

Proposed Increased Storage Capacity of the Easigas LPG Storage Facility in Sidwell, Gqeberha

Draft Environmental Management Programme (EMPr)

Report Prepared for

Easigas (Pty) Ltd



Report Number: 565826/2



Report Prepared by

 **srk** consulting

November 2021

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Easigas (Pty) Ltd.

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SRK Project Number 565826

November 2021

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Acronyms

+ve	Positive
BAR	Basic Assessment Report
BID	Background Information Document
CBA	Critical Biodiversity Area
DBAR	Draft Basic Assessment Report
DCP	Dry Chemical Powder
DEDEAT	Department of Economic Development, Environmental Affairs and Tourism
DEO	Designated Environmental Officer
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
Easigas	Easigas (Pty) Ltd
ECO	Environmental Control Officer
ECPHRA	Eastern Cape Provincial Heritage Resources Authority
EMPr	Environmental Management Programme
IAP	Interested and Affected Party
LPG	Liquid Petroleum Gas
MHI	Major Hazard Installation
NEMA	National Environmental Management Act
NMBM	Nelson Mandela Bay Municipality
PPP	Public Participation Process
QRS	Quantitative Risk Assessment
RP	Representative Person (developer) who is responsible for the implementation of the EMPr
SABS	South African Bureau of Standards
SRK	SRK Consulting
-ve	Negative

1 Introduction and Scope of Report

Easigas (Pty) Ltd proposes to increase the capacity of their existing Liquid Petroleum Gas (PLG) storage depot in Sidwell / New Brighton through the installation of an additional 400 m³ above ground LPG storage tank.

SRK Consulting has been appointed to conduct a Basic Assessment process according to the National Environmental Management Act (Act 107 of 1998) (NEMA) 2014 EIA Regulations (GNR 326, of 07 April 2017), as amended. This Environmental Management Programme (EMPr) has been prepared as part of the Basic Assessment (BA) process to Department of Economic Development, Environmental Affairs and Tourism (DEDEAT).

The style of writing is aimed at making the Draft EMPr easier to read and convert into a practical management tool should the application be approved. SRK has exercised all due care in reviewing the supplied information provided. The appropriateness and practicality of the management measures presented in this Draft EMPr has been considered in terms of the facility and the surrounding areas. Easigas is fully responsible for the implementation of the Draft EMPr.

The aim of this Draft EMPr is to ensure that construction and operation activities are conducted such that potential negative environmental impacts are minimised and positive impacts are enhanced. This Draft EMPr is not a health and safety plan and this Draft EMPr makes no attempt to satisfy the requirements of the Occupational Health and Safety Act.

1.1 Environmental Assessment Practitioner (EAP)

This EMPr was prepared by Nicola Rump and Abby van Nierop and reviewed by Rob Gardiner.

Rob Gardiner (MSc, Pr Sci Nat Reg. EAP (EAPASA)) is the Principal Environmental Scientist and head of SRK's Environmental Department in Port Elizabeth. He has more than 27 years environmental consulting experience covering a broad range of projects, including Environmental Impact Assessments (EIA), Environmental Management Systems (EMS), environmental management plans (EMP), and environmental auditing. His experience in the development, manufacturing, mining, and public sectors has been gained in projects within South Africa, Lesotho, Botswana, Angola and Argentina, and Suriname.

Nicola Rump (MSc, EAPSA) is an environmental consultant in the SRK Port Elizabeth office. Nicola has been involved in EIA's and environmental management for the last 14 years. Her expertise includes Environmental Assessment, Environmental Management Plans, Environmental Auditing, and management system implementation.

Abby van Nierop (BSc Hons) is an Environmental Scientist in the Port Elizabeth office. Abby has been involved in environmental management for the past 8 years. Her expertise includes Environmental Impact Assessments (EIAs), Environmental Management Programmes (EMPrs), Water Use Applications (WUAs), and environmental compliance auditing.

Refer to Appendix A for the CVs of Project EAPs.

