

**Integrated Environmental Authorisation (Environmental Impact Assessment and Waste Management Licence Application) for the Proposed Retrofitting of a Flue Gas Desulphurisation (FGD) System at Medupi Power Station, Lephalale, Limpopo Province**

**(DEA Ref.: 14/12/16/3/3/3/110)**

**PUBLIC MEETING**

**Wednesday, 5 November 2014, 18h00, Mogol Club, Lephalale**

## Final Minutes

### List of abbreviations:

BID	Background Information Document	CFB	Circulating Fluidised Bed
DEA	Department of Environmental Affairs	DFB/D	Circulating Fluidised Bed
DAFF	Department of Agriculture, Forestry and Fisheries	DSR	Draft Scoping Report
DWS	Department of Water and Sanitation	FGD	Flue Gas Desulphurisation
MCWAP	Mokolo and Crocodile River (West): Water Augmentation Project	NEMA	National Environmental Management Act (act 107 of 1998 as amended)
NEMWA	National Environmental Management: Waste Act (act 59 of 2008 as amended)	NEM: AQA	National Environmental Management: Air Quality Act
NWA	National Water Act (Act 36 of 1998 as amended)	PM	Public Meeting
PS	Power Station	ROD	Record of Decision
TCTA	Trans-Caledon Tunnel Authority	WWTP	Waste Water Treatment Plant

### **1. WELCOME, INTRODUCTIONS AND APOLOGIES**

Nicolene Venter, Zitholele Consulting, welcomed all present and requested that the team and the delegates introduce themselves and the Department and/or Organisation that they are representing.

***Please refer to Appendix A for the Attendance Record and the apologies received.***

### **2. AGENDA FOR THE WORKSHOP**

The Agenda proposed for the workshop, as below, was presented to and accepted by the delegates:

- Welcome, introductions and objectives of the meeting;
- Overview of the environmental baseline as documented in the Draft Scoping Report;
- Discussions; and
- Way forward and closure.

### **3. OBJECTIVES OF THE MEETING**

- To present information regarding the proposed development;
- To present the EIA and Public Participation Processes followed to date;
- To present the environmental baseline as documented in the Draft Scoping Report;
- To obtain comments and inputs from stakeholders on the Draft Scoping Report; and
- To record stakeholders comments and inputs at the Public Meeting.

### **4. PRESENTATION**

Sharon Meyer-Douglas presented a summary of the information available within the Draft Scoping Report.

*The presentation is attached as Appendix B.*

#### **4.1. Authorisations**

The FGD technology retrofit requires authorisation under the National Environmental Management Act (NEMA) (Act 107 of 1998 as amended). The project also requires a Waste Management License under the National Environmental Management Waste Act (NEMWA) (Act 59 of 2008) and a Water Use License under the National Water Act (NWA) (Act 36 of 1998 as amended).

In order to comply with this legislation, Zitholele Consulting is implementing an integrated environmental authorisation process, which accommodates all requirements of the relevant regulations. This integrated process will investigate environmental and socio-economic impacts associated with the proposed activities and will package the reports such that these are acceptable to all competent authorities.

#### **4.2. Scoping Phase**

The key aims of the Scoping Phase of an environmental authorisation process are to:

1. Assess the receiving environment to identify any obvious sensitivities.
2. Liaise with the client and engineers to understand the activities involved in the project in order to relate these to potential enviro-social impacts.
3. Introduce the project to the authorities and to the interested and affected parties. In this regard, Zitholele Consulting compiles a database of known stakeholders and also advertises the process as per the NEMA regulations. Public notification is a dynamic process and often key stakeholders are not identified by the EAP but become involved in the project through word of mouth as the project evolves.

4. Environmental and social issues are identified throughout the Scoping Phase, through site investigation, literature review and discussions with the stakeholders, including the client.
5. Once key issues are flagged, the relevant specialist studies can be identified to further investigate these issues in terms of the associated potential environmental and social impacts.
6. At the end of the scoping phase a way forward is presented by means of a methodology for the impact assessment phase.
7. All of this information is packaged within the Draft Scoping Report.

#### **4.3. Project Progression**

The project Initiation phase was carried out between December 2013 and April 2014.

During this phase:

- The listed activities triggered under the environmental legislation were identified and confirmed.
- The scope of the project was determined.
- The schedule for the environmental authorisation and licensing processes was finalised.
- Application forms for the EIA and WML were submitted.
- Initial stakeholder notification was carried out.

The Project Team is currently operating within the Scoping Phase. Currently the stakeholder review period is running and the Draft Scoping Report is available to interested and affected parties for review and comment.

The EIA phase will run from about January 2015 to November 2015 and the WULA will fit into this phase of the programme. It is anticipated that the final EIR, EMP<sub>r</sub> and WULA will be made available to the competent authority by November 2015.

#### **4.4. Motivation for the Project**

1. The World Bank is a financier of Medupi Power Station one of the conditions of this finance is that there is a reduction to the SO<sub>2</sub> emissions from the Power Station.
2. The NEM: AQA 39 of 2004, requires that existing industries operate within the prescribed minimum emissions standards – subcategory 1.1 – solid fuel combustion installations. This requires that Medupi Power Station significantly reduces SO<sub>2</sub> emissions from the power station operations.
3. Eskom Air Quality Strategy has established an emissions target of 400mg/Nm<sup>3</sup> at 10% O<sub>2</sub>. This means that technology is required to reduce SO<sub>2</sub> emissions by up to 95% for worst quality coal.

#### **4.5. FGD Technology**

- FGD process inputs are water and limestone, and the outputs are gypsum, sludge and salts.

- The system utilises an Open Spray Tower Wet FGD Technology, which operates much like a wet vacuum cleaner to trap SO<sub>2</sub> in water droplets and then react it with limestone.
- Zero Liquid Discharge Plant forms an important component of the FGD system and allows for the treatment of all waste water for reuse within the system, thereby producing no effluent for discharge.
- The FGD operation will need to identify methods for disposal of the new waste streams.
- Specialist study findings, a cost-benefit analysis and discussion with the authorities will determine the requirements for use of existing or new waste disposal facilities. This process will be carried out within the EIA phase.

#### **4.6. FGD Activities**

Limestone, as the reagent, will be sourced off-site and will be stored on-site prior to use. Limestone will be prepared for input to the absorber for reaction with the SO<sub>2</sub> and water. The gaseous emissions will be reacted with the limestone and water within the absorber to produce gypsum and waste water.

There will be Gypsum de-watering, handling and storage facilities. A wastewater treatment plant will ensure that wastewater can be treated for reuse within the FGD of power station operation. The wastewater treatment process will produce salts and sludge as waste products.

Gypsum, salts and sludge will require disposal at one or more facilities.

#### **4.7. FGD Process**

The FGD system will operate with 2 common plants which are :

- Gypsum dewatering
- Limestone preparation

Carel van Heerden explained the technical process and the FGD infrastructure within Medupi PS footprint (*please refer to Appendix B*).

#### **4.8. Waste Management License**

Activity B1 is included in the event that the sludge requires storage prior to disposal. This activity may or may not be triggered.

Activity B5 is included to cover the possibility that the sludge cannot be disposed of in its current state and may require treatment at a new facility on-site.

