

DEVELOPMENT OF THE RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE ON A SITE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE

**NOTES OF THE FOCUS GROUP MEETING
DEPARTMENT OF WATER AND SANITATION
HELD ON 30 AUGUST 2017**

12 FLOOR, SOUTHERN LIFE BUILDING, 88 JOE SLOVO STREET, DURBAN

Notes for the Record prepared by:

Savannah Environmental (Pty) Ltd

Contact: Ms Gabriele Stein

Position: Public Participation and Social Consultant

E-mail: gabreiele@savannahsa.com

Please address any comments to Gabriele Stein at the above address

DEVELOPMENT OF THE RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE ON A SITE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE

Venue: 12th Floor, Southern Life Building, 88 Joe Slovo Street, Durban

Date: 30 August 2017

Time: 09:00

WELCOME AND INTRODUCTION

Gabriele Stein of Savannah Environmental welcomed all present and thanked the meeting attendees for availing themselves for the meeting. She noted that Eskom Holdings SoC Ltd (Eskom) proposes the development of a Combined Cycle Power Plant (CCPP) and associated infrastructure on Portion 2 and Portion 4 of Erf 11376 in the Richards Bay Industrial Development Zone (IDZ) Phase 1D located within the jurisdiction of the City of uMhlatuze Local Municipality and the King Cetshwayo District Municipality, KwaZulu-Natal Province. She stated that the project is to be known as the Richards Bay Combined Cycle Power Plant (CCPP).

Gabriele Stein explained that the purpose of the project is to reduce transmission losses from generation facilities supplying KwaZulu-Natal, by having a generation centre in KwaZulu-Natal. In addition, the project is planned to aid in reducing Eskom's carbon footprint per Unit of electricity produced, as power plants using natural gas emit approximately half the carbon of coal-fired power plants while using considerably less water, thus supporting Government's commitment to reduce carbon emissions.

Gabriele Stein noted that Eskom had appointed Savannah Environmental as the independent Environmental Assessment Practitioners (EAPs) responsible for undertaking an Environmental Impact Assessment (EIA) process (Scoping and EIA) to identify and assess all potential and assess all potential environmental impacts associated with the project for the area as identified, and propose appropriate mitigation and management measures in an Environmental Management Programme (EMPr). She further noted that Savannah Environmental will submit the Water Use Licence Application (WULA) for this project. She stated that the purpose of the meeting was to introduce the Richards Bay CCPP Project, present the findings of the Scoping Study, provide a description of the EIA and public participation process being undertaken and to obtain comments and inputs for inclusion in the Scoping Report to be submitted to the National Department of Environmental Affairs (DEA).

MEETING ATTENDEES

Name	Organisation	Position
Masala Nemubura (NM)	Department of Water and Sanitation	Environmental Officer
Mpho Muswubi (MM)	Eskom	Snr Environmental Advisor, EIA
Vincent Chauke (VC)	Eskom	Snr Manager, PDD (Acting)

Name	Organisation	Position
Mula Phalanndwa (MP)	Eskom	Senior Manager, WULA
Reggie Chippe (RG)	Eskom	Peaking Generation (Client Office)
Kevin Chetty (KC)	Eskom	Project Manager
Tebogo Mapinga (TM)	Savannah Environmental	Environmental Consultant
Gabriele Stein (GS)	Savannah Environmental	Public Participation Consultant

APOLOGIES

An apology was received from Coleen Moonsamy of the Department of Water and Sanitation.

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Tebogo Mapinga of Savannah Environmental presented the background and technical aspects regarding the proposed project (refer to attached presentation).

DISCUSSION SESSION

Question / Comment	Response
MN: Were wetland delineation studies undertaken?	TM: Desktop Wetland and Aquatic Ecology and Geo-hydrology studies have been undertaken and are appended to the Scoping Report. A wetland delineation study will be undertaken during the EIA phase.
MN: What are the plans to compensate for the expected loss of water features on the site?	<p>TM: A preliminary layout would be looked at in terms of where the infrastructure would be placed. It is our intention from an environmental perspective to try and avoid and minimize impact if we can on the water features. The layout will be configured to avoid water features. In areas where this is not possible we will recommend mitigation measures.</p> <p>MP: Eskom has met with KZN Ezemvelo Wildlife to understand their concerns and some of the work regarding the biodiversity offset agreement between them and the Municipality.</p>

<p>MN: This meeting will be considered a pre-application meeting required as part of the Water Use License (WULA) submission process. A Water Use License will be required to be submitted. The conceptual designs can be submitted with the WULA. The detailed designs can be submitted at a later stage once they are finalized.</p>	<p>TM: The WULA is planned to be submitted during the EIA phase.</p> <p>VC: The WULA is planned to be submitted once Eskom has completed the conceptual design in October or November 2017.</p>
<p>MN: The Integrated Water and Waste Management Plan (IWWMP) document provides details of what information is required to be submitted to DWS as part of the WULA. I will send this to you.</p>	<p>TM: Comment noted. Savannah Environmental are aware of the requirements that need to be met in order to submit the WULA.</p>
<p>MN: The DEA will request comments from DWS on the Scoping and EIA reports. We will submit our comments to the environmental consultant and to DEA directly.</p>	<p>GS: Thank you, please submit comments to Savannah Environmental by 20 September 2017. A hard copy of the Scoping Report was sent to Coleen Moonsamy.</p>
<p>MN: You will be required to submit a letter from the DEA acknowledging that an application for environmental authorisation has been lodged as part of the WULA.</p>	<p>TM: Comment noted. The DEA's acknowledgment letter will be included in the WULA.</p>
<p>MN: The maximum timeframe for the issuing of a WULA is 300 days.</p>	<p>TM: Comment noted.</p>

WAY FORWARD AND CLOSURE

Gabriele Stein stated that Interested and Affected Parties (I&APs) could submit their written comments on the Scoping Report and proposed project to Savannah Environmental by 20 September 2017. She noted that comments received would be included in the final Scoping Report that would be submitted to the DEA. She thanked the meeting attendees for availing themselves for the meeting and closed the meeting.

DEVELOPMENT OF THE RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE ON A SITE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE

**NOTES OF THE FOCUS GROUP MEETING
MONDI GROUP RICHARDS BAY
HELD ON: 30 AUGUST 2017
7 WESTERN ARTERIAL, ALTON, RICHARDS BAY**

Notes for the Record prepared by:

Savannah Environmental (Pty) Ltd

Contact: Ms Gabriele Stein

Position: Public Participation and Social Consultant

E-mail: gabreiele@savannahsa.com

Please address any comments to Gabriele Stein at the above address

DEVELOPMENT OF THE RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE ON A SITE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE

Venue: 7 Western Arterial, Alton, Richards Bay

Date: 30 August 2017

Time: 12:30

WELCOME AND INTRODUCTION

Tebogo Mapinga, of Savannah Environmental, welcomed all present and thanked Candice Webb of Mondi for availing herself for the meeting. She noted that Eskom Holdings SoC Ltd (Eskom) proposes the development of a Combined Cycle Power Plant (CCPP) and associated infrastructure on Portion 2 and Portion 4 of Erf 11376, in the Richards Bay Industrial Development Zone (IDZ) Phase 1D, located within the jurisdiction of the City of uMhlatuze Local Municipality and the King Cetshwayo District Municipality, KwaZulu-Natal Province. She stated that the project is to be known as the Richards Bay Combined Cycle Power Plant (CCPP).

Tebogo Mapinga explained that the purpose of the project is to reduce transmission losses from generation facilities supplying KwaZulu-Natal, by having a generation centre in KwaZulu-Natal. In addition, the project is planned to aid in reducing Eskom's carbon footprint per Unit of electricity produced, as power plants using natural gas emit approximately half the carbon of coal-fired power plants while using considerably less water, thus supporting Government's commitment to reduce carbon emissions.

Tebogo Mapinga noted that Eskom had appointed Savannah Environmental as the independent Environmental Assessment Practitioners (EAPs) responsible for undertaking an Environmental Impact Assessment (EIA) process (Scoping and EIA) to identify and assess all potential environmental impacts associated with the project for the area as identified, and propose appropriate mitigation measures in an Environmental Management Programme (EMPr). She further noted that Savannah Environmental will submit the Water Use Licence Application (WULA) for this project. She stated that the purpose of the meeting was to introduce the Richards Bay CCPP Project, present the findings of the Scoping Study, provide a description of the EIA and public participation process being undertaken and to obtain comments and inputs for inclusion in the Scoping Report to be submitted to the National Department of Environmental Affairs (DEA).

MEETING ATTENDEES

Name	Organisation	Position
Candice Webb (CW)	Mondi – Richards Bay	Environmental Manager
Mpho Muswubi (MM)	Eskom	Snr Environmental Advisor, EIA
Vincent Chauke (VC)	Eskom	Snr Manager, PDD (Acting)
Mula Phalanndwa (MP)	Eskom	Senior Environmental Advisor, WULA

Name	Organisation	Position
Reggie Chippe (RG)	Eskom	Peaking Generation (Client Office)
Kevin Chetty (KC)	Eskom	Project Manager
Koogendran Govender (KG)	Eskom	Chief Engineer
Khaya Kebeni (KK)	Eskom	Peaking Generation (Client Office)
Cobus Dippenaar	Eskom	Project Engineering Manager
Tebogo Mappinga (TM)	Savannah Environmental	Environmental Consultant
Gabriele Stein (GS)	Savannah Environmental	Public Participation Consultant

APOLOGIES

None

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Tebogo Mappinga of Savannah Environmental presented the background and technical aspects regarding the proposed project (refer to attached presentation).

