

## APPENDIX A: EAP EXPERIENCE

## CURRICULUM VITAE

CHANÉ PRETORIUS

### ENVIRONMENTAL SPECIALIST

#### BACKGROUND

Chané is an environmental specialist at ABS Africa.

She has 5 years' experience in coordinating and managing various environmental studies in the mining and energy sectors.

Her key experience includes the management and compilation of local and international Environmental and Social Impact Assessments, in compliance with in-country and international standards. She has undertaken projects in South Africa, Zimbabwe, DRC, Mozambique, Mali and Ghana.

#### FIELDS OF COMPETENCE

- Environmental and Social Impact Assessments
- Environmental Auditing
- Project Management
- Fatal Flaw Assessments
- Pre-feasibility Assessments
- Environmental Due Diligence
- Basic Assessment Reports (BARs)
- Environmental Management Programmes (EMPr) and Action Plans
- Legal Registers

#### ACADEMIC QUALIFICATIONS

- Bachelor of Science in Tourism, Zoology and Geography: North West University, 2010
- Bachelor of Science (Honours) in Geography: University of Johannesburg, 2011

#### COURSES COMPLETED

- Environmental Law for Environmental Managers, North West University, 2015.

- Water Management in Mining, University of the Free State, 2014.
- Mining Closure and Rehabilitation, North West University, 2013.

#### KEY PROJECT EXPERIENCE

##### **PRIESKA ZINC COPPER PROJECT – SOUTH AFRICA (2017-2018)**

Environmental Coordinator for an environmental authorisation, waste management license and integrated water use licence for the proposed re-establishment of the Prieska Copper Mine, near Copperton in the Northern Cape Province.

##### **PRIESKA ZINC COPPER PROJECT (VARDOCUBE SECTION)– SOUTH AFRICA (2018)**

Environmental Assessment Practitioner for an environmental authorisation for the proposed re-establishment of the Prieska Copper Mine (underground), near Copperton in the Northern Cape Province.

##### **HLAGISA WILDFONTEIN MINE EXPANSION PROJECT – 2018**

Environmental Assessment Practitioner for a Section 102 amendment for the expansion of the Wildfontein Mine.

##### **HLAGISA WILDFONTEIN MINE IWWMP**

Environmental Practitioner responsible for the compilation of an Integrated Water and Waste Management Plan for the Wildfontein Colliery.

##### **LENASIA SOUTH HOSPITAL PROJECT – SOUTH AFRICA (2016)**

Environmental Assessment Practitioner for an environmental authorisation, waste management license and atmospheric emission license for the conversion of a community health centre into a Level 1 District Hospital.

#### **SPRINGS FRESH PRODUCE MARKET EXPANSION PROJECT – SOUTH AFRICA (2016-2017)**

Environmental Assessment Practitioner for an environmental authorisation for the expansion of the Springs Fresh Produce Market.

#### **KALANA GOLD PROJECT – MALI (2015-2016)**

Project Manager for an IFC-compliant ESIA and RAP for a proposed gold mine and processing plant. The Project included management of various specialist sub-consultants and a local consultant responsible for the social studies as well as assistance with the completion of a Resettlement Action Plan (RAP).

#### **ESAASE GOLD MINE PROJECT - GHANA (2013 – 2014)**

Assistance with the project coordination of an EIA for a greenfield gold mine in Ghana. The Project included management of various specialist studies and coordination of the public participation process and social impact assessment. An online project legal register was developed.

#### **HWANGE POWER STATION - ZIMBABWE (2013 – 2014)**

Project management of the comprehensive environmental and social audit of the Hwange Power Station. The audit assessed compliance of the power station to both in-country legal requirements and the IFC performance standards. Studies were coordinated between experts in Australia, South Africa and Zimbabwe. A prioritized management plan was compiled with recommendations to address the findings of the audit.

#### **FEKOLA GOLD PROJECT - MALI (2013)**

Project assistance with the completion of an IFC-compliant ESIA for a proposed gold mine and processing plant.

#### **ESTIMA COAL PROJECT - MOZAMBIQUE (2013)**

Assisted with the fatal flaw analysis for the proposed Chitima Northern Conveyor Line.

#### **ENVIRONMENTAL IMPACT ASSESSMENT FOR THE KUSILE 60 YEAR ASH DISPOSAL FACILITY - MPUMALANGA, SOUTH AFRICA (2012)**

Project coordination of an EIA for an ash disposal facility including management of specialist studies, report compilation and assistance with public participation. A desktop site selection study was undertaken as part of the EIA.

#### **RENEWABLE ENERGY GUIDELINE - SOUTH AFRICA (2012)**

Compilation of a guideline document for the Renewable Energy Sector on the listed activities in the Environmental Impact Assessment Regulations published under the National Environmental Management Act 107 of 1998.

