned that the Speaker and Municipal Manager could not attend as they were attending by-elections in Heilbron. Mr Calvin Netshisaulu indicated that apologies were received from the Ward Councillor, Provincial commenting authority; Free State Heritage Resources Agency and Birdlife Africa.

MM encouraged all members to sign the attendance register so that they can receive the minutes of the meeting.

The agenda for the meeting was adopted without alteration or additions

Purpose of the Focus Group Meeting and Public Participation Process:

MM mentioned that this was a focus group meeting in that stakeholders registered on the database for the project were invited to the meeting. The number of attending stakeholders was considered low and the attending members raised a concern about the Public Participation process followed in inviting people to the meeting. The PPP Team explained the process followed and that this had been agreed upon because it was anticipated that because the project was situated within the grounds of the power station, it would have limited impact on the surrounding community and environment. The PPP further indicated that the process followed was adequate but during the EIA Phase the Public Participation Officer from Metsimaholo LM should be consulted to give names of stakeholders to be invited. It was indicated that I&APs will be invited at the EIA phase as requested by the stakeholders present at the meeting. The purpose of the meeting was then outlined as indicated below.

- Provide information regarding the proposed project
- Background and technical aspects of project
- Receive inputs in the form of comments and issues of concern relating to the proposed project
- Record comments, issues and concerns
- Agree on the way forward

Using the presentation slide included in the whole presentation for the meeting, MM explained the public participation process followed up to the end of comment period of the Draft Scoping Report. He assured the meeting that comments

received on the day of the focus group meeting will be included in the Final Scoping Report. The **way forward** in terms of public participation in the EIA Phase and after the decision has been issued was outlined.

Background and Technical Aspects of Project:

Ms Jean Beater [JB] gave a presentation on the project's need and justification and technical background. Eskom Team present at the meeting supported the presentation by giving additional information and clarifications on some aspects of the project and the process followed in conducting the studies. Eskom officials also gave responses to questions that were directed to Eskom. JB's presentation focused on:

- Background of the existing CWTP
- Details of the new CWTP
- Technical details of the new CWTP
- Environmental authorization process
- Potential impacts of the new CWTP

Discussion Session:

Please note: These minutes are not a verbatim recording of what was said by the commentator. This is a summary of our understanding of what the speaker was highlighting.

Below are the points brought forward during the discussions:

- After some discussion during which it was conveyed by some members of the audience that they were unaware of the project, Mr Mahlangu explained how information about the project had been disseminated to both the (stakeholders) District and Local Municipalities as well as the availability of the Draft Scoping Report (DSR). It was agreed with the stakeholders that in future, a meeting should take place with the Speaker's office where projects are discussed in detail so that municipal officials are aware of the scope and content of projects in their area of jurisdiction. It was conveyed that especially local municipalities need assistance in understanding projects and their impacts.
- The Fezile Dabi District Municipality (DM) representative stated that the Public Participation process for the Lethabo project was being done so that it could meet Legislative requirements but no more than this. He had sent an email to the PP team and had not got a response to this email. PP team indicated that follow ups will be made on the email sent by the DM representative, and feedback shall be provided. In subsequent correspondence between the DM representative and PP team it was established that the representative had mistakenly not sent the email he had composed and he apologised for the misunderstanding.
- Public speaker's office indicated that the copy of the DSR was not received at their office. It was further indicated that I&APs were not informed properly. After discussion, it was agreed that Eskom should use this as a lesson to learn, and I&AP's must be informed during the EIA phase of the project.
- Discussion regarding how the PP process should go forward, it was suggested that more I&APs be contacted including NUM and other unions, Ward Councillors, etc.
- Mr Bokwe advised that it would be important to establish how many jobs would be created by the proposed project so that the extent of interest in the project could be determined. It was recommended that a focus public meeting to be undertaken during the EIA phase of the project, issues such as jobs could be discussed. This meeting should include Ward Councillors, municipal officials, local NGOs, etc.