DISCUSSION SESSION

Question / Comment	Response
CW: Is the proposed site the same erven that Pulp United undertook an EIA on?	TM: The project is proposed on Portion 2 and Portion 4 of Erf 11376, the same site that was considered for the Pulp United plant.
CW: Why is the gas pipeline being assessed under a separate EIA process?	KC: Eskom will need to enter into a gas sales agreement (GSA) with potential gas suppliers. The entity supplying the gas will be responsible for undertaking the EIA for the gas pipeline. However, the pipeline inside the power plant or at the boundary fence (connection point) of the gas power plant will be assessed in this EIA. Eskom is in discussions with Transnet and other stakeholders to determine possible routing options for the gas pipeline.
CW: Mondi's primary concern is the potential impact the power plant or power plant processes would have on the quality of our	TM: Mondi's concern regarding the potential impacts to their product considering the location of the warehouse in relation to the

<p>product. Only potable water is utilised within our process to ensure the brightness and whiteness of our product. The proposed power plant will face Mondi's warehouse and this is a concern for us.</p>	<p>proposed power plant site is noted. Eskom and the air quality specialist will consider this concern in their layout design, and the most optimal layout will be provided in the Draft EIA.</p>
<p>CW: Eskom must note that Mondi has an impact on air quality from a nuisance point of view. Odour is inherent in our process and although stringent odour abatement processes are adhered to, the power plant site will be impacted by nuisance air quality impacts. Mondi do not wish to find themselves in a situation where complaints are lodged against them regarding this nuisance impact. Eskom will need to decide whether it is acceptable to deal with this air quality impact.</p>	<p>Comment noted. This will be investigated by the air quality specialist study, which is part of the current EIA process. Following the installation of the plant, appropriate monitoring will be undertaken by Eskom, as Mondi is also expected to continue its monitoring processes.</p>
<p>CW: What are the water consumption volumes requirements for the proposed power plant?</p>	<p>TM: The project will require approximately 37 290 m³ for the construction period of 36 months. Approximately 1 825 000m³ will be required annually during the operational phase.</p>
<p>CW: From a cumulative impact the industry in Richards Bay has made noteworthy efforts to reduce the need and demand on the water that is left. New industry must be on board in making efforts to reduce water demand.</p>	<p>Comment noted. Eskom is certainly aware of the scarce water resource South Africa is facing and is always investigating innovative ways to save water. Currently there is a public participation project with the Richards Bay Municipality with regards to water supply and Eskom is well represented in this regard.</p>
<p>CW: What type of process will be used for effluent treatment?</p>	<p>KG: Eskom is considering installing a reverse osmosis treatment plant. Eskom's transmission department will be initiating the EIA for the transmission lines which will commence once a consultant has been appointed (envisaged to be in the fourth quarter of 2017) and confirmation of this will be finalised as the engineering designs progress from concept to basic designs.</p>
<p>CW: Would the effluent be treated so that you could feed the treated water back into the plant or are you planning on disposing effluent via the marine outlet?</p>	<p>KG: It is likely that effluent would be discharged via the sea outlet.</p>
<p>CW: Eskom will need to consider the air quality impacts from any other processes that could have an impact on air quality in the region to avoid impacts to our process and quality of the end product.</p>	<p>Comment noted. The impact assessment for air quality will include the following: » The compilation of a baseline emissions inventory for existing facilities within Richards</p>

	<p>Bay based on measured emissions in the RBCAA inventory;</p> <ul style="list-style-type: none"> » The establishment of an emissions inventory by referring to NMES and emission factors for combustion processes, fuel storage and fugitive dust (construction); » Atmospheric dispersion simulations using the US EPA CALPro suite (CALMET and CALPUFF); and » A human health risk and nuisance impact screening assessment based on dispersion simulation results.
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WAY FORWARD AND CLOSURE

Tebogo Mapinga stated that Interested and Affected Parties (I&APs) could submit their written comments on the Scoping Report and proposed project to Savannah Environmental by 20 September 2017. She noted that comments received would be included in the final Scoping Report that would be submitted to the DEA. She thanked the meeting attendees for availing themselves for the meeting and closed the meeting.

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**NOTES OF THE PUBLIC MEETING
HELD ON 30 AUGUST 2017
NEW LIFE CHURCH, 2 HEDGE HUNT, BRACKENHAM, RICHARDS BAY**

Notes for the Record prepared by:

Savannah Environmental (Pty) Ltd

Contact: Ms Gabriele Stein

Position: Public Participation and Social Consultant

E-mail: gabriele@savannahsa.com

Please address any comments to Gabriele Stein at the above address

DEVELOPMENT OF THE RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE ON A SITE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE

Venue: New Life Church, 2 Hedge Hunt, Brackenham, Richards Bay

Date: 30 August 2017

Time: 18:00

WELCOME AND INTRODUCTION

Gabriele Stein, of Savannah Environmental welcomed all present and thanked the meeting attendees for availing themselves for the meeting. She noted that Eskom Holdings SoC Ltd (Eskom) proposes the development of a Combined Cycle Power Plant (CCPP) and associated infrastructure on Portion 2 and Portion 4 of Erf 11376 in the Richards Bay Industrial Development Zone (IDZ) Phase 1D, located within the jurisdiction of the City of uMhlathuze Local Municipality and the King Cetshwayo District Municipality, KwaZulu-Natal Province. She stated that the project is to be known as the Richards Bay Combined Cycle Power Plant (CCPP).

Gabriele Stein explained that the purpose of the project is to reduce transmission losses from generation facilities supplying KwaZulu-Natal, by having a generation centre in KwaZulu-Natal. In addition, the project is planned to aid in reducing Eskom's carbon footprint per Unit of electricity produced, as power plants using natural gas emit approximately half the carbon of coal-fired power plants while using considerably less water, thus supporting Government's commitment to reduce carbon emissions.

Gabriele Stein noted that Eskom had appointed Savannah Environmental as the independent Environmental Assessment Practitioners (EAPs) responsible for undertaking an Environmental Impact Assessment (EIA) process (Scoping and EIA) to identify and assess all potential and assess all potential environmental impacts associated with the project for the area as identified, and propose appropriate mitigation measures in an Environmental Management Programme (EMPr). She stated that the purpose of the meeting was to introduce the Richards Bay CCPP Project, present the findings of the Scoping Study, provide a description of the EIA and public participation process being undertaken and to obtain comments and inputs for inclusion in the Scoping Report to be submitted to the National Department of Environmental Affairs (DEA).

MEETING ATTENDEES

Name	Organisation	Position
Darryl Hunt (DH)	Cheniere	Consultant
Keith Harvey (KH)	Richards Bay Industrial Development Zone	Legal Manager
Dion Wilmans (DW)	Richards Bay Gas Power 2	Director
Mpho Muswubi (MM)	Eskom	Snr Environmental Advisor
Vincent Chauke (VC)	Eskom	Snr Manager, PDD (Acting)

Name	Organisation	Position
Mula Phalanndwa (MP)	Eskom	Senior Environmental Advisor, WULA
Reggie Chippe (RG)	Eskom	Peaking Generation (Client Office)
Koogendran Govender (KG)	Eskom	Chief Engineer
Cobus Dippenaar (CD)	Eskom	Project Engineering Manager
Kevin Chetty (KC)	Eskom	Project Manager
Khaya Kebeni (KK)	Eskom	Peaking Generation (Client Office)
Tebogo Mapinga (TM)	Savannah Environmental	Environmental Consultant
Gabriele Stein (GS)	Savannah Environmental	Public Participation Consultant

APOLOGIES

An apology was received from Sandy Camminga of the Richards Bay Clean Air Association.

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Tebogo Mapinga of Savannah Environmental presented the background and technical aspects of the proposed project (refer to attached presentation).

DISCUSSION SESSION

Question / Comment	Response
DW: Richards Bay is reported to have the second worst air quality in South Africa, second only to Secunda, due to the high concentration of heavy industry. There are numerous industries contributing to air emissions in Richards Bay including Mondi (who have taken steps to reduce their own emissions), a cement factory, a smelter, a fertilizer manufacturing plant, a chrome smelter and two titanium smelters all contributing to the second worst air quality in the Country. Surely a regional air emissions	TM: The appointed air quality specialist, AirShed Planning Professionals, is in contact with the Richards Bay Clean Air Association and their data is being considered in the air quality assessment. The EIA will assess cumulative impacts as well as localised impacts. The air quality impacts of all industries within a 30 – 50km radius of the proposed site will be assessed. The assessment of cumulative impacts is a requirement of the EIA Regulations, 2014 (as amended), and the EIA Report will include a chapter on cumulative impacts.

<p>study has to be completed rather than a site specific one due to the excessive impact of these industries in Richards Bay. What is your proposed methodology for assessing air emissions on a cumulative scale.</p> <p>The wind does blow in both directions and if the wind does blow in a certain direction it will blow the emissions over sugar cane and forestry lands as well as a few rural communities. However, if the wind blows in the opposite direction it will take the emissions over highly concentrated residential areas.</p>	
<p>DW: This area is a severely water-stressed area. Recent rains have caused the dam levels to rise slightly. In August 2016 dam levels were at 17% and many of the industries in Richards Bay were facing closure due to no water being available. How much water will this power plant require and where will the water be sourced from?</p>	<p>KG: Water is planned to be sourced from the uMhlathuze Local Municipality. The Municipality has informed Eskom that they are investigating the option of using effluent from other industries in the Empangeni area. Such effluent will be treated and then used to supply the power station.</p>
<p>DW: We are aware that the Municipality is undertaking a technical advisory on the potential recycling of effluent. However, this process has not been concluded. Do the water volumes provided by the Municipality meet the water consumption requirements of the power station?</p> <p>The report must include a comparison of what the minimum and maximum water requirements are when using ACC technology when compared to water-cooled technology. A balance of the water consumption needs must be provided in terms of what the municipality can provide and where the shortfall will be sourced from.</p>	<p>KG: Eskom is currently preparing the power station's basic design and that will tie in with the Municipality's plan. Eskom will provide the Municipality with the first opportunity to supply water and then look to other water providers if the power station's water requirement needs cannot be met.</p> <p>RC: Eskom sits on a working group which is investigating the possibility of recycling water from industries in Richards Bay and Empangeni. Eskom is considering the best practice figures internationally and we cannot provide accurate water consumption figures at this stage. Accurate figures will be provided during the EIA Phase. Eskom has identified and acknowledged that water scarcity is a major risk to this project.</p>
<p>DW: Are there any plans to construct a desalination plant? Will water recycling plants be considered to provide the water for the power plant?</p>	<p>KC: The working group is investigating the development of a desalination plant which could provide water in the future. Eskom aims to conclude the basic design of the CCPP project by the end of 2017. The water use consumption figures will be detailed in the EIA</p>

