

# Warren Kok



<b>Name of firm</b>	<b>Zitholele Consulting</b>
<b>Profession</b>	<b>Divisional Leader: Environmental Management Services</b>
<b>Specialisation</b>	<b>Environmental and Social Impact Assessment / Management Planning, Public Participation, and GIS</b>
<b>No. of years with firm</b>	<b>2 years</b>
<b>Nationality</b>	<b>South African, ID No. 780104 5014 085</b>

<b>Key Experience</b>	Warren has in excess of 12 years experience in environmental management consulting in South Africa. The majority of his work experience has been gained in the mining sector in South Africa, where he has been responsible for undertaking and managing Integrated Environmental Authorisation Processes. Warren has successfully undertaken numerous integrated EIA processes that require integration of the MPRDA, NEM:WA, WULA and NEMA regulatory processes. Many of these projects are considered landmark projects in South Africa's environmental mining sector and included several hazardous waste facilities.
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<b>Professional Registrations</b>	Certified Environmental Assessment Practitioner ([ICB], 2004; CBEAPSA). International Association of Impact Assessment (Since 2000).
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<b>Education</b>	BA Honours, Geography and Environmental Management	RAU	2000
	BA Humanities, Geography and Environment Management and Psychology	RAU	1999

<b>Employment Record</b>		
2011 - Present	Zitholele Consulting	Divisional Head: Environmental Management
2009 – 2011	Phoenix Environmental and Social Consulting Services	Member
2004 – 2009	Cymbian Enviro-Social Consulting Services	Director
2000 – 2004	Oryx Environmental	Senior Environmental Consultant
2000	Matrix Environmental	Junior Environmental Consultant

## Project Experience

### Mining Projects

#### Anglo Coal

#### Mpumalanga Province, South Africa

Environmental Impact Assessment and Water Use License application for the Syferfontein and Kriel Dragline Relocations. This project was the first of its kind in South Africa. The total project value exceeded a billion Rand's once completed, and consisted of relocating three draglines across the Highveld Coal Field.

Each dragline weighs more than 3500 tonnes. The mining programmes, construction schedule, route alignment, and rehabilitation of the three dragline walkway's had to be carefully synchronised across two mining houses, three mining operations, five government departments, two construction companies, and limited by seasonal changes. I was the senior environmental assessment practitioner, responsible for conducting the EIA, compile the authorisation reports, sourcing and managing specialist consultants, undertaking the stakeholder engagement, client liaison, and compliance auditing during the construction and rehabilitation phases of the project. I was also the appointed project manager responsible for budget controlling, progress reporting, and adherence to schedules and time lines.

### **Sasol Mining**

### **Mpumalanga Province, South Africa**

Environmental Impact Assessment and amendment of the Environmental Management Programme Report (EMPR) for the Syferfontein Mining Operation for the upgrade of the existing coal conveyor from the Syferfontein Mine to the Sasol Mining Coal Yard at Secunda. I was the environmental practitioner responsible for conducting the EIA, stakeholder engagement, appointment and management of specialists, and walking the project through the authorisation process. I was also the appointed project manager responsible for budget controlling, progress reporting, and adherence to schedules and time lines.

### **Anglo Coal**

### **Mpumalanga Province, South Africa**

Environmental Impact Assessment and compilation of the Environmental Management Programme Report (EMPR) for the Arnot North Coal Mining Operation. This was a green-fields coal strip mining operations project. I was the responsible environmental assessment practitioner and project manager. I was responsible for sourcing, appointing and managing a project team across all necessary disciplines, and producing the EMPR for mining and environmental authorisation / licensing purposes. The strip mine was 900ha in size and formed the initial phase of what is now the Mufube Coal mining operation. I was also the appointed project manager responsible for budget controlling, progress reporting, and adherence to schedules and time lines.

### **Anglo Coal & Ingwe Collieries**

### **Mpumalanga Province, South Africa**

Environmental Impact Assessment and Environmental Management Programme Report (EMPR) amendment for the Emalahleni Water Reclamation Project. A joint initiative by Anglo Coal and Ingwe Collieries to address the treatment of 20 mega litres per day of polluted groundwater for reuse as potable water and supplement municipal water supplies in the Witbank Municipality. This project was the first of it's kind in South Africa, and has been considered for many awards within the environmental community in South Africa. The project is now expanding into it's second phase, and will be doubled in size. Making it one of the largest mine water treatment plants in the world treating in excess of 40 Ml of water per day for reuse in by a local municipality. I was the responsible environmental assessment practitioner and project manager. I was responsible for sourcing, appointing and managing a project team across all necessary disciplines, and producing the EIA and amending the EMPR for all three affected mining areas. I was responsible for walking the project through the environmental authorisation / licensing process and then for the compliance auditing during the construction phase.