1.2 Environmental Assessment Practitioner Details

EAP	Ms Nicola Rump
Company	SRK Consulting (South Africa) (Pty) Ltd
Qualifications	MSc (Eco Physiology), Wits, 2005 BSc (Hons) (Zoology), UPE, 2002 BSc (Zoology, Biochemistry), UPE, 2001 Certified Environmental Assessment Practitioner (CEAPSA)

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2 Project Description

Easigas proposes to increase the capacity of their existing Liquid Petroleum Gas (LPG) storage depot in Sidwell / New Brighton through the installation of an additional 400 m³ above ground LPG storage tank. The facility currently stores a total of 315 m³ LPG in five above ground LPG storage tanks (3 x 45 m³ and 2 x 90 m³) and acts as a LPG cylinder filling facility. The new tank will differ from the existing facility in that it will be for strategic bulk storage to support the region, and in particular existing industrial customers within the automotive industry (bulk truck offloading and loading), as opposed to cylinder filling.

The proposed new tank will measure approximately 27 m length x 4 m diameter and will be mounted on a concrete slab (approximately 31.75 m x 7.75 m), via concrete plinths, similar to the existing tanks on the site. Delivery trucks will use the existing access gate to the site (off Eveready road) and the existing access control and security measures for the site (fencing and security guard to control access) will apply. A truck offloading and loading point will be constructed adjacent to the tank, and will include automatic fire monitor systems for fire control. Two fire islands, one on either side of the tank, including a fire hose, and Dry Chemical Powder (DCP), to facilitate the relevant fire emergency control measures including automatic fire monitors (connected to the existing fire water system on the site) are included in the design. The design safety distances for above ground storage tanks shall be in accordance with SANS 10087.

The following LPG storage protection measures are included in the design specifications for the facility:

1. Tank overfill protection (to ensure the tank is not filled beyond the maximum 85% volume);
2. Electrical equipment earthing (to ensure flame and spark-proofing);
3. Earthing and bonding (to control static electricity build-up during LPG offloading);
4. A preventive maintenance programme, including daily inspections of all equipment at the LPG facility;
5. Detailed operating procedures for all sections of the facility, including training of personnel;
6. Perimeter fencing and access control via one gate; and
7. No combustible material or vegetation shall be allowed in the facility

The following automatic and passive fire protection systems are included in the design:

1. High velocity automatic fire monitors; and
2. Gas detection system, installed at the tank, truck loading/offloading point and LPG pumps area, and linked to the sites safeguarding system.

The daily operation of the new tank will be limited to loading and unloading of supply trucks into and from the 400m³ LPG tank (approximately twice a week). This will be done via LPG pumps installed on the truck trailer and a supply pump, which will be part of the new 400m³ tank installation