	<p>report. A Water Use License Application will be submitted by Savannah Environmental during the EIA phase.</p>
<p>DW: Where will the fuel for this power plant be sourced from? Will the fuel be supplied via the Mozambique gas pipeline, via LNG containers being delivered, via an FSRU or a land-based storage facility? How can an EIA for the gas power plant be undertaken without having completed an EIA for the fuel pipeline?</p> <p>Details pertaining to the supply of fuel must be included in this EIA assessment as this aspect of the project will have a monumental impact on transportation routes, safety, etc. One has to take fuel supply into consideration in this EIA.</p>	<p>VC: The application for environmental authorisation only applies to the power plant itself. In terms of Eskom's mandate, it is not authorised to develop or construct gas pipelines. Eskom is a power generation, transmission and distribution company. A partnership with the relevant service provider would need to be established to determine the routing of the pipeline and the supply of gas. This partnership will be responsible for the permitting of the pipeline and gas supply and storage. It should be noted, however, that Eskom considered aspects relating to fuel supply when the site was selected. The project is being developed in phases and the project's operational requirements will be met when all the phases and aspects of the project have been considered.</p> <p>Eskom has experience from two plants requiring the supply of fuel in the Western Cape and therefore, understand the requirements and what the impacts are. Furthermore, Eskom has in-house knowledge, expertise and capability to mitigate and manage those impacts.</p>
<p>DH: Cheniere supports any gas to power initiative in South Africa irrespective of whether those projects are being developed by Eskom or by the private sector. Gas power is a strategic market since coal and nuclear power generation options have numerous challenges. Gas is viewed as a key part of South Africa's secure power supply. We welcome any initiative that can sustainably move the Country forward in an environmentally friendly way.</p>	<p>Comment noted.</p>
<p>DH: The Scoping Report states that the gas power plant's load factor is assumed to operate for 16 hours per day for 5 days per week (mid merit basis). The impacts should be assessed for both mid-merit and baseload options so that the EA is not constrained in the</p>	<p>Comment noted.</p>

event that the plant is required to operate at baseload.	
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WAY FORWARD AND CLOSURE

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NOTES OF THE PUBLIC MEETING HELD ON 31 AUGUST 2017

RICHARDS BAY PUBLIC LIBRARY, 03 KRUGERRAND GROVE, RICHARDS
BAY

Notes for the Record prepared by:

Savannah Environmental (Pty) Ltd

Contact: Ms Gabriele Stein

Position: Public Participation and Social Consultant

E-mail: gabreiele@savannahsa.com

Please address any comments to Gabriele Stein at the above address

DEVELOPMENT OF THE RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE ON A SITE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE

Venue: Richards Bay Public Library, 3 Krugerrand Grove, Richards Bay

Date: 31 August 2017

Time: 09:00

WELCOME AND INTRODUCTION

Gabriele Stein, of Savannah Environmental, welcomed all present and thanked the meeting attendees for availing themselves for the meeting. She noted that Eskom Holdings SoC Ltd (Eskom) proposes the development of a Combined Cycle Power Plant (CCPP) and associated infrastructure on Portion 2 and Portion 4 of Erf 11376 in the Richards Bay Industrial Development Zone (IDZ) Phase 1D, located within the jurisdiction of the City of uMhlathuze Local Municipality and the King Cetshwayo District Municipality, KwaZulu-Natal Province. She stated that the project is to be known as the Richards Bay Combined Cycle Power Plant (CCPP).

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MEETING ATTENDEES

Name	Organisation	Position
Frans van der Walt (FvdW)	QS2000 Plus	Quantity Surveyor
Franz Schmidt (FS)	Richards Bay Alloys	SHREQC Manager
Percy Langa (PL)	Richards Bay Industrial Development Zone (RBIDZ)	Environmental Manager
GA Lotter (GL)	Motla	Engineer

Name	Organisation	Position
Retha van Niekerk (RvN)	Urban Plan	Director
Oscar Nzima (ON)	Richards Bay Airport	Manager
Dion Wilmans (DW)	Richards Bay Gas Power 2	Director
Andile Nxumalo (AN)	Richards Bay Industrial Development Zone (RBIDZ)	-
Darryl Hunt (DH)	Chenierye	Consultant
Mpho Muswubi (MM)	Eskom	Snr Environmental Advisor, EIA
Vincent Chauke (VC)	Eskom	Snr Manager, PDD (Acting)
Mula Phalanndwa (MP)	Eskom	Senior Environmental Advisor, WULA
Reggie Chippe (RG)	Eskom	Peaking Generation (Client Office)
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Khaya Kebeni (KK)	Eskom	Peaking Generation Client Office
Tebogo Mapinga (TM)	Savannah Environmental	Environmental Consultant
Gabriele Stein (GS)	Savannah Environmental	Public Participation Consultant

APOLOGIES

Apologies were received from:

- » Sandy Camminga – Richards Bay Clean Air Association (Chairperson)
- » Russel Addison – Umhlatuzi Valley Sugar Board (Managing Director)
- » Kevin Seamark – Umhlatuzi Valley Sugar Board (Chief Financial Officer)

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Tebogo Mapinga of Savannah Environmental presented the background and technical aspects of the proposed project (refer to attached presentation).

DISCUSSION SESSION

Question / Comment	Response
<p>FS: It is recommended that you consult Mondi. Mondi has previously blocked activity on the proposed project site. I have noted that air quality has been identified as least preferable in terms of the selected site. Air pollution works both ways and one would need to take cognisance of the air pollution impacts that Mondi would have on the project site and determine what mitigation measures could be implemented to reduce these impacts.</p>	<p>GS: A one-on-one meeting was held with Candice Webb the Environmental Manager at Mondi on 30 August 2017. Potential air quality impacts caused by Mondi have been raised and Eskom has taken note of these.</p>
<p>FS: The Scoping report does not make reference to sulphur dioxide. Sulphur dioxide emissions are a key concern in Richards Bay as many industries contribute to sulphur dioxide emissions.</p>	<p>TM: The Scoping report identifies sulphur dioxide as a source of air pollution within the region. A detailed Air Quality Impact Assessment will be provided in the EIA Report.</p>
<p>FS: It is advised that Eskom join the Richards Bay Clean Air Association which will provide access to a network of updated and relevant information.</p>	<p>This recommendation is noted.</p>
<p>FS: Extensive studies were undertaken within Phase 1D of the IDZ in 2003/204. Kwambo Grassland (<i>Kwambonambi Hygrophilous Grassland</i>) was identified as an endangered plant species. Does the Scoping report identify Kwambo Grassland as endangered?</p>	<p>TM: The <i>Kwambonambi Hygrophilous Grassland</i> has been identified as an endangered species in the Scoping report. Further detail on how impacts to this plant species will be mitigated or managed will be provided in the EIA report.</p>
<p>FS: I assume that this power plant will start up on diesel instead of gas. Will the plant be fully operational on diesel fuel alone?</p>	<p>VC: The primary fuel stock for this power plant is gas. The plant will have dual fuel capabilities; however, the intention is to have the power station supplied by gas full time. The plant will only operate on diesel as a backup for emergency situations.</p>
<p>FS: How will the impacts on traffic be managed if diesel or gas is required to be trucked in.</p>	<p>TM: A Traffic Impact Assessment will be undertaken in the EIA phase of this project, and will also address issues related to transportation of the fuel. Traffic impacts will be assessed and appropriate management measures proposed and presented in the Traffic Impact Assessment and in the EIA Report. Gas will not be trucked in but will be supplied by a gas supplier via its pipeline to the Eskom connection point at the boundary fence of the plant. Only diesel (used as back-up) will be trucked in.</p>

<p>FvdW: What will the power plant's visual impact be? The power plant's proximity to the John Ross Highway must be considered.</p>	<p>TM: Afzelia Environmental Consultants have been appointed to undertake a Detailed Visual Impact Assessment. The Scoping report provides detail on the visual receptors in the area that would be impacted by the development. At this stage, the visual impact is considered to be <i>medium-low</i> subject to a detailed assessment being undertaken in the EIA phase.</p>
<p>FvdW: This power plant will be a Major Hazardous Installation (MHI). The location of the power plant in close proximity to the John Ross Highway, a critical arterial to the Richards Bay Port, must be considered.</p>	<p>TM: A MHI assessment is being conducted and will form part of the EIA report. The potential impact of the facility on the John Ross Highway will be considered in the MHI assessment.</p>
<p>FvdW: The same site was subjected to an EIA for Pulp United. A number of environmental challenges were identified during that process. I am glad that you are aware of these challenges. Too often we find that outside consultants are unaware of other environmental assessments undertaken in the area.</p> <p>What is the full extent of that site? My concern is that there will not be sufficient space to develop the project due to the environmental sensitivities identified on the site.</p>	<p>TM: Savannah Environmental are fully aware of the challenges faced with regards to the Pulp United EIA that was previously conducted. Phase 1D is approximately 107ha in extent. The project study site is 71ha, as the off-set area has to be avoided. The footprint of the power plant is likely to be less than 71ha depending on the environmental sensitivities on the site. The entire power plant may require approximately 60ha.</p>
<p>FvdW: I am not supportive that Phase 1D is being considered as the site for the development of the proposed power plant due to the potential visual impacts and that it will be a MHI. This project will have a negative impact on the proposed Richards Bay Port expansion. More appropriate sites should be considered, for example, sites within Phase 2 of the IDZ might be better suited for the development of a power station.</p>	<p>TM: Comment noted. Afzelia Environmental Consultants have been appointed to undertake a Detailed Visual Impact Assessment. The Scoping report provides detail on the visual receptors in the area that could be impacted by the development. At this stage, the visual impact is considered to be <i>medium-low</i> subject to a detailed assessment being undertaken in the EIA phase. Eskom identified six potential sites within the greater Richards Bay area for the development of the proposed power plant. Four sites were taken forward into an environmental screening study. The process followed in determining which sites were most preferred is outlined in Chapter 3 of the Scoping report. Phase 1D is considered to be the most preferred alternative for consideration in the environmental screening and site selection</p>

