

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

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**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**

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**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](mailto: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:** 12<sup>th</sup> Floor, Southern Life Building, 88 Joe Slovo Street, Durban

**Date:** 30 August 2017

**Time:** 09:00

### **WELCOME AND INTRODUCTION**

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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 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**

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<b>Name</b>	<b>Organisation</b>	<b>Position</b>
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

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

## BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

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

## DISCUSSION SESSION

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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**

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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

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

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**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](mailto: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**

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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 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).

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**

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<b>Name</b>	<b>Organisation</b>	<b>Position</b>
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

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None

## BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

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

## DISCUSSION SESSION

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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 m<sup>3</sup> for the construction period of 36 months. Approximately 1 825 000m<sup>3</sup> 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"> <li>» The establishment of an emissions inventory by referring to NMES and emission factors for combustion processes, fuel storage and fugitive dust (construction);</li> <li>» Atmospheric dispersion simulations using the US EPA CALPro suite (CALMET and CALPUFF); and</li> <li>» A human health risk and nuisance impact screening assessment based on dispersion simulation results.</li> </ul>
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**WAY FORWARD AND CLOSURE**

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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**

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**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***

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

**Date:** 30 August 2017

**Time:** 18:00

### **WELCOME AND INTRODUCTION**

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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.

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### **MEETING ATTENDEES**

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<b>Name</b>	<b>Organisation</b>	<b>Position</b>
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**

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

## **BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT**

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

## **DISCUSSION SESSION**

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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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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

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## NOTES OF THE PUBLIC MEETING HELD ON 31 AUGUST 2017

RICHARDS BAY PUBLIC LIBRARY, 03 KRUGERRAND GROVE, RICHARDS  
BAY

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**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](mailto: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 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).

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### **MEETING ATTENDEES**

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<b>Name</b>	<b>Organisation</b>	<b>Position</b>
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)	Cheniere	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)
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**

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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**

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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**

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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

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## NOTES OF THE FOCUS GROUP MEETING TRANSNET

HELD ON: 31 AUGUST 2017

BOARDROOM 253, MALAHLE HOUSE, KIEWIET ROAD, EMPANGENI

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**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](mailto: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**

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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**

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<b>Name</b>	<b>Organisation</b>	<b>Position</b>
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

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None

## BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

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

## DISCUSSION SESSION

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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**

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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

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**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**

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**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

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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

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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

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Vincent M Chauke: Snr Manager, PDD (Acting)

## BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

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

## DISCUSSION SESSION

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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&amp;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 m<sup>3</sup> for the construction period of 36 months. Approximately 1 825 000m<sup>3</sup> 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 <sub>x</sub> and So <sub>x</sub> 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

savannah  
environmental

## MEETING AGENDA

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

savannah  
environmental

# 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

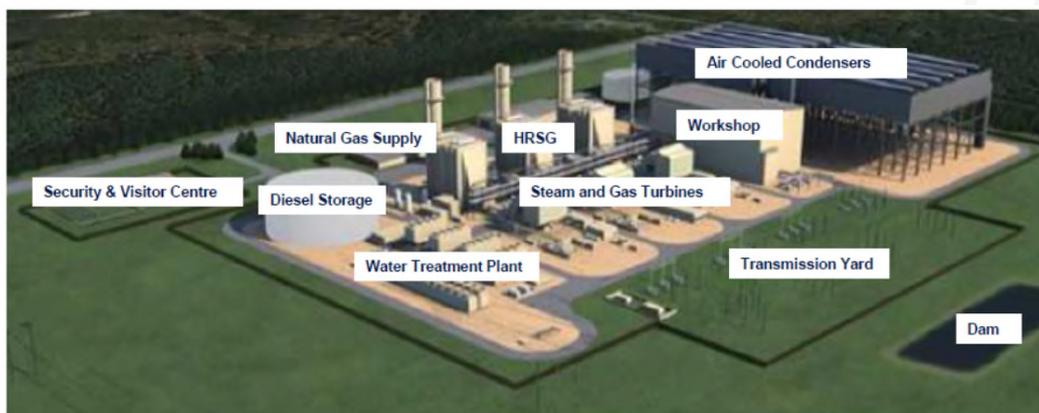
- » **Combined Cycle Power Plant (CCPP) with a maximum generating capacity of up to 3000MW** and associated infrastructure
- » Project site is located on Portion 2 and Portion 4 of Erf 11376 (71ha) within the Richards Bay Industrial Development Zone (IDZ) Phase 1D
- » City of uMhlathuze Local Municipality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

savannah  
environmental

## TYPICAL COMBINED CYCLE GAS TURBINE POWER PLANT



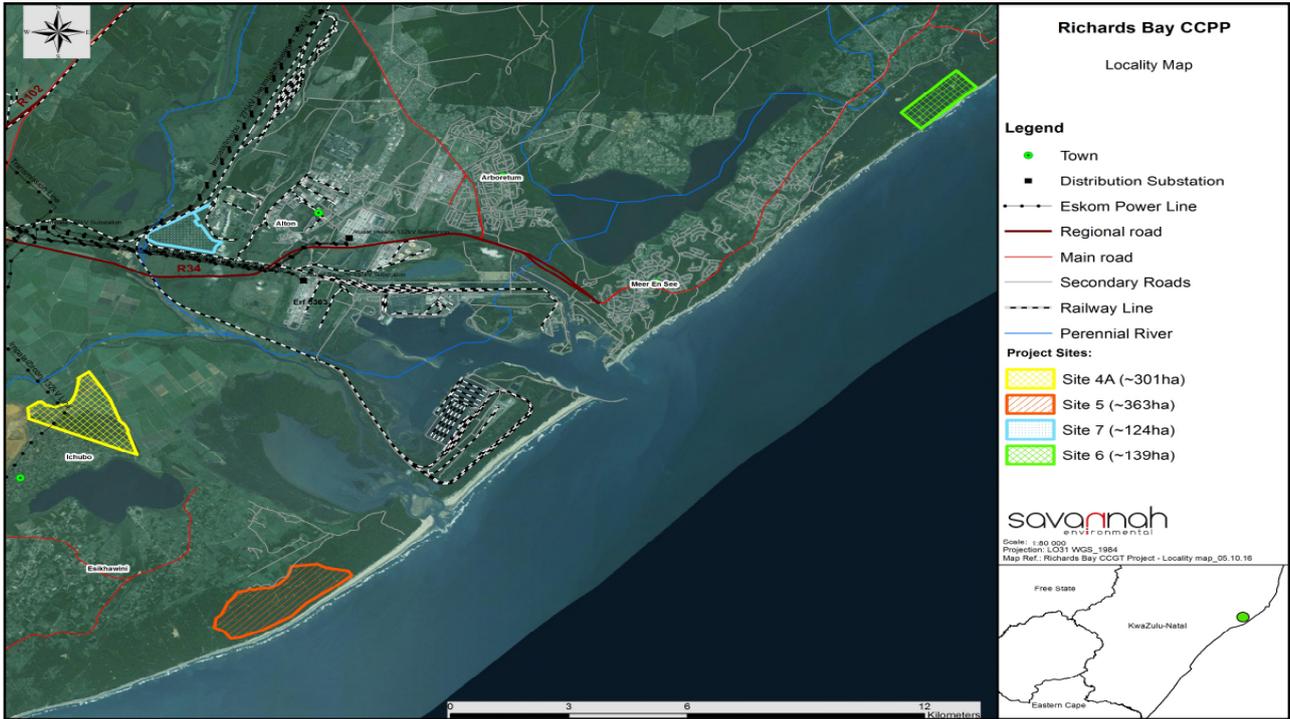
savannah  
environmental

## 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

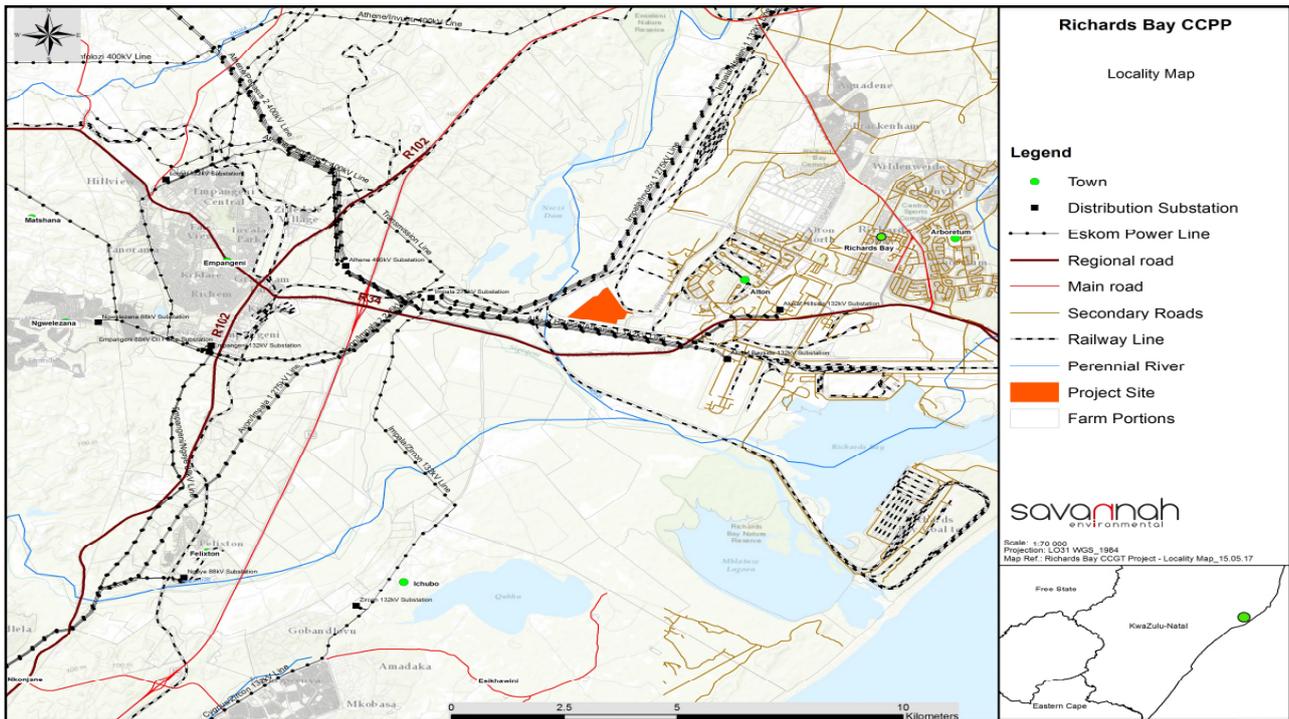
## SCREENING AND SITE SELECTION

- » 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

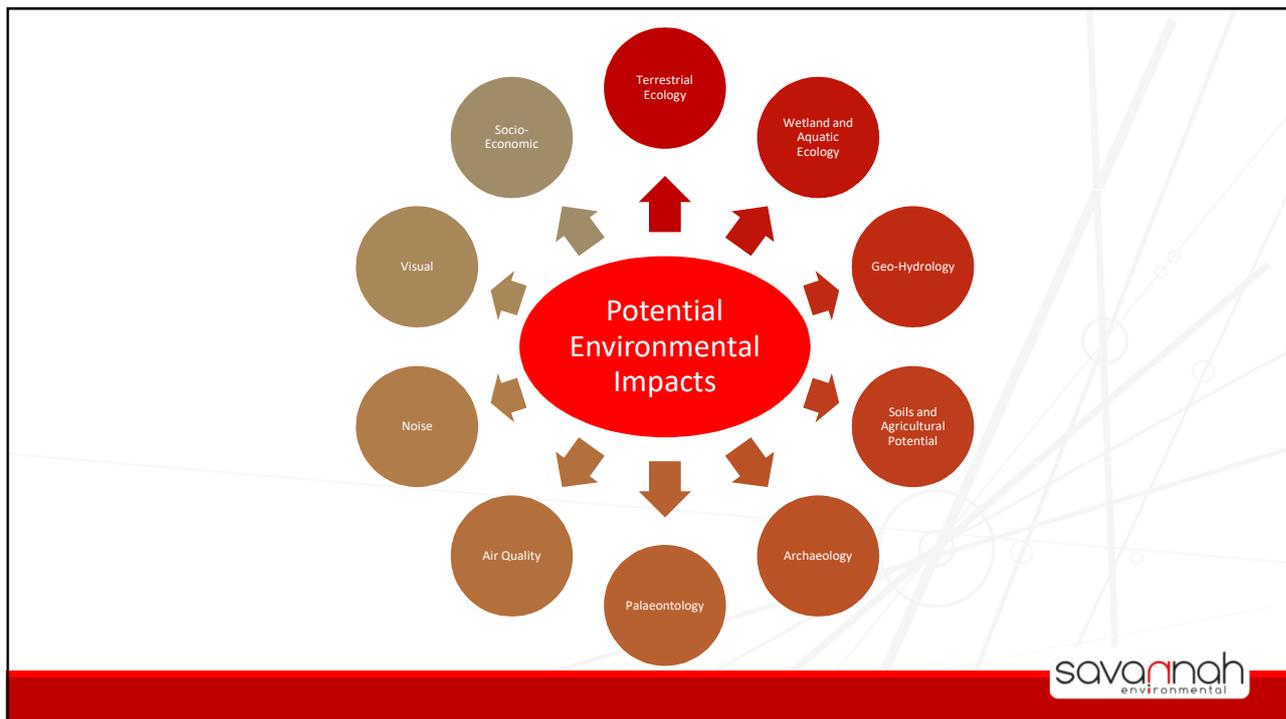
- » National Environmental Management Act (No 107 of 1998)
- » Application for Environmental Authorisation submitted under the EIA Regulations, 2014
- » Competent Authority - National Department of Environmental Affairs (DEA)
- » Commenting Authority – KwaZulu-Natal Department of Economic Development,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

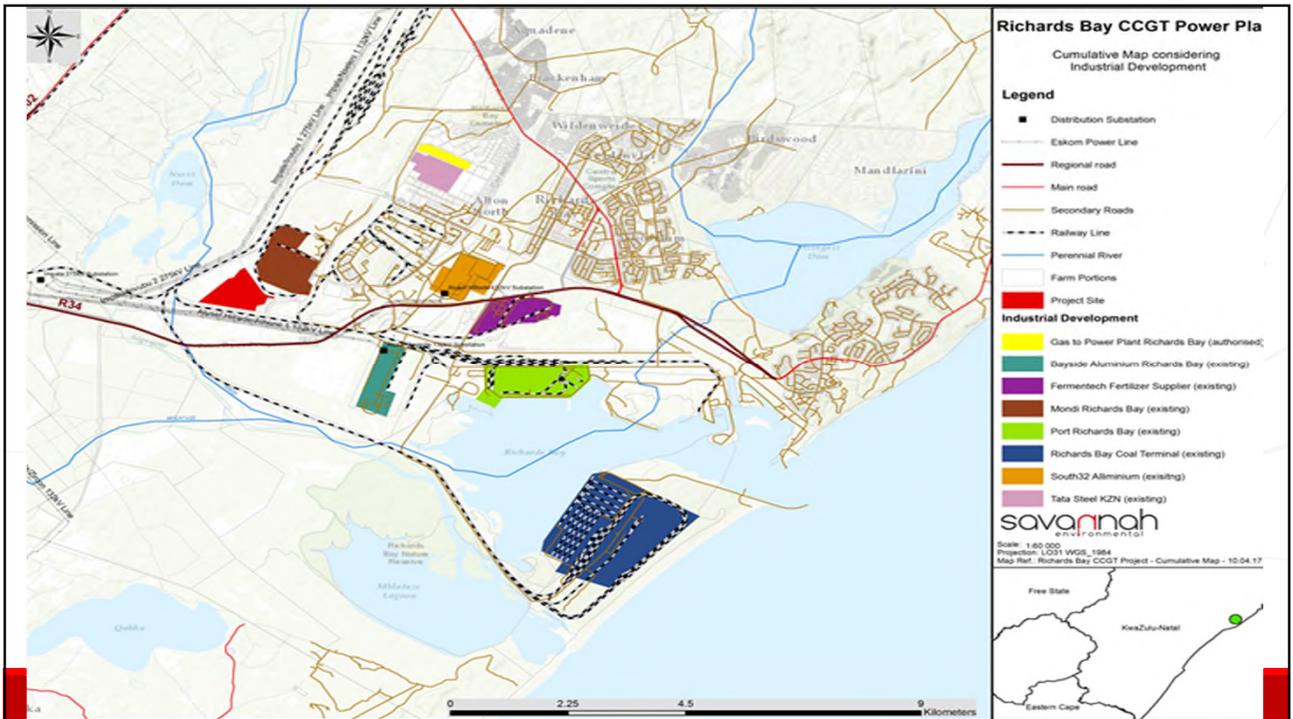
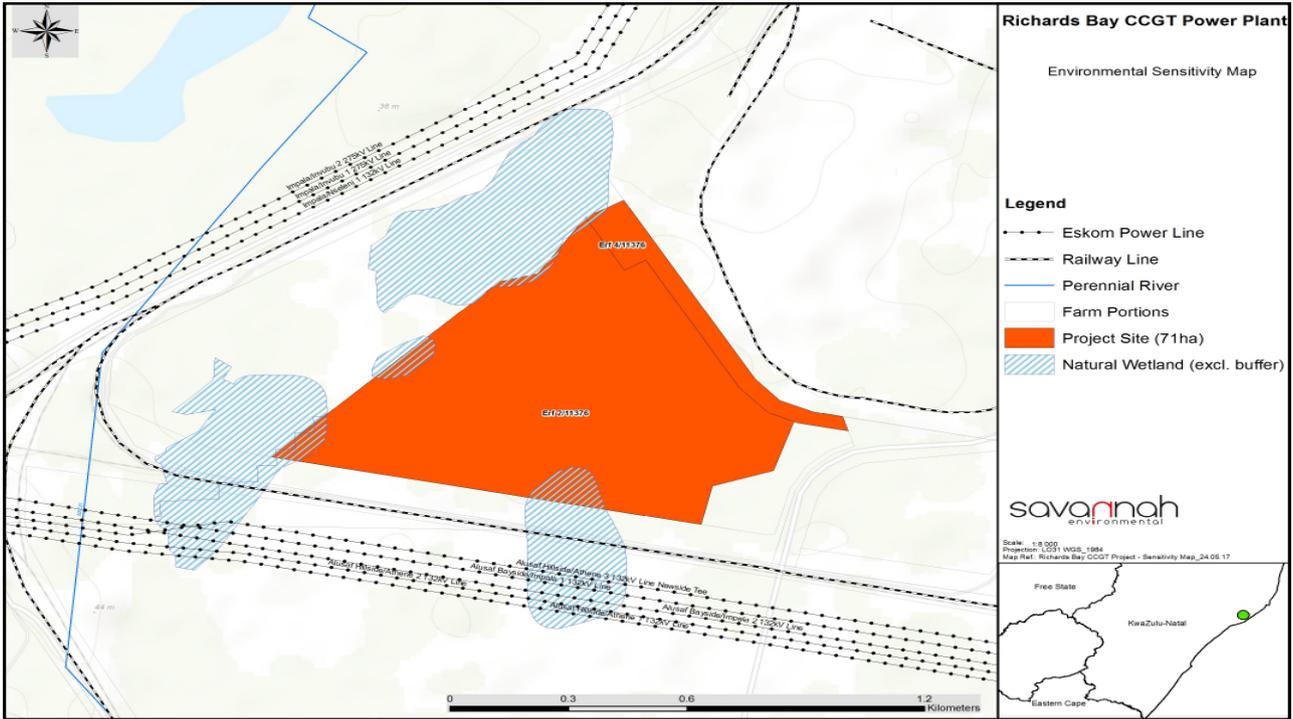
Study	Specialist
Terrestrial Ecology	Afzelia Environmental Consultants
Wetland and Aquatic Ecology	Afzelia Environmental Consultants
Geo-Hydrology	Afzelia Environmental Consultants
Soils and Agricultural Potential	Afzelia Environmental Consultants
Archaeology	Heritage Contracts and Archaeological Assessments
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

Savannah Environmental

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f: +27 (0)86 684 0547

e: [gabriele@savannahsa.com](mailto:gabriele@savannahsa.com)

w: [www.savannahsa.com](http://www.savannahsa.com)

a: First Floor, Block 2, 5 Woodlands Drive Office Park

Cnr Woodlands Drive & Western Service Road

Woodmead, 2191

# DISCUSSION SESSION

» Question and comments are welcome

Impact Phase

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

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## MEETING NOTES OF THE KEY STAKEHOLDER WORKSHOP

HELD ON 26 MARCH 2019

RICHARDS BAY ENVIRONMENTAL COMMITTEE CONFERENCE ROOM,  
RICHARDS BAY INDUSTRIAL DEVELOPMENT ZONE, HARBOUR ARTERIAL RD,  
RICHARDS BAY

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**Notes for the Record prepared by:**

**Savannah Environmental (Pty) Ltd**

**Contact:** Ms Nicolene Venter

**Position:** Public Participation and Social Consultant

**E-mail:** publicprocess@savannahsa.com

**NOTE:** These meeting notes are not verbatim

***Please address any comments to Nicolene Venter 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 Environmental Committee Conference Room, Richards Bay Industrial Development Zone, Old Bayside Smelter Site, Harbour Arterial Rd, Richards Bay

**Date:** 26 March 2019

**Time:** 10:00

### WELCOME AND INTRODUCTION

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Nicolene Venter, Savannah Environmental, welcomed all present and thanked the attendees for availing themselves for the meeting. After formal introduction by the project team members and the delegates present, she handed over to Percy Langa of the Richards Bay Industrial Development Zone (IDZ) Environmental Review Committee to present the Richards Bay IDZ's evacuation procedure.