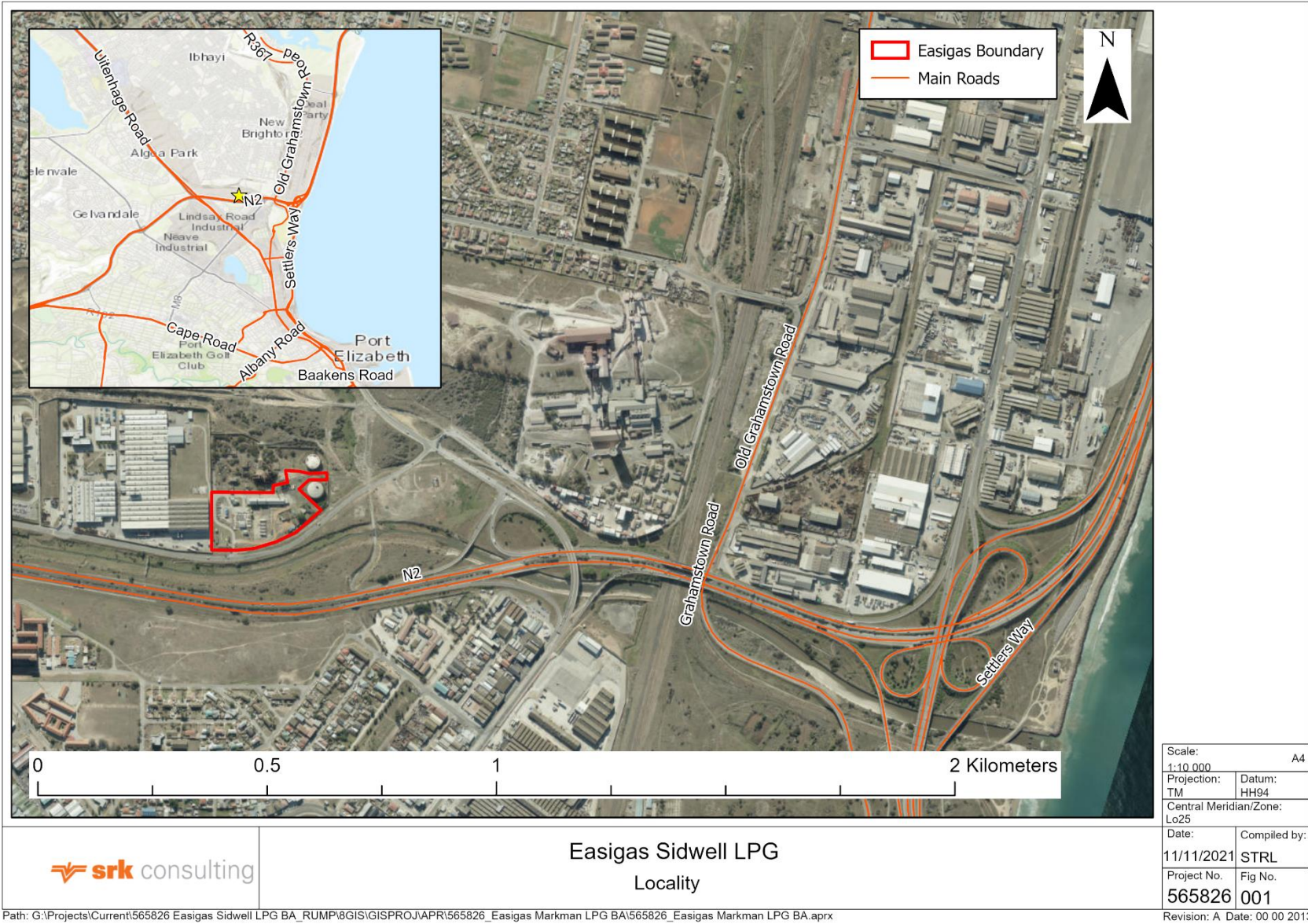


Figure 1: Site locality map for the existing Easigas facility

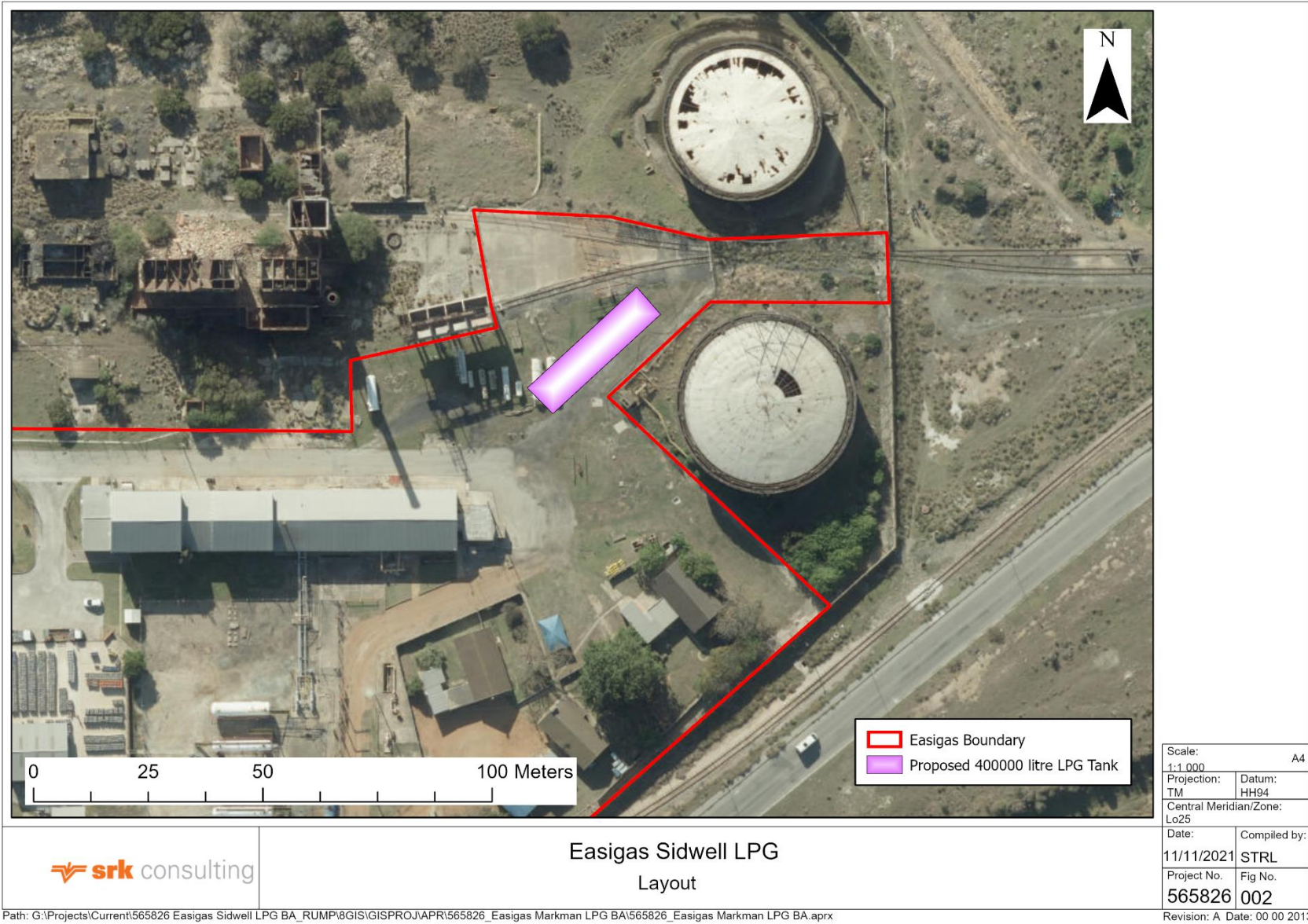


Figure 2: Site layout plan showing location of the proposed 400 m³ LPG storage tank

3 Environmental Impacts and Management Objectives

This section specifies the impact management objectives and outcomes used to determine the extent of management action(s) required to mitigate the impacts identified during the impact assessment process. Descriptions and environmental objectives are listed below for each of the relevant impact categories as identified in the Basic Assessment Report (BAR) for the design, construction and operational phase of the project. There are no intentions to decommission the tanks in the foreseeable future and as such this EMPr does not cover decommissioning activities.

3.1 General construction related impacts

Impacts typically associated with the construction phase include the following:

1. Dust impacts (from dust due to earth moving activities on site);
2. Noise impacts;
3. General construction waste management; and
4. Potential spills of cement and other construction related material on site.

Due to the nature of the site (i.e. a brownfields site on an existing industrial site) and limited development footprint (~250 m²), general construction related impacts are not expected to be significant. General construction good management measures to manage these impacts are included in the EMPr. The management objectives for these impacts are to:

- Minimise dust generation during construction;
- Ensure construction activities are in accordance with the Noise Control By-Law of the NMBM
- Ensure waste is correctly managed, stored and disposed of during construction; and
- Prevent potential contamination of soil or groundwater through management and prevention of spills of hazardous materials during construction

3.2 Socio-economic impacts during construction

Construction activities will result in a limited number of temporary job opportunities as well as indirect economic benefits (industries that provide construction materials and services for the project). Due to the small size of the project and limited construction requirements and duration. It is not anticipated that any new employment opportunities will result from the proposed new tank, as staff at the existing operation will be used to run it.

The management objective for this impact is to maximise local socio-economic benefits during the construction phase.

3.3 Soil, stormwater, and groundwater impacts resulting from excavation of potentially contaminated soil material

Given the nature of coal fired gasworks and how such facilities were typically operated at the time, it is possible that contaminants remain present in the soil on and around the proposed development site and could mobilise to surrounding areas via dust and stormwater if adequate mitigation measures are not in place. Due to the size and nature of the project, an estimated excavated soil volume of 35 – 70 m³) will be required, and this will need to be spoiled or disposed of, possibly off-site. While it is recognised that the surrounding area may already have been impacted over the years by any contamination that may be present in the soil, excavation of material currently underground and loosening of this material during construction would make it more prone to mobilisation into the surrounding area, potentially affecting water quality in the nearby Papenkuils river, which discharges to the marine environment.

The management objective for this impact is to prevent migration of possible contaminants from excavated soil into the surrounding environment via soil, water or wind.