During the presentation it was explained that effluent mixed with ash will be disposed of at the existing ash disposal facility. An attendee wanted clarity on the following regarding the ash disposal facility:

<ul style="list-style-type: none"> • The distance from the neighbouring community and the ash disposal facility • The lifespan of the disposal facility • Are the ash disposal facilities licenced? 	<ul style="list-style-type: none"> • Eskom explained stated that an accurate distance was not available at the time of the meeting and will be obtained after the meeting for the purpose of the minutes. It was determined that the nearest community is Three Rivers, Vereeniging at an estimated distance of 4.05km. Vaal Village was estimated to be 4.5km from the Lethabo Ash Disposal Facility. It was stated that the project will not abstract more water than currently abstracted from current water resources as the project will not treat more water. The project will improve the stations current efficiency by allowing for the current load to be shared amongst the current and proposed water treatment plants. Consequently there will also not be more effluent generated. The primary concern currently experienced with the Lethabo Ash Disposal Facility is not water related issues but rather fugitive emissions. The proposed project will therefore not influence the Lethabo Ash Disposal facility. • The footprint of the ash disposal facility is estimated to be available until 2036 taking into consideration the current rate of ash sales and coal burnt. • The Lethabo ash disposal facility is a pre-existing lawful use of which permit/licence for operation was not required since it was specifically excluded from waste activities requiring permitting
<p>How is the project going to impact on the municipality water supply system?</p>	<p>The project is not likely to impact on the municipality water supply system as the amount of water processed through the treatment process will remain unchanged. The new plant is meant to provide redundancy and ensure reliability of waste water treatment capacity and Lethabo Power Station recovers and treats its own waste water</p>
<p>Eskom requested the municipality to observe if their water supply system is affected by the construction of the new plant.</p>	<p>The project is not likely to impact on the municipality water supply system as the amount of water processed through the treatment process will remain unchanged. This plant is meant to ensure reliability of the system that treat water at Lethabo Power Station</p>
<p>Did you consult the Ward Councillor?</p>	<p>The Ward Councillor was contacted and encouraged to attend the meeting, however he could not attend due election campaigns.</p>
<p>When will this plant be constructed and start operating?</p>	<p>The focus at this stage is to construct the Cooling Water Treatment Plant after 2018.</p>
<p>Is the project going to create any employment for locals and how many jobs will be created?</p>	<p>The project is small scale and is situated within Eskom premises. At this stage it is unknown as to whether the</p>

	project will create employment and if it does, the number of jobs that will be created is unknown
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Way Forward:

JB and **MM** explained what will happen going forward by mentioning that:

- The Draft Scoping Report will be updated with the information gathered during the comment period and during this meeting that will form part of the Final Scoping Report
- The Final Scoping Report will be submitted to the Department of Environmental Affairs (DEA) for decision making/acceptance. Registered stakeholders will be notified about the submission of the FSR to the department and the FSR will be made available to the public on request.
- Once the FSR is accepted by DEA, the EIA Phase will commence and this will produce a Draft Environmental Impact Assessment Report (DEIAR) that will be made available for public review and comment.
- At the end of the comment period of DEIAR a Final Environmental Impact Assessment Report will be produced and submitted to the DEA.
- The decision that will be given by DEA will be communicated to stakeholders and a twenty days appeal period will be allowed.
- MM requested that comments can still be submitted to the Consultant and will be incorporated on the FSR
- Documents will be made available for Public on Eskom Website, link to the site is: http://www.eskom.co.za/OurCompany/SustainableDevelopment/EnvironmentalImpactAssessments/Pages/Environment_Impact_Assessments.aspx

ATTENDANCE REGISTER

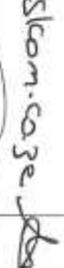
<p style="text-align: center;">SEINKOSI ENVIRONMENTAL CONSULTING</p> <p style="text-align: center;">ATTENDANCE REGISTER. (FOCUS GROUP MEETING FOR THE PROPOSED LETHABO POWER STATION COOLING WATER TREATMENT PLANT.) DATE: 20th JANUARY 2016</p>					
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