The attendees were informed that due to a throat infection, the presentation will be presented by Lisa Opperman, Savannah Environmental, and Shaun Taylor, Savannah Environmental, will respond to questions raised. Nicolene also informed the attendees that Shaun Taylor, as Environmental Assessment Practitioner (EAP) for the project, will be leaving the services of Savannah Environmental at the end of the month and that Lisa Opperman will take over the role as EAP.

### MEETING ATTENDEES

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Name	Organisation	Position
Lindiwe Zondi	City of uMhlathuze Municipality	Deputy Manager: Energy Management
Sharin Govender		Environmental Planning
Bonga Mkhize	KZN EDTEA	Assistant Director
Siyanda Nzuza		Environmental Officer
Muzi Mdamba		Control Environmental Officer
Zamokuhle Mashyane		Environmental Officer
Sandy Camminga	Richards Bay Clean Air Association	Director
Frans Schmidt	Richards Bay Alloy	SHREQC Manager
Brendan Crawford	Mondi Richards Bay	Environmental Manager
Percy Langa	Richards Bay IDZ	Environmental Manager
Tobile Bokwe	Eskom Holdings SOC Ltd	Middle Manager: EIA
Pierre Nelson		Snr Consultant
Anesh Surendra		Middle Manager
Tinyiko Masondo		Project Manager: Project Development Department
Vincent Chauke		Programme Manager: Project Development Department
Koogendran Govender		Chief Engineer

Name	Organisation	Position
Reggie Chippe		Client Office
Mula Phalannwa		Senior Environmental Advisor, WULA
Lisa Opperman	Savannah Environmental	Environmental Assessment
Shaun Taylor		Practitioner
Nicolene Venter		Public Participation and Social Consultant

### Apologies:

Mr Dominic Wieners: KZN Ezemvelo Wildlife

### PRESENTATION

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The following key points were presented:

- Project Progress to Date – Savannah Environmental
- Need for the Project and Integrated Projects – Eskom Holdings SOC Ltd
- Overview of EIA & WULA Process – Savannah Environmental
- Project Overview – Savannah Environmental
- Key Environmental Findings of the EIA Report – Savannah Environmental

**Copy of the presentation is attached as Appendix A**

### DISCUSSION SESSION

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Question / Comment	Response
Sandy Camminga raised the concern that the key stakeholder workshop has been scheduled so early in the Environmental Impact Assessment Report's review period, not allowing the attendees to indulge the content of the report which would allow a meaningful contribution to the meeting.	The concern on the approach taken was acknowledged, but Nicolene Venter responded that the reason for holding the workshop early in the review period is to present the key findings to stakeholders, allowing them to be able to focus on the key environmental impacts or technical aspects of their interest. It also allowed the stakeholders the opportunity to exchange ideas and raise concerns with the project team at the start of the review period.
Sandy Camminga informed the project team that in order to allow a meaningful discussion regarding the project, the source of the gas needs to be confirmed.	Vincent Chauke acknowledged the need for an inclusive reflection of the project developmental elements, and advised that Eskom is engaging with various suppliers, such as Transnet, who have already identified two gas off-loading sites at the Richards Bay Port, in this regard. Further, he indicated that an

	<p>EIA/permitting process still needs to be conducted by the service providers, e.g. Transnet, regarding these two proposed off-loading sites, as well as for the associated gas pipeline corridor to the power station.</p> <p>It was mentioned that the proposed power plant is designed to operate with Liquefied Natural Gas (LNG) which can be sourced from Mozambique.</p> <p>It was also confirmed that the power plant is designed to be operated as mid-merit plant.</p>
<p>Sandy Camminga expressed the viewpoint that as the plant is designed to be a combined cycle it would render the plant usable to other alternative energies.</p>	<p>Vincent Chauke responded that the plant is design to run 99% on gas but should there be an issue in terms of gas supply, the plant can, as an emergency, operate on diesel. However, it was confirmed that diesel would not be the primary fuel source for the power plant.</p> <p>Tobile Bokwe allayed this concern/viewpoint by stating that, if there would be a need for the plant to use a different source of energy, from the current plans, a permitting process would have to be undertaken, since the impacts of that new energy source have not been assessed as part of this application. Therefore, the public would be made aware, and would participate, in permitting processes of such a change.</p>
<p>Sandy Camminga stated that to ensure the public understands the technical and operational processes of the power plant, a process flow diagram must be included in the Report.</p>	<p>Koogendran Govender presented a flow diagram to the attendees of the operational process for a typical combined cycle power plant and Shaun Taylor confirmed that a process flow diagram is included in the Report.</p> <p><b>Post-meeting note:</b> A process flow diagram is included in Figure 2.3 of the EIA Report which was made available for a 30-day review period.</p>
<p>Frans Schmidt made reference to various concerns and issues raised during the scoping phase as documented in the comments and responses report regarding the separate EIA processes being undertaken for the power</p>	<p>Tobile Bokwe informed the attendees that all required permitting and regulating requirements of all associated infrastructure are required to be obtained as one aspect of the larger project cannot function without the</p>

<p>plant, which includes separate processes for the power lines and gas pipeline. The concern is that should an Environmental Authorisation be issued for the power plant and not for the power lines and/or the gas pipeline, the power plant cannot operate or evacuate the generated electricity.</p>	<p>other. He added that, although separate EIA processes are being conducted by different stakeholders and their consultants, Eskom will still consider the project in its totality to source approval for project implementation.</p> <p>Shaun Taylor added that should any technical aspect of the power plant be required after the Environmental Authorisation has been issued, then Eskom will have to go through another EIA process.</p>
<p>Sharin Govender informed the project team that the information provided in the presentation regarding agriculture is misleading from a landuse point of view as the area referred to is used for subsistence grazing.</p>	<p>Shaun Taylor replied that the study that was undertaken to consider the agricultural aspects was a soils and agricultural potential study. During the assessment it was determined that the soil type is more suited for sugar cane because of the low groundwater level and for this reason it was classified as having a low grazing potential, but still high agricultural potential.</p> <p>It can be confirmed that the grazing taking place on the property is by illegal occupants and not subsistence farming.</p>
<p>Frans Schmidt informed the project team that a more precise consideration of greenhouse gas (GHG) emissions must be undertaken. Reference was made to the meeting of 31 August 2017 during which it was stated that the purpose of the development of the power plant in Richards Bay would be to save on transmissions losses and to minimise carbon emissions from using coal.</p> <p>It was noted that the EIA Report does not address this.</p>	<p>Shaun Taylor replied that the project is planned to reduce Eskom's carbon footprint by using natural gas which emit approximately half the carbon of coal-fired power plants. It should also be noted that Eskom is still undertaking feasibility studies to determine whether the development of such a power plant will be viable.</p> <p>The results of GHG is included in <b>Appendix J</b> of the EIA report.</p>
<p>Frans Schmidt enquired as to when the feasibility study will be completed and how long would it take.</p>	<p>Shaun Taylor responded that this EIA process is part of the feasibility study as Eskom still needs to determine the feedstock.</p> <p><b><u>Post-meeting note:</u></b> The anticipated completion of the overall project feasibility studies is ~August 2020.</p>
<p>Sandy Camminga enquired as to whether the option of "No go" has been considered i.e. not</p>	<p>Shaun Taylor replied that the "no go" option is covered in the EIA Report as the "Do Nothing"</p>

developing the proposed power plant.	alternative.
Percy Langa informed the project team of studies undertaken to make the IDZ phase 1D zone an oil and gas hub and asked whether the project team is aware of the study and do they have a copy of the report drafted by the steering committee.	<p>Shaun Taylor responded that the team is not aware of such as study and the availability of a report. Shaun advised that the matter will be investigated further.</p> <p><b><u>Post-meeting note:</u></b> Percy Langa was contacted via email by Lisa Opperman on 18 June 2019 to request a copy of the mentioned studies. These studies will be considered for the project should it be relevant.</p>
Sandy Camminga requested that a 2 <sup>nd</sup> meeting be held as the stakeholders did not have an opportunity to fully familiarise themselves with the content of the Report and its Appendices,	<p>After brief consultation with the team it was decided that after a two-week period, Nicolene Venter will contact the stakeholders present in the meeting to determine the need for a 2<sup>nd</sup> meeting or a 2<sup>nd</sup> engagement.</p> <p>The possibility of a telephone conference was mentioned as an alternative to the team travelling to Richards Bay.</p> <p><b><u>Post-meeting note:</u></b> A telephonic follow-up was undertaken on 09 April 2019 with the attendees and it was confirmed that a follow-up meeting was not required. A confirmation e-mail was sent to the attendees and is included in <b>Appendix C5</b> of the revised EIA Report.</p>
<p>Brendan Crawford enquired whether a Major Hazardous Installation (MHI) study was conducted for this project. It was noted that there will be two MHIs near each other i.e. Mondi and the proposed power plant.</p> <p>It was also enquired whether the MHI includes an emergency procedure plan.</p>	<p>Shaun Taylor responded that a quantitative risk assessment has been undertaken to consider MHIs (<b>Appendix N</b> of the EIA Report). It was also confirmed that a full MHI study will have to be undertaken for the project at a later stage, prior to the commencement of construction.</p> <p><b><u>Post-meeting note:</u></b> All Eskom power stations have an Emergency evacuation procedure which is suitable for its own conditions, as part of its Environmental Management Systems (EMS) and this plant would have one developed and implemented for it.</p>
Brendan Crawford asked whether a traffic impact study was done especially at the intersection of the road providing access to the	Shaun Taylor replied that a Traffic Study was undertaken as part of the Environmental Screening and Site Selection Study and the

<p>site. The concern is that the impact is indicated as medium, but it is believed it would increase once construction starts and the plant is fully operational.</p>	<p>Traffic Impact Assessment Report is included in the EIA Report as <b>Appendix M</b>. It was confirmed that the traffic impacts have been considered for the construction phase of the power plant.</p>
<p>Sharin Govender enquired whether a cumulative impact assessment was conducted.</p>	<p>Shaun Taylor responded that the EIA Report addresses potential direct, indirect, and cumulative impacts (both positive and negative) associated with all phases of the project including design, construction, operation and decommissioning.</p>
<p>Brendan Crawford requested that in terms of disaster management that Eskom considers working closely with the Municipality.</p>	<p>Vincent Chauke confirmed that Eskom will be working closely with all relevant disaster management agencies in the area.</p>
<p>Brendan Crawford asked whether Eskom will have a dedicated emergency plan for the plant. He informed the project team that most of the industries in the area are part of the Disaster Management Forum and assist one another as and when needed.</p>	<p>Vincent Chauke replied that Eskom does not have a dedicated emergency plan at this stage but it can be confirmed that Eskom will join the existing forums such as the Disaster Management Forum, to implement the appropriate emergency plan.</p> <p><b>Post-meeting note:</b> All Eskom power stations have an Emergency evacuation procedure which is suitable for its own conditions, as part of its Environmental Management Systems (EMS) and this plant would have one developed and implemented for it.</p>
<p>Sharin Govender informed the project team that due to the stewardship in place for the offset area identified for the project, the concern is that there are various roles and responsibilities that needed to be discussed to achieve what has been set out. Discussions also need to take place regarding the issue that the area is a proclaimed nature reserve and concerns the whole of Richards Bay. The Offset Plan that is being developed will need to be approved, in principle, by the Municipality's Council.</p> <p>It is recommended that engagement take place with the Regional Land Claims Commissioner, the parties that submitted a land claim for the project site etc., as the Council is</p>	<p>Shaun Taylor responded that it is his understanding that currently the discussions regarding the Offset Plan, as part of the EIA process, would only be high-level discussions. The details would be discussed once there is a certainty that the project would proceed i.e. post the issuing of the environmental authorisation.</p> <p>Mula Phalanndwa responded that Eskom will follow the current Offset Guidelines and respond to them.</p> <p>The need for engagement with the Regional Land Claim Commissioner was noted by the project team, but this process would have to be driven by the landowner, as Eskom will be</p>

<p>not the only decision-maker regarding the portion of land. Eskom's role would also need to be determined and clarified.</p> <p>It was reiterated that the roles and responsibilities be clarified prior to submitting the final EIA Report.</p>	<p>leasing the land.</p> <p><b><u>Post-meeting note:</u></b> Appropriate consultation would be undertaken to discuss Eskom's proposal on the offset, but it is anticipated that final agreements on roles and responsibilities would be agreed between the concerned parties when required.</p>
<p>Percy Langa informed the project team that they need to take note that the whole of Richards Bay is currently under land claims.</p>	<p>The information is acknowledged and Nicolene Venter informed the attendees that the Department of Rural Development and Land Reform (Land Claims Commission) is a stakeholder on this proposed project and have been provided with the opportunity to review and provide comment on the EIA Report.</p>
<p>Sandy Camminga asked whether effluent disposal will take place by utilising the uMhlathuze Local Municipality's pipeline and did the team consider the possibility of an alternative disposal resource to dispose of the effluent, i.e. Mondi's infrastructure.</p> <p>The attendee also asked whether this has been addressed in the report.</p>	<p>Shaun Taylor replied that the current plan is to use uMhlathuze Local Municipality's pipeline and clarified that confirmation was received that the Municipality would be able to handle the estimated volumes required for the development of the power plant. The project team had not investigated Mondi, a private company, as an alternative service provider for the effluent disposal.</p> <p>The issue regarding effluent disposal is covered in the EIA Report under Chapter 2.</p>
<p>Percy Langa requested that the EAP draft a table, maximum two pages, which track the issues raised during scoping and addressed in the impact phase as this will eliminate a number of the issues raised and discussed at the meeting and those issues that were raised in August 2017.</p>	<p>Shaun Taylor responded that this can be undertaken and it could be in the same format as the table included on page 62 of the EIA Report.</p> <p><b><u>Post-meeting note:</u></b> Savannah Environmental will include a table of the issues raised during the Scoping phase and provide the details of how the issues have been addressed as part of the final EIA Report.</p>
<p>Sandy Camminga and all other delegates present stated that the major issue regarding this proposed development is the lack of information regarding the fuel resource (gas) as the project team does not know where the resource is coming from and how it will reach the proposed development site.</p>	<p>The project team acknowledged this comment and replied that the source of fuel is part of an ongoing investigation.</p> <p><b><u>Post-meeting note:</u></b> Cognisance should be given to the fact that feasibility of the development of the whole power plant complex (power station and</p>

	energy source/s) has to be proved before the project can get approval for construction. The various investigations being undertaken for the complex will feed into the internal decision-making /approval processes.
--	--

**WAY FORWARD AND CLOSURE**

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Nicolene Venter thanked the attendees for their meaningful contributions and again thanking them for making time available to attend the workshop.

She informed the attendees to please take note of the review and comment period and to please submit their written comments before, or latest on the closing date, which is Friday, 26 April 2019.

The delegates were wished a safe journey and the meeting closed at 12h30.

# RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) PROJECT, KWAZULU-NATAL PROVINCE

Key Stakeholder Workshop  
Tuesday, 26 March 2019

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## MEETING AGENDA

1. Evacuation Procedure
2. Welcome & introduction
3. Purpose of the Meeting
4. Project Progress to Date
5. Need for the Project & Integrated Projects
6. Overview of EIA & WULA Process
7. Project Overview
8. Key Environmental Findings
9. Discussions & Questions
10. Way forward

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## PURPOSE OF THE MEETING

- » Provide I&APs with an overview of the Richards Bay CCPP
- » Explain the **Environmental Impact Assessment (EIA) & Public Participation** and the **Water Use License process** being undertaken
- » Present the summary of key findings of the **EIA Report**
- » Provide I&APs the opportunity to seek clarity regarding the project
- » Opportunity to provide valuable input into/to inform the EIA process
- » Obtain and record comments for inclusion in the **Final EIA Report** to be submitted to DEA

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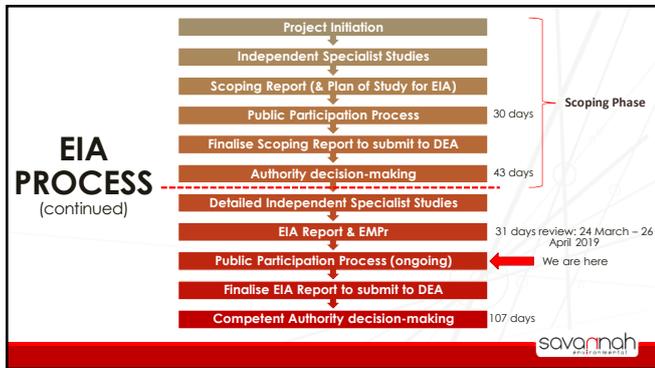
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## EIA PROCESS

LEGAL REQUIREMENT	REFERENCE / NOTE
Environmental Authorisation (EA)	NEMA & EIA Regulations, 2014, as amended
Competent Authority (decision-maker)	Department of Environmental Affairs
Commenting Authority	KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs (KZN DEDTEA)
Independent Environmental Assessment Practitioner	Savannah Environmental

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## PROGRESS UPDATE

ACTIVITIES	NOTES
Scoping Phase	
Final Report & POS submitted to DEA	October 2017
Report accepted & POS approved by DEA	November 2017
Identification of wetland offset-plan requirement	February 2018
Request for Extension of EIA Timeframe (EIA Reg, 2014, as amended, Section 3(7))	
Submission to DEA	January 2018
DEA Refusal	March 2018
Application Lapsed – DEA notification	April 2018
Re-submission of EA Application to DEA	
Impact Assessment Commencement	February 2019
Preliminary Wetland Offset Plan	
Holding meetings	26 & 27 March 2019
Draft EIAr available for review and comment	24 March 2019 – 26 April 2019

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## PUBLIC PARTICIPATION PROCESS

ACTIVITY	DATE
Notification of Resubmission of Application	19 February 2019
Notification of Availability of Report & invitation to Public Meetings	18 March 2019
Placement of Advertisements	
Zululand Observer	21 March 2019
Mercury	22 March 2019
Sunday Times	24 March 2019
Rapport	24 March 2019

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## NEED FOR THE PROJECT AND THE INTEGRATED PROJECTS

ESKOM HOLDINGS SOC LTD

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**RBCCPP Background** 

- The Richards Bay Combined Cycle Power Plant (CCPP) and associated infrastructure, with an installed generating capacity of up to 3 000MW (using natural gas as its primary feedstock and diesel as an back up) was identified as part of the energy mix in addition to renewable energy. The power plant will be operated as a mid-merit plant.
- The Richards Bay CCPP project site is on Portion 2 and Portion 4 of Erf 11376 located in the Richards Bay Industrial Development Zone (IDZ) Phase 1D, approximately 6km south west of Richards Bay, and 4km south west of Alton, which falls within the jurisdiction of the City of uMhlatuze Local Municipality and the King Cetshwayo District Municipality.
- Eskom has explored various options for sourcing gas and its associated infrastructure. These opportunities will be explored through engaging the open market.
- The uMhlatuze will supply water to the CCPP for the construction and operation period. The municipality will have the capacity to handle waste removal from the Richards Bay CCPP and Eskom is envisaged to be one of the off-takers on the water re-use project.