Activity B7 is triggered by the disposal of gypsum, salts and sludge at any landfill waste facility besides lagoon facilities.

Activity B10 is required for the construction of waste facilities under category B and would include the facilities for storage, treatment and disposal.

Storage of waste, both hazardous and general will be registered under Category C and the norms and standards will apply.

#### **4.9. EIA Listed Activities**

Activity 3 of GNR 545 is for the storage and handling of limestone prior to input of the limestone into the FGD process. This activity includes the construction of storage facilities for this purpose.

Activity 15 is triggered by the alteration of undeveloped land adjacent to the Medupi Power Station for purposes of the railway yard which will be used to transport limestone to the Medupi site. There is also the potential that additional waste disposal sites will be required and these would also alter undeveloped land within about 10km radius of the Power Station.

Activity 6 includes the potential transportation of ash, gypsum and sludge via conveyor or truck between storage facilities, the Medupi Power Station and the potential disposal facility.

Activity 11 is triggered by the construction of the railway yard for the transportation of limestone, and possibly gypsum and sludge, to and from the Power Station, respectively.

#### **4.10. Water Use License Application**

Activity 21a relates to the use of water allocated from the Mokolo and Crocodile Water Augmentation Project (Phase 2) for purposes of the FGD process.

21b refers to a potential new dirty water control dam associated with the limestone handling area adjacent to the rail yard.

21g addresses the disposal of gypsum and sludge, either to the ADF or to another facility. There is a risk that this waste may impact on groundwater and possibly on local surface water resources. Therefore the WULA process will ensure that mitigation and management measures are identified and documented in order to reduce the risk of this potential impact.

#### **4.11. Specialist Studies**

There are numerous specialist studies already completed for the Medupi site that were carried out prior to the construction of the Medupi Power Station. Due to the fact that the majority of FGD activities will be carried out within the area already impacted by the Medupi Power Station construction phase, the existing specialist studies will be sufficient in providing baseline information and an indication of impact to the receiving environment.

Due to the subsequent impact of the Medupi footprint by Medupi Power Station construction activities, much of the original environment has been removed in its entirety – fauna and flora, for example. In other cases, the impact of the FGD, considering the existing Medupi impact, will be insignificant and can be captured within the existing specialist studies – for example visual impact and land use.

Potential air quality impacts from the Medupi Power Station will be changed by the FGD retrofit and so the air quality study needs to be revised. Airshed Professionals undertook the original Medupi air quality study and will be undertaking the same study for the FGD. This will provide a good comparison of emissions from the Power Station before and after the retrofit.

Waste classification of ash, gypsum, salts and sludge is essential in informing the design of the disposal facility/ies and barrier system/s. The waste specialist will use the chemical composition of expected waste products from the Power Station in order to classify these wastes individually and together to provide recommendations for disposal. This study will form the basis of selection of feasible disposal options and the motivation for the preferred disposal option. It is proposed that samples of waste streams from Kusile Power Station be used to verify the findings of the Medupi waste classification study, once Kusile is on line.

The rail yard will be developed immediately south of the conveyors of the PS. This development area will include the following:

- Conveyors for various transportation of gypsum and limestone.
- Limestone transfer house and unloading facility.
- Limestone storage area.
- Gypsum storage area.
- Gypsum transfer houses and offloading facilities.
- A storm water dirty water dam.
- Emergency loading facilities.
- Sewage treatment of containment facilities to accommodate staff bathrooms on site.

Due to the fact that the rail yard will be bordering on the Medupi Power Station footprint, it has been identified that an ecological assessment should be carried out in order to identify any potentially significant impacts that the rail yard may have on the site. This assessment will investigate terrestrial ecology, aquatic ecology and wetlands, as appropriate.

Geotechnical studies will be carried out in order to inform the construction of the rail yard facilities.

#### **4.12. Design Alternatives**

As part of the EIA process one of the alternatives that will be investigated is the alternative of wet FGD with and without a gas cooler inlet. This forms a component of the design that will be finalised for the FGD retrofit.

- The gas cooler will reduce the amount of water required for the FGD operation.
- The Medupi Power Station has been designed to accommodate a gas cooler if necessary.
- The EIA will investigate both alternatives and provide recommendations for the preferred design.

#### **4.13. Waste Disposal Alternatives**

There are three waste streams from the FGD process, i.e.

- Gypsum from the Absorber
- Water from the absorber goes to the waste water treatment plant where it is treated and re-used in the Power Station.
- Sludge and salts are generated as wastes from the WWTP.

Depending on the waste classification, the project team will investigate the following alternatives for disposal:

- All wastes are disposed of as a mixture with ash at the ADF.
- All wastes are disposed at the ADF but in separate compartments.
- Only gypsum is disposed of at the ADF and the sludge and salts are disposed of on-site in lagoons.
- Sludge and salt lagoons may be located outside of the PS footprint. This assumes that gypsum can be disposed of at the ADF.
- Gypsum and salts and sludge to be disposed of on waste disposal facility/ies developed outside of the PS footprint.
- Trucking of one or more waste streams to an existing and appropriately licensed waste disposal site.

#### **4.14. Studies required**

Should new waste disposal sites be required, this will necessitate a site selection process. Three feasible site alternatives will be identified and specialist studies will be carried out in order to assess the potential environmental and socio-economic impact of development of the sites. At most three (3) alternative sites will be investigated within the Medupi footprint, and if unsuccessful, a 10km radius from the power station will be investigated for suitable alternative sites. A cost-benefit analysis, taking cognisance of environmental, social, engineering and financial criteria, will be carried out to identify the preferred site. The preferred site will then be investigated through a full environmental impact assessment to identify significant impacts and provide meaningful mitigation recommendations that focus on the environmental objectives of mitigation, rather than the mitigation mechanism.

#### **4.15. Key Issues**

##### ***Air Quality***

Air quality impacts generated by the Medupi PS should be reduced through the introduction of the FGD technology. A specialist air emissions study will be carried out in order to assess this reduction in SO<sub>2</sub> emissions. The air emissions specialist will take cognisance of possible indirect emissions and air quality impacts associated with stockpiling of limestone and gypsum.

***Waste Handling***

Waste handling and disposal is an important issue in terms of potential groundwater, surface water and soil impacts. This issue is being addressed through a waste classification study which will classify each waste stream according to the DEA Norms and Standards in order to inform the selection of a preferred disposal alternative. Should new disposal sites be required outside of the Medupi PS footprint, then numerous additional specialist studies will be required in order to assess the preferred waste disposal site for development and to identify and assess potential impacts of the construction and operation of the disposal facility.

***Water allocation***

Water is a key issue of contention within the Limpopo Province due to this being a water stressed environment. The use of water from MCWAP Phase 1 and 2 by the Medupi Power Station for energy production and for the FGD operation will be investigated as a key issue of significance and this will be assessed through the socio-economic assessment that is being commissioned. The Water Use License will also address this issue through the application for sourcing water from MCWAP Phase 2.

***Socio-economic impacts***

The Socio-economic assessment will investigate key impacts that may be generated by the FGD on receiving communities and economic sectors. These impacts may be positive or negative and will be assessed for purposes of decision making.