	<p>study. The area surrounding the project site is inclusive of open fields, industrial activities, and pockets of commercial activities. The proposed development is, therefore, compatible with the surrounding land uses. No fatal flaws from an environmental perspective were identified. Mitigation in terms of air quality through appropriate design of the facility will however be required.</p>
<p>FvdW: Where will the proposed power station connect to the Eskom grid? The transmission lines will be subject to an EIA. Why is this aspect of the project not included within this EIA?</p>	<p>VC: Eskom has undertaken desktop level studies in relation to the transmission lines. Three corridor alternatives have to be selected and assessed within an EIA. This project is being developed in a phased approach and the permitting of the transmission lines will be undertaken once Eskom has completed the required options analysis and technical studies with respect to the transmission lines. Since the current site is the only site deemed most feasible, all Transmission corridors being investigated are leading to this site.</p>
<p>FvdW: The gas pipeline will require an EIA. The pipeline route is critical as it may impact the Richards Bay Port expansion project.</p>	<p>VC: A partnership needs to be established with other state-owned companies or with private companies to establish the gas pipeline. This entity will be responsible for the permitting required for the pipeline. More work needs to be undertaken in this regard from a technical and commercial point of view.</p>
<p>FvdW: That specific location concerns me. A much better site would be next to the Athene Transmission Station in Empangeni because of its proximity to the Sasol pipeline. The power station can also connect to the Athene Transmission Station. This site would make more sense as there would be limited visual and air quality impacts.</p>	<p>VC: As Savannah Environmental indicated in the presentation, Eskom commissioned a Site Screening and Selection Study to identify the most preferred site for the power plant. The Site Screening and Selection Study details the methodology used and the factors considered in selecting this site as the most preferred alternative. The Scoping report provides further details in this regard.</p>
<p>FvdW: Where will the product be stored and where is your strategic reserve going to be stored. This needs to be considered within the EIA. Is the storage going to be included within the footprint that you are referring to or will it be at another location?</p>	<p>KG: The current planning is that only diesel will be stored on the site.</p>

<p>FvdW: My sentiment is that this EIA cannot be approved until you have clarified the routing of the transmission lines and the pipelines.</p>	<p>Comment noted.</p>
<p>ON: My interest in this project is the potential impact of the project on aviation. The IDZ is positioned in line with the runway of the Richards Bay Airport. It is approximately 4.5 miles from the runway threshold. Any development in line with the runway might affect aircraft operation and the decent gradient onto the runway. From an advisory point of view, Eskom needs to take this into consideration and consult the Civil Aviation Authority (CAA) so that an obstacle evaluation assessment can be undertaken.</p>	<p>RC: Eskom has received correspondence from the CAA. Eskom is liaising with Lizell Stroh, Obstacle Specialist – Aviation Obstacle and GIS, and she has advised that the application for obstacle evaluation assessment should be submitted once the project is in an advanced stage, once the heights have been determined.</p>
<p>RvN: Why are the EIAs for the various project components being undertaken separately?</p>	<p>VC: Eskom is unable to undertake the EIA for the fuel supply pipeline as the gas supplier will conduct this. A partnership needs to be established with other state-owned companies or with private companies to establish the gas pipeline. This entity will be responsible for the permitting required for the pipeline. More work needs to be undertaken in this regard from a technical and commercial point of view. Eskom's transmission department will be initiating the EIA for the transmission lines which will commence once a consultant has been appointed (envisaged to be in the fourth quarter of 2017). Once this is completed the EIA for the powerlines will commence. It should be noted that Eskom is not developing the power plant in isolation from its other critical components. Consultation with various stakeholders and state-owned companies are ongoing.</p> <p>KC: In terms of the project lifecycle for generation project, the Transmission EIA lags the facility EIA (generation). Eskom's transmission department will be initiating the EIA for the transmission lines which will commence once a consultant has been appointed (envisaged to be in the fourth quarter of 2017). Desktop and conceptual studies were undertaken from Eskom's transmission, generation and technical</p>

	<p>engineering departments. This information was used to inform the Site Screening and Selection Study. Eskom's transmission department will be initiating the EIA for the transmission lines which will commence once a consultant has been appointed (envisaged to be in the fourth quarter of 2017). Eskom has to select three corridors and a few substations close to the site are being considered. Also, Eskom is taking due consideration of future developments planned within the IDZ. Eskom is working very closely with the IDZ as well as Transnet and other key state-owned companies. It is expected that the Scoping Report for the transmission lines will be available in due course.</p>
<p>RvN: Do you have your plans in place already in terms of where the application area will be?</p>	<p>KC: Yes, transmission studies have been undertaken on a desktop level, and some corridors were identified.</p>
<p>FvdW: This project must take cognisance of other developments such as the relocation of the airport and the expansion of the port. With all due respect to Eskom, we have been involved in EIAs in Richards Bay where the same mistake was made. Applicants separated the transmission lines from the substation EIAs and then it failed. It is tax payers' money that Eskom is wasting by using this approach. Rather undertake a Scoping Study on the preferred sites and investigate more sites and present realistic solutions. Undertaking an EIA on this site is premature if you do not know what your source of supply is and where your source of supply is going to be stored. The UVS site would have been optimal for this development but was dropped to environmental concerns.</p>	<p>VC: Eskom is not working in isolation. Key stakeholders and government departments are being consulted and we are aware of other developments taking place in Richards Bay.</p> <p>MP: It should be noted that some of the sites considered within the Site Screening and Selection Study were considered no-go areas for development due to water related issues. The UVS site (Site 4a) is not preferred from an environmental perspective as the impacts on the aquatic ecology and wetlands may present an impact of high significance in these areas which cannot be avoided.</p>
<p>DH: The Vortum Energy Project and the Accelor Mittal Thermal Plant located in Saldanha in the Western Cape recently received environmental authorisation from the Department of Environmental Affairs (DEA) which also excluded the grid connection and pipeline infrastructure. DEA has approved the impact of the power plant in isolation, with the condition that the remaining project components must</p>	<p>Comment noted.</p>

receive environmental authorisation within two years.	
DH: Was access to sea water cooling one of the criteria for this development?	TM: Access to sea water cooling would have been a criterion if the project site was located along the coast.
FS: What is the reason for developing this project? It seems as though 3000MW is more than Richards Bay requires in the future with the development of other energy related projects.	VC: The purpose of the project is to reduce transmission losses from generation facilities supplying KwaZulu-Natal, by having a generation centre in KwaZulu-Natal. Also, the project is planned to aid in reducing Eskom's carbon footprint per Unit of electricity produced, as power plants using natural gas emit approximately half the carbon of coal-fired power plants while using considerably less water, thus supporting Government's commitment to reduce carbon emissions. It should be noted however, that Eskom are still undertaking feasibility studies to determine whether the development of such a power plant will be viable. Eskom will decide whether to proceed with the implementation of this power plant once the permitting requirements and regulatory compliance requirements have been met.
RvN: In terms of the air quality would it be possible for you to present the impact on residential areas in Richards Bay?	TM: Air quality impacts to residential areas in Richards Bay will be detailed in the Air Quality Impact Assessment which will be undertaken in the EIA phase.
GL: Is the intention of this power plant to be part of the primary generation of Eskom or will it be a standby plant that will only be used if necessary. Is the plant going to run fulltime or on a standby basis?	KG: The plant is a mid-merit plant that will operate for 16 hours per day for 5 days per week.
FvdW: I hope that the EIAs being undertaken by the private sector will continue. NERSA is the deciding factor and will make the decision based on rate. Eskom cannot develop a plant like this in competition and price wise then it should go to the private sector. The sad thing is that in this instance the tax payers are funding this EIA. IPPs should be assisted by our government to do these studies because at the end of the day this is all to the benefit of the Country.	Comment noted.

WAY FORWARD AND CLOSURE

Gabriele Stein stated that Interested and Affected Parties (I&APs) could submit their written comments on the Scoping Report and proposed project to Savannah Environmental by 20 September 2017. She noted that comments received would be included in the final Scoping Report that would be submitted to the DEA. She thanked the meeting attendees for availing themselves for the meeting and closed the meeting.

DEVELOPMENT OF THE RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE ON A SITE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE

NOTES OF THE FOCUS GROUP MEETING TRANSNET

HELD ON: 31 AUGUST 2017

BOARDROOM 253, MALAHLE HOUSE, KIEWIET ROAD, EMPANGENI

Notes for the Record prepared by:

Savannah Environmental (Pty) Ltd

Contact: Ms Gabriele Stein

Position: Public Participation and Social Consultant

E-mail: gabreiele@savannahsa.com

Please address any comments to Gabriele Stein at the above address

DEVELOPMENT OF THE RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE ON A SITE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE

Venue: Boardroom 253, Malahle House, Kiewiet Road, Empangeni

Date: 31 August 2017

Time: 12:30

WELCOME AND INTRODUCTION

Gabriele Stein, of Savannah Environmental welcomed all present and thanked the meeting attendees for availing themselves for the meeting. She noted that Eskom Holdings SoC Ltd (Eskom) proposes the development of a Combined Cycle Power Plant (CCPP) and associated infrastructure on Portion 2 and Portion 4 of Erf 11376 in the Richards Bay Industrial Development Zone (IDZ) Phase 1D, located within the jurisdiction of the City of uMhlatuze Local Municipality and the King Cetshwayo District Municipality, KwaZulu-Natal Province. She stated that the project is to be known as the Richards Bay Combined Cycle Power Plant (CCPP).

Gabriele Stein explained that the purpose of the project is to reduce transmission losses from generation facilities supplying KwaZulu-Natal, by having a generation centre in KwaZulu-Natal. In addition, the project is planned to aid in reducing Eskom's carbon footprint per Unit of electricity produced, as power plants using natural gas emit approximately half the carbon of coal-fired power plants while using considerably less water, thus supporting Government's commitment to reduce carbon emissions.

Gabriele Stein noted that Eskom had appointed Savannah Environmental as the independent Environmental Assessment Practitioners (EAPs) responsible for undertaking an Environmental Impact Assessment (EIA) process (Scoping and EIA) to identify and assess all potential environmental impacts associated with the project for the area as identified, and propose appropriate mitigation measures in the Environmental Management Programme (EMPr). She stated that the purpose of the meeting was to introduce the Richards Bay CCPP Project, present the findings of the Scoping Study, provide a description of the EIA and public participation process being undertaken and to obtain comments and inputs for inclusion in the Scoping Report to be submitted to the National Department of Environmental Affairs (DEA).