## Other Mining Projects

## Various Locations, South Africa

- *Air Quality Impact Analysis Study:* Air quality impact analysis of Sulphur Dioxide from the Impala Platinum Mine Smelter near Rustenburg, North West Province, South Africa.
- *Samancor Manganese, Metalloys – Metal Recovery and Slag Processing Plant (Meyerton, South Africa):* Environmental Impact Assessment for the proposed Metal Recovery and Slag Processing Plant (MRSPP) at Metalloys. On this project I was the Principal Environmental Assessment Practitioner responsible for conducting the EIA, compiling the authorisation reports, sourcing and managing specialist consultants, and undertaking the stakeholder engagement.
- *Kleinkopje Dragline Relocation Project:* Section 21 (i) License application for the temporary alteration of the streambed and banks of the Olifants and Klein Olifants Rivers for a Dragline Walkway.
- *Rietspruit Dragline Relocation Project:* Scoping and Environmental Impact Report for a dragline walkway from the Rietspruit Colliery to the proposed Klipspruit Colliery near Ogies. Undertaken for Xtrata Coal.
- *C-Cut Feasibility Study:* Feasibility study for the C-Cut development of Cullinan Diamond Mine. The proposed C-Cut will extend the Cullinan Diamond Mine by another 50 years. The mine is currently in excess of 100 years old and still in active mining. The largest diamond in the world has been found at Cullinan Diamond Mine.
- *CDM EMPR Gap Analysis Study:* Gap analysis of the Cullinan Diamond Mine EMPR to determine the requirements for updating the EMPR as a result of the change in mine plan, and promulgation of the new Mining Regulations.
- *CDM EMPR Project:* Revision and compilation of an EMP for Cullinan Diamond mine aligned to the requirements of the Minerals Petroleum Resources Development Act.
- *Oaks Closure Plan:* Preliminary Closure Plan for The Oaks Diamond Mine. This project was the first of its kind, putting into practice the most recent closure planning requirements of the Minerals and Petroleum Resources Development Act of South Africa. The process was pilot study for the Anglo American plc (AAplc) Closure Planning process, now being rolled out internationally by AAplc.

## Electrical Projects

### Eskom (Bravo Project)

### Mpumalanga and KwaZulu-Natal Provinces, South Africa

As part of Eskom's Build Programme, a new 6000MW Power Station is being constructed in the Mpumalanga Province of South Africa. In order to accommodate the power station the South African National Power Grid required strengthening. The Bravo Project covered the construction of five (5) high voltage (765kV) power lines across the Mpumalanga and KwaZulu Natal Provinces of South Africa. Each power line required its own individual EIA report, however, a single overarching stakeholder engagement programme had to be undertaken. The project was complex due to the vast distances it had to cover, the various environments affected, and the strategic importance of the project not excluding. On this project I was the Principal Environmental Assessment Practitioner and Programme Director. I was responsible for overseeing all aspects of the project including individual consultants responsible for compiling the reports, appointment of specialist and management of specialist team, overseeing public participation activities, and facilitating meetings, client liaison, and authority consultation.

### Eskom (Camden-Mbewu)

### Mpumalanga and KwaZulu-Natal Provinces, South Africa

For this project the consultant had to undertake a Scoping and EIA process for the authorisation of a 765kV transmission line in excess of 300km, extending from Camden Power station in Mpumalanga Province, to the new Mbewu substation near Empangeni in the KwaZulu-Natal Province in South Africa. On this project I was the Project Director and Reviewer responsible for ensuring compliance to legislation.

## **Other Electrical Installation Projects**

## **Various Locations, South Africa**

- *Dalkieth Power Line Project:* Principal Environmental Assessment Practitioner and Project Manager for the consulting team responsible for obtaining the Environmental Authorisations for the new Dalkieth power line and substation installation to improve Joburg City Power's power distribution on the West Rand.
- *Springs Power Line Project:* Compilation of an Environmental Management Plan for the construction phase of the power line.
- *Solar Park Integration Project:* A Scoping and Environmental Impact Assessment project for the integration of the proposed 100MW Solar Park into the National Grid of South Africa. The project consists of two 400kV power lines and substations (each requiring their own EIA Report) and two 132kv power lines, and one substation (each requiring a Basic Assessment Report). A single integrated stakeholder engagement process is being undertaken for all five projects.

## **Environmental Management Systems, Compliance Monitoring and Auditing**

### **Anglo Coal**

### **Mpumalanga Province, South Africa**

Development of an Environmental Management System for implementation on the Syferfontein and Kriel Dragline Relocation Project. Followed by the regular auditing and compliance monitoring to the EMS as part of the construction and rehabilitation phases of the project.

### **Anglo Coal**

### **Mpumalanga Province, South Africa**

Acting Environmental Control Officer for the Emalhleni Water Reclamation Project.

### **De Beers SA**

### **Gauteng Province, South Africa**

Legal Compliance Audit for De Beers CHQ including design of electronic database.

### **Protea Chemicals**

### **Gauteng Province, South Africa**

Risk assessment and aspect identification for four (4) Protea Chemical Sites.

### **De Beers SA – Venetia Diamond Mine**

### **Limpopo Province, South Africa**

Internal compliance auditing for the ISO 14001 Environmental Management System at Venetia Diamond Mine.