***Off-site development***

The off-site development of waste facilities has been highlighted as an issue that will require significant additional investigation during the Impact Assessment Phase. As discussed previously, there will be numerous specialist studies associated with the site selection and the impact assessment of new waste disposal facilities.

***4.16. What has happened so far***

- Site visit;
- Public notification (Advertisement and BID);
- Identification of alternatives;
- Identification of significant issues;
- Initial identification of specialist studies;
- Initial meeting with DEA; and
- Release of the DSR for public and authority review and comment.

***4.17. Public Participation***

Public participation was commenced with stakeholder notification. The notification period ran from 06<sup>th</sup> June 2014 to 18<sup>th</sup> July 2014. The Draft Scoping Report is currently available for review and the review period ends on Friday 5 December 2014. Public meetings and the key stakeholder workshop are currently taking place.



It is envisaged that the Final Scoping Report will be submitted to DEA in mid-December 2014.

**Post meeting note:**

Please note that the public review period has been extended to Friday 9<sup>th</sup> January 2015. The Final Scoping Report will be submitted to DEA in March 2015.

**4.18. Way Forward**

1. Public review of DSR;
2. Update report to address public comment;
3. Submit FSR to commenting authorities and to public;
4. Authorities accept or reject FSR; and
5. If accepted the project moves into the IA Phase.

**5. DISCUSSIONS**

- 5.1. Councillor Astrid Basson, Lephalale Local Municipality (AB): Why was a dry FGD system not considered in such a water-poor area? Why was the decision made to go for a wet system if it is going to require a considerable amount of water, which the area does not have?

Mr Carel van Heerden, Eskom Holdings SOC Ltd (CvH): The reason why the wet FGD was selected is because there are only two options which are viable for the removal of emissions to the degree required for Medupi Power Station. Eskom needs to comply with the minimum emission standards as well as the requirements stipulated by the World Bank. The two commercially viable technologies are Wet FGD and semi-dry specifically Circulating Fluidised Bed (CFB). Both technologies were assessed and a techno-economical study was done. The wet FGD was selected because of its techno-economic viability as well as the fact the semi-dry technologies requires a larger footprint and the retrofit period would be longer which is not desirable for the current Eskom's power supply conditions. With the cooler possibility, the water requirements for wet FGD can be reduced to a level which is comparable to the dry or semi-dry technologies.

- 5.2 AB: As the FGD units and the pollution filters will only be installed after the Power Station has been running for six years whilst the surrounding area will be subjected to pollution, what is the anticipated effect on the pollution levels, especially in Marapong which is going to be exposed mostly to the pollution?

Mr Kuben Nair, Eskom Holdings SOC Ltd (KN): The attendees need to recognise where the project is in the Environmental Impact Assessment (EIA) process which is the Scoping Phase. In the next phase which is the EIA Phase the team will be unpacking these elements and assessing the associated impacts. Out of that process, the team would be able to answer the questions raised at the meeting.

CvH: During the ROD only very low ambient conditions to be adhered to were specified. After the release of the maximum emission standards in 2010 the decision was made to retrofit Medupi Power Station with a WetFGD. Until such time as the FGD system is designed and built the Power Station will operate without it whilst still adhering to the Minimum Emission Standard.

KN: In terms of Eskom's power station's life cycle, there are various processes that needs to take place i.e.:

- the first process is the feasibility studies that need to be undertaken and this includes the EIA process;
- then the conceptual design phase;
- the detailed design phase; and
- appointment of contractor.

All these steps have different time frames and Eskom needs to wait for a major general overhaul of Medupi Power Station as the relevant units will need to be off line for a period of time to facilitate the retrofit. Timeframes are linked to Eskom's power stations' life cycles.

5.3 AB: MCWAP Phase 2 will possibly only be starting up in 2020 or later, is it therefore correct that before MCWAP 2 there can be no retrofitting of the FGDs because there is not sufficient water for it?

It was commented that a lot of mines in the area are waiting for MCWAP 2 and once it is available there will be a rush to the area which in turn will trigger a lot of pollution activities. SO<sub>2</sub> levels for instance are going to increase. The Municipality is aware that Medupi Power Station is a Key Point Infrastructure, but everything is going to happen at the same time and that is a concern. The brunt of the pollution is going to be for the community and the community is not being made aware of the impacts (dangers) of retrofitting of the FGD. Is there a possibility of fitting three of the six units at the start-up of the Power Station and the rest when MCWAP 2 is on line?

Mr Ian Midgley, Eskom Holdings SOC Ltd (IM): The DWS is currently developing MCWAP 2, and the project consists of a number of phases. DWS is currently busy with Phase 1 which entails an increase in the capacity from the Mokolo Dam to Lephalale. Eskom has already secured 10.9 cubic litres of water from Phase 1 of the Project through a pipeline infrastructure, which will provide water for the full Energy Production at Medupi Power Station as well as for three of the FGD units. Phase 2 will bring water from the Crocodile River and return flows from the waste water treatment plants from Johannesburg and Tshwane for the purpose of supplying the Power Station with additional water to cater to all six (6) FGD units.

The current water use license for the 10.9 cubic litres is sufficient until 2020/23, before Phase 2 is needed. Another 15.4 cubic litres will be needed for the Energy Production and FGD facilities combined, which will become available from Phase 2 of the MCWAP Project. Eskom is currently in discussions with DWS and TCTA, and water users have submitted their requirements. The matter is currently in the hands of National Treasury to provide the guarantees for the pipeline which will hopefully be finalised by the end of November 2014. Contracts have been negotiated and it is therefore not a question of whether the pipeline is going to be built, but merely the size of the pipeline.

AB: The Municipality was told that the FGD units could not be built from the beginning because of a lack of water. Eskom just responded that there is enough water for three FGD units from the MCWAP Phase 1. What is the reason then for it only being installed six years after the Power Station starts operating? Why can the units not be installed right from the beginning if there is water available for it? Is there actually another reason for it not being installed from the beginning?

KN: It comes back to the air quality standards which were set after the release of the emission standards in 2010 and the project being initiated in 2007. In that period the project was in the concept phase. The standards set at that time were very stringent. This is the first part.

The second part is that Eskom sourced funding for the Project. One of the funders in this case was the World Bank. Their requirements for provision of funding was the inclusion of FGD. Since the Project had progressed significantly during this period. It was decided to retrofit FGD. The opportunity to start the Project with FGD had since passed.

Mr Prince Khumalo, Eskom Holdings SOC Ltd (PK) and Mr Patrick Seloba, Eskom Holdings SOC Ltd (PS): Eskom needed to take note of the requirements for having to construct the FGD plant. The first requirement is the new Air Quality Standards and the project's time frames around these requirements. Eskom was already planning, designing and initiating the construction of Medupi Power Station when the new Air Quality Emission Standards were promulgated 2010. Therefore, the FGD was only identified and feasibility studies carried out very late in the Power Station's construction phase. Due to the processes that must be followed, initial inclusion of the FGD was not possible and ad to be retrofitted. Kusile Power Station is being designed with FGD units from the beginning because there was sufficient time to design and commission the FGDs

IM: The intention right at the beginning was to build the FGDs as there was always sufficient water. The MCWAP Phase 1 and 2 were planned to be done concurrently but Phase 1 was unfortunately delayed in 2008 and Phase 2 development was stopped. Eskom got what it could from the yield of Mokolo Dam.