3.4 Traffic flow and safety impacts during construction

Due to the small construction footprint and timeframe, potential impacts on traffic will be very limited. The most significant piece of equipment to be transported to the site will be the new tank itself, which will be delivered to the site via truck. It is likely that access to the site via the gate on the eastern side of the site along the old (decommissioned) gasworks railway entrance to the site will temporarily be used for this delivery. All other construction related traffic will be related to general construction activities (cement work etc) and will use the existing access roads to the site, which are designed to accommodate trucks for the operation of the site

The management objective for this impact is to minimise road safety hazards and impacts on traffic flow during construction.

3.5 Safety risks during operation

The facility is classified as a Major Hazard Installation (MHI) in terms of the MHI regulations (R.692 of 30 July 2001), because a major incident at the site will impact members of the public outside the boundaries of the premises. Easigas is therefore required to undertake MHI assessments every five years, and prior to installation of any new infrastructure relevant to its MHI status, for submission to the local authorities. The proposed installation of the new 400 m³ LPG tank on the site was included in the assessment, as well as all existing permanent storage (consisting of 315 m³ (in total) in above ground storage tanks), and temporary LPG storage (a 45 m³ road tanker and 10,000 LPG cylinders) on the site. The safety risks have been assessed and through a MHI Study conducted by Dr Alfonso Niemand of Nature & Business Alliance Africa (see specialist report in Appendix D of the DBAR).

A total of 24 hazard scenarios were analysed in the risk assessment. The impacts relating to the safety risks to surrounding communities have been rated by the EAP based on the findings of the specialist report and all mitigation measures listed in the MHI report listed below. It is noted that the surrounding land uses are largely industrial, as well as open space. The closest residential development is approximately 300 m from the site and falls outside the safety risk contours identified by the specialist based on modelling of risks for various scenarios. Maps showing the surrounding land uses and zonings are provided in Appendix A of the DBAR.

The management objective is to reduce any safety risks to surrounding communities relating to the storage of LPG on the site to the absolute minimum.

4 Impact Management

This section specifies the impact management outcomes and impact management actions required for the aspects and potential impacts related to the proposed development. The manner in which the impact management objectives and outcomes, identified above, will be achieved through mitigation measures. Where applicable actions will include activities to:

- (i) avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation;
- (ii) comply with any prescribed environmental management standards or practices;
- (iii) comply with any applicable provisions of the Act regarding closure, where applicable; and
- (iv) comply with any provisions of the Act regarding financial provisions for rehabilitation, where applicable

The above are detailed in Table 1 for the pre-construction phase, Table 2 for the construction phase and Table 3 for the operational phase. Decommissioning of the tank is not planned for the foreseeable future.

Table 1: Mitigation and management measures for the pre-construction phase

Environmental Aspect	Potential Environmental Impact	Management and mitigation measure	Time-frame	Responsibility
Excavation activities	Excavated soil material (potentially of a hazardous nature) resulting in contamination of stormwater and the surrounding environment.	<ul style="list-style-type: none"> The soil material must be tested for contamination prior to commencement of construction, and should it be confirmed to be hazardous as per the waste classification criteria, disposed of at a hazardous landfill site 	Prior to commencement of construction	Easigas,
Transport of new tank to site	Impacts on traffic safety and flow	<ul style="list-style-type: none"> A transportation specialist must be consulted to advise on any specific measures that may be required to ensure safety measures and permits are in place for delivery of the new tank to site. 	Prior to commencement of construction	Easigas,
Expansion of existing MHI facility	Safety risks to workers and surrounding communities as a result of catastrophic failure of the LPG tank or associated facilities	<ul style="list-style-type: none"> The national and provincial Chief Inspectors of the Department of Employment and Labour must be notified about the status of the proposed LPG installation. The NMBM Fire Department must be notified about the status of the proposed LPG installation. In accordance with the MHI regulations, an advertisement must be published in a local community newspaper, notifying the public of the proposed MHI installation and a comment period provided 	Prior to commencement of operation	Easigas, MHI consultant

Table 2: Mitigation and management measures for the construction phase

Environmental Aspect	Potential Environmental Impact	Management and mitigation measure	Time-frame	Responsibility
Construction – related activities	Impacts on ambient air quality of the surrounding area, such as the generation of dust, and exhaust emissions	<ul style="list-style-type: none"> Minimise disturbed areas of soil and excavations to what is absolutely necessary; Minimise stockpiling of excavated soil material on site; and If stockpiling of soil is required for any period, soil/sand stockpiles are to be covered with appropriate material (e.g., hessian, shade cloth or plastic). 	Duration of construction	Easigas, Contractor
	Noise disturbance	<ul style="list-style-type: none"> Construction activities must be in accordance with the Noise Control By-Law of the NMBM. 	Duration of construction	Easigas, Contractor