#### **WILGE / PHOLA SEWER AND WATER PIPELINE DEVELOPMENT PROJECT – MPUMALANGA, SOUTH AFRICA (2012)**

Conducting the water use license application (WULA) process for Section 21 (c) and (i) water uses, including compilation of all DWA application forms and assisting with compilation of the technical report.

#### **SOLAR PARK INTEGRATION PROJECT - NORTHERN CAPE, SOUTH AFRICA (2012)**

Coordination and compilation of three Basic Assessment Reports (BAR) and associated EMPr for the Solar Park Integration Project consisting of:

- 3 x 132kV lines and 2 x 20MVA Transformers for the Solar Park Site
- 3 x 132kV lines for the independent power producers in Solar Park
- 5 x 132kV lines for Solar Park
- 2 x (±) 25km 132kV lines to Gordonia Substation (Upington)

#### **MEDUPI POWER STATION OEMP – LIMPOPO, SOUTH AFRICA (2012)**

Compilation of an Operational Environmental Management Plan for the Medupi Power Station.

## CURRICULUM VITAE

PAUL FURNISS

### ENVIRONMENTAL ADVISOR / ENVIRONMENTAL ASSESSMENT PRACTITIONER

#### BACKGROUND

Paul is a Director of ABS Africa. He has 16 years environmental assessment and management experience in the energy, water, mining and infrastructure sectors. His project experience includes conducting environmental assessment studies in South Africa, Guinea, Lesotho, Democratic Republic of Congo, Sudan, Namibia, Botswana, Zimbabwe, and Mozambique.

In the role of environmental manager, he has been responsible for the setup and auditing of environmental construction management procedures for a range of developments. Having led various environmental due diligence assessments for mining clients and project financiers, he has a good understanding of international environmental governance requirements including Equator Principles and IFC Performance Standards.

#### FIELDS OF COMPETENCE

- Environmental and Social Impact Assessments for the energy, water, mining, and infrastructure sectors
- Integration of environmental management principles into EPCM activities throughout the project lifecycle
- Environmental risk and screening assessments
- Environmental permitting
- Environmental auditing
- Environmental due diligence studies
- Strategic environmental assessment
- Integrated waste management

#### ACADEMIC QUALIFICATIONS

- Bachelor of Agricultural Science in Animal Science: University of Pretoria, 1998
- Bachelor of Science (Honours) in Wildlife Management: University of Pretoria, 1999
- Master of Science in Environmental Science (Water Resource Management): University of Pretoria, 2000

#### PROFESSIONAL REGISTRATION

Pr.Sci.Nat. Professional Natural Scientist (Environmental Science): The South African Council for Natural Scientific Professions, 2007

Certified Environmental Assessment Practitioner: Environmental Assessment Practitioners Association of South Africa

#### ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT STUDIES

##### **PRIESKA ZINC COPPER PROJECT – SOUTH AFRICA (2017-2018)**

Environmental Assessment Practitioner for an environmental authorisation, waste management license and integrated water use licence for the proposed re-establishment of the Prieska Copper Mine, near Copperton in the Northern Cape Province.

##### **TRI-K GOLD PROJECT – GUINEA (2017-2018)**

Environmental Assessment Practitioner for an IFC-compliant ESIA for a greenfields gold mining project in the Mandiana Prefecture of Guinea.

#### **LENASIA SOUTH HOSPITAL PROJECT – SOUTH AFRICA (2016)**

Environmental Assessment Practitioner for an environmental authorisation, waste management license and atmospheric emission license for the conversion of a community health centre into a Level 1 District Hospital.

#### **SEDIBENG WATER HARTSWATER REGIONAL OFFICE PROJECT – SOUTH AFRICA (2016-2017)**

Environmental Assessment Practitioner for a rapid environmental screening assessment and compilation of an Environmental Management Plan for the new Sedibeng Water Regional Office in Hartswater.

#### **SPRINGS FRESH PRODUCE MARKET EXPANSION PROJECT – SOUTH AFRICA (2016-2017)**

Environmental Assessment Practitioner for an environmental authorisation for the expansion of the Springs Fresh Produce Market.

#### **MORUPULE B UNITS 5 & 6 – BOTSWANA (2015-2016)**

Specialist consultant for a JBIC and IFC compliant ESIA for a 300 MW thermal coal power plant.

#### **EDF PROJECT TIZERT – MOROCCO (2015-2016)**

Technical advisory services for an IFC-compliant ESIA for a copper mine and associated facilities in the Taroudant Province.