CvH: The Medupi Power Station is categorised as an existing plant due to the fact that it was in construction phase in 2010 when the minimum emissions standards were promulgated. The minimum emission standards that the existing plant needs to adhere to is 3500mg/Nm<sup>3</sup> at 10% O<sub>2</sub> and 500mg/Nm<sup>3</sup> at 10% O<sub>2</sub> by 2020. Eskom is within its goal and is investigating mitigations to adhere to the standards in the interim period in the first six years. Another reason why it is only installed after six years is because it ties in with what is required by the NEM: AQA. Eskom will not be in transgression of the Minimum Emissions Standards during the 6 year period without FGD.

- 5.4 Ms Makoma Lekalakala, Earthlife Africa Johannesburg (ML): From the questions being posed it is obvious that there were problems with the initial specialist studies or scoping for the plant itself, because the process followed was inadequate and rushed just to have the plant constructed and there are a lot of issues still not being address such as the specialist studies. We are not sure how Zitholele and Eskom are going to deal with this matter, especially when stakeholders start submitting comments on the current DSR. Going through the DSR it is realised that there is a portion missing, i.e. the Technology Selection Report as it was not attached to the DSR as an Annexure, although within the DSR it is referred to several times. This means the process is incomplete and people cannot submit comments based on information not available. It will be appreciated if stakeholders can be informed when it is available for public scrutiny so that some of the questions being asked can be answered.

Ms Sharon Meyer-Douglas, Zitholele Consulting (SM-D): Specialist studies have not been undertaken yet. Reference made to the specialist studies are to those studies that were conducted during the original EIA for Medupi Power Station, and which will form part of the baseline assessments for the FGD EIA. The specialist studies done in 2006 for the Medupi Power Station can be made available. The specialist studies for the FGD will be done between now and March 2015.

Ms Rosetta Rammutla, Eskom Holdings SOC Ltd (RR): Eskom would have provided a reference number for the report in the DSR. Eskom would look into it and provide the reference number in the draft minutes.

CvH: The report referred to is an internal report and not available for public review yet as it contains intellectual properties. Specific questions can be submitted to Eskom and a response will be provided.

**Post-meeting note:**

The Technical Study Report was made available on the 1<sup>st</sup> of December 2014 to all registered I&APs.

PK: When further scoping has been done, Eskom will be in a position to share some of the high level results of the alternatives with the public.

ML: That is an acceptable request, but Eskom needs to know that there may be more stakeholders who will be submitting questions.

**Post meeting note:**

The technology selection report was submitted to all stakeholders on 1<sup>st</sup> December 2014 and the public review period was extended to 9<sup>th</sup> January 2015 to allow sufficient time for review and comment.

- 5.5 Ms Filomaine Swanepoel, Exxaro (FS): What will be used as baseline for the waste classification of the gypsum and other waste products associated with the FGD technology, and is there a similar unit functioning of which one can use the same information?

SM-D: A chemical make-up will be used for the waste classification of the three waste streams and once Kusile Power Station is in operation the information will be verified through testing of the wastes produced by the Kusile FGD operation .

- 5.6 Mr David Verca, GP Strategies (Dv): Will the gypsum be sold to commercial users?

CvH: Eskom is producing commercially resalable gypsum but the market will be flooded due to the volumes which will be produced at Kusile Power Station. However Eskom has made certain design considerations in order to possibly facilitate the offtake of 20% of the produced Gypsum.

- 5.7 KN: Can the status of the Public Meeting in Marapong tomorrow evening be confirmed?

NV: Information received late this afternoon indicates that there is a strong possibility that the meeting at Marapong might not take place due to safety concerns. The team will obtain confirmation regarding this fact, and should the meeting need to be cancelled, notification thereof will be communicated accordingly.

- 5.8 DV: What would be the size of the plume?

CvH: The Flue Gas exiting the stack will be saturated with water and will therefore be visible.

**6. Closure and Way Forward**

NV officially closed the meeting at 19h05 and provided the way forward.

**DATE:** 06 February 2015

**SIGNATURE:**

**ZITHOLELE CONSULTING**

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**KEY STAKEHOLDER WORKSHOP**

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- Initial stakeholder notification was carried out.

The Project Team is currently operating within the Scoping Phase. Currently the stakeholder review period is running and the Draft Scoping Report is available to interested and affected parties for review and comment.

The EIA phase will run from about January 2015 to November 2015 and the WULA will fit into this phase of the programme. It is anticipated that the final EIR, EMPr and WULA will be made available to the competent authority by November 2015.

#### **4.4. Motivation for the Project**

1. The World Bank is a financier of Medupi Power Station one of the conditions of this finance is that there is a reduction to the SO<sub>2</sub> emissions from the Power Station.
2. The NEM: AQA 39 of 2004, requires that existing industries operate within the prescribed minimum emissions standards – subcategory 1.1 – solid fuel combustion installations. This requires that Medupi Power Station significantly reduces SO<sub>2</sub> emissions from the power station operations.
3. Eskom Air Quality Strategy has established an emissions target of 400mg/Nm<sup>3</sup> at 6% O<sub>2</sub>. This means that technology is required to reduce SO<sub>2</sub> emissions by up to 95% for worst quality coal.

#### **4.5. FGD Technology**

- FGD process inputs are water and limestone, and the outputs are gypsum, sludge and salts.
- The system utilises an Open Spray Tower Wet FGD Technology, which operates much like a wet vacuum cleaner to trap SO<sub>2</sub> in water droplets and then react it with limestone.
- Zero Liquid Discharge Plant forms an important component of the FGD system and



allows for the treatment of all waste water for reuse within the system, thereby producing no effluent for discharge.

- The FGD operation will need to identify methods for disposal of the new waste streams.
- Specialist study findings, a cost-benefit analysis and discussion with the authorities will determine the requirements for use of existing or new waste disposal facilities. This process will be carried out within the EIA phase. .

#### **4.6. FGD Activities**

Limestone, as the reagent, will be sourced off-site and will be stored on-site prior to use. Limestone will be prepared for input to the absorber for reaction with the SO<sub>2</sub> and water. The gaseous emissions will react with the limestone and water within the absorber to produce gypsum and waste water.

There will be Gypsum de-watering handling and storage facilities. A waste water treatment plant will ensure that waste water can be treated for reuse within the FGD of power station operation. The waste water treatment process will produce salts and sludge as waste products.

Gypsum, salts and sludge will require disposal at one or more facilities.

#### **4.7. FGD Process**

The FGD system will operate with 2 common plants which are :

- Gypsum dewatering
- Limestone preparation

Carel van Heerden explained the technical process and the FGD infrastructure within Medupi PS footprint (*please refer to Appendix B*).

#### **4.8. Waste Management License**

Activity B1 is included in the event that the sludge requires storage prior to disposal. This activity may or may not be triggered.

Activity B5 is included to cover the possibility that the sludge cannot be disposed of in its current state and may require treatment at a new facility on-site.

Activity B7 is triggered by the disposal of gypsum, salts and sludge at any landfill waste facility besides lagoon facilities.