MEETING ATTENDEES

Name	Organisation	Position
Nonhlanhla Sithono (NS)	Transnet Freight Rail	REM Manager
Thulani Fakude (TF)	Transnet Freight Rail	Depot Engineer – Infrastructure
Vuyo Keswa (VK)	Transnet Freight Rail	Environmental Manager
Mpho Muswubi (MM)	Eskom	Snr Environmental Advisor, EIA
Vincent Chauke (VC)	Eskom	Snr Manager, PDD(Acting)
Mula Phalanndwa (MP)	Eskom	Senior Environmental Advisor, WULA

Name	Organisation	Position
Reggie Chippe (RG)	Eskom	Peaking Generation(Client Office)
Kevin Chetty (KC)	Eskom	Project Manager
Koogendran Govender (KG)	Eskom	Chief Engineer
Khaya Kebeni (KK)	Eskom	Peaking Generation (Client Office)
Cobus Dippenaar	Eskom	Project Engineering Manager
Tebogo Mapinga (TM)	Savannah Environmental	Environmental Consultant
Gabriele Stein (GS)	Savannah Environmental	Public Participation Consultant

APOLOGIES

None

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Tebogo Mapinga of Savannah Environmental presented the background and technical aspects regarding the proposed project (refer to attached presentation).

DISCUSSION SESSION

Question / Comment	Response
VK: Is Eskom aware of the Port Expansion Programme. This programme is being developed in phases and implementation is likely to commence in 2050.	KC: Eskom is aware of the Port Expansion Programme and are engaging with the Transnet Port Authority and the Richards Bay IDZ in this regard. It should be noted that the Richards Bay CCPP lifespan is approximately 20 years and the plant is likely to come online by 2023. Therefore the power plant is likely to be decommissioned before 2050.
VK: How many people will be based on the site during the construction and operation phases?	RC: Approximately 800 – 1000 people will be on site during the construction phase and 80 – 100 people during the operation phase.
VK: What modes of transport will be moving in and out of the proposed power plant?	RC: A gas pipeline will be used to supply gas to the power plant as the primary fuel. Fuel tankers will be used occasionally should diesel be required to operate the facility as a back-up (this is all during operation of the power plant). During construction there will be construction vehicles moving in and out of the site on a regular basis.

<p>VK: Has a Traffic Impact Assessment been undertaken?</p>	<p>TM: A Traffic Study was undertaken as part of the Environmental Screening and Site Selection Study and a Traffic Impact Assessment will be conducted during the EIA phase.</p>
<p>TF: Transnet infrastructure and servitudes are not affected by the proposed development. Transnet will require a better understanding of how the gas pipeline and the transmission lines would impact on Transnet infrastructure.</p>	<p>TM: It is noted that the power plant project does not impact on Transnet's servitudes or infrastructure. A separate EIA applications will be undertaken for the transmission lines. The potential gas supplier whom Eskom will enter into consider a Gas Sales Agreement (GSA) will conduct an EIA for its gas pipeline corridor from the power plant to Eskom's connection point at the boundary fence of, and the power plant. The gas pipeline from this connection point to Eskom's power plant is part of service provider will be responsible for authorisation processes from the associated infrastructure included in this EIA.</p>

WAY FORWARD AND CLOSURE

Gabriele Stein stated that Interested and Affected Parties (I&APs) should submit their written comments on the Scoping Report and proposed project to Savannah Environmental by 20 September 2017. She noted that comments received would be included in the final Scoping Report that would be submitted to the DEA. She thanked the meeting attendees for availing themselves for the meeting and closed the meeting.

DEVELOPMENT OF THE RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE ON A SITE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE

**NOTES OF THE FOCUS GROUP MEETING
RICHARDS BAY INDUSTRIAL DEVELOPMENT ZONE
ENVIRONMENTAL REVIEW COMMITTEE
HELD ON 31 AUGUST 2017
BHP BILLITON'S (SOUTH 32), OLD BAYSIDE SMELTER SITE, HARBOUR
ARTERIAL RD, RICHARDS BAY**

Notes for the Record prepared by:

Savannah Environmental (Pty) Ltd

Contact: Ms Gabriele Stein

Position: Public Participation and Social Consultant

E-mail: gabreiele@savannahsa.com

Please address any comments to Gabriele Stein at the above address

DEVELOPMENT OF THE RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE ON A SITE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE

Venue: BHP Billiton's (South 32), Old Bayside Smelter Site, Harbour Arterial Rd, Richards Bay

Date: 31 August 2017

Time: 14:00

WELCOME AND INTRODUCTION

Percy Langa of the Richards Bay Industrial Development Zone (IDZ) Environmental Review Committee welcomed all present and thanked the meeting attendees for availing themselves for the meeting. He handed over to Savannah Environmental and Eskom to present the Richards Bay Combined Cycle Power Plant (CCPP) project.

MEETING ATTENDEES

Name	Organisation	Position
Letitia Moodley (LM)	Richards Bay IDZ	-
Sharin Govender (SG)	City of uMhlatuze Municipality	PM: Environmental Planning
Sandy Caminga (SC)	Richards Bay Clean Air Association	Director
Percy Langa (PL)	Richards Bay IDZ	Environmental Manager
Nizibone-Izibele Sakwe (NS)	Richards Bay IDZ	Investment Manager
Kershia Govender (KG)	KZN EDTEA	Environmental Officer
Dominic Wieners (DW)	Ezemvelo KZN Wildlife	Principal Planner
Tembakazi Koali (TK)	Richards Bay IDZ	Investment Support Manager
Siyabonga Zigubu (SZ)	City of uMhlatuze Municipality	Air Quality Inspection
Sibusiso Ndlovu (SN)	Richards Bay IDZ	-
Lungile Nyembe (LN)	Transnet Ports Authority	-
Muzi Mdamba (MM)	KZN EDTEA	Control Environmental Officer
Lumko Ncapai (LN)	Transnet Port Authority	Environmental Officer
Mzamo Khuzwayo (MK)	Richards Bay IDZ	Chief Financial Officer
Mpho Muswubi (MM)	Eskom	Snr Environmental Advisor, EIA
Mula Phalanndwa (MP)	Eskom	Senior Environmental Advisor, WULA
Reggie Chippe (RG)	Eskom	Peaking Generation (Client Office)
Koogendran Govender (KG)	Eskom	Chief Engineer
Cobus Dippenaar (CD)	Eskom	Project Engineering Manager
Kevin Chetty (KC)	Eskom	Project Manager
Khaya Kebeni (KK)	Eskom	Peaking Generation (Client Office)
Tebogo Mapinga (TM)	Savannah Environmental	Environmental Consultant

Name	Organisation	Position
Gabriele Stein (GS)	Savannah Environmental	Public Participation Consultant

APOLOGIES

Vincent M Chauke: Snr Manager, PDD (Acting)

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Tebogo Mapinga of Savannah Environmental presented the background and technical aspects regarding the proposed project (refer to attached presentation).

DISCUSSION SESSION

Question / Comment	Response
SC: How were the sites selected? I am not entirely convinced that the other three sites options which were assessed were even viable to begin with.	<p>KG: The sites along the coast were chosen based on the technology that Eskom wanted to use for the power plant, which was wet cooling technology and planned to use sea water for cooling. The two inland sites were chosen based on their availability for power generation following discussions with the landowners.</p> <p>MP: Eskom's project selection criteria does not consider technology only. Transmission studies and the cost of the project are considered as well. Eskom undertook a pre-site selection screening exercise prior to these four sites being selected. Richards Bay is identified as the best locality for this project as the Department of Energy (DoE) plans to implement a gas-to-power programme in Richards Bay which would include the supply of gas to the port. Three of the sites were not selected based on cost factors. Eskom commissioned an Environmental Screening and Site Selection Study which was undertaken by Savannah Environmental prior to the commencement of the Scoping Study. The site selection report was concluded and approved in March 2017.</p>
SC: Was there any consultation with the City of uMhlathuze Municipality during the Environmental Screening and Site Selection Study.	TM: The City of uMhlathuze Municipality was consulted during the Environmental Screening and Site Selection Study. It is Eskom's intention to continue to liaise and engage with the

	Municipality during the EIA process and during the entire life cycle of the project.
SG: It is true that site 4a, 5 and 6 are deemed unfeasible for various reasons. These sites should not be presented as alternative sites in the EIA as they are deemed unfeasible.	<p>TM: These sites were assessed in the Environmental Screening and Site Selection Study that was undertaken prior to the EIA process being initiated. Site 4a, 5 and 6 are not presented as alternative sites in the Scoping report.</p> <p>It is important to demonstrate how the site was selected prior to the Scoping study being initiated, therefore, the process undertaken for the Environmental Screening and Site Selection Study is detailed in the Scoping Report. A motivation as to why these sites were not preferred has been included in the Scoping report.</p>
SC: With all due respect you cannot present unfeasible sites as alternative sites. It is disingenuous if you present four sites as alternatives which are deemed unfeasible from the commencement of this process.	<p>KG: There are two processes which were undertaken prior to the Scoping study being undertaken. First, Eskom undertook an assessment of six potential sites from an engineering and cost perspective. Technical and landowner issues reduced the potential sites to four. Second, Savannah Environmental was commissioned to undertake an Environmental Screening and Site Selection Study. Four sites were assessed within this study. The result of this study was that Site 7 is considered to be the most preferred alternative considered within this Environmental Screening and Site Selection Study. No fatal flaws from an environmental perspective were identified at this stage in the process. A Scoping and EIA study are now being undertaken on Site 7. The other sites are not being considered as alternative sites within the EIA.</p>
SG: It is important to note within the Scoping and EIA report that an initial Environmental Screening and Site Selection Study was undertaken and that the sites assessed are not being assessed within the EIA.	<p>TM: The Environmental Screening and Site Selection process is detailed in Chapter 3 of the Scoping report.</p>
SG: The City of uMhlatuze Municipality is concerned that this project is not being planned holistically as the gas pipeline, the LNG import terminal and the liquefaction plant are	<p>KC: This project is being developed in a development phased approach where the project is considered holistically. The pipeline and transmission power lines are being</p>