## **Development Projects**

### **Viva Construction**

### **Gauteng Province, South Africa**

Environmental Impact Assessment and Water Use License Application for the development of Teak Place, a sustainable micro-community development located in the buffer zone of the Cradle of Humankind World Heritage Site. This development is the only township establishment project approved uncontested by all stakeholders and authorities within the management area of the Cradle of Humankind World Heritage Site. This project has contributed to the eradication of unemployment of the ward area in which it is located, and has ensured the entitlement of land to formerly disadvantaged, landless, unemployed citizens within the ward district. This project has since become the model against which all developments within the Cradle of Humankind management area are evaluated. On this project I was the Principal Environmental Assessment Practitioner responsible for conducting the EIA, compiling the authorisation reports, sourcing and managing specialist consultants, undertaking the stakeholder engagement, client liaison, and compliance auditing during the construction and rehabilitation phases of the project. I was also the appointed project manager responsible for budget controlling, progress reporting, and adherence to schedules and time lines.

## **Other Development Projects**

## **Various Locations, South Africa**

- *Pala Meetse Project:* Environmental Impact Assessment and Water Use License Application for the Pala Meetse Eco Reserve development, Nylstroom, Limpopo Province. .
- *Noordheuwel Ext 17 and 19 Project:* Environmental Impact Assessment for the residential development of Noordheuwel Ext 17 and Ext 19, Krugersdorp, Gauteng Province South Africa.

## **Waste and Incineration Projects**

### **Kimberly-Clarke – Enstra Paper Mill**

### **Gauteng Province, South Africa**

Scoping and Initial Impact Assessment of the potential Biophysical Impacts of a Multi-fuel Incinerator at Kimberly-Clark Enstra Paper Mill. On this project I was the Principal Environmental Assessment Practitioner responsible for conducting the EIA, compiling the authorisation reports, sourcing and managing specialist consultants, undertaking the stakeholder engagement, client liaison, and compliance auditing during the construction and rehabilitation phases of the project. I was also the appointed project manager responsible for budget controlling, progress reporting, and adherence to schedules and time lines.

### **Eskom – Kusile 60 year Ash Disposal Facility**

### **Mpumalanga Province, South Africa**

Scoping and Environmental Impact Assessment for the proposed 60 year ash disposal facility for the new Kusile Power Station. The facility will be approximately 1500ha in size. The project includes all the engineering design, site selection and social and environmental impact assessment for the proposed facility. On this project I was the Principal Environmental Assessment Practitioner and Project Director responsible for conducting the EIA, reviewing the authorisation reports, sourcing and managing specialist consultants, undertaking the stakeholder engagement, and client liaison. I am responsible for quality assurance, legal compliance, and supporting the project manager and project team.

## **Other Waste Projects**

## **Various Locations, South Africa**

- *Camden Ash Disposal Facility:* Environmental Impact Assessment for the 10 year expansion to the existing Camden Ash Disposal Facility, Mpumalanga Province – South Africa.
- *Devon Land Fill Site:* Environmental Impact Assessment for the closure of the existing Devon General Waste Landfill Site, and siting and Environmental Impact Assessment for the proposed replacement Devon Landfill Site, Gauteng Province – South Africa.
- *CDM Waste Landfill Site:* Environmental Impact Assessment for the three existing waste disposal sites located within Cullinan Mine, Gauteng Province – South Africa.

## **Geographic Information System (GIS) Projects**

- Three dimensional modelling and surface analysis of contours for a new coal mine located near Arnot.
- Collation, management, and mapping of all spatial information; and the determination and spatial analysis of land use over the study area for the combined Sasol-Anglo: Kriel South Mining Project.
- Collation, management, and mapping of all spatial information; and the determination and spatial analysis of land use for the Middelbult Block 8 Underground Coal Mine Expansion Project.
- Mapping and spatial analysis of socio-economic indicators for the SIA of the Block 8 Middelbult Underground Coal Mine Expansion Project.
- Collation, management, and mapping of all spatial information; and the determination and spatial analysis of land use for the Ingwe Klipspruit Project.
- Baseline environment mapping; spatial information collation and management; and the route selection and raster overlay analysis of a dragline walkway route from Rietspruit Colliery to the proposed Klipspruit Strip mine near Ogies.
- Baseline environment mapping; spatial information collation and management; and the route selection and analysis of a dragline walkway route from Syferfontein Colliery to Kleinkopje Colliery.
- Supervision and management of the GIS for the Elders-Goedeheop extension, Kriel Block 2 and 3, and the Kriel Block F projects.
- Supervision and management of the GIS for the Syferfontein Mine Addendum.

### **Energy Efficiency and Housing Studies**

- United States Agency for International Development - Initiative on Energy Efficient Housing in South Africa.
- Green Building Design Evaluation and Environmental Impact Assessment Screening Report for the proposed new Regional Office Facilities within the Kruger National Park.

### **Socio Economic Studies Projects**

- Social Impact Assessment of the Sasol Block 8 Middelbult Underground Coal Mine Expansion Project.

### **Tourism Projects**

- Strategic Environmental Assessment for the proposed new tented safari camp product for the Kruger National Park.
- Tourism Asset Assessment and Strategic Assessment for the Conservation Management Plan of the Kruger National Park.

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### **Papers, publications and presentations**

None