Activity B10 is required for the construction of waste facilities under category B and would include the facilities for storage, treatment and disposal.

Storage of waste, both hazardous and general will be registered under Category C and the norms and standards will apply.

#### **4.9. EIA Listed Activities**

Activity 3 of GNR 545 is for the storage and handling of limestone prior to input of the limestone into the FGD process. This activity includes the construction of storage facilities for this purpose.

Activity 15 is triggered by the alteration of undeveloped land adjacent to the Medupi Power Station for purposes of the railway yard which will be used to transport limestone to the Medupi site. There is also the potential that additional waste disposal sites will be required and these would also alter undeveloped land within about 10km radius of the Power Station.

Activity 6 includes the potential transportation of ash, gypsum and sludge via conveyor or truck between storage facilities, the Medupi Power Station and the potential disposal facility.

Activity 11 is triggered by the construction of the railway yard for the transportation of limestone, and possibly gypsum and sludge, to and from the Power Station, respectively.

#### **4.10. Water Use License Application**

Activity 21a relates to the use of water allocated from the Mokolo and Crocodile Water Augmentation Project (Phase 2) for purposes of the FGD process.

21b refers to a potentially new dirty water control dam associated with the limestone handling area adjacent to the rail yard.

21g addresses the disposal of gypsum and sludge, either to the ADF or to another facility. There is a risk that this waste may impact on groundwater and possibly on local surface water resources. Therefore the WULA process will ensure that mitigation and management measures are identified and documented in order to reduce the risk of this potential impact.

#### **4.11. Specialist Studies**

There are numerous specialist studies already completed for the Medupi site that were carried out prior to the construction of the Medupi Power Station. Due to the fact that the majority of FGD activities will be carried out within the area already impacted by the Medupi Power Station construction phase, the existing specialist studies will be sufficient in providing baseline information and an indication of impact to the receiving environment.

Due to the subsequent impact of the Medupi Power Station construction activities, much of the original environment has been removed in its entirety – fauna and flora, for example. In other cases, the impact of the FGD, considering the existing Medupi impact, will be insignificant and can be captured within the existing specialist studies – for example visual impact and land use.

Potential air quality impacts from the Medupi Power Station will be changed by the FGD retrofit and so the air quality study needs to be revised. Airshed Professionals undertook the original Medupi air quality study and will be undertaking the same study for the FGD. This will provide a good comparison of emissions from the Power Station before and after the retrofit.

Waste classification of ash, gypsum, salts and sludge is essential in informing the design of the disposal facility/ies and barrier system/s. The waste specialist will use the chemical composition of expected waste products from the Power Station in order to classify these wastes individually and together to provide recommendations for disposal. This study will form the basis of selection of feasible disposal options and the motivation for the preferred disposal option. It is proposed that samples of waste streams from Kusile Power Station be used to verify the findings of the Medupi waste classification study, once Kusile is on line.

The rail yard will be developed immediately south of the conveyors of the PS. This development area will include the following:

- Conveyors for various transportation of gypsum and limestone.
- Limestone transfer house and unloading facility.
- Limestone storage area.
- Gypsum storage area.
- Gypsum transfer houses and offloading facilities.
- A storm water dirty water dam.
- Emergency loading facilities.
- Sewage treatment or containment facilities to accommodate staff bathrooms on site.

Due to the fact that the rail yard will be bordering on the Medupi Power Station footprint, it has been identified that an ecological assessment should be carried out in order to identify any potentially significant impacts that the rail yard may have on the site. This assessment will investigate terrestrial ecology, aquatic ecology and wetlands, as appropriate.

Geotechnical studies will be carried out in order to inform the construction of the facilities.

#### **4.12. Design Alternatives**

As part of the EIA process one of the alternatives that will be investigated is the alternative of wet FGD with and without a gas cooler inlet. This forms a component of the design that will be finalised for the FGD retrofit.

- The gas cooler will reduce the amount of water required for the FGD operation.
- The Medupi Power Station has been designed to accommodate a gas cooler if necessary.
- The EIA will investigate both alternatives and provide recommendations for the preferred design.

#### **4.13. Waste Disposal Alternatives**

There are three waste streams from the FGD process, i.e.

- Gypsum from the Absorber.
- Water from the absorber goes to the waste water treatment plant where it is treated and re-used in the Power Station.
- Sludge and salts are generated as wastes from the WWTP.

Depending on the waste classification, the project team will investigate the following alternatives for disposal:

- All wastes are disposed of as a mixture with ash at the ADF.
- All wastes are disposed at the ADF but in separate compartments.
- Only gypsum is disposed of at the ADF and the sludge and salts are disposed of on-site in lagoons.
- Sludge and salt lagoons may be located outside of the PS footprint. This assumes that gypsum can be disposed of at the ADF.
- Gypsum and salts and sludge to be disposed of on waste disposal facility/ies developed outside of the PS footprint.
- Trucking of one or more waste streams to an existing and appropriately licensed waste disposal site.

#### **4.14. Studies required**

Should new waste disposal sites be required, this will necessitate a site selection process. Three feasible sites will be identified and specialist studies will be carried out in order to assess the potential environmental and socio-economic impact of development of the sites. Sites will be investigated within the Medupi footprint, and if unsuccessful, a 10km radius from the power station will be investigated for suitable alternative sites. A cost-benefit analysis, taking cognisance of environmental, social, engineering and financial criteria, will be carried out to identify the preferred site. The preferred site will then be investigated through a full environmental impact assessment to identify significant impacts and provide meaningful mitigation recommendations that focus on the environmental objectives of mitigation, rather than the mitigation mechanism.

#### **4.15. Key Issues**

##### ***Air Quality***

Air quality impacts generated by the Medupi PS should be reduced through the introduction of the FGD technology. A specialist air emissions study will be carried out in order to assess this reduction in SO<sub>2</sub> emissions. The air emissions specialist will take cognisance of possible indirect emissions and air quality impacts associated with stockpiling of limestone and gypsum.

***Waste Handling***

Waste handling and disposal is an important issue in terms of potential groundwater, surface water and soil impacts. This issue is being addressed through a waste classification study which will classify each waste stream according to the DEA Norms and Standards in order to inform the selection of a preferred disposal alternative. Should new disposal sites be required outside of the Medupi PS footprint, then numerous additional specialist studies will be required in order to assess the preferred waste disposal site for development and to identify and assess potential impacts of the construction and operation of the disposal facility.

***Water allocation***

Water is a key issue of contention within the Limpopo Province due to this being a water stressed environment. The use of water from MCWAP Phase 1 and 2 by the Medupi Power Station for energy production and for the FGD operation will be investigated as a key issue of significance and this will be assessed through the socio-economic assessment that is being commissioned. The Water Use License will also address this issue through the application for sourcing water from MCWAP Phase 2.

***Socio-economic impacts***

The Socio-economic assessment will investigate key impacts that may be generated by the FGD on receiving communities and economic sectors. These impacts may be positive or negative and will be assessed for purposes of decision making.

***Off-site development***

The off-site development of waste facilities has been highlighted as an issue that will require significant additional investigation during the Impact Assessment Phase. As discussed previously, there will be numerous specialist studies associated with the site selection and the impact assessment of new waste disposal facilities.