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**RBCCPP Background** 

- Savannah Environmental was appointed to undertake EIA studies on the proposed Richards Bay CCPP while Ekoinfo Consulting has been appointed to undertake EIA studies on the proposed transmission power lines to connect the Richards Bay CCPP to the national grid for the evacuation of the generated electricity.
- The EIA process for the transmission power lines is at scoping phase and the public participation meetings were held on the 13<sup>th</sup> and 14<sup>th</sup> March 2019 respectively.

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**PROJECT OVERVIEW  
AND  
ENVIRONMENTAL IMPACT  
ASSESSMENT**

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**SCOPE OF WORKS**

- » Assessment of the environmental and social impacts (all infrastructure within project site boundaries)
- » Recommendation of appropriate mitigation measures
- » Environmental Management Programme
- » WUL Application





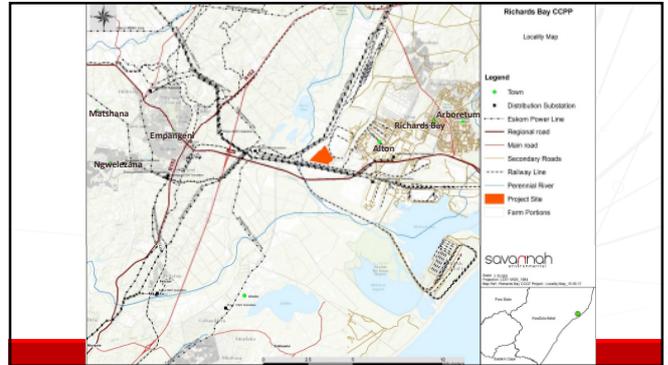
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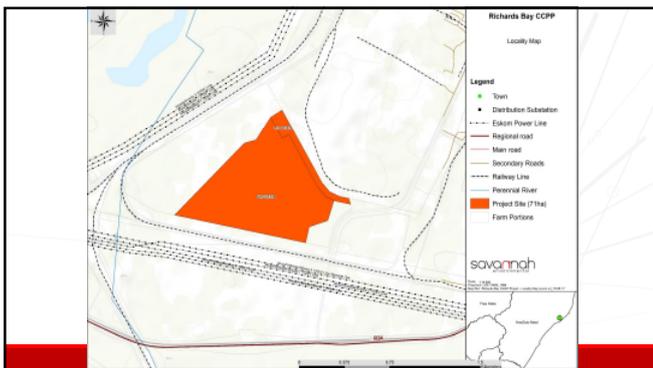
## PROJECT DETAILS

Richards Bay CCPP	
Applicant	Eskom Holdings SOC Ltd (Eskom)
Province	KwaZulu-Natal
District Municipality	King Cetshwayo District Municipality
Local Municipality	City of uMhlatuze Local Municipality
Ward Number	26
Nearest towns	Alton, Richards Bay, Arboretum, Empangeni, Ichubho
Farm name(s) and number(s)	Erf 11376
Portion number(s)	» Portion 2 » Portion 4
Current zoning and land use	The properties are zoned for industrial use (Phase 1D of the Richards Bay IDZ, and are currently used for communal grazing

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## TECHNICAL PROJECT DETAILS

Richards Bay CCPP	
Electricity generation capacity	Up to 3000MW (installed)
Proposed technology	Combined Cycle Power Plant (CCPP) with an anticipated configuration of 2:2:1 (Gas Turbine: HRSG: Steam Turbine).
Development footprint	Up to 60ha (CCPP) and up to 11ha (associated infrastructure) - to be developed within the 71ha project site

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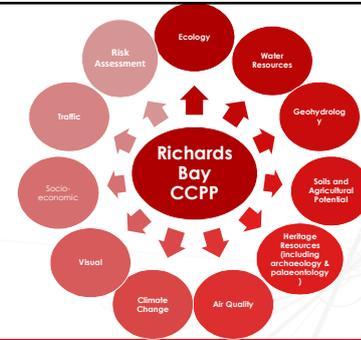
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## PROJECT-SPECIFIC DETAILS: Operation Activities

- » Maintenance activities
- » Operation of the facility
- » Transportation (including diesel offloading)
- » Administration operations

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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction Impacts (within development footprint)

### Ecology:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Loss of sensitive terrestrial ecosystems	Medium (52)	Low (21)
Loss of critical biodiversity areas (CBAs)	Medium (30)	Low (21)
Loss of sensitive aquatic ecosystems	High (90)	Medium (48)
Loss of natural vegetation	High (64)	Medium (33)
Loss / disturbance of local fauna populations	High (95)	Medium (39)
Noise and artificial light disturbances	Medium (40)	Low (21)
Soil erosion and sedimentation	Medium (40)	Low (14)
Pollution of soils and habitat	Medium (52)	Low (15)

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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

### Ecology:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Introduction and spread of alien invasive plant species and weeds	High (60)	Low(14)
Disturbance of local fauna communities	Medium (48)	Low (14)
Noise and artificial light disturbance	Medium (48)	Low (27)
Pollution of soils and habitat	Medium (48)	Low (14)

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**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Construction Impacts** (within development footprint)

**Surface Water Resources:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Include loss / degradation of wetlands	High (100)	High (100)
Spread of / or establishment of alien and / or invasive plant species	Medium (52)	Low (21)
Sedimentation and erosion of watercourses	Medium (52)	Low (27)
Impaired water quality	High (64)	Medium (39)
Alteration of the hydrological regime	Medium (52)	Low (20)

**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Operation Impacts**

**Surface Water Resources:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Impaired water quality	High (64)	Medium (39)
Alterations in the hydrological regime	High (64)	Medium (39)

**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Construction Impacts** (within development footprint)

**Soils and Agricultural Potential:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Loss of agricultural potential	High (95)	High (95)
Loss of soil resources	High (95)	Medium (40)

**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Construction Impacts** (within development footprint)

**Geohydrology:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Groundwater flow direction due to dewatering	Medium (44)	Medium (32)
Groundwater levels	Medium (44)	Medium (32)
Accidental fuel and oil spills / leaks from construction vehicles	High (60)	Low (10)
Impacts to groundwater due to on-site accidental fuel spill and leaks/leachate and infiltration of dirty water	High (60)	Low (15)

## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

### Geohydrology:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Groundwater due to possible leakage of diesel from storage facilities / pipelines / emergency back-up generators	Medium (48)	Medium (18)
Local surface water bodies due to possible diesel from storage facilities and/or pipelines and Emergency backup generators	Medium (48)	Low (12)
Groundwater due to waste water and solid waste discharges	Medium (40)	Low (14)
Surface water bodies due to waste water and solid waste discharges	Medium (40)	Low (12)

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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction Impacts (within development footprint)

### Heritage:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Palaeontological or cultural heritage resources which may be unearthed during excavations on the site	Low (16)	Low (16)

30

## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction & Operational Impacts

### Air Quality:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Emissions form particulate and gaseous pollutants	Medium (33) (construction)	Low (21) (construction)
Sulfur dioxide emission	Medium (36) (operation)	Medium (36) (operation)

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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction & Operation Impacts

### Visual:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Industrialisation of views from Urban Areas	Low (12)	Low (12)
Views from Protected Areas	Low (12)	Low (12)
Views from Roads	Low (24)	Low (12)
Industrialisation of Views from Homesteads	Low (12)	Low (6)
Recreational uses on the Northern Side of the Port could be negatively impacted by further Industrialisation of the Landscape	Low (6)	Low (6)
Industrialisation of the view as seen from the N2 Service Station	Low (14)	Low (12)
Lighting impacts	Low (16)	Low (6)

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### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction Impacts (within development footprint)

**Socio-economic:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Increase in economic production	High (60) (positive)	High (60) (positive)
Increase in gross domestic product	Medium (52) (positive)	Medium (52) (positive)
Employment creation	High (75) (positive)	High (75) (positive)
Skills development	High (70) (positive)	High (70) (positive)
Household income	High (65) (positive)	High (65) (positive)
Demographic shift due to influx of migrant labour	Medium (33) (negative)	Low (27) (negative)
Increase in demand for housing	Medium (36) (negative)	Low (21) (negative)
Pressure on basic services, social facilities and economic facilities	Medium (33) (negative)	Low (18) (negative)

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### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

**Socio-economic:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Increase in economic production	High (60) (positive)	High (68) (positive)
Increase in gross domestic product	High (60) (positive)	High (68) (positive)
Employment creation	High (75) (positive)	High (75) (positive)
Skills development	High (70) (positive)	High (70) (positive)
Household income	High (75) (positive)	High (75) (positive)
Government Revenue	High (65) (positive)	High (65) (positive)
Improvement in the energy sector	High (60) (positive)	High (60) (positive)

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### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction & Operation Impacts

**Traffic:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Construction traffic	Medium (35)	Medium (30)
Operation traffic	Medium (40)	Medium (35)

35

### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

**Climate Change:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Estimated Greenhouse Gas Emissions	Not applicable – mitigation is automatically integrated.	High (65)

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## AVAILABILITY OF REPORT

### Websites:

Savannah Environmental	<a href="https://www.savannahsa.com/public-documents/energy-generation/">https://www.savannahsa.com/public-documents/energy-generation/</a>
Eskom Holding SOC Ltd	<a href="http://www.eskom.co.za/OurCompany/SustainableDevelopment/EnvironmentalImpactAssessments/RichardsBayCCPP/Pages/default.aspx">http://www.eskom.co.za/OurCompany/SustainableDevelopment/EnvironmentalImpactAssessments/RichardsBayCCPP/Pages/default.aspx</a>

### Public Places:

LIBRARY	ADDRESS
Richards Bay Public Library	No 5 Kruger Rand Road, Richards Bay
Empangeni Public Library	Cnr Union & Maxwell Streets, Empangeni

## WAY FORWARD

- » EIA Report Review period: **Sunday, 24 March to Friday, 26 April 2019** (32-days)
- » Written comments to be submitted by **Friday, 26 April 2019**
- » **Record of comments** raised during the meeting – distribute to those attended & apologies
- » Incorporate all comments received into C&RR
- » Submit **Final EIA Report** to DEA for approval: envisaged May 2019.
- » Expected timing of decision: September 2019.

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## PLEASE DIRECT COMMENTS TO:

Nicolene Venter: **Savannah Environmental**

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f: +27 (0)86 684 0547

e: [publicprocess@savannahsa.com](mailto:publicprocess@savannahsa.com)

w: [www.savannahsa.com](http://www.savannahsa.com)

a: First Floor, Block 2, 5 Woodlands Drive Office Park  
Cnr Woodlands Drive & Western Service Road  
Woodmead, 2191

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

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## MEETING NOTES OF PUBLIC MEETING #1

HELD ON 26 MARCH 2019  
PREMIER HOTEL THE RICHARDS, RICHARDS BAY

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**Notes for the Record prepared by:**

**Savannah Environmental (Pty) Ltd**

**Contact:** Ms Nicolene Venter

**Position:** Public Participation and Social Consultant

**E-mail:** [publicpoces@savannahsa.com](mailto:publicpoces@savannahsa.com)

**NOTE:** These meeting notes are not verbatim

***Please address any comments to Nicolene Venter 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:** Premier Hotel The Richards, Richards Bay

**Date:** 26 March 2019

**Time:** 18h00

### WELCOME AND INTRODUCTION

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Nicolene Venter, Savannah Environmental, welcomed all present and thanked the attendees for availing themselves for the meeting. After formal introduction by the project team members and the delegates present, she handed over to Jean Short from the Premier Hotel The Richards to present their evacuation procedure to the attendees.

The attendees were informed that due to a throat infection, the presentation would be made by Lisa Opperman, Savannah Environmental, and Shaun Taylor, Savannah Environmental, would respond to questions raised. Nicolene also informed the attendees that Shaun Taylor, as Environmental Assessment Practitioner (EAP) for the project, would be leaving the services of Savannah Environmental at the end of the month and that Lisa Opperman would take over the project as the EAP.

The Agenda presented was accepted by the attendees and no objections were lodged for recording the meeting proceedings.

### MEETING ATTENDEES

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Name	Organisation	Position
Magda Pardy	BDM Staffing	Area Manager
Jean Short	Premier Hotels	Sales & Marketing Manager
Simon Aggett	South African Maritime Safety Authority: (SAMSA)	Surveyor
Mike Petterson	Zululand Chamber or Business Foundation (ZCBF)	EXCO Member
Dwayne Baker	NCE	-
Wallace Manyaka	Analdo Energia	Head of Business Development - SADC
Sizwe Khumalo	Isizinda Aluminium & Zululand Chamber or Business Foundation (ZCBF)	CEO and Executive Member
S Shezi	Richards Bay Coal Terminal	HSE Manager
Danny Naidoo	DNK Engineering / ZCCI	EXCO
Buddy	-	Interested Party
Tobile Bokwe	Eskom Holdings SOC Ltd	Middle Manager: EIA
Pieter Nelson		Snr Consultant

Name	Organisation	Position
Anesh Surendra		Middle Manager
Tinyiko Masondo		Project Manager: Project Development Department
Vincent Chauke		Programme Manager: Project Development Department
Koogendran Govender		Chief Engineer
Reggie Chippe		Client Office
Mula Phalannawa		Senior Environmental Advisor, WULA
Lisa Opperman		Savannah Environmental
Shaun Taylor	Public Participation and Social Consultant	
Nicolene Venter		

### Apologies:

Mr Dominic Wieners: KZN Ezemvelo Wildlife

### PRESENTATION

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The following key points were presented:

- Project Progress to Date – Savannah Environmental
- Need for the Project & Integrated Projects – Eskom Holdings SOC Ltd
- Overview of EIA & WULA Process – Savannah Environmental
- Project Overview – Savannah Environmental
- Key Environmental Findings – Savannah Environmental

**Copy of the presentation is attached as Appendix A**

### DISCUSSION SESSION

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Question / Comment	Response
Jean Short enquired as to who will the power plant supply electricity to.	Shaun Taylor responded that the electricity generated by the power plant will be fed into Eskom's national grid network, and also provide power to the plant itself as the plant will be self-sustained.
Jean Short asked where water will be sourced from.	Shaun Taylor replied that the water will be supplied by the uMhlathuze Local Municipality. It was established through consultation that there is sufficient water available to supply the power plant.
Simon Aggett asked what process is in place to	Shaun Taylor replied that a site-specific

<p>address the possible losses of water due to evaporation.</p>	<p>stormwater management plan forms part of the water management systems. He informed the attendees that Eskom will try to utilise a little water as possible.</p> <p><b><u>Post-meeting note:</u></b> Dry-cooling has been employed as the preferred cooling process which saves on water evaporation and water use.</p>
<p>Simon Aggett asked how polluted water will be managed.</p>	<p>Anesh Surendra responded that it is common knowledge that water shortage, not only in Richards Bay but around the country, is a concern.</p> <p>Due to the Municipality's water supply constraints, the Municipality is not considering using the conventional supply system to industries in the area but is rather considering water re-use by taking effluent discharge that would have been discharged to the ocean. The re-use will include the treatment and supplying of water in appropriate qualities for industrial use to Eskom and other off-takers.</p> <p><b><u>Post-meeting note:</u></b> Waste water from the site will be recycled until it cannot be used in the power plant processes, at which point it is envisaged to be discharged into the Municipal waste water systems.</p>
<p>Mike Petterson informed the project team that a water re-use project report is available.</p> <p>He enquired as to how water will be re-used and the amount of water use per day required by the plant.</p>	<p>Anesh Surendra confirmed that Eskom is part of the consultation process as a potential off-taker end user of treated water.</p> <p>In terms of volume of water supply required for the proposed power plant is estimated at up to 5 Megalitres per day.</p>
<p>Sizwe Khumalo asked, as Eskom's neighbour in the Richards Bay IDZ, what kind of safety hazards are likely to be used and/or stored on the site. Major explosions or chemical plastics are expected.</p>	<p>Shaun Taylor responded that a specialist study was conducted looking at:</p> <ul style="list-style-type: none"> <li>• the quantitative risk as per the project site layout;</li> <li>• type of chemicals / materials to be stored on site;</li> <li>• volume / capacity of chemicals to be stored;</li> <li>• its associated risk scenarios;</li> </ul>

	<ul style="list-style-type: none"> <li>• proximity to other infrastructures; and</li> <li>• high risk scenarios and proximity who it will affect.</li> </ul> <p>Shaun Taylor stated that no explosives will be stored on site. The specialist study is attached as <b>Appendix N</b> to the Report and he urged the attendee to consult the report regarding the findings.</p> <p>An electronic copy of the Report and Appendices (CD) was given to the delegate by Nicolene Venter after the meeting.</p>
<p>Sizwe Khumalo informed the project team that, on behalf of the Zululand Chamber of Business Foundation (ZCBF), they welcome investments in the area especially in terms of economic growth and social upliftment. However, the presentation did not include any information regarding what type of employment will be available, the figures for the construction and operation phase and which will be temporary and / or permanent.</p>	<p>Shaun Taylor responded that it is envisaged that approximately 90 permanent employment positions will be available directly consisting of highly skilled, skilled and semi-skilled positions.</p> <p><b>Post-meeting note:</b>  Approximately 4 300 employment positions will be available over the 36-48 months construction phase of which ~1% of positions will be highly skilled (i.e. supervisors and engineers) and 99% will be skilled and unskilled labour (i.e. drivers and machine operators). Actual operation and construction figures will be finalised once feasibility studies are completed.</p>
<p>Sizwe Khumalo asked what selection process Eskom went through to select the site for their proposed power plant.</p>	<p>Shaun Taylor responded that a screening and site selection assessment was undertaken to determine suitable site alternatives. The results of the screening assessments informed the selection of the site and no alternative site has been assessed. The screening selection process and results are included <b>Appendix Q1</b> of the EIA Report.</p> <p>Anesh Surendra added that it needs to be kept in mind that the site is not a done deal as the due diligence still needs to be done, geology studies still need to be conducted, the source of gas still needs to be determined and the grid connection needs to be determined. The consideration of the grid connection is being undertaken as part of a separate EIA process.</p>