<p>excluded from this EIA. It is the Municipality's sentiment that this project needs to be dealt with from a cumulative perspective.</p>	<p>considered by Eskom even though separate EIA processes are being undertaken for these project components. Eskom is in the process of appointing an EIA consultant to undertake the environmental assessment required for the transmission line infrastructure. This process will not lag far behind the EIA for the power plant. With regards to the gas pipeline, Eskom's commodities department is responsible for sourcing potential gas supply through various stakeholders. The gas supplier will be responsible for the permitting requirements of this project component, therefore a separate EIA will be undertaken by the entity responsible for the gas. It must be noted that Eskom will not present a business case for this power plant if all the project components are not in place.</p>
<p>SG: It must be noted that as much as Phase 1D is being made available for purposes of gas development there are issues that need to be tested through an environmental process. These issues relate to terrestrial, ecological and hydrological impacts identified in the Environmental Screening and Site Selection Study.</p>	<p>TM: The terrestrial, ecological and hydrological impacts will be further assessed in the EIA phase and detailed impact assessments will be provided in the specialist studies and EIA report.</p>
<p>SG: The presentation should have included more detailed information on the power plant processes.</p>	<p>TM: Comment noted. The presentation provided a summary of the infrastructure required for the power plant and the technology being investigated. Detailed information is presented within the Scoping Report.</p>
<p>SC: The Richards Bay Clean Air Association is concerned that there is no gas available to supply a gas power plant in Richards Bay. We will not support a gas power plant which will be operated using diesel because there is no gas available.</p>	<p>KC: The Richards Bay CCPP will be operated on gas with diesel as a back-up in case there is an emergency situation. It would not be feasible to operate the power plant solely on diesel as this is too expensive and harmful to the environment. Eskom is currently engaging with various stakeholders to source gas. There is a possibility that gas could be imported from Mozambique via a pipeline.</p>
<p>SC: There is no EIA process underway for the gas supply. My sentiments are that the EIA for the power plant is being undertaken prematurely. The critical component of this project is the supply of gas and this need to be</p>	<p>KC: Eskom's governance will not approve the business case for this power plant if the fuel source is not available. Eskom is mandated to source the gas from potential gas suppliers and Eskom would be unable to proceed with the</p>

<p>put in place prior to the power plant being approved. We do not want a gas power plant operating on diesel in Richards Bay. Will the Air Quality Impact Assessment investigate the worst-case scenario which is a power plant that runs entirely on diesel? This is an assumption that the Richards Bay Clean Air Association is going to make until there is an LNG facility in Richards Bay.</p>	<p>project if the gas is not sourced. Eskom will not run this plant on diesel as its primary source of fuel. The power plant will operate on a mid-merit basis of 16 hours a day for 5 days a week on gas. It will not operate at baseload, although the EIA will assess the impacts for both mid-merit and baseload cases.</p>
<p>SG: It is understood that the gas pipeline, the LNG import terminal and the liquefaction process plant will be operated by different entities. It is important to understand that the National DEA is in the process of undertaking a Strategic Environmental Assessment on the gas network and it is assumed that this assessment will include LNG aspects. However, it is imperative that I&APs are provided with a holistic understanding of this project.</p>	<p>KG: Comment noted. Eskom is engaging with the Department of Energy on an ongoing basis. Eskom forms part of the committee that is working on the SEA.</p>
<p>SC: Does the Air Quality Impact Assessment investigate air quality impacts on the facility operating on gas or the facility operating on diesel?</p>	<p>TM: The Air Quality Impact Assessment considers air quality impacts with the facility operating on gas as the primary fuel and diesel as a backup.</p>
<p>SC: The term "back-up" needs to be clearly defined in the Scoping and EIA reports.</p>	<p>KG: The term "back-up" will be quantified and clarified in the report. Diesel will not be used to operate the plant for 16 hours a day for 5 days a week (only natural gas will be used for this purpose). Diesel will only be utilised in extreme worst-case scenarios. The quantities of diesel will be small.</p>
<p>SG: Is this plant considered a Major Hazardous Installation (MHI)?</p>	<p>TM: The power plant is considered to be a MHI and an MHI assessment will be undertaken in the EIA phase.</p>
<p>SC: What are the water consumption requirements for the power plant? There is no water available for this project at this stage.</p>	<p>TM: The project will require approximately 37 290 m³ for the construction period of 36 months. Approximately 1 825 000m³ will be required annually during the operation phase. Two cooling technology alternatives are being considered for the project namely dry cooling and once-through cooling.</p> <p>KC: Eskom is aware of the water constraints in the region and Eskom has representation in working group that has been established to investigate various water supply options for the</p>

	region. Options being considered include the utilisation of treated effluent from other industries in the area, a desalination plant and a water treatment plant on the site.
SC: Is effluent discharge going to go into uMlathuze Effluent Pipeline and out to sea?	KG: Effluent will be discharged to sea via the uMhlathuze Effluent Pipeline.
SG: Are there any other combined cycle power plants in South Africa?	KC: There are no combined cycle power plants in South Africa currently.
DW: The agreements regarding the biodiversity offset between KZN Ezemvelo wildlife and the City of uMhlathuze Municipality will remain in place.	GS: Comment noted, the agreement should be updated to make it relevant to the Richards Bay CCPP project once the DEA has issued its decision.
What kind of waste would be generated by the power plant?	KG: The waste which would be generated would include sewage, waste from the reverse osmosis plant.
SC: Will rain water be harvested at the proposed power plant?	KG: Onsite rainwater harvesting will be implemented. Eskom's policy is to have a zero discharge so all rain water is harvested. This water could be used for domestic use and in the cooling process.
SG: The site is in close proximity to Mondi. Have any incompatibilities with those land users been assessed (i.e. the pulp mill).	TM: A meeting has been held with Mondi and further discussions will be held in this regard and comments on the DSR are expected to be submitted.
SG: Phase 1D consists of 3 portions and the portion being investigated are Portion 2 and Portion 4 of Erf 11376. Portion 3 of Erf 11376 will likely be traversed by infrastructure such as access roads. It must be noted that any infrastructure linking to the site would need to bypass the off-set area. We would need an understanding of what infrastructure will need to traverse Portion 3 of Erf 11376.	TM: The detailed layout will be presented in the EIA report. Eskom will ensure that the offset areas are avoided.
SZ: The Scoping report does not make reference to abatement technologies that will be used in case the plant is required to operate on diesel.	KG: The requirement for emissions for diesel is that they should be within the air emission limits. No _x and So _x emissions would need to fall within these limits.

WAY FORWARD AND CLOSURE

Gabriele Stein stated that Interested and Affected Parties (I&APs) could submit their written comments on the Scoping Report and proposed project to Savannah Environmental by 20 September 2017. She noted that comments received would be included in the final Scoping

Report that would be submitted to the DEA. She thanked the meeting attendees for availing themselves for the meeting and closed the meeting.

RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE NEAR RICHARDS BAY, KWAZULU-NATAL

Public & Focus Group Meetings

30 – 31 August 2017

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MEETING AGENDA

1. Welcome and Introduction
2. Purpose of the Meeting
3. Project Overview
4. Overview of EIA Process
5. Discussion session

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WELCOME AND INTRODUCTION

- » Savannah Environmental (Pty) Ltd
 - * Tebogo Mapinga (EAP)
 - * Gabriele Stein (Public Participation Consultant)
- » Eskom Holdings SoC Ltd (Eskom)
 - * Mpho Muswubi (EIA)
 - * Kevin Chetty (Project Manager)
 - * Mula Phalanndwa (WULA)
 - * Reggie Chippe (Peaking generation)
 - * Vincent Chauke (Senior Manager, PDD)
 - * Koogendran Govender (Chief Engineer)
 - * Cobus Dippenaar (Project Engineering Manager)
 - * Khaya Kebeni (Client Officer)



SAVANNAH ENVIRONMENTAL (PTY) LTD

- » Appointed as the independent **Environmental Assessment Practitioners (EAP)**
- » Responsible for the:
 - * Environmental Impact Assessment (EIA)
 - * Management of independent specialists
 - * Public Participation (PP) process
 - * Application for the Water Use License



PURPOSE OF THE MEETING

- » Introduce the **Richards Bay CCPP Project**
- » Present the **findings of the Scoping Study**
- » Provide a description of the **EIA and Public Participation process** being undertaken
- » Obtain comments for inclusion in the **Scoping Report** to be submitted to DEA

RICHARDS BAY CCPP PROJECT

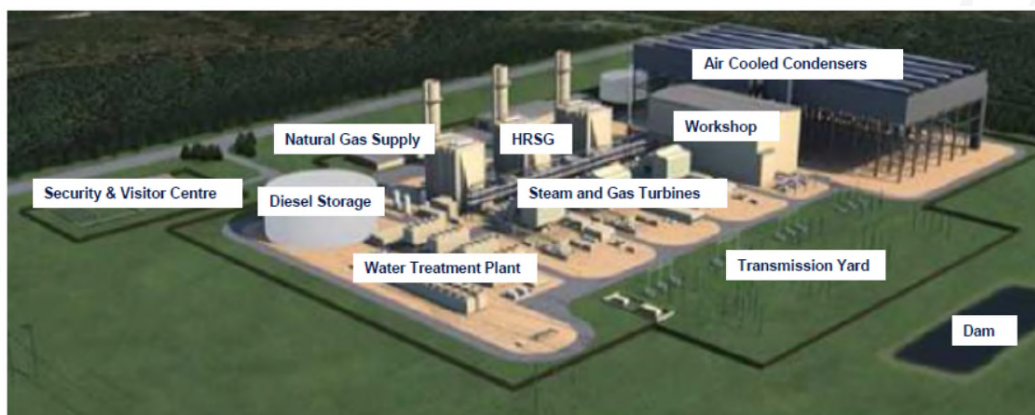
- » **Combined Cycle Power Plant (CCPP) with a maximum generating capacity of up to 3000MW** and associated infrastructure
- » Project site is located on Portion 2 and Portion 4 of Erf 11376 (71ha) within the Richards Bay Industrial Development Zone (IDZ) Phase 1D
- » City of uMhlathuze Local Municipality and the King Cetshwayo District Municipality