**4.16. *What has happened so far***

- Site visit;
- Public notification (Advertisement and BID);
- Identification of alternatives;
- Identification of significant issues;
- Initial identification of specialist studies;
- Initial meeting with DEA; and
- Release of the DSR for public and authority review and comment.

**4.17. *Public Participation***

Public participation was commenced with stakeholder notification. The notification period ran from 06<sup>th</sup> June 2014 to 18<sup>th</sup> July 2014. The Draft Scoping Report is currently available for review and the review period ends on Friday 5 December 2014. Public meetings and the key stakeholder workshop are currently taking place.

It is envisaged that the Final Scoping Report will be submitted to DEA in mid-December 2014.

**Post meeting note:**

Please note that the public review period has been extended to Friday 9<sup>th</sup> January 2015. The Final Scoping Report will be submitted to DEA in March 2015.

**4.18. Way Forward**

1. Public review of DSR;
  2. Update report to address public comment;
  3. Submit FSR to commenting authorities and to public;
  4. Authorities accept or reject FSR; and
- If accepted the project moves into the IA Phase.

**5. DISCUSSIONS**

- 5.1. Mr Nakedi Maake, Marapong SANCO (NM): Speaking for the affected community, SANCO wishes to place on record that they are very disappointed about the manner in which meeting notices were placed, how the public participation process was followed, the fact that it was not broadcasted on the local radio station and no site notices were put up in Marapong. It will be reflected in the attendance at the meetings. SANCO has to account for the proposed project to the Community as their leaders.

Ms Nicolene Venter, Zitholele Consulting (NV): The site notices, announcing the project, according to legal requirements, were put up at the affected site where the development is taking place i.e. Medupi Power Station. Zitholele Consulting went over and above that by distributing the BID to community members, and Marapong was excluded during this process. As a general guideline, EIA process notices are displayed at various public places within a 10 kilometre radius.

Our attention was drawn to the fact that Marapong should be included in the notification process and that has been done. The PM notices were put up at seven places in Marapong alone, which include the:

- Marapong Public Library;
- Clinic;
- Marapong Spar;
- Mzosti's Car Wash;
- Nelsonskop Primary School;
- Ditheku Primary School; and
- Tielelo Secondary School.

In Lephalale the meeting notice was put up at the Public Library, Municipality and Afgri. As per the telephone call with Mr Maake a few weeks ago, the matter has been flagged and Zitholele will ensuring, going forward, that Marapong community is included in this process.

- 5.2. NM: SANCO's key concern is whether either of the FGD alternatives, wet and or dry FGD will reduce the water for other water users, or have a level of impact on the water usage. Lephalale Local Municipality's water source is very scarce, and if wet FGD will be used it will impact on the water usage in the area and will have a cost impact for Eskom.

Mr Carel van Heerden, Eskom Holdings SOC Ltd (CvH): Medupi Power Station has been designed to accommodate wet FGD Retrofit, but is also cooler ready. With the cooler, water usage is drastically reduced. the FGD and Medupi Power Station will use water from Eskom's water allocation abstraction from the Mokolo-Crocodile Water Augmentation Project.

Ms Sharon Meyer-Douglas, Zitholele Consulting (SM-D): Alternatives are part of the EIA process, and all environmental impacts of the alternatives, like the cooler, have to be assessed and presented to the Competent Authority, the Department of Environmental Affairs (DEA), and the Department of Water and Sanitation (DWS) as a commenting authority/ies. The DWS must make a decision on the water use license for Eskom's water allocation from MCWAP Phase 2. DWS may revert by saying that they will only grant a license with conditions stipulating, for example, that a gas cooler has to be retrofitted to reduce water consumption. Zitholele Consulting cannot make the decisions, but is mandated to provide detailed information to the DWS who will make the decision, and could perhaps make the license conditional on certain terms like retrofitting a cooler, which will reduce water consumption.

NV: It needs to be kept in mind that the process is in the Scoping Phase during which the environmental team needs to look at alternatives. No detailed information has been obtained yet, and the question raised relates to the next phase which is the EIA and the results will be included in the DEIR will be available. All present were urged to read the Draft Scoping Report (DSR) and submit written comments on the DSR to Zitholele Consulting by Friday 5<sup>th</sup> December 2014 to ensure timeously submission to the DEA. According to the Regulations, the DEA is tasked to approach the Commenting Authorities for comments, but are now asking the Environmental Assessment Practitioners (EAPs) to source the comments from these Authorities to fast-track their decision making process.

**Post-meeting note:**

The DSR review period has been extended to Friday 09 January 2015.

- 5.3. Mr Mulalo Nethengwe, Department of Water and Sanitation (MN): Is Eskom going to operate according to their existing water allocation or are they proposing to get additional water allocation for the Retrofitting? Does Eskom intend to re-use the waste water?

Mr Ian Midgley, Eskom Holdings SOC Ltd (IM): DWS is developing the Mokolo-Crocodile Water Augmentation Project Phase 2. Eskom has an allocation of 10.9 MI from Phase 1 of MCWAP, and this is sufficient for the operation of the Power Station as well as the operation of 3 FGD units. However, due to the fact that Medupi Power Station will need additional water for the remaining 3 FGD units, as well as for the operation of FGD associated infrastructure, a further 15.4 MI will be supplied from MCWAP Phase 2.

CvH: A zero liquid discharge treatment plant will be utilised, therefore there will be no liquids i.e. waste water discharged. The treated water will be re-used within the power station.

- 5.4 NM: Has a decision been made about which of the two types of FGDs will be used?

CvH: Medupi Power Station was constructed to be FGD ready and based on a techno-economical study, a wet FGD system will be utilized. It utilises limestone as a reagent and gypsum is produced as a bi-product..

- 5.5 Mr Joshua Hlapa, Lephalale Local Municipality (JH): Will ash be produced and will it be re-used?

CvH: Ash is not a by-product of the FGD technology, only the gypsum, salts and sludge.

- 5.6 NM: What is the percentage that emissions will be reduced by if the FGDs are retrofitted?

Ms Olga Makhalemele, Eskom Holdings SOC Ltd (OM): Ambient emissions will be reduced by 30%.

**Post-meeting note:**

The ambient emissions of 30% quoted in the response at the KSW represents the relative SO<sub>2</sub> emission reduction for the entire Eskom fleet, including the effect of FGD Kusile, FGD Medupi and the decommissioned units between 2015 and 2030.

CvH: Point source emissions will be reduced by between 90% and 95% if the FGDs are retrofitted.

Mr Prince Khumalo, Eskom Holdings SOC Ltd (PK): The emission levels will be at 3500mg/Nm<sup>3</sup> @ 10% O<sub>2</sub>. With the FGD retrofitted it will be able to meet the limit of 500mg/Nm<sup>3</sup> at 10% O<sub>2</sub>, which is a decrease of 90%.

- 5.7 Mrs JM Matlou, Department of Agriculture, Forestry and Fisheries (JM): The DAFF representatives will go through the DSR and submit their written comments, if any.

- 5.8 Mr Joshua Hlapa, Lephalale Local Municipality (JH): The Municipality will also go through the DSR and submit comments on it if there are any.

