

CURRICULUM VITAE

Name:	Cheyenne Muthukarapan
Nationality:	South African
Date of Birth:	3 January 1992
Profession:	Environmental Scientist
Professional Qualification/ Training:	B.S.c Environmental and Geographical Sciences; University of Cape Town
	Advanced Diploma Business Project Management; University of Cape Town
	Master's in Business Administration; European Business School (in progress)
	ArcGIS Working with imagery - online course, ESRI South Africa, 2017
	ArcGIS Geo-mapping - online course, ESRI South Africa, 2017
	IFC Environmental and Social Risk Management Training for Financial Institutions
Current Employer:	Environmental Impact Management Services (Pty) Ltd.

KEY EXPERIENCE

Ms Cheyenne Muthukarapan holds a Bachelor of Science degree in Environmental and Geographical Science from the University of Cape Town and an Advanced Diploma in Business Project Management from the University of Cape Town. Her expertise lies in public consultation/participation processes and sustainability consulting. She has participated in numerous public/stakeholder consultations in relation to environmental impacts, and the formulation of sustainable solutions to various environmental problems.

CAREER SUMMARY

Period: November 2016 - Current	Organisation: EIMS	Position: Junior Environmental Scientist
Key Projects/Assignments	<ul style="list-style-type: none"> • Consultant for the Sasol Secunda Plant Air Quality Education and Awareness Project as part of the offset programme required by the plants Air Emissions License; • Environmental and Sustainability consultant to Arup (Pty) Ltd for the Thabametsi Coal IPP (Lenders technical advisory team); • Consultant to the IDC for the Development of Sustainability Appraisal Framework; 	

	<ul style="list-style-type: none"> • Consultant for the Lesotho Ministry of Social Development for the development of the Lesotho Livelihood Project Environmental and Social Management Framework; • Consultant to the Department of Energy for the Development of the Department of Energy's Environmental Management Plan 2014-2019 • Public Participation Consultant for the Sasol Air Quality Matters Public Participation sessions; • Environmental Management Plans update for EMPR for Harmony Gold. • Public Participation Specialist for Anker Coal Prospecting Right Renewal Application and Environmental Management Plan Update (Mpumalanga); • Public Participation Specialist for the City of Ekurhuleni Wetland and Watercourse Rehabilitation Project for the Kaalspruit, Rietspruit and Rietvlei Catchments; • Public Participation Specialist for Manungu Colliery Project (Delams); • Public Participation Specialist for Vlakvarkfontein Coal Mine Project (Ogies); • Public Participation Specialist for the Kangala Coal Mine Extension Project (Delmas); • Compilation of a Site and Retail Licence Application; • Public Participation Consultant for EcoRevert Pyrolysis Plant and Refinery (Gauteng); • Public Participation Consultant for Motuoane Hennenman Natural Gas Exploration Right (Free State); • Public Participation Consultant for the Harmony Hill Township Establishment (Sabie) • Public Participation Consultant for Pembani Coal Carolina (Carolina); • Public Participation Consultant for S. Bothma and Son Transport Sand Mine (Sasolburg); • Public Participation Consultant for Laudem Mining and Industrial Services (Pty) Ltd. Sand Mine (Free State); • Public Participation Consultant for Lothtech (Pty) Ltd. (Wynberg)
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LANGUAGE CAPABILITY

Language	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Average	Good	Average

DECLARATION

I confirm that the above information contained in the CV is an accurate description of my experience and qualifications at the time of signature.



Date

CURRICULUM VITAE

Name:	Brian Peter Whitfield
Nationality:	South African
Date of Birth:	20 October 1977
Profession:	Environmental Scientist
Professional Qualification/ Training:	BSc (Botany and Zoology); University of the Witwatersrand, 1998 BSc Honours (Botany); University of the Witwatersrand, 1999
Professional Membership/ Registrations:	Registered Professional Natural Scientist (SACNASP- #400447/13).
Current Employer:	Environmental Impact Management Services (Pty) Ltd.