	<p>He also informed the attendees that the various environmental sensitivities of the site also need to be taken into consideration.</p>
<p>Sizwe Khumalo asked whether Eskom is aware that there are several land claims on properties in and around Richards Bay and whether a land claim has been lodged on the site selected.</p> <p>Considering the risk of land claims, is this site exposed/vulnerable to land claims</p>	<p>Vincent Chauke responded that throughout the consultation with the Local Municipality Eskom was not made aware of a land claim lodged against the property.</p> <p>Nicolene Venter informed the attendee that the Department of Rural Development and Land Reform (Land Claims Commissioner) is one of the Organs of State being consulted during the public participation process. They received a copy of the Report and to date no information has been forthcoming from them. The team will make a concerted effort to secure comments / confirmation from them regarding the information received at the meeting. She informed the delegates that should the Department's comments be received after the final EIA Report has been submitted to the Department of Environmental Affairs, then their comments will be forwarded to the project's case officer at the Department of Environmental Affairs as late comments received. No claims have been made to date.</p>
<p>Danny Naidoo asked who will be supplying the proposed power plant with the required gas resource.</p>	<p>Vincent Chauke responded that the Liquefied Natural Gas (LNG) supplier has not yet been identified and the LNG could be sourced from Mozambique.</p> <p><b><u>Post-meeting note:</u></b> To identify the supplier, Eskom will go out on open market to source the supplier.</p>
<p>Danny Naidoo asked where the gas will be stored and if on site what would the impacts be.</p>	<p>Vincent Chauke responded that LNG will be transported to the power plant through a pipeline from -the supplier's storage facility.</p> <p>He added that, if the gas is stored at the Port, the location of the storage facility at the Port and its associated risk will be considered as part of a separate EIA to be undertaken by Transnet.</p> <p>Vincent Chauke responded that the strategy is to store only diesel at site that will serve as the</p>

	emergency back-up fuel source.
Danny Naidoo informed the project team that air quality is a major issue in the Richards Bay area. He enquired what impacts, in terms of air quality, were identified, and what mitigation are being propose.	<p>Shaun Taylor responded that from the findings of the Air Quality studies it was concluded that the air quality impacts are of medium to low significance looking at the location of the site in the Richards Bay IDZ area. The key impacts associated with the proposed power plant are:</p> <ul style="list-style-type: none"> <li>• emissions during the construction phase</li> <li>• SO<sub>2</sub> and NO<sub>x</sub> emissions</li> <li>• SO<sub>2</sub> release when diesel is being used as an emergency fuel source.</li> </ul> <p>He requested the delegate to read the Air Quality Assessment Report, included as <b>Appendix I</b> of the EIA Report. Mitigation measures include the use of wet suppression at key handling points or cleared areas, and on unpaved roads and 99% of operational time combusting natural gas.</p>
Danny Naidoo asked where the gas storage facility would be located.	Vincent Chauke replied that there will be no gas storage facility on site and that only a gas processing facility will be located on the site. The gas source, in the form of LNG, will be stored at the Port in Floating Storage and Regasification Units (FSRUs). The gas will be transported to the power plant through Transnet's existing gas pipeline infrastructure through a turn-off point to the proposed power plant.
Wallace Manyaka asked, in terms of the greater project, where does the procurement process lie in terms of this proposed development i.e. who will own the power plant.	Vincent Chauke responded that Eskom, as a governance entity and market structure, will engage with the relevant procurement stakeholders to reach an amicable agreement as per the National Treasury Guidelines. Therefore, the full procurement process cannot be discussed at this meeting as the project is still in its development phase where the various aspects such as technical, environment, gas source and connection, and the grid connection are still under assessments and these will inform the next required steps for the project.
Mike Petterson requested Eskom to please advise the Zululand Chamber or Business Foundation (ZCBF) in advance, on the numbers and types of skills that will be required so as to	Shaun Taylor replied that a skills requirement audit will be undertaken to determine what skills are required and that during the EIA process, the information is not available.

<p>ensure that they have the opportunity to upskill the local people.</p>	<p>Tobile Bokwe informed the delegate that it would be to the advantage of both parties if the ZCBF can familiarise themselves with the EIA Report and identify opportunities through which they can give their support to, and be ready for, the project, in terms of its social contribution to the area. A skills requirement audit will be conducted, and Eskom will be in contact with the ZCBF at the relevant time, and as more clarity is obtained in this regard.</p>
<p>Sizwe Khumalo informed the project team that the ZCBF is more than willing to share their information and lessons learned with Eskom regarding training and skill transfer.</p>	<p>Tobile Bokwe thanked the delegate and confirmed that when the project development reaches certainty for its developmental requirements, the ZCBF will be contacted.</p>
<p>Sizwe Khumalo asked, on a high level, what is the ballpark figure for this proposed development.</p>	<p>Vincent Chauke responded that at this stage an estimated figure cannot be provided. The figures in the Report are the general estimate to building a power plant and those are currently the only figures that can be used.</p>
<p>Wallace Manyaka enquired whether there has been any configuration done to try and reach a 3000MW power plant. He informed Eskom that their company has been involved in such projects and are willing to assist, should it be required.</p>	<p>Vincent Chauke replied that the design of the power plant is still on a very high level and that this type of information is not yet available.</p>
<p>Simon Aggett asked, for interest sake, what the project timeline is for the commencement of construction starts i.e. 3 years of 4 years.</p>	<p>Vincent Chauke responded that the two key drivers at this stage are the EIA processes required to support the project as well as the Minister of Energy's decision on Independent Power first, and then Minister of Energy's decision regarding the Integrated Resource Plan (IRP).</p> <p>Should all be in place one looks typically at a 36-month construction period for infrastructure developments such as the gas pipeline and transmission power lines. Therefore, taking the above as a combined process one looks at 3 to 5 years until operation phase.</p>
<p>Mike Petterson informed the project team that the ZCBF welcomes the project due to need for electricity assurance to support investment.</p>	<p>Nicolene Venter acknowledged the comment.</p>
<p>Buddy asked whether the general public is aware of the public meeting as it seems only</p>	<p>Nicolene Venter replied that advertisements were placed in two national newspapers and</p>

<p>business people are present at the meeting.</p>	<p>two local community newspapers and that there are representatives from non-government, non-profit, etc organisations on the project database and it is believed that these representatives will distribute the information received regarding this project to their members.</p> <p>Tobile Bokwe added that one of the main focus of the public meeting is to share the environmental findings but the consultation process does not end at the meeting and the delegate is most welcome to contact the public participation consultant for any additional information.</p>
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**WAY FORWARD AND CLOSURE**

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Nicolene Venter thanked the attendees for their meaningful contributions and again thanking them for making time available to attend the public meeting.

She informed the attendees to please take note of the review and comment period and to please submit their written comments before or latest on the closing date, which is Friday, 26 April 2019.

The delegates were wished a safe journey and the meeting closed at 19h45.

## RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) PROJECT, KWAZULU-NATAL PROVINCE

Public Meetings  
26 – 27 March 2019

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## MEETING AGENDA

1. Evacuation Procedure
2. Welcome & introduction
3. Purpose of the Meeting
4. Project Progress to Date
5. Need for the Project & Integrated Projects
6. Overview of EIA & WULA Process
7. Project Overview
8. Key Environmental Findings
9. Discussions & Questions
10. Way forward

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## PURPOSE OF THE MEETING

- » Provide I&APs with an overview of the Richards Bay CCPP
- » Explain the **Environmental Impact Assessment (EIA) & Public Participation** and the **Water Use License process** being undertaken
- » Present the summary of key findings of the **EIA Report**
- » Provide I&APs the opportunity to seek clarity regarding the project
- » Opportunity to provide valuable input into/to inform the EIA process
- » Obtain and record comments for inclusion in the **Final EIA Report** to be submitted to DEA

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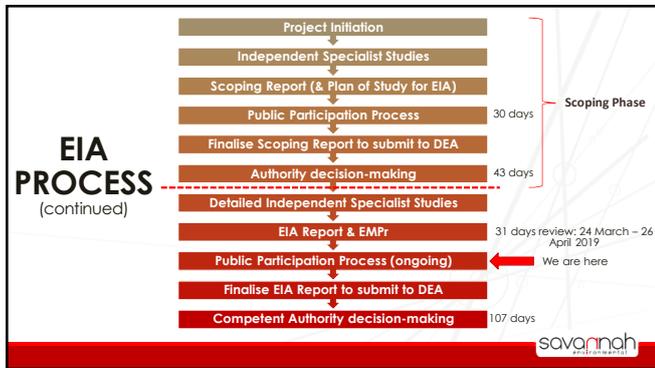
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## EIA PROCESS

LEGAL REQUIREMENT	REFERENCE / NOTE
Environmental Authorisation (EA)	NEMA & EIA Regulations, 2014, as amended
Competent Authority (decision-maker)	Department of Environmental Affairs
Commenting Authority	KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs (KZN DEDTEA)
Independent Environmental Assessment Practitioner	Savannah Environmental

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## PROGRESS UPDATE

ACTIVITIES	NOTES
Scoping Phase	
Final Report & POS submitted to DEA	October 2017
Report accepted & POS approved by DEA	November 2017
Identification of wetland offset-plan requirement	February 2018
Request for Extension of EIA Timeframe (EIA Reg, 2014, as amended, Section 3(7))	
Submission to DEA	January 2018
DEA Refusal	March 2018
Application Lapsed – DEA notification	April 2018
Re-submission of EA Application to DEA	
Impact Assessment Commencement	February 2019
Preliminary Wetland Offset Plan	
Holding meetings	26 & 27 March 2019
Draft EIAr available for review and comment	24 March 2019 – 26 April 2019

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## PUBLIC PARTICIPATION PROCESS

ACTIVITY	DATE
Notification of Resubmission of Application	19 February 2019
Notification of Availability of Report & invitation to Public Meetings	18 March 2019
Placement of Advertisements	
Zululand Observer	21 March 2019
Mercury	22 March 2019
Sunday Times	24 March 2019
Rapport	24 March 2019

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## NEED FOR THE PROJECT AND THE INTEGRATED PROJECTS

ESKOM HOLDINGS SOC LTD

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**RBCCPP Background** 

- The Richards Bay Combined Cycle Power Plant (CCPP) and associated infrastructure, with an installed generating capacity of up to 3 000MW (using natural gas as its primary feedstock and diesel as a back up) was identified as part of the energy mix in addition to renewable energy. The power plant will be operated as a mid-merit plant.
- The Richards Bay CCPP project site is on Portion 2 and Portion 4 of Erf 11376 located in the Richards Bay Industrial Development Zone (IDZ) Phase 1D, approximately 6km south west of Richards Bay, and 4km south west of Alton, which falls within the jurisdiction of the City of uMhlatuze Local Municipality and the King Cetshwayo District Municipality.
- Eskom has explored various options for sourcing gas and its associated infrastructure. These opportunities will be explored through engaging the open market.
- The uMhlatuze will supply water to the CCPP for the construction and operation period. The municipality will have the capacity to handle waste removal from the Richards Bay CCPP and Eskom is envisaged to be one of the off-takers on the water re-use project.

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**PROJECT OVERVIEW  
AND  
ENVIRONMENTAL IMPACT  
ASSESSMENT**

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**SCOPE OF WORKS**

- » Assessment of the environmental and social impacts (all infrastructure within project site boundaries)
- » Recommendation of appropriate mitigation measures
- » Environmental Management Programme
- » WUL Application




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

ENVIRONMENTAL MANAGEMENT PROGRAMME

DATE: 01/11/2018

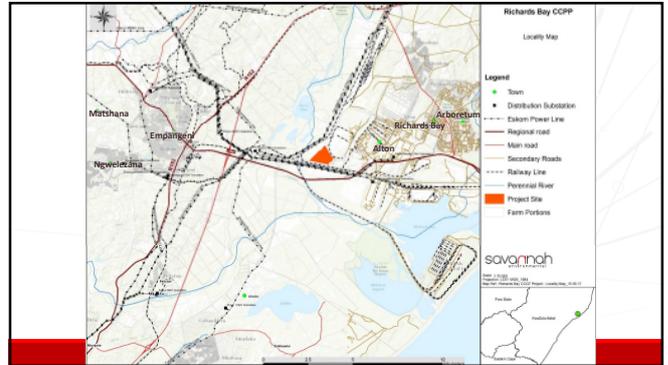


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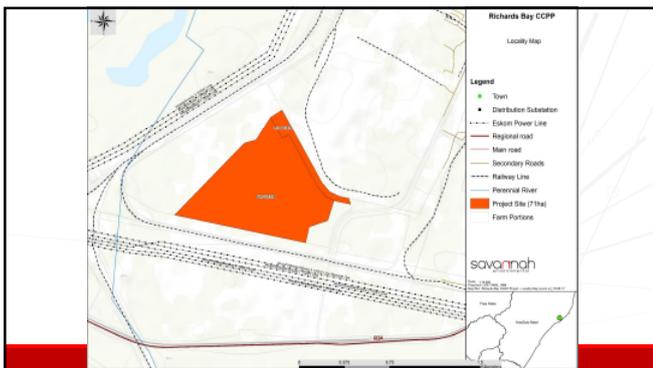
## PROJECT DETAILS

Richards Bay CCPP	
Applicant	Eskom Holdings SOC Ltd (Eskom)
Province	KwaZulu-Natal
District Municipality	King Cetshwayo District Municipality
Local Municipality	City of uMhlatuze Local Municipality
Ward Number	26
Nearest towns	Alton, Richards Bay, Arboretum, Empangeni, Ichubho
Farm name(s) and number(s)	Erf 11376
Portion number(s)	» Portion 2 » Portion 4
Current zoning and land use	The properties are zoned for industrial use (Phase 1D of the Richards Bay IDZ, and are currently used for communal grazing

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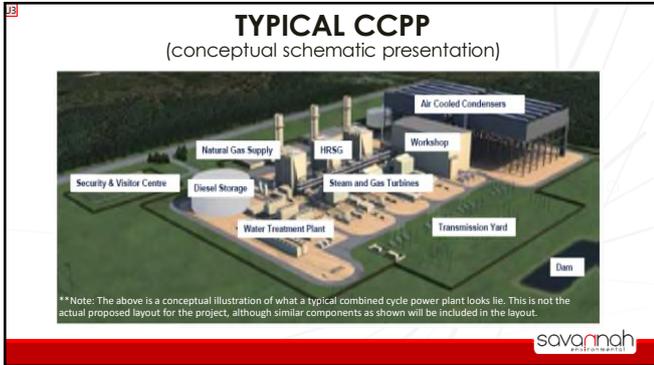
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## TECHNICAL PROJECT DETAILS

Richards Bay CCPP	
Electricity generation capacity	Up to 3000MW (installed)
Proposed technology	Combined Cycle Power Plant (CCPP) with an anticipated configuration of 2:2:1 (Gas Turbine: HRSG: Steam Turbine).
Development footprint	Up to 60ha (CCPP) and up to 11ha (associated infrastructure) - to be developed within the 71ha project site

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### MAIN INFRASTRUCTURE

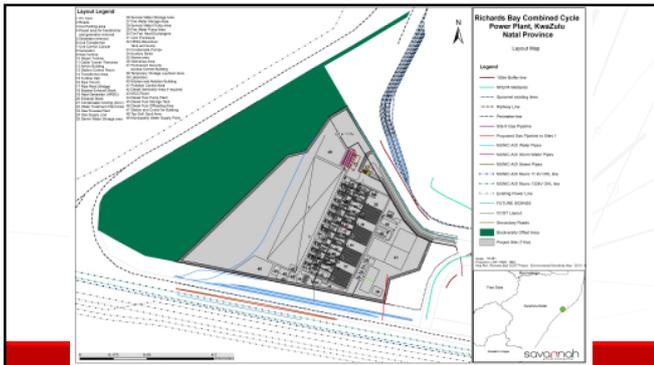
**Richards Bay CCPP Main \*Infrastructure**

» Gas turbines	» Water treatment plant
» Heat Recovery Steam Generator	» Water pipelines and water tanks
» Steam turbines	» Dry-cooled system including air-cooled condenser fans
» Bypass stacks	» Closed Fin-fan coolers
» Dirty Water Retention Dams and Clean Water Dams	» Gas infrastructure (from the boundary fence and within the site boundaries only)
» Storm water channels.	» Diesel off-loading facility and storage tanks
» Waste (general and hazardous) storage facilities	» Ancillary infrastructure - access roads, warehousing, buildings, access control facilities and workshop area, storage facilities, emergency back-up generators, firefighting systems, laydown areas, and 132kV & 400kV power lines and associated switchyards
» Exhaust stacks	» A power line (from the boundary fence and within the site boundaries only)

**\*Transmission Power Line and Gas Pipe Line outside property boundaries: Separate EIA Processes**

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- ### PROJECT-SPECIFIC DETAILS: Construction Activities
- » Pre-construction surveys
  - » Establish access roads
  - » Site preparation
  - » Laydown areas
  - » Construction of foundations and other civil works
  - » Mechanical and electrical work
  - » Temporary infrastructure
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## Slide 17

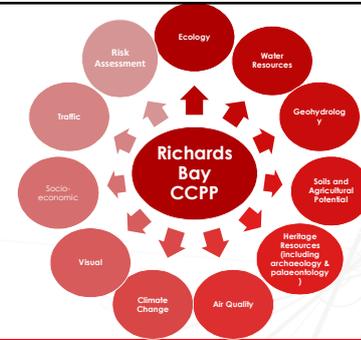
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- U3** Included an additional note at the bottom of the drawing.  
Shaun Taylor, 3/22/2019

## PROJECT-SPECIFIC DETAILS: Operation Activities

- » Maintenance activities
- » Operation of the facility
- » Transportation (including diesel offloading)
- » Administration operations

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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction Impacts (within development footprint)

### Ecology:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Loss of sensitive terrestrial ecosystems	Medium (52)	Low (21)
Loss of critical biodiversity areas (CBAs)	Medium (30)	Low (21)
Loss of sensitive aquatic ecosystems	High (90)	Medium (48)
Loss of natural vegetation	High (64)	Medium (33)
Loss / disturbance of local fauna populations	High (95)	Medium (39)
Noise and artificial light disturbances	Medium (40)	Low (21)
Soil erosion and sedimentation	Medium (40)	Low (14)
Pollution of soils and habitat	Medium (52)	Low (15)

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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

### Ecology:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Introduction and spread of alien invasive plant species and weeds	High (60)	Low(14)
Disturbance of local fauna communities	Medium (48)	Low (14)
Noise and artificial light disturbance	Medium (48)	Low (27)
Pollution of soils and habitat	Medium (48)	Low (14)

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**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Construction Impacts** (within development footprint)

**Surface Water Resources:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Include loss / degradation of wetlands	High (100)	High (100)
Spread of / or establishment of alien and / or invasive plant species	Medium (52)	Low (21)
Sedimentation and erosion of watercourses	Medium (52)	Low (27)
Impaired water quality	High (64)	Medium (39)
Alteration of the hydrological regime	Medium (52)	Low (20)

**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Operation Impacts**

**Surface Water Resources:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Impaired water quality	High (64)	Medium (39)
Alterations in the hydrological regime	High (64)	Medium (39)

**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Construction Impacts** (within development footprint)

**Soils and Agricultural Potential:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Loss of agricultural potential	High (95)	High (95)
Loss of soil resources	High (95)	Medium (40)

**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Construction Impacts** (within development footprint)

**Geohydrology:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Groundwater flow direction due to dewatering	Medium (44)	Medium (32)
Groundwater levels	Medium (44)	Medium (32)
Accidental fuel and oil spills / leaks from construction vehicles	High (60)	Low (10)
Impacts to groundwater due to on-site accidental fuel spill and leaks/leachate and infiltration of dirty water	High (60)	Low (15)

## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

### Geohydrology:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Groundwater due to possible leakage of diesel from storage facilities / pipelines / emergency back-up generators	Medium (48)	Medium (18)
Local surface water bodies due to possible diesel from storage facilities and/or pipelines and Emergency backup generators	Medium (48)	Low (12)
Groundwater due to waste water and solid waste discharges	Medium (40)	Low (14)
Surface water bodies due to waste water and solid waste discharges	Medium (40)	Low (12)

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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction Impacts (within development footprint)

### Heritage:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Palaeontological or cultural heritage resources which may be unearthed during excavations on the site	Low (16)	Low (16)

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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction & Operational Impacts

### Air Quality:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Emissions from particulate and gaseous pollutants	Medium (33) (construction)	Low (21) (construction)
Sulfur dioxide emission	Medium (36) (operation)	Medium (36) (operation)

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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction & Operation Impacts