#### **PUMPI COPPER AND COBALT PROJECT – DEMOCRATIC REPUBLIC OF CONGO (2014 – 2016)**

Project Environmental Manager responsible for a comprehensive update of the Environmental Impact Study for an open-cast copper and cobalt mine, process plant and associated infrastructure.

#### **HASSAI VMS PROJECT – SUDAN (2014 – 2015)**

Lead consultant responsible for the legal register, review and gap analysis of environmental and social aspects for a gold mining and processing prefeasibility study at the Hassai Mine.

#### **THUSANANG HOUSING PROJECT – SOUTH AFRICA (2013)**

Project Environmental Manager for the EIA and EMP for a 4000 unit residential 1 housing development for Anglo American Platinum, Rustenburg Local Municipality and the Department of Human Settlements.

#### **MANGANESE PROJECT – BURKINA FASO AND CÔTE D’IVOIRE (2013)**

Environmental coordinator for a prefeasibility study for a proposed mine, port and rail project for the export of Manganese from Burkina Faso to the Port of Abidjan.

#### **MINERAL SANDS PROJECT – MOZAMBIQUE (2012)**

Environmental programme manager responsible for establishing and coordinating all social and environmental studies for a pre-feasibility study for a large mineral sands project in Mozambique.

#### **CONFIDENTIAL PROJECT – MOZAMBIQUE (2012)**

Project Environmental Manager responsible for the preparation of environmental and social design criteria and high-level comparison of different rail alignment and port location options for a coal export project.

#### **LANDAU LIFEX PROJECT - SOUTH AFRICA (2012)**

Project Environmental Manager responsible for the compilation of non-mineral waste management plan and hazardous substances plan as part of a pre-feasibility study for Anglo American Thermal Coal.

#### **CONFIDENTIAL PROJECT – SOUTH AFRICA (2011-2012)**

Project Environmental Manager for a pre-feasibility study for the development of a new iron and steel plant in South Africa including all associated infrastructure. Inputs included a multi-criteria site selection analysis and coordination of all environmental and social assessment inputs to the study.

#### **NATIONAL INTEGRATED RESOURCE PLAN – NAMIBIA (2011)**

Environmental advisor responsible for the assessment and description of the environmental and social issues associated with primary and secondary generation options.

#### **150 MW WIND FARM PROJECT – LESOTHO (2011)**

Project Environmental Manager responsible for the management and coordination of all environmental studies and environmental approval processes required for a 150 MW wind farm development in the Lesotho Highlands.

#### **TRANSNET CAPITAL EXPANSION PROGRAMME – SOUTH AFRICA (2008-2011)**

Mobilised as a full-time Environmental Manager for the Richards Bay region for the HMG-Joint Venture. The latter was established as the EPCM agent for the Transnet Capital Projects operating division of Transnet Limited. The role involved management and coordination of numerous environmental studies throughout the project lifecycle process including an environmental resource economic study for the Port of Richards Bay, environmental authorisation processes and fatal flaw assessments.

#### **NUCLEAR 1 PROJECT – SOUTH AFRICA (2008)**

Senior Project Scientist for the EIA and EMP for the proposed construction of a conventional nuclear power station and associated infrastructure in the Western Cape.

#### **PEBBLE-BED MODULAR REACTOR DEMONSTRATION POWER PLANT PROJECT – SOUTH AFRICA (2007-2008)**

Project Manager and Senior Project Scientist for the Impact Assessment Phase of the EIA and EMP for the proposed Pebble Bed Modular Reactor Demonstration Power Plant in the Western Cape.

#### **600 MW MORUPULE B POWER STATION PROJECT – BOTSWANA (2008)**

Team Leader for the 600 MW Morupule B coal-fired power station in Botswana. Compilation of the ESIA in a manner that complied with Botswana legislation and World Bank Group requirements.

#### **INGULA PUMPED STORAGE SCHEME – SOUTH AFRICA (2007)**

Project Manager for seven mining permit applications for borrowpits in the Free State and KwaZulu-Natal Provinces for the Ingula (previously Braamhoek) Pumped Storage Scheme Project.

#### **GABORONE WASTEWATER RECLAMATION PROJECT– BOTSWANA (2007)**

Senior Project Scientist for the Gaborone Wastewater Reclamation EIA. This project was aimed at determining the feasibility of reclaiming wastewater for direct potable reuse in Gaborone and its satellite villages.

#### **SELEBI-PHIKWE WATER MASTER PLAN – BOTSWANA (2006)**

Senior Project Scientist for the EIA, EMP and Public Consultation Process for the Selebi-Phikwe Water Master Plan.

#### **HYDRA-PERSEUS 765kV POWER LINE EIA – SOUTH AFRICA (2007)**

Senior Project Scientist for the EIA for the 260 km 765 kV transmission power line from the Hydra to Perseus Substations.