Environmental Aspect	Potential Environmental Impact	Management and mitigation measure	Time-frame	Responsibility
	Construction waste polluting the surrounding environment	<ul style="list-style-type: none"> Standard waste management practices must be implemented; All staff shall be trained on correct waste management; No on-site burning, burying, or dumping of any waste materials, litter or refuse shall occur; and All waste must be removed from the site on a regular basis and disposed of at a registered landfill. 	Duration of construction	Easigas, Contractor
Workers on site	Socio- economic benefits to local communities	<ul style="list-style-type: none"> Local contractors and labour to be considered for the construction phase. 	Duration of construction	Easigas, Contractor
Storage and handling of environmentally hazardous materials/dangerous goods (specifically, fuel, oil, grease, and cement)	Leaks and spills of environmentally hazardous materials (e.g., oils and fuels) has the potential to impact on the groundwater.	<ul style="list-style-type: none"> The proper storage and handling of any hazardous substances (hydrocarbons and chemicals) used during construction needs to be administered on site. If hazardous liquids are stored/ used on site, spill kits must be available; Hazardous materials must be stored on an impermeable, bunded surface within a weather-proof structure; No wash water from washing of mechanical plant or equipment may be discharged into the surrounding environment. All construction effluent (e.g., cement wastewater) must be collected in a container and allowed to evaporate prior to disposal; Cement batching activities should occur in the construction area and be conducted on an impermeable surface; and Drip-trays must be provided beneath standing vehicles and machinery, and routine checks should be done to ensure that these are in a good condition. 	Duration of construction	Easigas, Contractor
Excavation activities	Excavated soil material (potentially of a hazardous nature) resulting in contamination of stormwater and the surrounding environment.	<ul style="list-style-type: none"> Should it be confirmed to be hazardous as per the waste classification criteria, excavated soil must be disposed of at a hazardous landfill site; Suppression of dust during construction; Minimal stockpiling of soil (if required at all); and Limiting the disturbed area to the minimum required. 	Duration of construction	Easigas, Contractor

Environmental Aspect	Potential Environmental Impact	Management and mitigation measure	Time-frame	Responsibility
Construction machinery	Impacts on traffic safety and flow	<ul style="list-style-type: none"> Implementation of strict traffic safety measures and speed limits for all construction related traffic; All signage and road markings at the proposed site should be in accordance with the South African Road Traffic Signs Manual. 		

Table 3: Mitigation and management measures for operational phase

Environmental Aspect	Potential Environmental Impact	Management and mitigation measure	Time-frame	Responsibility
Loading and off-loading of LPG from the tank and storage thereof	Safety risks to workers and surrounding communities as a result of catastrophic failure of the LPG tank or associated facilities	<ul style="list-style-type: none"> A permanent warning sign must be installed at the entrance to the site Ensure that no flammable or explosive liquid or gas is stored in the redundant municipal gas storage tank next to the proposed new 400 m3 LPG tank. The emergency management plan for the site must be updated when changes in personnel or contact details occur, in accordance with the in the MHI report. Operating procedures for the site must be kept up to date to include preventative measures against the uncontrolled release of the following hazardous substances: <ul style="list-style-type: none"> LPG from the delivery road tanker. LPG from the storage tank. LPG from the cylinder filling platform The outcome of the risk assessment must be brought to the attention of all the employees at the site. A Maintenance Plan must be compiled and kept up to date for all the hazardous equipment used on the facility. The Plan must contain at least the following: <ul style="list-style-type: none"> List of all equipment and facilities on the facility. Maintenance frequency. Particulars of maintenance activities that must be performed on the listed equipment. Responsible person. 	Duration of operation	Easigas