### Visual:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Industrialisation of views from Urban Areas	Low (12)	Low (12)
Views from Protected Areas	Low (12)	Low (12)
Views from Roads	Low (24)	Low (12)
Industrialisation of Views from Homesteads	Low (12)	Low (6)
Recreational uses on the Northern Side of the Port could be negatively impacted by further Industrialisation of the Landscape	Low (6)	Low (6)
Industrialisation of the view as seen from the N2 Service Station	Low (14)	Low (12)
Lighting impacts	Low (16)	Low (6)

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### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction Impacts (within development footprint)

**Socio-economic:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Increase in economic production	High (60) (positive)	High (60) (positive)
Increase in gross domestic product	Medium (52) (positive)	Medium (52) (positive)
Employment creation	High (75) (positive)	High (75) (positive)
Skills development	High (70) (positive)	High (70) (positive)
Household income	High (65) (positive)	High (65) (positive)
Demographic shift due to influx of migrant labour	Medium (33) (negative)	Low (27) (negative)
Increase in demand for housing	Medium (36) (negative)	Low (21) (negative)
Pressure on basic services, social facilities and economic facilities	Medium (33) (negative)	Low (18) (negative)



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### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

**Socio-economic:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Increase in economic production	High (60) (positive)	High (68) (positive)
Increase in gross domestic product	High (60) (positive)	High (68) (positive)
Employment creation	High (75) (positive)	High (75) (positive)
Skills development	High (70) (positive)	High (70) (positive)
Household income	High (75) (positive)	High (75) (positive)
Government Revenue	High (65) (positive)	High (65) (positive)
Improvement in the energy sector	High (60) (positive)	High (60) (positive)



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### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction & Operation Impacts

**Traffic:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Construction traffic	Medium (35)	Medium (30)
Operation traffic	Medium (40)	Medium (35)



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### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

**Climate Change:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Estimated Greenhouse Gas Emissions	Not applicable – mitigation is automatically integrated.	High (65)



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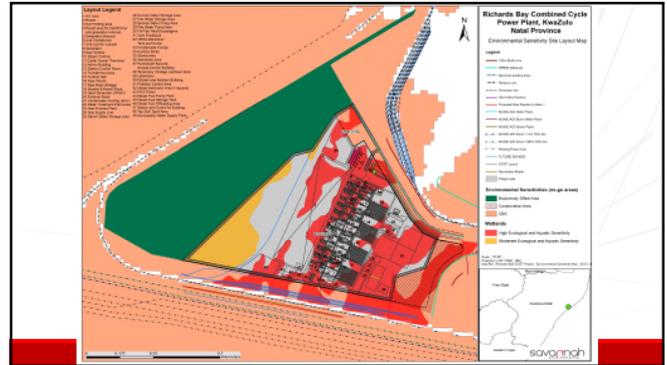
## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction & Operation Impacts

### Risk:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Chlorine installation	Low (12)	Low (9)
Natural gas installation	Low (11)	Low (8)
Diesel installations	Low (11)	Low (8)
Hydrogen installation	Low (10)	Low (8)
Liquefied natural gas installations	Low (11)	Low (8)
Ammonia installations	Low (11)	Low (8)

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## RICHARDS BAY CCPP- RESULTS

- » Specialist findings - no identified environmental fatal flaws.
- » Eskom has proposed a technically viable and suitable design and layout for the project site.
- » All impacts can be mitigated to acceptable levels or enhanced through the implementation of the recommended mitigation or enhancement measures.
- » Impacts on wetlands cannot be avoided, approval of a wetland offset plan will be required,

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## WATER USE LICENSE PROCESS

WULA required in terms of Section 21 of the National Water Act, 1998 (Act No. 36 of 1998)

- Water uses identified to be applied for:
  - » Storing water;
  - » Impending or diverting the flow of water in a watercourse;
  - » Altering the bed, bank, course and characteristics of a watercourse;
  - » Disposing in any manner of water which contains waste from, or which has been heated in any industrial or power generation process; and
  - » Removing, discharging and disposing of water found underground if it is necessary for the continuation of an activity or for the safety of people.
- Application process not yet taken place, nor confirmation that each to be undertaken by DWS. This process to be done at a later stage.
- Typical WULA process takes 300 days from submission of application and registration forms

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## AVAILABILITY OF REPORT

### Websites:

Savannah Environmental	<a href="https://www.savannahsa.com/public-documents/energy-generation/">https://www.savannahsa.com/public-documents/energy-generation/</a>
Eskom Holding SOC Ltd	<a href="http://www.eskom.co.za/OurCompany/SustainableDevelopment/EnvironmentalImpactAssessments/RichardsBayCCPP/Pages/default.aspx">http://www.eskom.co.za/OurCompany/SustainableDevelopment/EnvironmentalImpactAssessments/RichardsBayCCPP/Pages/default.aspx</a>

### Public Places:

LIBRARY	ADDRESS
Richards Bay Public Library	No 5 Kruger Rand Road, Richards Bay
Empangeni Public Library	Cnr Union & Maxwell Streets, Empangeni

## WAY FORWARD

- » EIA Report Review period: **Sunday, 24 March to Friday, 26 April 2019** (32-days)
- » Written comments to be submitted by **Friday, 26 April 2019**
- » **Record of comments** raised during the meeting – distribute to those attended & apologies
- » Incorporate all comments received into C&RR
- » Submit **Final EIA Report** to DEA for approval: envisaged May 2019.
- » Expected timing of decision: September 2019.

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## PLEASE DIRECT COMMENTS TO:

Nicolene Venter: **Savannah Environmental**

t: +27 (0)11 656 3237

f: +27 (0)86 684 0547

e: [publicprocess@savannahsa.com](mailto:publicprocess@savannahsa.com)

w: [www.savannahsa.com](http://www.savannahsa.com)

a: First Floor, Block 2, 5 Woodlands Drive Office Park  
Cnr Woodlands Drive & Western Service Road  
Woodmead, 2191

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

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## MEETING NOTES OF THE PUBLIC MEETING #2

HELD ON 27 MARCH 2019  
EMPANGENI PUBLIC LIBRARY, EMPANGENI

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**Notes for the Record prepared by:**

**Savannah Environmental (Pty) Ltd**

**Contact:** Ms Nicolene Venter

**Position:** Public Participation and Social Consultant

**E-mail:** [publicpocess@savannahsa.com](mailto:publicpocess@savannahsa.com)

**NOTE:** These meeting notes are not verbatim

***Please address any comments to Nicolene Venter 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:** Empangeni Public Library, Empangeni

**Date:** 27 March 2019

**Time:** 10h00

### WELCOME AND INTRODUCTION

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Nicolene Venter, Savannah Environmental, welcomed all present and thanked the attendees for availing themselves for the meeting. After formal introduction by the project team members and the delegates present, she informed the attendees of the evacuation procedure as provided by the Librarian.

The attendees were informed that due to a throat infection, the presentation would be made by Lisa Opperman, Savannah Environmental, and Shaun Taylor, Savannah Environmental, would respond to questions raised. Nicolene also informed the attendees that Shaun Taylor, as Environmental Assessment Practitioner (EAP) for the project, would be leaving the services of Savannah Environmental at the end of the month and that Lisa Opperman would take over the project as the EAP

The Agenda presented was accepted by the attendees and no objections were lodged for recording the meeting proceedings.

### MEETING ATTENDEES

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Name	Organisation	Position
Luke Harel	The uMhlathuzi Valley Sugar Company (Pty) Ltd	OD Manager
Kelly Lourens	Exigent Engineering consultants CC	Environmental Practitioner
Siphesihle Nkome		Environmental Intern
Wallace Manyaka	Ansaldo Energia	Head of Business Development - SADC
Paula Leah	Master Builder Association	Area Manager
Percy Langa	Richards Bay IDZ	SHEQ Manager
Ntando Mhsoli		Environmental Intern
Jandré van Zyl	Hilti South Africa	Head of Engineering
Tobile Bokwe	Eskom Holdings SOC Ltd	Middle Manager: EIA
Pieter Nelson		Snr Consultant
Vincent Chauke		Programme Manager: Project Development Department
Koogendran Govender		Chief Engineer
Mula Phalanndwa		Senior Environmental Advisor, WULA

Name	Organisation	Position
Lisa Opperman	Savannah Environmental	Environmental Assessment Practitioner
Shaun Taylor		
Nicolene Venter		Public Participation and Social Consultant

## PRESENTATION

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The following key points were presented:

- Project Progress to Date – Savannah Environmental
- Need for the Project & Integrated Projects – Eskom Holdings SOC Ltd
- Overview of EIA & WULA Process – Savannah Environmental
- Project Overview – Savannah Environmental
- Key Environmental Findings – Savannah Environmental

**Copy of the presentation is attached as Appendix A**

## DISCUSSION SESSION

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Question / Comment	Response
<p>Luke Harel informed the project team that he had not yet had an opportunity to read the report in detail, however, he did scan through it.</p> <p>He asked what the reason is that Site 7 has been selected as the preferred site and to explain why site 4A was deemed as not preferred from an environmental (wetland, aquatic, ecology, socio-economic, noise and air quality) perspective.</p>	<p>Vincent Chauke responded by informing the attendees that originally there were 7 sites, and after looking at them from a technical viewpoint it was scaled down to four sites. The four sites went through an environmental screening phase which assessed various environmental aspects as well as technical and associated infrastructures (power lines). It can be confirmed that Site 7 is not a done deal. Should the current environmental studies identify an impact that cannot be mitigated, then Eskom will consider the next preferred site which will also need to go through a rigorous environmental process.</p> <p>Tobile Bokwe added that Site 7 is not suitable for agriculture as the soil is not suited for agriculture but that the site is currently being used for subsistence grazing.</p> <p>Shaun Taylor replied that Chapter 3, point 3.1 of the Report gives a summary of the site selection process undertaken for the project. He also informed the attendees that the wetlands on</p>

	<p>the property is part of an off-set process currently being discussed between the Local Municipality, who is also the landowner, Eskom and KwaZulu-Natal Ezemvelo to determine an appropriate offset for a conservation area.</p> <p><b>Post-meeting note:</b> Table 3.1 of the EIA report provides a summary of the site screening considerations and comparison of the four sites considered. The environmental aspects on Site 7 were all identified to be either acceptable or preferred, with only air quality considered as not preferred. Site 4A was much more sensitive with various environmental aspects identified as not preferred which includes wetlands, aquatic ecology, socio-economic aspects and air quality.</p>
<p>Luke Harel informed the project team that a formal request will be sent to the project team to provide detailed information regarding the four (4) sites.</p>	<p>Nicolene Venter acknowledged the information and the team will await his written request.</p>
<p>Percy Langa informed the project team that negotiations between the Richards Bay IDZ and uMhlathuzi Local Municipality has progressed well and it is believed that by the time this proposed project received Environmental Authorisation that the parcel of land identified for this proposed project will be the registered property of Richards Bay IDZ.</p> <p>It would then be required from Eskom to attend to a number of applications relevant for this proposed development.</p>	<p>Nicolene Venter thanked Mr Langa for the information shared and Eskom is taking note of this matter. When the time arises for purchasing / leasing the property, discussions will take place with the relevant registered property owner.</p>
<p>Paula Leah asked what the proposed time frame is for starting construction after the Department of Environmental Affairs' 107-days decision-making time.</p>	<p>Vincent Chauke replied that there are several environmental authorisations that are being undertaken to support the feasibility of the project, some running parallel to this EIA process, while others have not been commenced with. Such environmental authorisation processes include the processes for the transmission power line/s and gas pipeline infrastructures.</p> <p>The construction of the power plant,</p>

	<p>transmission power lines and gas pipeline is envisaged to take 36 months and it is envisaged that the project will be operational, should all the authorisations be granted, within 3 to 5 years from now. It needs to be noted that the application for environmental authorisation for the proposed power plant is for a 3000MW facility and the facility might initially produce only 2000MW but will have capacity for 3000MW.</p> <p><b>Post-meeting note:</b></p> <p>Additional to the EIA process, there are other applicable environmental approvals, e.g. the Water Use Licence and the Atmospheric Emissions Licence; as well as other governance approvals, e.g. the Section 34 determination, which is a competency of the Department of Energy.</p> <p>The key factor in terms of timelines is the decision to be made by the Department of Energy in terms of the Integrated Resources Plan in which the Minister will announce the allocation to energy into the energy generation mix.</p>
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**WAY FORWARD AND CLOSURE**

Nicolene Venter thanked the attendees for their meaningful contributions and again thanking them for making time available to attend the public meeting.

She informed the attendees to please take note of the review and comment period and to please submit their written comments before or latest on the closing date, which is Friday, 26 April 2019.

The delegates were wished a safe journey and the meeting was closed at 11h15.

## RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) PROJECT, KWAZULU-NATAL PROVINCE

Public Meetings  
26 – 27 March 2019

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## MEETING AGENDA

1. Evacuation Procedure
2. Welcome & introduction
3. Purpose of the Meeting
4. Project Progress to Date
5. Need for the Project & Integrated Projects
6. Overview of EIA & WULA Process
7. Project Overview
8. Key Environmental Findings
9. Discussions & Questions
10. Way forward

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## PURPOSE OF THE MEETING

- » Provide I&APs with an overview of the Richards Bay CCPP
- » Explain the **Environmental Impact Assessment (EIA) & Public Participation** and the **Water Use License process** being undertaken
- » Present the summary of key findings of the **EIA Report**
- » Provide I&APs the opportunity to seek clarity regarding the project
- » Opportunity to provide valuable input into/to inform the EIA process
- » Obtain and record comments for inclusion in the **Final EIA Report** to be submitted to DEA

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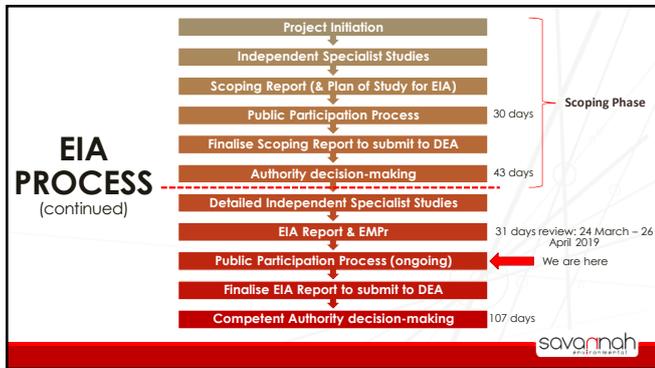
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## EIA PROCESS

LEGAL REQUIREMENT	REFERENCE / NOTE
Environmental Authorisation (EA)	NEMA & EIA Regulations, 2014, as amended
Competent Authority (decision-maker)	Department of Environmental Affairs
Commenting Authority	KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs (KZN DEDTEA)
Independent Environmental Assessment Practitioner	Savannah Environmental

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## PROGRESS UPDATE

ACTIVITIES	NOTES
Scoping Phase	
Final Report & POS submitted to DEA	October 2017
Report accepted & POS approved by DEA	November 2017
Identification of wetland offset-plan requirement	February 2018
Request for Extension of EIA Timeframe (EIA Reg, 2014, as amended, Section 3(7))	
Submission to DEA	January 2018
DEA Refusal	March 2018
Application Lapsed – DEA notification	April 2018
Re-submission of EA Application to DEA	
Impact Assessment Commencement	February 2019
Preliminary Wetland Offset Plan	
Holding meetings	26 & 27 March 2019
Draft EIAr available for review and comment	24 March 2019 – 26 April 2019

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## PUBLIC PARTICIPATION PROCESS

ACTIVITY	DATE
Notification of Resubmission of Application	19 February 2019
Notification of Availability of Report & invitation to Public Meetings	18 March 2019
Placement of Advertisements	
Zululand Observer	21 March 2019
Mercury	22 March 2019
Sunday Times	24 March 2019
Rapport	24 March 2019

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## NEED FOR THE PROJECT AND THE INTEGRATED PROJECTS

ESKOM HOLDINGS SOC LTD

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**RBCCPP Background** 

- The Richards Bay Combined Cycle Power Plant (CCPP) and associated infrastructure, with an installed generating capacity of up to 3 000MW (using natural gas as its primary feedstock and diesel as a back up) was identified as part of the energy mix in addition to renewable energy. The power plant will be operated as a mid-merit plant.
- The Richards Bay CCPP project site is on Portion 2 and Portion 4 of Erf 11376 located in the Richards Bay Industrial Development Zone (IDZ) Phase 1D, approximately 6km south west of Richards Bay, and 4km south west of Alton, which falls within the jurisdiction of the City of uMhlatuze Local Municipality and the King Cetshwayo District Municipality.
- Eskom has explored various options for sourcing gas and its associated infrastructure. These opportunities will be explored through engaging the open market.
- The uMhlatuze will supply water to the CCPP for the construction and operation period. The municipality will have the capacity to handle waste removal from the Richards Bay CCPP and Eskom is envisaged to be one of the off-takers on the water re-use project.

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**PROJECT OVERVIEW  
AND  
ENVIRONMENTAL IMPACT  
ASSESSMENT**

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**SCOPE OF WORKS**

- » Assessment of the environmental and social impacts (all infrastructure within project site boundaries)
- » Recommendation of appropriate mitigation measures
- » Environmental Management Programme
- » WUL Application




RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE  
ENVIRONMENTAL MANAGEMENT PROGRAMME  
MAY 2017

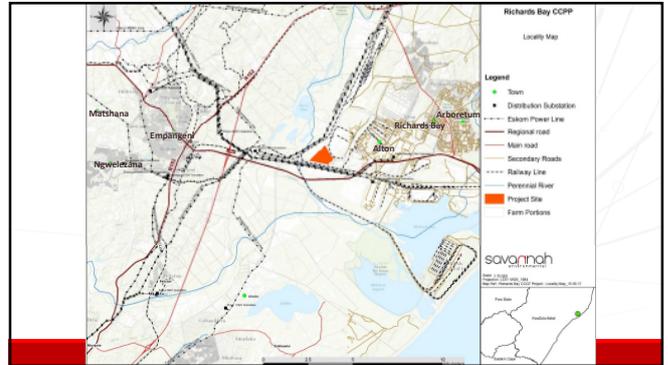
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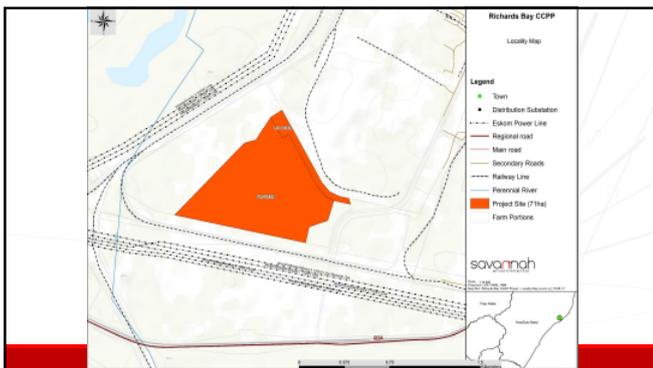
## PROJECT DETAILS

Richards Bay CCPP	
Applicant	Eskom Holdings SOC Ltd (Eskom)
Province	KwaZulu-Natal
District Municipality	King Cetshwayo District Municipality
Local Municipality	City of uMhlatuze Local Municipality
Ward Number	26
Nearest towns	Alton, Richards Bay, Arboretum, Empangeni, Ichubho
Farm name(s) and number(s)	Erf 11376
Portion number(s)	» Portion 2 » Portion 4
Current zoning and land use	The properties are zoned for industrial use (Phase 1D of the Richards Bay IDZ, and are currently used for communal grazing