- 5.9 MN: DWS will also go through the DSR and submit comments on it if there are any. Other Authorities like the DEA Provincial should also be invited to these meetings.

NV: A large number of stakeholders, approximately 120, mainly Authorities, which included Provincial, and representatives from various NGOs were invited. Invitees are more than welcome to extend the invitation to their colleagues in another Department who they believe need to be present.

**6. CLOSURE AND WAY FORWARD**

NV officially closed the meeting at 15h15 and presented the way forward.

**DATE:** 06 February 2015

**SIGNATURE:**

**ZITHOLELE CONSULTING**

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**Eskom Holdings SOC Limited**

**Post-Application Meeting between the Department of Environmental Affairs, Eskom Holdings  
SOC Limited and Zitholele Consulting**

**Project No : 12949**

**Wednesday, 6 August 2014, 10h00**

**Department of Environmental Affairs Offices, Environmental House,**

**Cnr Steve Biko Street & Soutpansberg, Pretoria**

**Post-Application Meeting**

**ACTION**

**1. Present**

Leoni Lubbe – Zitholele Consulting (LL)  
Olga Makhalemele – Eskom Holdings SOC Limited (OM)  
Sharon Meyer-Douglas - Zitholele Consulting (SMD)  
Danie Möller - Eskom Holdings SOC Limited (DM)  
Henry Nawa - Eskom Holdings SOC Limited (HN)  
Bernard Pelei Petlane - Eskom Holdings SOC Limited (BPP)  
Felicia Sono - Eskom Holdings SOC Limited (FS)  
Carel Van Heerden - Eskom Holdings SOC Limited CvH)  
Bianca Wernecke - Eskom Holdings SOC Limited (BW)  
Masina Litsoane – Department of Environmental Affairs (ML)  
Pumesa Suepe – Department of Environmental Affairs (PS)

**2. Apologies**

Bongani Dhlamini – Zitholele Consulting  
Chuene Manamela - Eskom Holdings SOC Limited  
Ebrahim Patel - Eskom Holdings SOC Limited

PS offered apologies for their Department of Environmental Affairs Waste Management colleagues who were not able to attend the meeting and agreed to email them waste related queries from and the presentation of the meeting.

**ACTION****3. Previous Minutes**

This is the first meeting for this proposed project. No previous minutes available.

**4. Purpose of the Meeting**

SMD outlined the purpose of the meeting and asked everyone to introduce themselves.

**5. Presentations**

SMD, DM & and CvH presented the public participation and technical processes of the proposed Environmental Impact Assessment and Waste Management License Application for the Medupi Power Station Flue Gas Desulphurisation.

**6. Questions**

PS wanted to know if SMD looked at the new categories for waste and that they are still applicable.

SMD confirmed that they have Category C for the storage and at the norms and standards of those activities. Everything is included and will be updated because the application form was submitted before the update. Need to liaise with the DEA Waste Directorate so that the applications can be updated with the Scoping Reports. Everything is in line with the activities.

**SMD**

PS said that SMD should send an amended application form ..... and wanted to know if SMD is sure where the waste will be disposed.

**SMD**

SMD clarified that they are motivating for co-disposal for the waste at the ash disposal facility. The motivation is that all of the waste comes from the same process, they have similar constituents, have similar impacts and are a similar type. It is expected to be a type three waste requiring a class C barrier system. Once the team has the waste classification it will help with the motivation for co-disposal at the ADF, which is going to need more engagement with the DEA Waste Directorate.

PS pointed out that SMD should engage with ML who is going to be the Case Officer who will be co-ordinating with the DEA Waste Directorate. The Case Officer should be kept in the loop at all times.

**SMD**

SMD enquired how the DEA would want the technical information, which is very rigorous, presented in future to the public, key stakeholders, municipalities and so forth, who are not all engineers, in future.

ML recommended the vacuum cleaner concept and the simplified diagram showing the limestone going down.

**SMD**

**ACTION****SMD**

PS mentioned that the complicated diagrams should be included in the report, but that the team should make sure that the simplified diagrams are also included in the report.

PS enquired whether the limestone will be sourced within the facility or sourced from elsewhere.

DM confirmed that there is no limestone close-by and that it will have to be purchased somewhere off site. He added that the team is looking at different options and prices, which would be best financially and technically viable option. He confirmed that no mining would be done for that on-site.

PS stated that they will be needing the reports with more information, which is when they will be able to communicate if they require any additional information. as they only have the application forms so far.

SMD undertook to send ML the presentation and the contact details of the team in order for it to be forwarded to DEA Waste Directorate for any further questions or clarification.

PS reiterated that all communication and requests for meetings will go through the Case Officer, Masina Litsoane.

HN informed the DEA that this is the second project of its kind which Eskom is dealing with and asked that the DEA please bear with them if a number of amendments should be coming through because of new technologies and processes arising from time to time.

PS requested that the Heritage Studies be given serious attention.

BPP ensured the DEA that the picture of the plant has been made clear and that what was presented is just an add-on to the Power Station, which is governed by Environmental Legislation.

**DATE: 6 August 2014**

**SIGNATURE:**



**SHARON MEYER-DOUGLAS**

**ZITHOLELE CONSULTING**

## Leoni Lubbe

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**From:** Nicolene Venter  
**Sent:** 22 January 2015 12:15 PM  
**To:** Sharon Meyer; Tricia Njapha; Bongani Dhlamini  
**Cc:** blomtf@eskom.co.za; Harripl@eskom.co.za; khumalPtm@eskom.co.za; marellem@eskom.co.za; ian.midgley@eskom.co.za; NairK@eskom.co.za; nawah@eskom.co.za; sonof@eskom.co.za; vHeerdCS@eskom.co.za; Leoni Lubbe  
**Subject:** Medupi Power Station: EIA for proposed FGD - Draft minutes of KSW and PM held on 05 November 2014  
**Importance:** High

Dear Stakeholders,

This e-mail serves to inform you that the draft minutes of the Key Stakeholder Workshop (KSW) and Public Meeting (PM) held on 05 November 2014, for the Medupi FGD environmental authorisation process, are still being reviewed by Eskom. As soon as we receive the draft minutes from Eskom, these will be distributed to you for your review and comments.

Please also be informed that the draft minutes will be included in the Public Participation Appendices that form part of the Final Scoping Report and that the comments/concerns/issues raised at these meetings have been incorporated into the Comments and Responses Report.

Please do not hesitate to contact us should you need any clarification regarding this matter.