Environmental Aspect	Potential Environmental Impact	Management and mitigation measure	Time-frame	Responsibility
		<ul style="list-style-type: none"> • All hazardous equipment and facilities on the site must be inspected on a regular basis by means of an Inspection Register. The Register must contain at least the following: <ul style="list-style-type: none"> ○ List of all equipment and facilities on the facility. ○ Equipment items that must be inspected. ○ Facilities that must be inspected. ○ Areas that must be inspected. ○ Inspection findings. ○ Responsible person who carried out the inspection • All authorised operators must be trained in the application of the operating procedures applicable to their jobs. • All operating personnel at the facility must be aware at all times of the dangers involving LPG. • The facility must remain under safety and security access control for 24 hours per day. The security guard on site must comply with the following requirements: <ul style="list-style-type: none"> ○ The guard must be trained in the potential major incidents that could occur at the site as well as the emergency procedure that must be followed. ○ The guard must be linked via SMS or cellular phone with a responsible standby person at the site. ○ The guard must be able to contact the local Fire Department immediately. • The Emergency Evacuation Procedure aimed at workers and visitors must be updated at least annually in collaboration with the NMBM emergency services. • The LPG delivery road tanker shall not reverse on site. • The LPG road tanker must be inspected on entry to the site, for possible overheated tyres, smell of heated rubber, LPG leaks or other defects that could place the site at risk. • The Emergency Management Plan and Emergency Evacuation Procedure must be tested at least annually by 		

Environmental Aspect	Potential Environmental Impact	Management and mitigation measure	Time-frame	Responsibility
		<p>means of mock emergencies. The NMBM emergency services must be invited to participate in these tests.</p> <ul style="list-style-type: none"> • Customer and staff parking bays must be located in an area where public vehicles will not cause obstruction to emergency vehicles. • Prior to any construction work on site, the local office of the Department of Employment and Labour must be notified in writing, in accordance with the Construction Regulations of the Department of Employment and Labour. • No additional modifications may be made to the facilities on site unless an MHI risk assessment has been done beforehand. • All staff must be trained in emergency preparedness for a LPG leak, in collaboration with the NMBM fire department. • The nameplates on all LPG storage tanks must be clearly visible and legible. • The deluge systems at the road tanker loading bays must be tested at least monthly to ensure they are in good working order and effective. • The site CCTV surveillance system must be inspected regularly to ensure its good functional operation and all employees in the control room must be trained in the use of the system. • Ensure that the windsock on site remains in a good functional state. • The LPG detection and alarm system at the site must be inspected and tested regularly to ensure that it remains in a good working order. 		

5 Monitoring, Reporting and Auditing

Site inspections by an Environmental Control Officer (ECO) must be conducted at commencement of construction to ensure the contractor is familiar with the conditions of the Environmental Authorisation (EA) and the measures contained in the approved EMPr, and post-construction to check and report on compliance in this regard. Pre-construction and post-construction audit reports are to be prepared by the ECO and submitted to the developer, engineering representative, contractor, and competent authority.

Monitoring measures during the operational phase are to include the following:

- The condition of the above ground storage tank including associated pipes and dispensing pumps should be checked on an annual basis using approved methodologies;
- Compliance with all MHI reporting and monitoring requirements.

6 Environmental Awareness Plan

On-site training must be provided for all employees for the construction and operational phases of the project. No personnel may be allowed to work onsite without having been instructed on the requirements of the approved EMPr and the EA conditions.

The training must deal specifically with triggers that would require the implementation of mitigation measures contained in the EMPr. These include, but are not limited to:

- Materials handling practices;
- Emergency response plans; and
- Waste management practices (including excavated soil material).

It is incumbent upon the Developer to convey the sentiments of the EMPr to all personnel involved in both the construction and operational phase (including sub-contractors) and the specific provisions of the EMPr. This should be done via regular toolbox talks as well as more formal training sessions, and attendance registers maintained for auditing purposes.

7 Organisational Structure

The general roles and responsibilities of various parties are outlined below.

7.1 The Developer: Easigas (Pty) Ltd

Easigas shall ultimately be responsible for the implementation of the EMPr and shall appoint a representative, the Responsible Person (RP), who shall:

- Ensure that the Employees are duly informed of the EMPr as well as associated responsibilities and implications of this Draft EMPr;
- Monitor the activities with regard to the requirements outlined in the EMPr;
- Act as a point of contact for local residents and community members;
- Ensure that problems are remedied in a timely manner and to the satisfaction of the authorities; and
- Notify the authorities and the Environmental Control Officer (ECO) should problems arise during construction that are not remedied effectively, or of any change in the development or changes in project specification that could significantly impact negatively on the environment.