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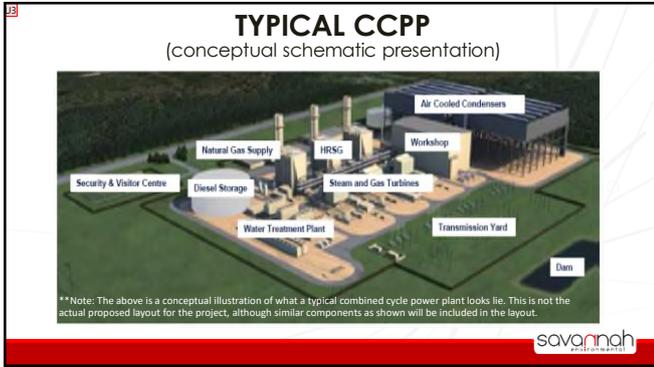


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## TECHNICAL PROJECT DETAILS

Richards Bay CCPP	
Electricity generation capacity	Up to 3000MW (installed)
Proposed technology	Combined Cycle Power Plant (CCPP) with an anticipated configuration of 2:2:1 (Gas Turbine: HRSG: Steam Turbine).
Development footprint	Up to 60ha (CCPP) and up to 11ha (associated infrastructure) - to be developed within the 71ha project site

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### MAIN INFRASTRUCTURE

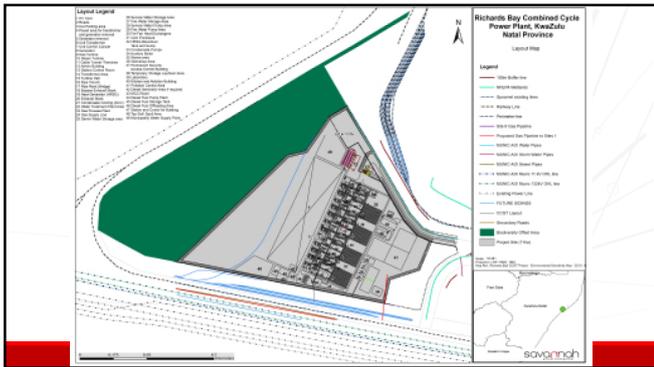
**Richards Bay CCPP Main \*Infrastructure**

» Gas turbines	» Water treatment plant
» Heat Recovery Steam Generator	» Water pipelines and water tanks
» Steam turbines	» Dry-cooled system including air-cooled condenser fans
» Bypass stacks	» Closed Fin-fan coolers
» Dirty Water Retention Dams and Clean Water Dams	» Gas infrastructure (from the boundary fence and within the site boundaries only)
» Storm water channels.	» Diesel off-loading facility and storage tanks
» Waste (general and hazardous) storage facilities	» Ancillary infrastructure - access roads, warehousing, buildings, access control facilities and workshop area, storage facilities, emergency back-up generators, firefighting systems, laydown areas, and 132kV & 400kV power lines and associated switchyards
» Exhaust stacks	» A power line (from the boundary fence and within the site boundaries only)

**\*Transmission Power Line and Gas Pipe Line outside property boundaries: Separate EIA Processes**

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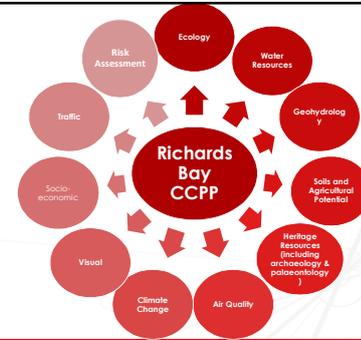
- ### PROJECT-SPECIFIC DETAILS: Construction Activities
- » Pre-construction surveys
  - » Establish access roads
  - » Site preparation
  - » Laydown areas
  - » Construction of foundations and other civil works
  - » Mechanical and electrical work
  - » Temporary infrastructure
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## PROJECT-SPECIFIC DETAILS: Operation Activities

- » Maintenance activities
- » Operation of the facility
- » Transportation (including diesel offloading)
- » Administration operations

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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction Impacts (within development footprint)

### Ecology:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Loss of sensitive terrestrial ecosystems	Medium (52)	Low (21)
Loss of critical biodiversity areas (CBAs)	Medium (30)	Low (21)
Loss of sensitive aquatic ecosystems	High (90)	Medium (48)
Loss of natural vegetation	High (64)	Medium (33)
Loss / disturbance of local fauna populations	High (95)	Medium (39)
Noise and artificial light disturbances	Medium (40)	Low (21)
Soil erosion and sedimentation	Medium (40)	Low (14)
Pollution of soils and habitat	Medium (52)	Low (15)

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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

### Ecology:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Introduction and spread of alien invasive plant species and weeds	High (60)	Low (14)
Disturbance of local fauna communities	Medium (48)	Low (14)
Noise and artificial light disturbance	Medium (48)	Low (27)
Pollution of soils and habitat	Medium (48)	Low (14)

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**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Construction Impacts** (within development footprint)

**Surface Water Resources:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Include loss / degradation of wetlands	High (100)	High (100)
Spread of / or establishment of alien and / or invasive plant species	Medium (52)	Low (21)
Sedimentation and erosion of watercourses	Medium (52)	Low (27)
Impaired water quality	High (64)	Medium (39)
Alteration of the hydrological regime	Medium (52)	Low (20)

**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Operation Impacts**

**Surface Water Resources:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Impaired water quality	High (64)	Medium (39)
Alterations in the hydrological regime	High (64)	Medium (39)

**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Construction Impacts** (within development footprint)

**Soils and Agricultural Potential:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Loss of agricultural potential	High (95)	High (95)
Loss of soil resources	High (95)	Medium (40)

**ENVIRONMENTAL IMPACTS ASSOCIATED WITH:  
Construction Impacts** (within development footprint)

**Geohydrology:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Groundwater flow direction due to dewatering	Medium (44)	Medium (32)
Groundwater levels	Medium (44)	Medium (32)
Accidental fuel and oil spills / leaks from construction vehicles	High (60)	Low (10)
Impacts to groundwater due to on-site accidental fuel spill and leaks/leachate and infiltration of dirty water	High (60)	Low (15)

## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

### Geohydrology:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Groundwater due to possible leakage of diesel from storage facilities / pipelines / emergency back-up generators	Medium (48)	Medium (18)
Local surface water bodies due to possible diesel from storage facilities and/or pipelines and Emergency backup generators	Medium (48)	Low (12)
Groundwater due to waste water and solid waste discharges	Medium (40)	Low (14)
Surface water bodies due to waste water and solid waste discharges	Medium (40)	Low (12)

## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction Impacts (within development footprint)

### Heritage:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Palaeontological or cultural heritage resources which may be unearthed during excavations on the site	Low (16)	Low (16)

## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction & Operational Impacts

### Air Quality:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Emissions form particulate and gaseous pollutants	Medium (33) (construction)	Low (21) (construction)
Sulfur dioxide emission	Medium (36) (operation)	Medium (36) (operation)

## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction & Operation Impacts

### Visual:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Industrialisation of views from Urban Areas	Low (12)	Low (12)
Views from Protected Areas	Low (12)	Low (12)
Views from Roads	Low (24)	Low (12)
Industrialisation of Views from Homesteads	Low (12)	Low (6)
Recreational uses on the Northern Side of the Port could be negatively impacted by further Industrialisation of the Landscape	Low (6)	Low (6)
Industrialisation of the view as seen from the N2 Service Station	Low (14)	Low (12)
Lighting impacts	Low (16)	Low (6)

### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction Impacts (within development footprint)

**Socio-economic:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Increase in economic production	High (60) (positive)	High (60) (positive)
Increase in gross domestic product	Medium (52) (positive)	Medium (52) (positive)
Employment creation	High (75) (positive)	High (75) (positive)
Skills development	High (70) (positive)	High (70) (positive)
Household income	High (65) (positive)	High (65) (positive)
Demographic shift due to influx of migrant labour	Medium (33) (negative)	Low (27) (negative)
Increase in demand for housing	Medium (36) (negative)	Low (21) (negative)
Pressure on basic services, social facilities and economic facilities	Medium (33) (negative)	Low (18) (negative)



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### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

**Socio-economic:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Increase in economic production	High (60) (positive)	High (68) (positive)
Increase in gross domestic product	High (60) (positive)	High (68) (positive)
Employment creation	High (75) (positive)	High (75) (positive)
Skills development	High (70) (positive)	High (70) (positive)
Household income	High (75) (positive)	High (75) (positive)
Government Revenue	High (65) (positive)	High (65) (positive)
Improvement in the energy sector	High (60) (positive)	High (60) (positive)



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### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction & Operation Impacts

**Traffic:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Construction traffic	Medium (35)	Medium (30)
Operation traffic	Medium (40)	Medium (35)



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### ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Operation Impacts

**Climate Change:**

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Estimated Greenhouse Gas Emissions	Not applicable – mitigation is automatically integrated.	High (65)



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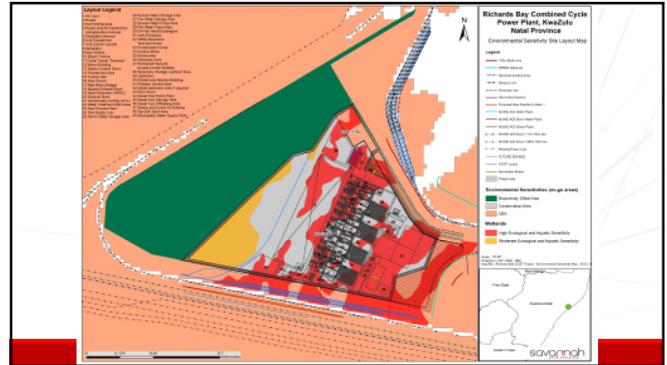
## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction & Operation Impacts

### Risk:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Chlorine installation	Low (12)	Low (9)
Natural gas installation	Low (11)	Low (8)
Diesel installations	Low (11)	Low (8)
Hydrogen installation	Low (10)	Low (8)
Liquefied natural gas installations	Low (11)	Low (8)
Ammonia installations	Low (11)	Low (8)

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## RICHARDS BAY CCPP- RESULTS

- » Specialist findings - no identified environmental fatal flaws.
- » Eskom has proposed a technically viable and suitable design and layout for the project site.
- » All impacts can be mitigated to acceptable levels or enhanced through the implementation of the recommended mitigation or enhancement measures.
- » Impacts on wetlands cannot be avoided, approval of a wetland offset plan will be required,

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## WATER USE LICENSE PROCESS

WULA required in terms of Section 21 of the National Water Act, 1998 (Act No. 36 of 1998)

- Water uses identified to be applied for:
  - » Storing water;
  - » Impending or diverting the flow of water in a watercourse;
  - » Altering the bed, bank, course and characteristics of a watercourse;
  - » Disposing in any manner of water which contains waste from, or which has been heated in any industrial or power generation process; and
  - » Removing, discharging and disposing of water found underground if it is necessary for the continuation of an activity or for the safety of people.
- Application process not yet taken place, nor confirmation that each to be undertaken by DWS. This process to be done at a later stage.
- Typical WULA process takes 300 days from submission of application and registration forms

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## AVAILABILITY OF REPORT

### Websites:

Savannah Environmental	<a href="https://www.savannahsa.com/public-documents/energy-generation/">https://www.savannahsa.com/public-documents/energy-generation/</a>
Eskom Holding SOC Ltd	<a href="http://www.eskom.co.za/OurCompany/SustainableDevelopment/EnvironmentalImpactAssessments/RichardsBayCCPP/Pages/default.aspx">http://www.eskom.co.za/OurCompany/SustainableDevelopment/EnvironmentalImpactAssessments/RichardsBayCCPP/Pages/default.aspx</a>

### Public Places:

LIBRARY	ADDRESS
Richards Bay Public Library	No 5 Kruger Rand Road, Richards Bay
Empangeni Public Library	Cnr Union & Maxwell Streets, Empangeni

## WAY FORWARD

- » EIA Report Review period: **Sunday, 24 March to Friday, 26 April 2019** (32-days)
- » Written comments to be submitted by **Friday, 26 April 2019**
- » **Record of comments** raised during the meeting – distribute to those attended & apologies
- » Incorporate all comments received into C&RR
- » Submit **Final EIA Report** to DEA for approval: envisaged May 2019.
- » Expected timing of decision: September 2019.

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## PLEASE DIRECT COMMENTS TO:

Nicolene Venter: **Savannah Environmental**

t: +27 (0)11 656 3237

f: +27 (0)86 684 0547

e: [publicprocess@savannahsa.com](mailto:publicprocess@savannahsa.com)

w: [www.savannahsa.com](http://www.savannahsa.com)

a: First Floor, Block 2, 5 Woodlands Drive Office Park  
Cnr Woodlands Drive & Western Service Road  
Woodmead, 2191

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

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## MEETING NOTES OF THE AUTHORITY SITE VISIT

HELD ON WEDNESDAY, 17 APRIL 2019

RICHARDS BAY ENVIRONMENTAL COMMITTEE CONFERENCE ROOM,  
RICHARDS BAY INDUSTRIAL DEVELOPMENT ZONE, HARBOUR ARTERIAL RD,  
RICHARDS BAY

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**Notes for the Record prepared by:**

**Savannah Environmental (Pty) Ltd**

**Contact:** Ms Nicolene Venter

**Position:** Public Participation and Social Consultant

**E-mail:** publicprocess@savannahsa.com

**NOTE:** These meeting notes are not verbatim

***Please address any comments to Nicolene Venter 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 Environmental Committee Conference Room, Richards Bay Industrial Development Zone, Old Bayside Smelter Site, Harbour Arterial Rd, Richards Bay

**Date:** 17 April 2019

**Time:** 09h00

### WELCOME AND INTRODUCTION

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Nicolene Venter, Savannah Environmental, welcomed all present and thanked the attendees for availing themselves for the meeting. After formal introduction by the project team members and the delegates present, Percy Langa from the Richards Bay IDZ informed the attendees that no exercise for emergency evacuation is planned for the day, therefore, if a siren is heard the attendees must please follow the evacuation procedure as presented as it would be a live event. The location of the various restrooms were also pointed out to the attendees.

The Agenda presented was accepted by the attendees and no objections were lodged against the recording of the meeting proceedings.

### MEETING ATTENDEES

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Name	Organisation	Position
Thembalakhe Sibozana	DAFF	Snr Forestry Regulations Officer
Nomfundo Ngcongco		-
Olivia Letlalo	DEA	-
Seoka Lekota		Biodiversity Officer
Portia Makitla		Biodiversity Officer
Tahndo Boo		Environmental Officer
Thobekile Zungu		Biodiversity: Intern
Lebogang Seperepere	Transnet	Business Development
Vusumzi Sihawu		-
Sinegugu Ncama		-
Jabulani Sithole		Executive Manager
Percy Langa	Richards Bay IDZ	SHEQ Manager
Tobile Bokwe	Eskom Holdings SOC Ltd	Middle Manager: EIA
Kishaylin Chetty		Senior Environmental Advisor
Tinyiko Masondo		Programme Manager: Project Development Department
Pieter Nelson		Snr Consultant
Vincent Chauke		Programme Manager: Project Development Department
Reggie Chippe		Client Office Manager
Koogendran Govender		Engineer

Name	Organisation	Position
Wayne Jackson	The Biodiversity Company	Wetland Specialist
Lisa Opperman	Savannah Environmental	Environmental Assessment Practitioner
Nicolene Venter		Public Participation and Social Consultant

**List of abbreviations / acronyms:**

DAFF	Department of Agriculture, Forestry and Fisheries	DEA	Department of Environmental Affairs
IDZ	Industrial Development Zone	SHEQ	Safety, Health, Environment and Quality
Tx	Transmission		

**PRESENTATIONS**

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The following presentations were presented:

- Need for the Project – Eskom Holdings SOC Ltd
- Technical Aspects regarding the proposed Combined Cycle Power Plant – Eskom Holdings SOC Ltd
- Transmission Power Line Infrastructure Development – Eskom Holdings SOC Ltd
- Gas Infrastructure Overview - Transnet
- Environmental Overview – Savannah Environmental
- DEA Site Visit Objectives – Savannah Environmental
- Wetland Offset – The Biodiversity Company
- Logistic arrangements for Site Visit – Savannah Environmental

***Copy of the presentations are attached as Appendix A***

**DISCUSSION SESSION**

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Question / Comment	Response
Olivia Letlalo requested, for clarification purposes, how the EIA process has unfolded. As per the DEA's recollection, the first application that was submitted had lapsed and now a draft EIAR has been submitted.	Lisa Opperman replied that a Request for Extension for the EIA timeframe was submitted to the DEA (January 2018) and the request was refused (March 2018). Subsequently the DEA notified Savannah Environmental in April 2018 that the Application had lapsed. The Application for Environmental Authorisation was re-submitted to the DEA in February 2019.
Olivia Letlalo informed the project team that the storage facility of general and hazardous waste are included in the draft EIAR but it was not presented / included in the layout presented. It was therefore requested, for	Koogendran Govender responded that the process flow plan presented is based on a conceptual design and did not include all the associated infrastructures such as the storage facilities. However, general and hazardous

<p>clarification purposes whether general and hazardous waste are part of the EIA process.</p>	<p>waste will be stored on site.</p> <p><b><u>Post meeting note:</u></b></p> <p>Lisa Opperman confirms that the storage of general and hazardous waste is being considered as part of the EIA process and that the relevant listed activities have been applied for under the National Environmental Management Act EIA Regulations. The project does not trigger listed activities under the National Environmental Management Waste Act.</p>
<p>Olivia Letlalo enquired, referring to the facility layout plan presented, whether consideration of the entering and exiting of the associated power lines were considered.</p>	<p>Tinyiko Masondo responded that the EIA process for the power lines is being undertaken as part of a separate EIA process. It was confirmed that the scoping phase has been completed.</p> <p>Lisa Opperman added that the facility layout plan is available and can be presented to the attendees.</p> <p>Koogendran Govender informed the DEA that the power line infrastructures will be taken into consideration when doing the final layout plant for the proposed power plant.</p>
<p>Olivia Letlalo raised the concern that the Report does not “talk” to the listed activity for the infrastructure mentioned above.</p>	<p>Lisa Opperman responded that she will check the EIA Report in terms of the relevant Listed Activity.</p> <p>Tobile Bokwe added that it could be that the volume of general and hazardous waste could be below the required threshold. However, the layout plan needs to show every infrastructure associated with the power plant.</p> <p><b><u>Post meeting note:</u></b></p> <p>Lisa Opperman confirms that the storage of general and hazardous waste is being considered as part of the EIA process and that the relevant listed activities have been applied for. It should be understood that the original developmental footprint covered the whole site area (71ha), and any infrastructure that is introduced is more for description purposes, as</p>

	<p>the impacts to the environment was assessed by the specialists and in the EIA report. The waste storage facilities would undergo a Registration process, as per the Norms and Standards for Storage of Waste.</p>
<p>Olivia Letlalo asked in terms of the information provided on the 1<sup>st</sup> presentation slide whether Savannah Environmental assessed all the alternative sites identified or was the detailed assessments done only on the one site as presented.</p>	<p>Lisa Opperman responded that a screening and site selection assessment was undertaken to identify the most appropriate site and also taking into consideration various specialist fields. This process assisted in determining the most suitable site from an environmental and technical aspect, as well as the identification of the site for which an Application for Environmental authorisation could be lodged.</p> <p>It was also mentioned that site visits to the sites that were accessible were conducted.</p> <p>Tobile Bokwe recommended that Lisa Opperman present to the DEA Officials the various criteria used for the site selection process. Lisa Opperman presented the Site Selection Table (<i>included in the presentation attached as <b>Appendix A</b></i>).</p> <p>She informed the attendees that the screening study was done on a very high level, and was a base-line study. Conclusions submitted outlined the preferred site considering the findings of the specialists.</p> <p>Tobile Bokwe added that cognisance needs to be taken in terms of air quality that the preferred site is located with the IDZ's development zone, earmarked for industry, and it also dovetails with the Municipality's greater development plan, as the site was originally earmarked and zoned for industrial development.</p>
<p>Seoka Lekota asked which one of the seven (7) sites proposed are the selected site presented at the meeting.</p>	<p>Lisa Opperman responded that Site 7 is the preferred site for which the EIA process is being undertaken.</p>
<p>Seoka Lekota asked for clarification in terms of site six (6) and seven (7), it seems that from a biodiversity perspective, wetland and aquatic is</p>	<p>Wayne Jackson responded that during the screening phase, information was sourced from the National Dataset and they did not conduct</p>