Kind Regards,

**Nicolene Venter** [Cert. Public Relations]

*Senior Public Participation Practitioner*

Building 1, Maxwell Office Park, Magwa Crescent West, cnr Allandale Road & Maxwell Drive, Waterfall City, Midrand, RSA

**T:** +27 11 207 2060 **D:** +27 11 207 2077 **F:** +27 86 676 9950 **C:** +27 83 377 9112

**E:** [nicolenev@zitholele.co.za](mailto:nicolenev@zitholele.co.za) **W:** [www.zitholele.co.za](http://www.zitholele.co.za)



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**INTEGRATED ENVIRONMENTAL AUTHORISATION (ENVIRONMENTAL IMPACT ASSESSMENT, WASTE MANAGEMENT LISENCE AND WATER USE LICENSE APPLICATIONS): PROPOSED RETROFITTING OF THE FLUE GAS DESULPHURISATION (FGD) FACILITY AT MEDUPI POWER STATION IN LEPHALALE**

**Emails: Status of Draft minutes of KSW and PM held on 05 November 2014**

**(BCC Recipients listed alphabetically according to Surname)**

<b>Mr/Ms</b>	<b>First Name</b>	<b>Last Name</b>	<b>Company/ Organisation</b>
Ms	Astrid	Basson	Lephalale Local Municipality
Mr	Dries	Basson	Waterberg District Municipality
Mr	Roman	Crookes	Eskom Holdings SOC Ltd
Mr	Bongani	Dhlamini	Zitholele Consulting (Pty) Ltd
Mr	Joshua	Hlapa	Lephalale Local Municipality
Ms	Robyn	Hugo	Centre for Environmental Rights
Mr	Gerhard	Human	Agri SA
Mr	Steven	Kgobalala	Department of Agriculture, Forestry and Fisheries
Mr	Sifiso	Khumalo	Eskom Holdings SOC Ltd
Ms	Makoma	Lekalakala	Earthlife Africa
Mr	Elton	Lemboe	Eskom Holdings SOC Ltd
Ms	Leoni	Lubbe	Zitholele Consulting (Pty) Ltd
Mnr	Nakedi	Maake	Marapong SANCO
Cllr	Moloko	Maeko	Lephalale Local Municipality
Ms	Olga	Makhalemele	Eskom Holdings SOC Ltd
Ms	Ntabiseng	Malebo	Eskom Holdings SOC Ltd
Mrs	JM	Matlou	Department of Agriculture, Forestry and Fisheries
Ms	Sharon	Meyer-Douglas	Zitholele Consulting (Pty) Ltd
Mr	Benjamin	Mokoka	Anglo American
Mr	Danie	Moller	Eskom Holdings SOC Ltd
Mr	Phanuel	Ndlovu	Department of Water and Sanitation
Mr	Mulalo	Nethengwe	Department of Water and Sanitation
Mrs	Sybil	Nieuwoudt	Lephalale Local Municipality
Mr	Jan	Oliver	South African National Roads Agency SOC Ltd
Mr	Bernard	Petlane	Eskom Holdings SOC Ltd
Ms	Oteng	Radipabe	Lephalale Local Municipality
Mr	Keketsi	Ramahali	Eskom Holdings SOC Ltd
Ms	Rosetta	Rammutla	Eskom Holdings SOC Ltd
Mr	Phuthi	Ramolobeng	Department of Water and Sanitation
Mr	Patrick	Seloba	Eskom Holdings SOC Ltd
Mr	April	Shiko	Lephalale Local Municipality
Ms	Lindiwe	Sibiya	Eskom Holdings SOC Ltd
Mr	Koos	Smit	Exxaro
Ms	Candice	Stephen	Eskom Holdings SOC Ltd
Ms	Filomaine	Swanepoel	Exxaro Grootegeluk
Mr	Rene	Thijs	Eskom Holdings SOC Ltd
Mr	Lufuno	Tshidzumba	Eskom Holdings SOC Ltd
Ms	Nicolene	Venter	Zitholele Consulting (Pty) Ltd
Mr	David	Verca	GP Strategies

## Leoni Lubbe

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**From:** Leoni Lubbe  
**Sent:** 29 October 2014 05:01 PM  
**To:** 'Daisy Mafubelu'  
**Subject:** Reminder - Stakeholder Workshop - EIA & WMLA for the proposed Retrofitting of a FGD System at Medupi Power Station, Lephalale

**DEA REF.: 14/12/16/3/3/3/110**

**INTEGRATED AUTHORISATION (ENVIRONMENTAL IMPACT ASSESSMENT AND WASTE MANAGEMENT LICENCE APPLICATION) FOR THE PROPOSED RETROFITTING OF A FLUE GAS DESULPHURISATION (FGD) SYSTEM AT MEDUPI POWER STATION, LEPHALALE, LIMPOPO PROVINCE**

· **Reminder - Key Stakeholder Workshop: Wednesday 05 November 2014**

Dear Stakeholder

This communication serves as a reminder of the Key Stakeholder Workshop scheduled to take place:

**DATE:** Wednesday, 05 November 2014  
**TIME:** 14h00 – 16h00 (Registration from 13h30)  
**VENUE:** Mogol Golf Club, Lephalale (Map attached)

Kind regards

**Nicolene Venter** [Cert. Public Relations]  
*Senior Public Participation Practitioner*  
Building 1, Maxwell Office Park, Magwa Crescent West, cnr  
Allandale Road & Maxwell Drive, Waterfall City, Midrand, RSA  
**T:** +27 11 207 2060 **D:** +27 11 207 2077 **F:** +27 86 676 9950  
**C:** +27 83 377 9112  
**E:** [nicolenev@zitholele.co.za](mailto:nicolenev@zitholele.co.za) **W:** [www.zitholele.co.za](http://www.zitholele.co.za)

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## Leoni Lubbe

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**From:** Leoni Lubbe  
**Sent:** 10 October 2014 05:38 PM  
**To:** 'Daisy Mafubelu'  
**Subject:** Invitation to a Key Stakeholder Workshop - EIA & WMLA for the proposed Retrofitting of a FGD System at Medupi Power Station, Lephalale  
**Attachments:** 12949-85-07-Mogol Golf Club Map.pdf; 12949-85-Let-001-DSR KSW Invite-Rev0.pdf; 12949-KSW-RegForm-Rev0.docx

**INTEGRATED AUTHORISATION (ENVIRONMENTAL IMPACT ASSESSMENT AND WASTE MANAGEMENT LICENCE APPLICATION)  
FOR THE PROPOSED RETROFITTING OF A FLUE GAS DESULPHURISATION (FGD) SYSTEM AT MEDUPI POWER STATION,  
LEPHALALE, LIMPOPO PROVINCE**

- **Invitation to a Key Stakeholder Workshop: Wednesday 05 November 2014**
- **DEA REF.: 14/12/16/3/3/110**

Dear Stakeholder

Kindly find attached a letter which serves as an invitation to Key Stakeholder Workshop:

**DATE:** Wednesday, 05 November 2014  
**TIME:** 14h00 – 16h00 (Registration from 13h30)  
**VENUE:** Mogol Golf Club, Lephalale (Map attached)

**Documents attached:**

**Appendix A:** Invitation Letter  
**Appendix B:** Map to Mogol Golf Club, Lephalale  
**Appendix C:** Key Stakeholder Workshop Registration Form

Kind regards

**Nicolene Venter** [Cert. Public Relations]  
**Senior Public Participation Practitioner**  
Building 1, Maxwell Office Park, Magwa Crescent West, cnr  
Allandale Road & Maxwell Drive, Waterfall City, Midrand, RSA  
**T:** +27 11 207 2060 **D:** +27 11 207 2077 **F:** +27 86 676 9950  
**C:** +27 83 377 9112  
**E:** [nicolenev@zitholele.co.za](mailto:nicolenev@zitholele.co.za) **W:** [www.zitholele.co.za](http://www.zitholele.co.za)

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