KEY EXPERIENCE

Brian is a senior project manager at EIMS and has been involved in numerous significant projects over the past 16 years he has been with the company. He holds a BSc (Botany and Zoology) and a BSc Honours degree in Botany from the University of the Witwatersrand. Brian is a registered professional natural scientist with the South African Council for Natural Scientific Professions. Brian's broad range of experience includes managing and/or undertaking projects in various sectors, including Energy, Mining, Oil and Gas, Water and Infrastructure. Brian's other experience includes Site Assessments, Water-use licensing, Environmental Monitoring and Auditing, Due Diligence Assessments, Competent Persons Reporting, Environmental Management Plans and Strategic Environmental Assessments.

CAREER SUMMARY

Period: May 2014 - Current	Organisation: EIMS	Position: Senior Environmental Consultant, Project Manager and Quality Reviewer
Key Projects/Assignments	Managed and/or undertook the following projects: <ul style="list-style-type: none"> • Ilima Colliery EIR/EMPR Amendment Application • Manungu Coal Mine Expansion (EIA, WML, IWUL) • Tetra4 Evander Exploration Right Application • Tetra4 Virginia Regional General Authorisation • Menar Kookfontein Prospecting Right Application • Sungu Sungu Dannhauser Oil and Gas Exploration Application • Sungu Sungu ER313 Oil and Gas Exploration Application 	



	<ul style="list-style-type: none"> • Eskom Real Estate (ERE) Waste Management Plan • Eskom Dolos Giraffe Substation BA • PH Bagale Lichtenburg Hospital BA • Old Mutual Properties Zonkizizwe Township Development EMP and Advisory Services • Continental Coal Ferreira Mine Internal Annual Audit • Pembani Mine External Annual Audit • Cennergi Tsitsikamma Community Wind Farm Annual External Audit (including IFC/World Bank compliance) • Cennergi Amakala Emoyeni Wind Farm Annual External Audit (including IFC/World Bank compliance) • Old Mutual Properties Zonkizizwe Township Substation Construction • Eskom Wittekleibosch Powerline and Substation Construction Audits • Eskom Dedisa Grassridge Powerline Construction Audits • Various audits for Eskom Power Stations 	
Period: August 2012 – May 2014	Organisation: EIMS (Secondment to Transnet)	Position: Transnet Capital Projects Environmental Manager
Key Projects/Assignments	<p>Transnet Capital Projects (TCP) Environmental Manager on the New Multi-Product Pipeline (NMPP) Project under the umbrella of the Centre of Excellence. The project included the following aspects:</p> <ul style="list-style-type: none"> • Pipeline 1: 554km of pipeline construction (30m wide servitude) from Durban Harbour (Island View) to Heidelberg (Gauteng) including construction of 2 Terminals, 3 Pump Stations and 2 Metering Stations. • Pipeline 2&3: 72km of Pipeline construction (30m wide servitude) from Jameson Park Terminal (Gauteng) via Alrode Terminal to Langlaagte Depot (Gauteng). • Pipeline 4: 89km of Pipeline construction (30m wide servitude) from Kendal Power Station (Mpumalanga) to Waltloo Terminal (Gauteng). <p><u>Responsibilities:</u> The following responsibilities applied to this position:</p> <ul style="list-style-type: none"> • Develop and implement a plan and strategy to address the closeout of environmental components of the project. • Facilitate, co-ordinate and manage the environmental closeout and handover process of the project: 	