<p>indicated as unacceptable. It is believed that in the presentation by the Wetland Specialist that there would be better clarification regarding the classification.</p> <p>From the Department's perspective, they need to be comfortable with an acceptable rating.</p>	<p>a site inspection as Site 7 was located within a developed area. Therefore, the results presented were from a desk-top level, no ground-truthing was undertaken.</p> <p>The site inspection was conducted during the scoping phase of the EIA process.</p>
<p>Seoka Lekota asked when the wetland assessment was completed, was the change of water levels and drainage land pockets addressed as it would be affected by the power plant and how was the flow to the east catered for.</p> <p>Additional to the above, he would like to confirm that regardless of the offset being proposed, it is believed that the offset would not be enough looking at what would be lost.</p>	<p>Wayne Jackson replied that the project site is flat and the water sits and in-flow is very slow, although minimal. When the plant is constructed the surface will be hardened and run-off will increase. It was therefore recommended that the applicant look at green engineering methods. It also needs to be noted that the footprint will be sunked into the ground which will raise the water level around the plant and the other surrounding wetlands will get wetter and will change from flat to possible depression pans.</p>
<p>Seoka Lekota noted that as the ecologist is not present at the meeting, he believes that the EAP will be answering on behalf of both to ensure that there is a proxy between them in terms of Option 2.</p> <p>Seoka Lekota informed the project team that the DEA is trying to align the two specialist studies and is not saying the project must not proceed but do the two reports support one another in terms of the rescue and protection plan.</p>	<p>Wayne Jackson responded that the ecologist identified near threatened mammals species on the site and that the habitat on Option 2 is more suitable as there are more trees and coverage.</p>
<p>Seoka Lekota asked, in terms of the conservation area, how is the team planning to manage the conservation and rescue and protection plan.</p> <p>The concern was raised that the assessment, impacts and mitigation regarding aquatic features was not clearly defined.</p>	<p>Tobile Bokwe responded that Eskom is committed to sustainable offset programmes. In this regard, with the specialist having assessed the project site and compiled their Report, Eskom would submit a proposal on how they will respond to the specialist's recommendation regarding the wetland offset Option 2. This is because the wetland offset Option recommended by the specialist will not be met, in terms of sustainability.</p> <p>Despite what should be done, Eskom believes the proposal they would like to put forward could ensure long-term sustainability and would</p>

	<p>like the DEA to evaluate what Eskom is proposing for the wetland offset.</p> <p>Kishaylin Chetty added that consideration needs to be taken that there are two separate issues including the wetland off-set and the land-based biodiversity offset. He will confirm his understanding by checking the specialist reports in terms of the Pickersgill Reed Frog species that are referenced in the report, as it is believed that the Pickersgill Reed Frog species were not found during the site survey, but rather historical records as documented by KwaZulu-Natal Wildlife.</p> <p>Eskom's position in terms of the wetland offset proposal is linked to property ownership and what the DEA, DWS and KwaZulu-Natal Wildlife would want in this regard. As mentioned, the important aspect is sustainable security and who and how the offset will be managed in the long-term. It is therefore important that all parties (Eskom, KwaZulu-Natal and the Municipality, who owns the land) agree.</p> <p>This proposal will be presented to the DEA in due course.</p> <p><b><u>Post-meeting note:</u></b> Eskom have confirmed that the Pickersgill reed frog was not found during the specialist surveys, but was raised through EKZNW historic records.</p>
<p>Olivia Letlalo asked whether the Municipality has submitted any comments regarding biodiversity impacts.</p>	<p>Nicolene Venter responded that to date, no written comments were received from the Municipality. Officials from the Municipality did attend the Key Stakeholder Workshop held, but at the workshop no comments were raised regarding biodiversity.</p>

The attendees, except Transnet, left for the site visit to familiarise themselves with the project site and surrounding areas. This provided the opportunity for the authorities to contextualise the information included in the EIA Report.

The notes above do not include the comments raised at the project site during the site visit.

## **WAY FORWARD AND CLOSURE**

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Nicolene Venter thanked all for a fruitful site meeting and thanked them for making time available to attend the site visit and meeting.

The delegates were wished a safe journey and the site visit was closed at 13h15.

**RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) AND ASSOCIATED INFRASTRUCTURE  
ON A SITE NEAR RICHARDS BAY, KWAZULU-NATAL PROVINCE  
(DEA REF.: 14/12/16/3/3/2/1123)**

**NOTES FOR THE RECORD:  
WATER USE LICENSE PRE-APPLICATION MEETING WITH THE DEPARTMENT OF WATER AND  
SANITATION**

**Meeting Date:** 26 June 2019

**Time:** 09:00

**Venue:** Department of Water and Sanitation, Durban

**Attendees (Savannah Environmental attendance register attached):**

NAME	ORGANISATION
Ayanda Mthlale	Department of Water and Sanitation (DWS): Water Use
Krishnee Naidoo	Department of Water and Sanitation (DWS): Water Use
Tinyiko Masondo	Eskom
Mula Phalannawa	Eskom
Koogendran Govender	Eskom
Lisa Opperman	Savannah Environmental

Savannah Environmental prepared a presentation to cover the items as listed in the agenda. The points were presented and included:

1. Purpose of the meeting
2. Project progress to date
3. Scope of works and project overview
4. Key environmental findings – surface water
5. Results
6. Water use license process
7. Way forward

The presentation is attached to the Notes for completeness (**Appendix A**).

**Notes:**

The purpose of the meeting was to hold the pre-application meeting for the water use license process to be undertaken for the project. This meeting was also in response to the requirement listed in the comments received from DWS on the EIA Report, dated 10 May 2019 (**Appendix B**).

Further to the above, Eskom presented a proposal to DWS in terms of their position in regards to the required wetland offset strategy to be developed and implemented for the project.

The following was stated and noted for the record:

- » Eskom and Savannah Environmental confirmed that Surface Water Impact Assessment undertaken for the project included and considered wetland delineation, wetland health and the Present Ecological Status (PES), Ecological Importance and Sensitivity and ecological functioning of the water resources.
- » DWS enquired whether alternative sites were considered for the development of the project. This query was related to the extent of the wetlands located within the project site. Eskom and Savannah Environmental confirmed that a screening process was undertaken by Savannah Environmental prior to the commencement of the EIA process. The screening process considered four alternative sites for the development of the project, which also included inputs from specialists of various fields to provide a better understanding of the suitability of the four sites for development. The proposed project site presented and assessed as part of the EIA was identified as the preferred site for the development of the project based on the consideration of the specialist inputs and the technical feasibility of the site.
- » Eskom presented their proposal for the wetland offset strategy. Eskom explained that two options for the required wetland offset has been identified by the wetland specialist. The two options included Option 1 which is making use of the current biodiversity offset in place for the site (located directly adjacent to the site) and Option 2 include assisting KZN Ezemvelo and the local municipality with the proclamation of three site in the surrounding Richards Bay area. Option 2 was identified as the recommended option for the wetland offset strategy by the wetland specialist. Eskom explained that should Option 1 be implemented a net loss of 17.2ha will take place and that should Option 2 be implemented a gain of 381 ha will relevant. Eskom highlighted specific challenges associated with the implementation of Option 2 which includes the fact that Eskom does not own the land associated with this option or has the required skills to maintain conservation areas, management challenges for the sites and the uncertainty of sustainability. Eskom advised that there must be certainty of the sustainability of the wetland offset plan being implemented.
- » Eskom advised that there will be no net gain with the implementation of Option 1, however Eskom have amended the facility layout in order to reduce the extent of the wetland loss and therefore increase the extent of the wetlands available for protection. It was mentioned that Option 1 is considered as a sustainable option by Eskom due to the fact that the offset will be adjacent to the project site, the area is already proclaimed as an offset for the project site, it is a much smaller area to be managed and Eskom has the resources to manage this offset option. Eskom also

advised that measures will be put in place in the surrounding areas of the project site to ensure that the wetlands present gain an increased functionality. This includes the implementation of erosion and invasive species management plans and measures.

- » DWS enquired what the functional gain of the wetlands will be with the implementation of the amended (reduced footprint) layout and Option 1 and what the final net loss will be. Eskom advised that they are still in the process of liaising with the wetland specialist in this regard.
- » DWS advised that a motivation for the Option 1 will need to be provided as this option is in contradiction with the recommendation made by the specialist (who recommends to implementation Option 2). DWS also stated that an agreement must be made between Eskom and the wetland specialist in terms of Option 1 and that Eskom must gain inputs and comments from the specialist regarding the measures and activities which Eskom plan to put in place for the protection of the wetlands. DWS advised that the measures and activities could include the upgrade of the wetlands but that the specialist would need to provide input in this regard. DWS advised that for the implementation of Option 1 a compromise would need to be made between Eskom and the wetland specialist and that both the specialist and Eskom must be satisfied with the conditions and requirements. DWS advised that the specialist also needs to understand and consider the financial aspects and sustainability from a management perspective associated with the implementation of each of the wetland offset options.
- » DWS stated that it will be appropriate for Eskom to implement Option 1 subject to the specialist considering the option as feasible and the specialist agrees with the additional activities and management plans to be implemented for the protection of the wetlands. Also, motivation will need to be provided by Eskom in this regard.
- » DWS brought to the attendees attention that the areas ultimately implemented for the wetland offset strategy must be applied for under the Water Use License Application (WULA).
- » DWS stated that when the wetlands are improved within the wetland offset area (subject to both options) that the associated wetland buffers will change (i.e. increase in extent). This will need to be considered for existing and proposed development within the area. Eskom advised that this is one of the reasons why they consider Option 1 as preferred, as it will be easier to manage than sites further away from the site (Option 2).
- » Eskom requested whether the DWS wetland specialist is located in Durban or Pretoria. DWS advised that the specialist is located in Pretoria. Eskom advised that a meeting with the DWS specialist might be required for the wetland offset.
- » DWS advised that their official guideline for stormwater management needs to be considered for the project.
- » DWS enquired as to why clean water will be contained in dams as the clean water needs to be fed back into the municipal system. DWS advised that Section 21(b) of the National Water Act (NWA) will not be triggered if clean water is stored. DWS requested that motivation be provided for the requirement of the clean water dam.

- » DWS confirmed that Section 21 (g) of the NWA will be triggered by the dirty water retention dams.
- » DWS enquired whether the dirty water will be treated and stored in the retention dam. Eskom advised that the dirty water retention dam is to store stormwater runoff where rainfall falls on the power plant and is contaminated.
- » DWS enquired whether there will be ablution facilities located within the power plant. Eskom advised that ablution facilities will be developed for the power plant.
- » DWS enquired as to which wastewater treatment facility will be used for the disposal of the sewage. Eskom advised that the sewage will be treated at the uMhlathuze Wastewater Treatment Works.
- » DWS advised that it must be confirmed whether the uMhlathuze Wastewater Treatment Works is authorised as DWS will not allow any developments to tie into facilities which are not authorised. It must be verified that the uMhlathuze Wastewater Treatment Works is authorised and a copy of the wastewater treatment works authorisation must be submitted with the Service Level Agreement. Eskom identified the possibility that the uMhlathuze Wastewater Treatment Works is not authorised as a potential risk to the project. Clarity must also be provided by the Wastewater Treatment Works on whether they are treating domestic or industrial effluent, as industrial effluent cannot be treated at the Wastewater Treatment Works. DWS also stated that Service Letter Agreements between the Eskom and Local Municipality will need to be provided for the water supply, sewage disposal and effluent discharge. DWS advised that the Service Letter Agreements need to stipulate whether the Wastewater Treatment Works is authorised, the capacity of the facility, the current capacity and what the capacity will be should the project tie into the facility.
- » DWS enquired whether it will be possible to treat effluent at the power plant. Eskom advised that it will be possible to treat effluent to an appropriate quality in order to release the effluent into the municipal system which releases into the ocean.
- » Savannah Environmental enquired whether a definition for wastewater is available in the NWA. DWS advised that the definition for wastewater can be found in the General Authorisation notices.
- » DWS enquired whether the areas associated with the power plant will be bunded. Eskom confirmed that the areas will be bunded.
- » DWS enquired whether there will be stockpiles on site. Eskom confirmed that there will be no stockpiles on site and that gas will be transported to site via a gas pipeline.
- » DWS advised that a hydrogeological study needs to be undertaken for the WULA. This study considers the interflow of water into the soils and the feeding of the wetlands. DWS also advised that the study must provide an overview of the soils and can make use of the information included in the Soils and Agricultural Potential Impact Assessment.

- » DWS advised that specific documentation will be required for the submission of the WULA. This includes a wetland/hydrology study which includes the function of the wetlands and the risk matrix in terms of GN 509, a geohydrology study, a stormwater management plan which includes the stormwater discharge culvert widths and any crossings, geotechnical study which states whether the soils are suitable for the proposed development, contingency plans, a signed off civil concept design report and layouts, water balance and supporting documents including the financial provisions.
- » DWS advised that the KwaZulu-Natal department does not make use of the E-WULA system and that one (1) hard copy and (1) CD must be submitted for the WULA. DWS advised that the documents must be addressed to Zama Hadebe on the 12<sup>th</sup> floor.
- » Eskom requested whether it will be possible to have a meeting with the DWS once all the documents have been finalised for submission. Eskom explained that the purpose of the meeting is for Eskom to confirm that all documents are correct before the official submission.
- » DWS advised that the timeframe of the WULA will commence on the date of submission of the application and not the date of the pre-application meeting.

It was agreed that the notes for the record would be available to all parties and include the presentation that had been prepared and presented at the meeting. It was agreed that the main issues raised during the meeting is the requirement for the motivation of the implementation of Option 1 in terms of the wetland offset strategy and the sourcing of Service Level Agreement Letters from the local municipality.

Prepared by:

Lisa Opperman

[lisa.o@savannahsa.com](mailto:lisa.o@savannahsa.com)

**APPENDIX A:  
PRESENTATION**

# RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) PROJECT, KWAZULU-NATAL PROVINCE

Water Use License  
DWS Pre-Application Meeting

26 June 2019

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## MEETING AGENDA

1. Purpose of the Meeting
2. Project Progress to Date
3. Scope of Works and Project Overview
4. Key Environmental Findings – Surface Water
5. Water Use License Process
6. Results
7. Way forward

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## PURPOSE OF THE MEETING

- » Undertaken pre-application meeting for the WULA and comply with the meeting request as per DWS comments dated 10 May 2019
- » Provide feedback on the **Environmental Impact Assessment (EIA)** and the **Water Use License process** being undertaken
- » Obtain clarity from DWS on the water licensing process
- » Obtain clarity from DWS on the water uses in terms of Section 21 of the NWA
- » Opportunity to provide valuable input into/to inform the WULA
- » Obtain and record comments for inclusion in the **Final EIA Report** to be submitted to DEA

## PROGRESS UPDATE

ACTIVITIES	NOTES
Scoping Phase	
Final Report & POS submitted to DEA	October 2017
Report accepted & POS approved by DEA	November 2017
Preliminary Wetland Offset Plan	February 2019
Request for Extension of EIA Timeframe (EIA Reg, 2014, as amended, Section 3(7))	
Submission to DEA	January 2018
DEA Refusal	March 2018
Application Lapsed – DEA notification	April 2018
Re-submission of EA Application to DEA	February 2019
Impact Assessment Commencement	
Holding meetings	26 & 27 March 2019
Draft EIAR available for review and comment	24 March 2019 – 26 April 2019

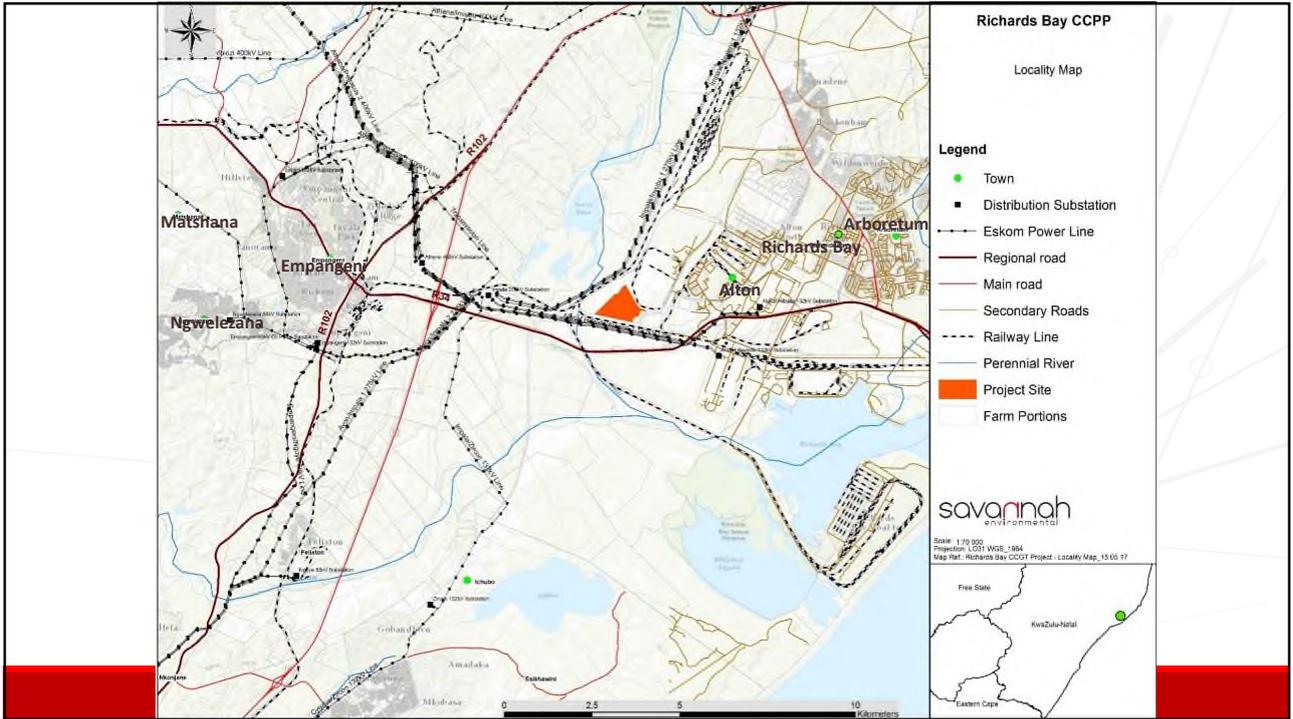
## SCOPE OF WORKS

- » Assessment of the environmental and social impacts  
(all infrastructure within project site boundaries)
- » Recommendation of appropriate mitigation measures
- » Environmental Management Programme
- » WUL Application