RICHARDS BAY CCPP PROJECT

- » The main infrastructure associated with the facility includes the following:
 - * Gas turbines
 - * Heat recovery steam generators (HRSG)
 - * Steam turbines
 - * Condensers
 - * Bypass stacks and Exhaust stacks
 - * A water pipeline, water tank and water treatment plant
 - * Dry-cooled system or Once-Through-Cooling system technology
 - * Closed Fin-fan coolers
 - * Diesel off-loading facility and storage tanks.
 - * Ancillary infrastructure (warehousing and buildings, storage facilities, generators and 132kV and 400kV switchyards)
 - * Access Roads
 - * A gas pipeline (will be assessed through a separate EIA process)
 - * Power lines (will be assessed through a separate EIA process)

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TYPICAL COMBINED CYCLE GAS TURBINE POWER PLANT



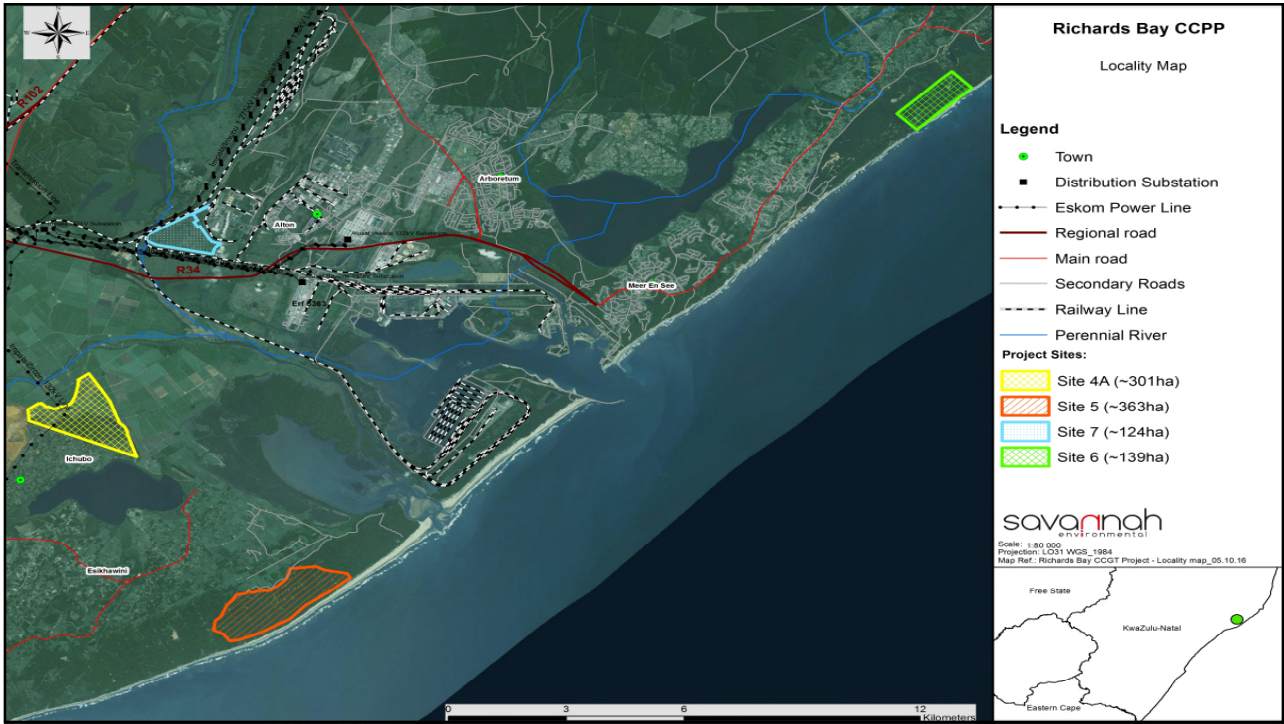
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RICHARDS BAY CCPP PROJECT

- » To be operated on natural gas piped to site with diesel as back-up
 - * Natural gas piped via a gas pipeline from the Richards Bay Harbour (not part of the scope of work will be under a separate application)
- » Site selected based on the following considerations:
 - * Technical criteria, including availability of the site for development, proximity to port, size of site, proximity to grid connection
 - * Environmental criteria, including sensitive social and biophysical features

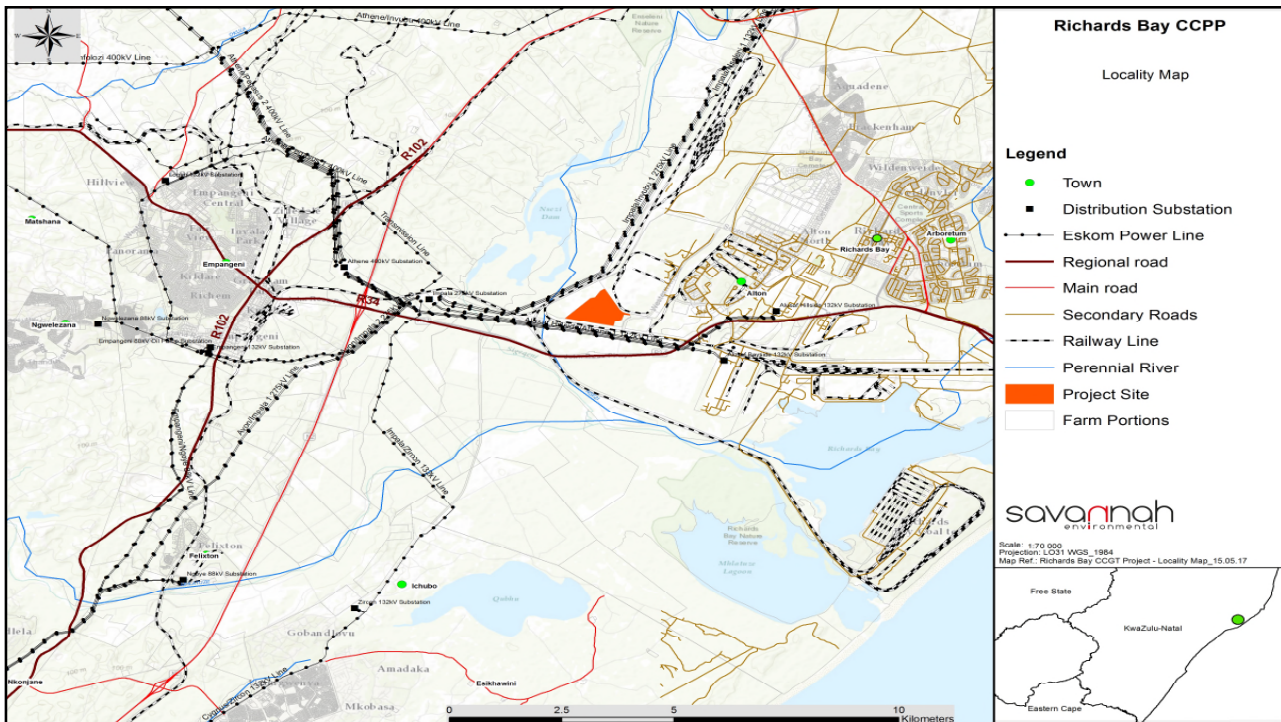
SCREENING AND SITE SELECTION

- » Eskom identified 6 potential sites
- » Technical and landowner issues reduced potential sites to 4
- » Environmental screening study undertaken on 4 potential sites
- » Specialist input included in screening study
- » 'Funnel-Down" Approach
 - * Avoidance
 - * Minimisation
 - * Remedy



SCREENING AND SITE SELECTION

Field of Study	Site 4a	Site 5	Site 6	Site 7
Terrestrial Ecology	Preferred	Not preferred	Acceptable	Acceptable
Wetland	Not preferred	Preferred	Preferred	Acceptable
Aquatic Ecology	Not preferred	Preferred	Preferred	Acceptable
Hydrological and Floodline	N/A	N/A	N/A	N/A
Geotechnical	Acceptable	Not preferred	Not preferred	Preferred
Ground Water	Acceptable	Acceptable	Preferred	Acceptable
Archaeology	Acceptable	Not preferred	Not preferred	Preferred
Palaeontology	Acceptable	Acceptable	Acceptable	Acceptable
Socio-Economic	Not preferred	Not preferred	Not preferred	Preferred
Noise	Not preferred	Acceptable	Acceptable	Preferred
Traffic	Acceptable	Not preferred	Not preferred	Preferred
Air Quality	Not preferred	Acceptable	Preferred	Not preferred
Visual	Acceptable	Acceptable	Not preferred	Preferred
Agricultural, Land Capability and Soils	Acceptable	Not preferred	Not preferred	Preferred
Marine	Preferred	Not preferred	Acceptable	Preferred