	<ul style="list-style-type: none"> ○ Facilitate the environmental execution of the reinstatement and rehabilitation of the Right of Way servitude (Wetland, erosion, grassing, etc); ○ Manage and ensure the landowner signoff of each property that has been obtained; ○ Ensure that all the required documents for handover have been prepared and are ready for handover to Transnet Pipelines (TPL); ○ Ensure all environmental risks are captured on the risk register and that all risks are mitigated and closed out; ○ Ensure that all actions from Community Liaison Forums (CLF's) and any other meetings are closed out. <ul style="list-style-type: none"> ● Plan, monitor and control the allocated budget. ● Ensure compliance with all conditions of the Environmental Authorisation (EA), permits, licenses, etc. ● Oversee the environmental performance of all contractors: <ul style="list-style-type: none"> ○ Ensure that all relevant information is shared with the contractor; ○ Ensure quality control of all environmental services. ● Visit and check all sites to ensure that the work is being undertaken as required by the EA and Environmental Management Plan (EMP). ● Facilitate environmental communication and engagement with internal and external stakeholders: <ul style="list-style-type: none"> ○ Interface with Interested and Affected Parties (I&AP's) where required; ○ Chair and facilitate regular feedback meetings with TPL and the environmental team; ○ Liaise with Government Departments as required; ○ Regularly meet with the Project Directors of the various teams on the project to ensure that environmental management is being adequately addressed. ● Provide the necessary environmental input into designs, plans, etc. ● Prepare environmental opinions and interpretations as and when required. ● Sign off all Independent Environmental Audit reports. ● Prepare and submit monthly progress and cost reports to various Executive Committee Members. ● Support and manage the environmental team.
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Period: 19 May 2008 to 31 July 2012	Organisation: EIMS	Position: ECO Manager and Independent Environmental Auditor to the Transnet NMPP Project
Key Projects/Assignments	<p><u>Responsibilities:</u></p> <ul style="list-style-type: none"> • Manage team of Environmental Control Officers (10 individuals at peak of project construction) as well as acting as Independent Auditor during period of the project. • Assist with all permits and applications where applicable on the project e.g.: borrow pits, water use licenses (WUL), etc. including but not limited to: <ul style="list-style-type: none"> ○ The compilation of 40 borrow pit (mining permit) applications with 9 permits issued (others cancelled for various reasons). Closure applications for the 9 permits have additionally been undertaken. • Educate the construction team about the management measures of the EMP's and ROD's/EA's. • Regular liaison with the construction team and the project leader. • Recommend corrective action for any non-compliance incidents on the construction site. • Consult with the I&AP's and the contractor where required by the EMP. • Comment on damage claims from the public. • Notify affected parties of changes to the construction programme should they be involved. • Ensure open communication channels between the affected parties and the contractor and respond promptly to queries and claims. • Develop a monitoring and auditing programme which is implemented for the duration of the construction phase of the project to monitor compliance with the conditions of the EMP's and RoD's/EA's. The management of this programme includes: <ul style="list-style-type: none"> ○ Ensure ECO's conduct daily audits in identified sensitive areas; ○ Ensure ECO's conduct weekly audits in their respective areas; ○ Compilation of a monthly audit report with a rating of the compliance with the EMP. This report is submitted to the relevant competent authorities including: <ul style="list-style-type: none"> ▪ Department of Environmental Affairs (DEA); ▪ Gauteng Department of Agriculture and Rural Development (GDARD); ▪ Department of Water Affairs (DWA – National). ○ Ensure ECO's keep a photographic record of any damage to areas outside the demarcated site area. The date, time of damage, type of 	



	<p>damage and reason for the damage is recorded in full to ensure the responsible party is held liable;</p> <ul style="list-style-type: none"> ○ Provide ad hoc advise and clarification on compliance issues to the responsible contractor; ○ Maintain records of compliance / non-compliance with the conditions of the authorizations and make available to competent authorities on request; ○ Assist the contractors in the identification of suitable contractors camp sites and delineation of environmental sensitive areas; ○ Review and approval of Environmental Awareness Training to be undertaken by the contractors or other suitable service providers. 	
Period: July 2004 to 19 May 2008	Organisation: EIMS	Position: Environmental Consultant
Key Projects/Assignments	Was involved in and managed numerous projects during this time. A detailed list can be provided on request.	

LANGUAGE CAPABILITY

Language	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Good	Good	Good

DECLARATION

I confirm that the above information contained in the CV is an accurate description of my experience and qualifications and that, at the time of signature.

Signature of Staff Member

2020-10-19

Date