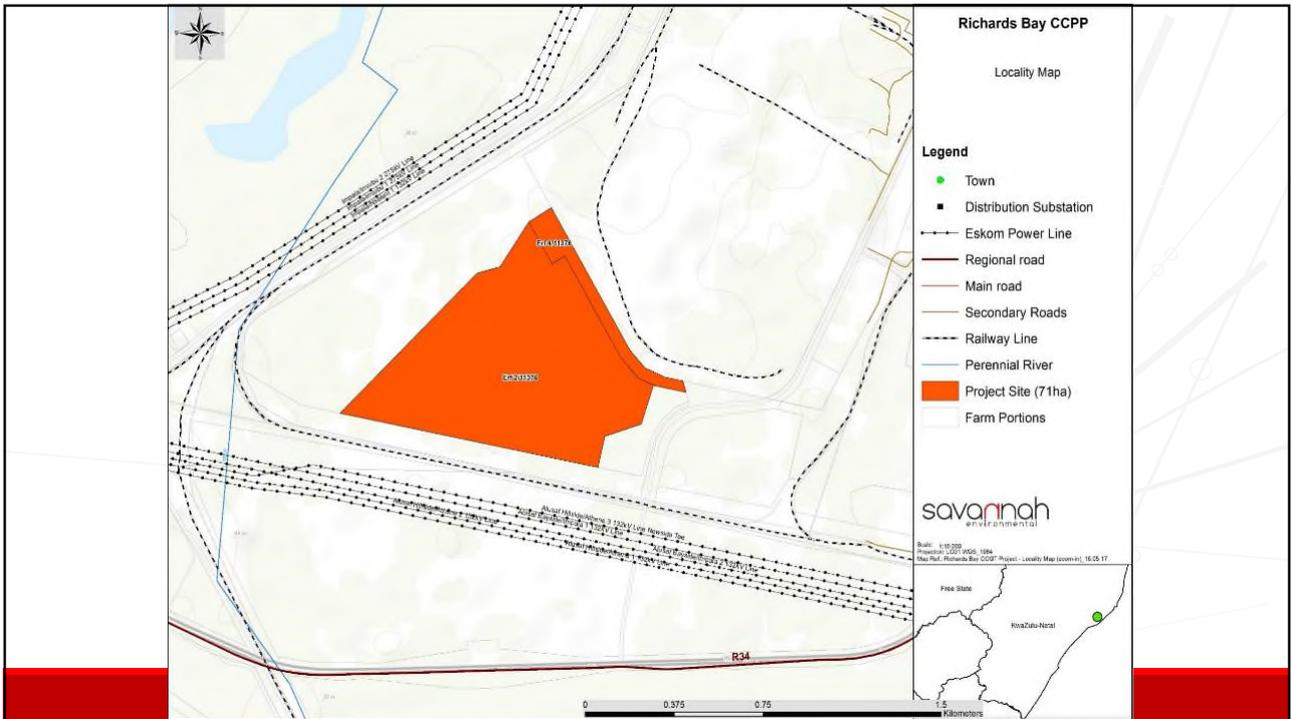
## PROJECT DETAILS

### Richards Bay CCPP

<b>Applicant</b>	Eskom Holdings SOC Ltd (Eskom)
<b>Province</b>	KwaZulu-Natal
<b>District Municipality</b>	King Cetshwayo District Municipality
<b>Local Municipality</b>	City of uMhlathuze Local Municipality
<b>Ward Number</b>	26
<b>Nearest towns</b>	Alton, Richards Bay, Arboretum, Empangeni, Ichubo
<b>Farm name(s) and number(s)</b>	Erf 11376
<b>Portion number(s)</b>	» Portion 2 » Portion 4
<b>Current zoning and land use</b>	The properties are zoned for industrial use (Phase 1D of the Richards Bay IDZ, and are currently used for communal grazing



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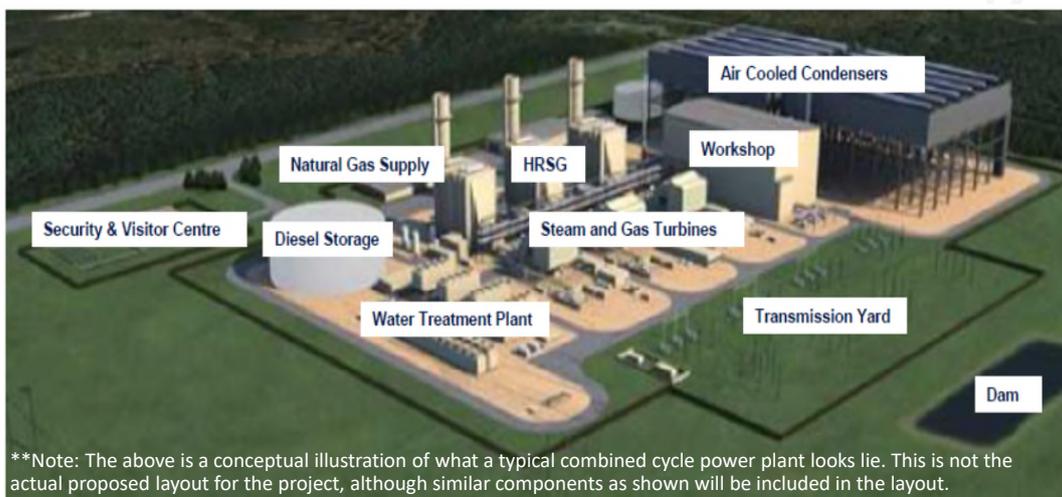
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# TECHNICAL PROJECT DETAILS

## Richards Bay CCPP

<b>Electricity generation capacity</b>	Up to 3000MW (installed)
<b>Proposed technology</b>	Combined Cycle Power Plant (CCPP) with an anticipated configuration of 2:2:1 (Gas Turbine: HRSG: Steam Turbine).
<b>Development footprint</b>	Up to 60ha (CCPP) and up to 11ha (associated infrastructure) - to be developed within the 71ha project site

## TYPICAL CCPP (conceptual schematic presentation)



\*\*Note: The above is a conceptual illustration of what a typical combined cycle power plant looks like. This is not the actual proposed layout for the project, although similar components as shown will be included in the layout.

# MAIN INFRASTRUCTURE

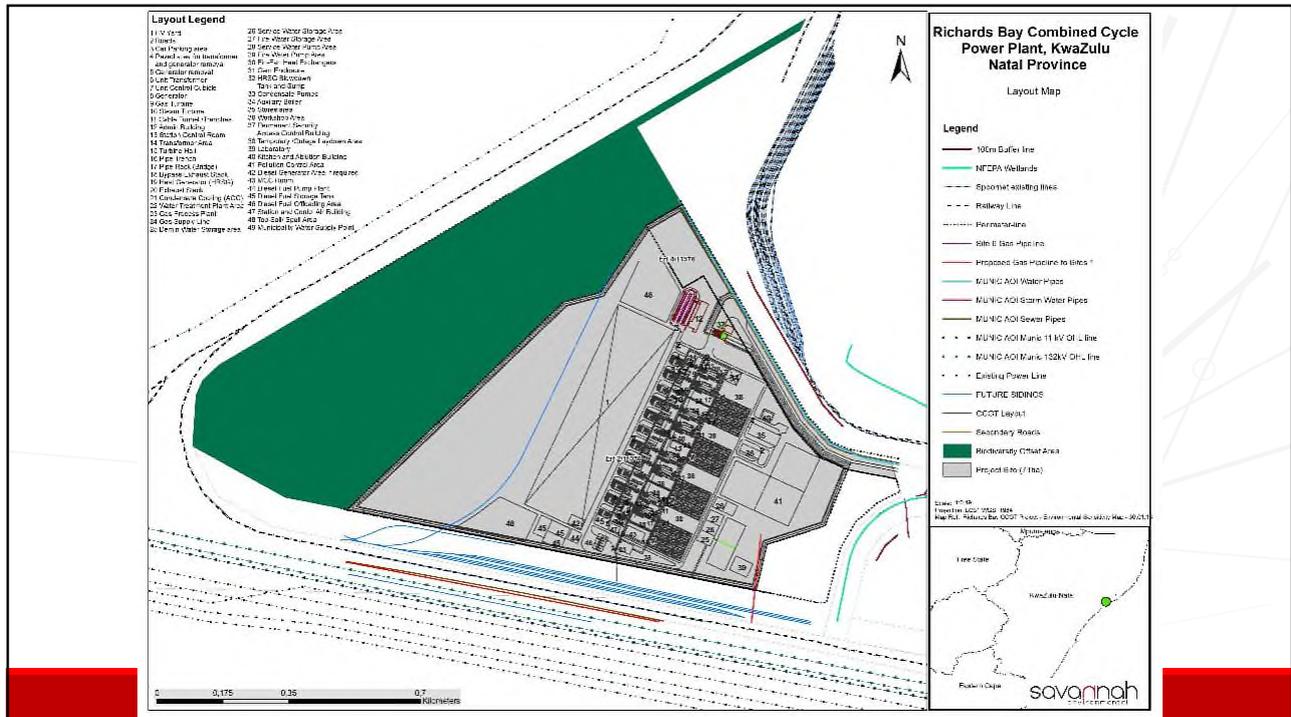
## Richards Bay CCPP Main \*Infrastructure

» Gas turbines	» Water treatment plant
» Heat Recovery Steam Generator	» Water pipelines and water tanks
» Steam turbines	» Dry-cooled system including air-cooled condenser fans
» Bypass stacks	» Closed Fin-fan coolers
» Dirty Water Retention Dams and Clean Water Dams	» Gas infrastructure (from the boundary fence and within the site boundaries only)
» Storm water channels.	» Diesel off-loading facility and storage tanks
» Waste (general and hazardous) storage facilities	» Ancillary infrastructure - access roads, warehousing, buildings, access control facilities and workshop area, storage facilities, emergency back-up generators, firefighting systems, laydown areas, and 132kV & 400kV power lines and associated switchyards
» Exhaust stacks	» A power line (from the boundary fence and within the site boundaries only)

\*Transmission Power Line and Gas Pipe Line outside property boundaries: Separate EIA Processes



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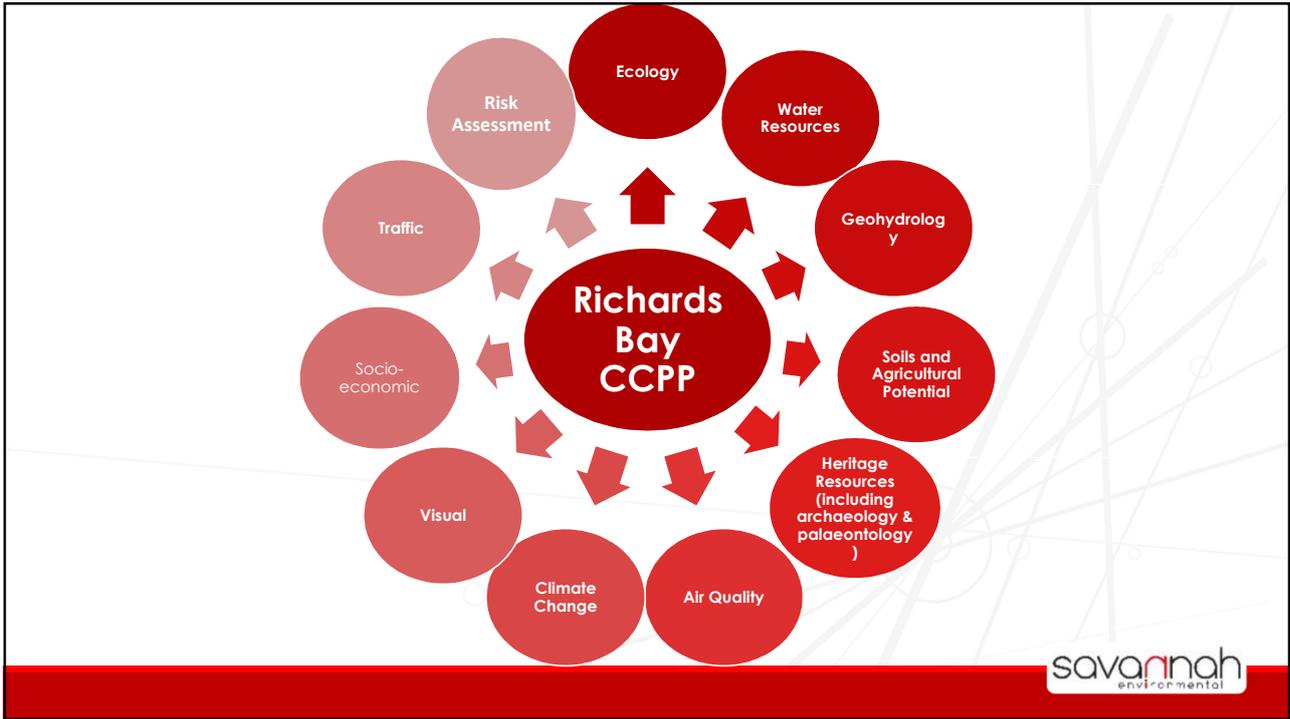
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## **PROJECT-SPECIFIC DETAILS: Construction Activities**

- » Pre-construction surveys
- » Establish access roads
- » Site preparation
- » Laydown areas
- » Construction of foundations and other civil works
- » Mechanical and electrical work
- » Temporary infrastructure

## **PROJECT-SPECIFIC DETAILS: Operation Activities**

- » Maintenance activities
- » Operation of the facility
- » Transportation (including diesel offloading)
- » Administration operations



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## ENVIRONMENTAL IMPACTS ASSOCIATED WITH: Construction Impacts (within development footprint)

### Surface Water Resources:

IMPACT	BEFORE MITIGATION	WITH MITIGATION
Include loss / degradation of wetlands	High (100)	High (100)
Spread of / or establishment of alien and / or invasive plant species	Medium (52)	Low (21)
Sedimentation and erosion of watercourses	Medium (52)	Low (27)
Impaired water quality	High (64)	Medium (39)
Alteration of the hydrological regime	Medium (52)	Low (20)

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# RICHARDS BAY CCPP- RESULTS

- » Specialist findings - no identified environmental fatal flaws.
- » All impacts can be mitigated to acceptable levels or enhanced through the implementation of the recommended mitigation or enhancement measures.
- » Impacts on wetlands cannot be avoided, approval of a wetland offset plan will be required,

# WATER USE LICENSE PROCESS

**WULA required in terms of Section 21 of the National Water Act, 1998 (Act No. 36 of 1998)**

- Water uses identified to be applied for:
  - » (a) taking water from a water resource – removal of underground water in order to construct
  - » (b) storing water – clean and dirty water retention dams
  - » (c) impeding or diverting the flow of water in a watercourse – construction on wetlands
  - » (g) disposing of waste in a manner which may detrimentally impact on a water resource – clean and dirty water retention dams
  - » (i) altering the bed, bank, course and characteristics of a watercourse – construction on wetlands
  - » (j) removing, discharging and disposing of water found underground if it is necessary for the continuation of an activity or for the safety of people – removal of underground water in order to construct

## WAY FORWARD

- » Distribute meeting minutes to all attendees
- » Consider the comments and comply with the requirements made by DWS for the WULA process
- » Commence with WULA process on EWULA system

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## PLEASE DIRECT COMMENTS TO:

**Nicolene Venter: Savannah Environmental**

**t:** +27 (0)11 656 3237

**f:** +27 (0)86 684 0547

**e:** [publicprocess@savannahsa.com](mailto:publicprocess@savannahsa.com)

**w:** [www.savannahsa.com](http://www.savannahsa.com)

**a:** First Floor, Block 2, 5 Woodlands Drive Office Park  
Cnr Woodlands Drive & Western Service Road  
Woodmead, 2191

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**APPENDIX B:  
DWS COMMENTS ON THE EIA REPORT**



## water & sanitation

Department:  
Water and Sanitation  
REPUBLIC OF SOUTH AFRICA

P.O. Box 1018, Durban, 4000. 88 Joe Slovo Street, Southern Life Building, Durban, 4001  
Tel: (031) 336 2700, Fax: (031) 305 9915, [www.dws.gov.za](http://www.dws.gov.za)

Savannah Environmental  
P. O. Box 148  
Sunninghill  
2157  
10 May 2019

Enq : Ms Lwandle Sibango  
Ref No: 16/2/7/W12F/D1  
DEA Ref : 14/12/16/3/3/2/1027

### ATTENTION: Ms Nicolene Venter

Dear Madam

### RE: ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR): RICHARDS BAY COMBINED CYCLE POWER PLANT (CCPP) PROJECT WITHIN UMHLATHUZE LOCAL MUNICIPALITY

Reference is made to the Environmental Impact Assessment Report (EIAR) with reference: 14/12/16/3/3/2/1027, received by the Department of Water and Sanitation (Department). This Department has the following comments:

#### (A) SPECIFIC COMMENTS

1. Reference is made to:

- (a) Page 1 of this EIAR which states that the during the impact phase by independent wetland and biodiversity specialist investigations on site, it was concluded that a wetland offset plan would be required to address significant residual impacts ...;
- (b) Page 3 of this EIAR which states that the main infrastructure associated with the facility includes, amongst others,
  - Dirty Water Retention dam and Clean Water Dams;
  - Storm water channels ;
  - A water treatment plant...;
- (c) Page 10 of this EIAR which states that some wetland features are located within the project site. The wetlands located within the project site are considered to be in a largely natural state and are ecologically important;
- (d) Page 68 - 69 of this EIAR (Table 6.3) which lists water uses associated with the proposed project, identified in terms of the National Water Act (NWA) which require authorisation;

(e) Page 87 - 103 of this EIAR (Table 6.8): a review of legislative requirements applicable to the proposed development, which identified activities triggered in terms of the National Water Act (NWA).

1.1. The Applicant is reminded (as stated in our letter dated 18 Sept 2017) that the above statements clearly confirm that this project must be authorised by this office in terms of Section 21 of the National Water Act (NWA).

1.2. It is the responsibility of the Applicant to identify all water uses applicable to the activity in terms of Section 21 of the NWA.

1.3. The Applicant is reminded to contact the Department's Licensing Administrator, Ms Zama Hadebe, (031 336 2767/2700) for a Pre- Water Use Authorisation meeting. Such a meeting will assist to determine all water uses requiring authorisation and provide guidance on the requirements in this regard.

2. Reference is made to:

(a) Page 24 of this EIAR which states that water – potable water is to be sourced from the uMhlatuze Municipality Water Works;

(b) Page 25 of this EIAR which states that water of industrial quality will be provided by the municipality ...;

(c) Page 24 of this EIAR which states that sanitation – during construction and operation of the Richards Bay CCPP a connection to the municipal sewer pipeline will be established for sanitation purposes at the plant;

(d) Page 25 of this EIAR which states that waste water from the plant will be discharged to the municipal system;

(e) Page 25 of this EIAR which states that waste water produced from the CCPP will be generated from the demineralised water treatment system, Boiler Blowdown Recovery System and the Condensate Polisher System. The waste water will be neutralised before discharge to the municipality;

(f) Page 25 of this EIAR which states that waste water containing oil will include waste water from ground-run-offs, and therefore the effluent is expected to contain grit and silt. An oil separator will be installed and a secondary oil water separator will be required to refine the waste water prior to discharging it to the local municipality sewage treatment plant.

2.1. This Department reiterates the request indicated in our letter dated 18 Sept 2017 that the Applicant is required to provide this office with a Service Level Agreement (SLA) between the project proponent and the Water Services Authority that will provide the services. Such a SLA should include, amongst others,

2.1.1. Confirmation of sustainability of potable and industrial water services i.e. capacity of

the source and supporting infrastructure.

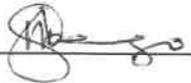
- 2.1.2. Confirmation of sustainability of waste water services: capacity of supporting infrastructure (pipelines, manholes, pump stations, etc) to withstand both anticipated quantities above and additional quantities.

N.B.

The applicant is reminded that since this development, parts of it, and its infrastructure are located within the regulated area then this project must be authorised by this department prior to commencement of the activity. Therefore the applicant is required to apply for a Water Use Licence as the activity will not be a permissible water use as stipulated in Section 22 of the National Water Act, Act 36 of 1998.

A regulated area is an area within 1:100 year floodline or within a horizontal distance of 100m (whichever is greatest) of a watercourse in terms of the National Water Act, Act 36 of 1998 and an area within 500m radius from a boundary of a wetland in terms of the General Authorisation No 509 of 27 July 2016.

Notwithstanding the above, the responsibility rests with the Applicant to identify any source or potential source of pollution from his undertaking and to take appropriate measures to prevent any pollution of the environment. Failure to comply with the requirements of the National Water Act (Act 36 of 1998) could lead to legal action being instituted against the Applicant.

 10 MAY 2019

For REGIONAL HEAD: KWAZULU NATAL

LLLS/llls 16725