EIA PROCESS

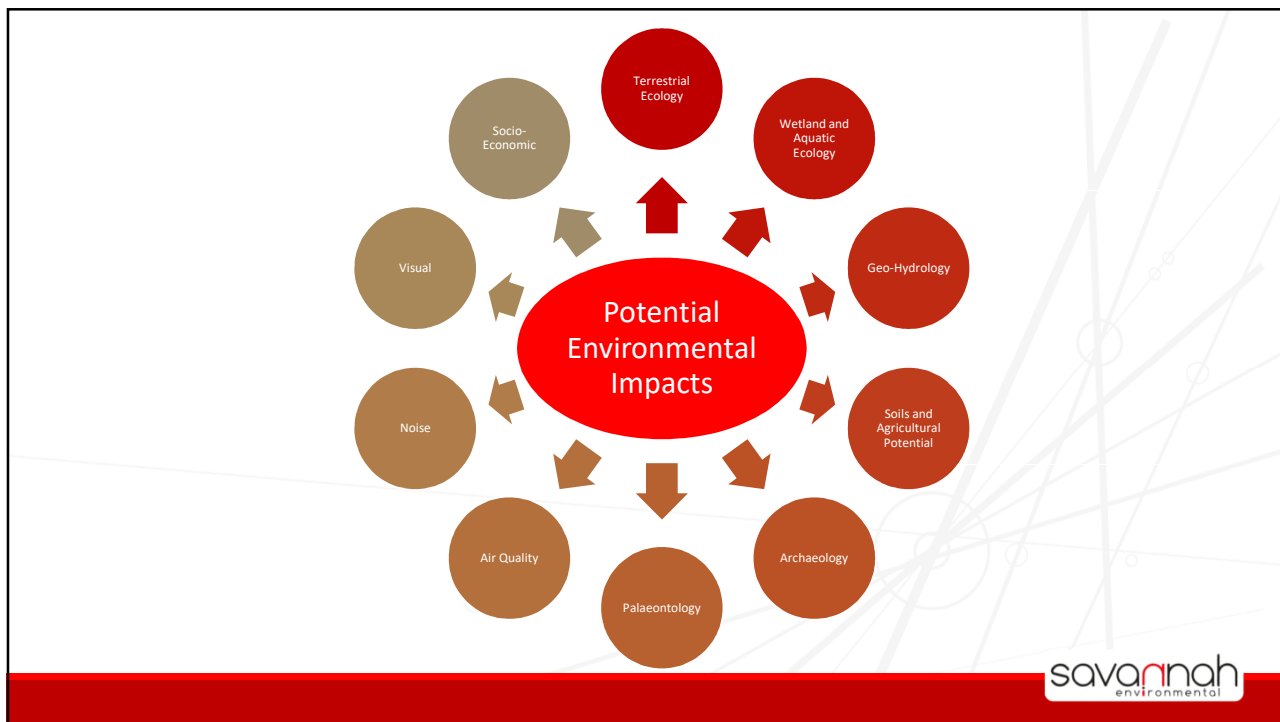
- » National Environmental Management Act (No 107 of 1998)
- » Application for Environmental Authorisation submitted under the EIA Regulations, 2014
- » Competent Authority - National Department of Environmental Affairs (DEA)
- » Commenting Authority – KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs (EDTEA)

OTHER PERMITS

- » Application for an **Atmospheric Emissions License (AEL)** will be applied for by Eskom only once a decision has been issued by the DEA
- » The **Water Use License (WUL)** will be applied for during the EIA Phase
- » Other permits will be identified during the EIA Phase

EIA PROCESS





INDEPENDENT SPECIALIST STUDIES

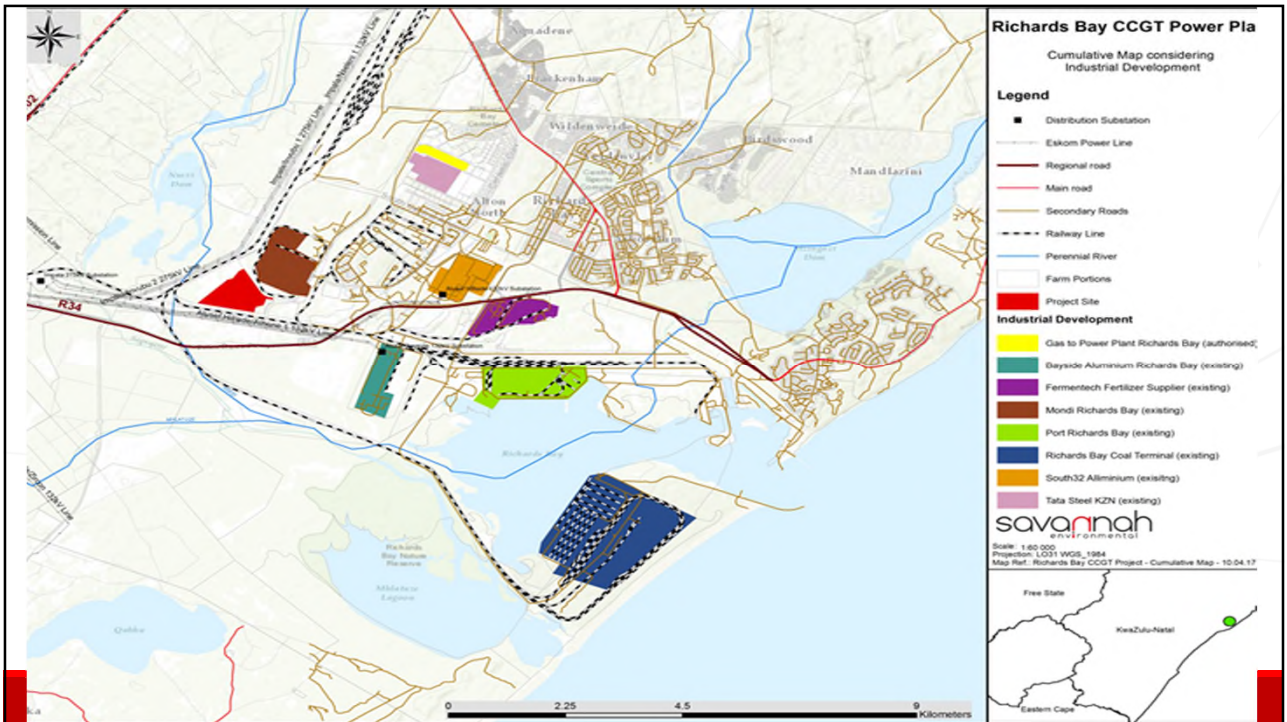
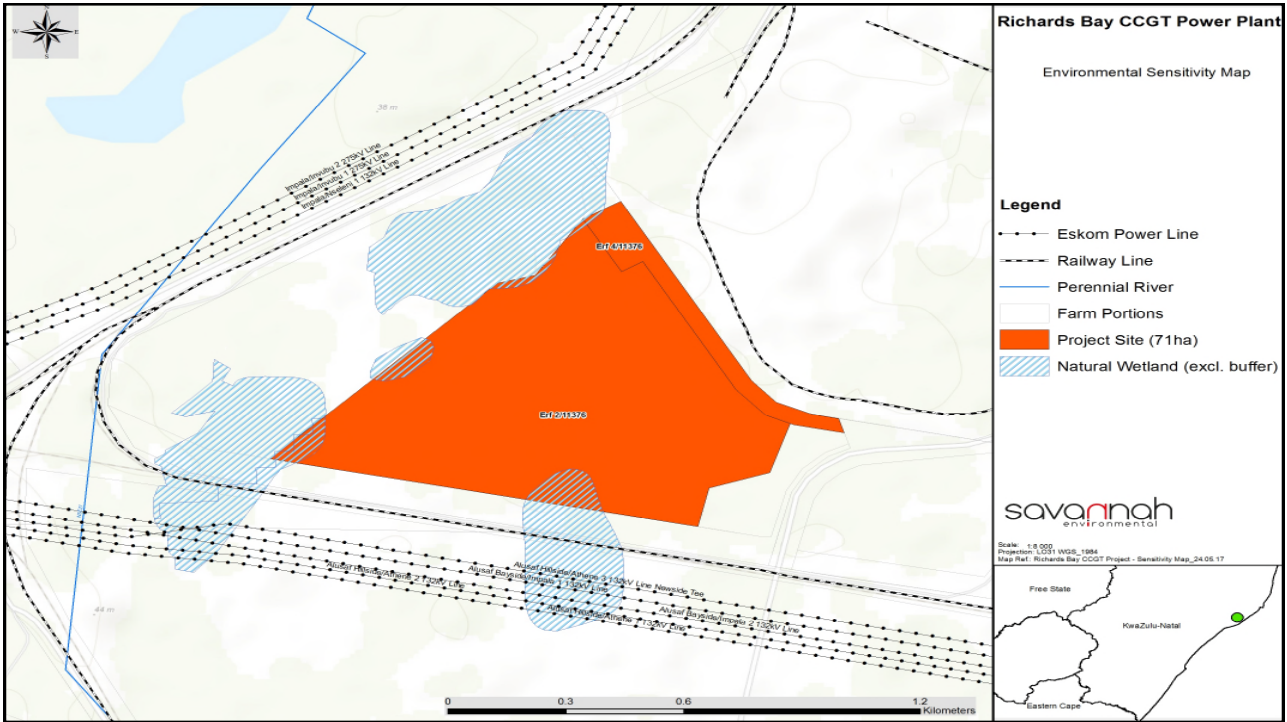
Study	Specialist
Terrestrial Ecology	Afzelia Environmental Consultants
Wetland and Aquatic Ecology	Afzelia Environmental Consultants
Geo-Hydrology	Afzelia Environmental Consultants
Soils and Agricultural Potential	Afzelia Environmental Consultants
Archaeology	Heritage Contracts and Archaeological Assessments
Palaeontology	National Museum of Bloemfontein
Air Quality	AirShed Planning Professionals
Noise	Enviro Acoustic Research cc
Visual	Afzelia Environmental Consultants
Socio-Economic	Urban Econ Development Economists

FINDINGS AND CONCLUSIONS

- » Impact on sensitive ecological features, i.e. CBA, loss of endangered ecosystem and loss of protected species
- » Loss of wetlands and altered hydrology and geo-hydrology
- » Risk for soil erosion
- » Potential damage to archaeological sites
- » Potential loss of palaeontological heritage, however no fossiliferous outcrops were found in the project site

FINDINGS AND CONCLUSIONS

- » Elevated daily PM10 concentrations and NOX, CO, and VOCs to the existing baseline concentrations
- » Production of Greenhouse Gases
- » Increased noise levels
- » Employment opportunities
- » Climate change and traffic impacts will be assessed during EIA. An MHI will also be conducted and form part of the EIAR
- » Cumulative impacts



WAY FORWARD

- » Review period of the Scoping Report: 21 August 2017 – 20 September 2017
- » Written comments or questions to be submitted by the 20 September 2017
- » Minute any issues / concerns from I&APs from the meetings
- » Incorporate issues and concerns raised during the Public Participation Process into the Final Scoping Report
- » Submit Final Scoping Report to DEA for approval

PLEASE DIRECT COMMENTS TO:

Gabriele Stein

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Cnr Woodlands Drive & Western Service Road

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DISCUSSION SESSION

» Question and comments are welcome

MINUTES OF MEETING HELD DURING ENVIRONMENTAL
IMPACT ASSESSMENT REPORT REVIEW AND COMMENT
PERIOD

(To be included in Final EIAR)