#### **ENVIRONMENTAL MANAGEMENT, COMPLIANCE MONITORING AND REGULATION**

##### **DINGLETON RESETTLEMENT PROJECT – SOUTH AFRICA (2014)**

Project Environmental Control Officer responsible for compilation of an Environmental Execution Plan for the Feasibility Study and the setup and implementation of the environmental compliance monitoring requirements for the project implementation phase.

##### **DEA COMPLIANCE MONITORING PROJECT - SOUTH AFRICA (2007)**

Task Team Leader for the Department of Environmental Affairs (DEA) Compliance Monitoring Project. The project involved the development of guidelines, systems and programmes for the Compliance Monitoring Directorate of DEA including compilation of a guideline for Emergency Incident reporting in terms of section 30 of the National Environmental Management Act, 1998 (Act 107 of 1998) and a compliance monitoring protocol for environmental authorisations.

### **JOHANNESBURG CITY PARKS GENERIC EMP - SOUTH AFRICA (2006)**

Project Manager and Senior Project Scientist for the Generic EMP for Johannesburg City Parks (JCP). The Generic EMP was developed as a tool for managing the activities of all contractors employed to undertake construction work in the Public Open Spaces within the jurisdiction of the JCP.

### **ENVIRONMENTAL AUDITS AND DUE DILIGENCE**

#### **CONFIDENTIAL PROJECT – SOUTH AFRICA (2017)**

Technical due diligence of environmental risks and closure liabilities associated with several operating gold and coal mine assets in South Africa.

#### **CHROME ASSET ACQUISITION – SOUTH AFRICA (2016)**

Technical due diligence review of an existing chrome washing facility. The due diligence required identification of environmental and social risks, a review of all existing environmental licenses and consideration of rehabilitation and closure liabilities.

#### **CONFIDENTIAL PROJECT – GUINEA (2012)**

Environmental specialist responsible for advising on environmental risks associated with a potential project acquisition of an iron ore resource in West Africa.

#### **SOLAR ENERGY FACILITY – SOUTH AFRICA (2012)**

Environmental specialist for a lender's technical due diligence review against local regulations, International Finance Corporation performance standards and Equator Principles for a proposed 30 MW solar energy facility in the Western Cape Province.

#### **WIND ENERGY FACILITY – SOUTH AFRICA (2012)**

Environmental specialist for a technical due diligence review against local regulations, International Finance Corporation performance standards and Equator Principles for a proposed new wind energy facility in the Western Cape Province.

### **SUSTAINABILITY REPORTING**

#### **SASOL LIMITED SUSTAINABILITY ASSURANCE PROJECT – SOUTH AFRICA (2009)**

Project Manager for the 2009 sustainability reporting assurance engagement for Sasol Limited. The engagement consisted of assuring sustainable performance data from health and safety, environmental and social indicators. Site audits were undertaken at numerous operational sites representative of Sasol's different business units.

#### **ANGLO AMERICAN PLC SUSTAINABILITY ASSURANCE PROJECT – VARIOUS COUNTRIES (2009)**

Project Manager for the 2009 sustainability reporting assurance engagement for Anglo American plc. This assurance engagement comprised of site audits at representative operations within Anglo Platinum, Kumba Iron Ore, Scaw, Anglo Coal and Tarmac. The site audits were undertaken in South Africa, Brazil, Chile, Australia and the United Kingdom with twenty sustainability indicators in key performance areas of human capital, natural capital and social capital.

### **STRATEGIC ENVIRONMENTAL ASSESSMENTS**

#### **SEA FOR THE PORT HARCOURT MASTERPLAN – NIGERIA (2008)**

Project Manager and Senior Project Scientist for the Strategic Environmental Assessment of the Masterplan for the city of Port Harcourt. The Masterplan was to provide for the development of a new city, appropriately designed for the current and future population of the existing Port Harcourt.

#### **SEA FOR ELECTRICITY DISTRIBUTION INFRASTRUCTURE FOR THE MAGALIESBERG AND SURROUNDING AREAS - SOUTH AFRICA (2007)**

Project Manager and Senior Project Scientist for the Strategic Environmental Assessment of the Magaliesberg and Surrounding Areas for Eskom Distribution. The SEA considered the environmental attributes of the study area and provided an environmental planning framework specific to the needs of Eskom Distribution.

### **SEA FOR HERITAGE PARK - SOUTH AFRICA (2006)**

Senior Project Scientist for the Strategic Environmental Assessment of the one million ha Heritage Park. This ecologically sensitive and socio-economically complex Park encompasses Pilansberg and Madikwe Nature Reserve and crosses the border between South Africa and Botswana.