7.2 The Contractor

The contractor will be responsible for:

- Ensuring all construction activities on the site are undertaken in accordance with the EMPr;

- Informing all employees and sub-contractors of their roles and responsibilities in terms of the EMPr;
- Ensuring that all employees and sub-contractors comply with this EMPr; and
- The Contractor has a duty to demonstrate respect and care for the environment in which they are operating. They will be responsible for the cost of rehabilitation, to the satisfaction of the ECO, of any environmental damage that may result from non-compliance with the EMPr, environmental regulations and relevant legislation.

7.3 The Designated Environmental Officer (DEO)

The Contractor's DEO shall be responsible for implementation of this EMPr and any other environmental requirements that may be identified by the ECO, and agreed to by the developer, during the course of the contract. The DEO shall have received basic environmental awareness training, either as part of this contract, or previously. In addition to any other responsibilities, the general duties of the DEO are as follows:

- Ensuring that all personnel (including sub-contractors) are duly informed of the requirements contained in this EMPr, and the associated responsibilities and implications of this EMPr;
- Ensuring that all records needed to demonstrate compliance with the EMPr requirements are obtained, safely stored, and are readily available for inspection by the ECO and/ or the developer. These records are detailed in this EMPr;
- Consulting with the ECO regarding interpretation of the EMPr and any other aspects of the contract that may impact significantly on the environment;
- Ensuring that all personnel (including sub-contracted personnel) demonstrate respect and care for the environment in which they are operating;
- Acting as a point of contact for local residents and community members; and
- Ensuring that a reporting system is in place and that community representatives can be informed of the correct procedures to lodge complaints.

It is anticipated that these DEO duties would be assigned to a member of the on-site personnel that would ordinarily be appointed for the duration of construction related activities by the Contractor, and that these DEO duties would be in addition to the other (possibly primary) responsibilities of that person.

7.4 The Environmental Control Officer (ECO)

An Environmental Control Officer (ECO) who is a qualified environmental professional with the relevant environmental expertise, and independent of the RP, shall be appointed for the duration of the construction activities. The ECO's duties are as follows:

- Being familiar with the environmental management requirements contained in this EMPr.
- Undertaking the pre-construction and post-construction inspection, which may result in recommendations for additional clean-up and rehabilitation measures;
- Monitor the Contractor's activities with regard to the requirements outlined in the EMPr;
- A post-construction Final Audit Report to fulfil the conditions of the post-construction recommendations. The Final Audit Report will be submitted to DEDEAT.

Prepared by

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Abby van Nierop
Environmental Scientist

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Nicola Rump
Principal Environmental Scientist

Reviewed by

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Rob Gardiner
Partner, Principal Environmental Scientist

Appendices

Appendix A: CV of Environmental Assessment Practitioner

Rob Gardiner

Principal Environmental Scientist



Profession	Principal Environmental Scientist
Education	MBA, Port Elizabeth Technikon, 2004 MSc, Chemistry, University of Leeds, 1993 BSc (Hons), Chemistry, University of Cape Town, 1989
Registrations/ Affiliations	Pr Sci Nat, Environmental Scientist (South Africa), 400079/03 Registered EAP (South Africa), 2020/1390 Member, IAIA
Awards	None

Specialisation

Environmental impact assessments, environmental management systems, ISO 14001, environmental management plans, environmental monitoring, and environmental auditing.

Expertise

Rob Gardiner has been involved in the field of environmental consulting for over 27 years. His experience has been obtained in the infrastructure, energy, mining, and manufacturing sectors. His expertise includes:

- environmental impact assessments (EIA);
- environmental management systems (EMS) and management plans (EMP);
- water quality; and
- environmental due diligence and environmental auditing.

Employment

2001 – present	SRK Consulting (Pty) Ltd, Principal Environmental Scientist and responsible for the Eastern Cape Environmental Department, Port Elizabeth
1998 – 2001	Gardiner Associates, Sole Proprietor and Environmental Consultant, Port Elizabeth. Assisted numerous clients in implementation, and aspects of, ISO 14001. This included conducting Initial Reviews, implementing environmental monitoring and management programmes, conducting third party audits of suppliers and contractors, and identifying and assessing compliance with legal and other requirements.
1991 – 1998	CSIR, Division of Textile Technology, Port Elizabeth. Responsible for the Division's environmental management offerings to the South African textile industry, including ISO 14001 awareness and eco-labelling. Also responsible for the CSIR's environmental impact assessment offerings in the Eastern Cape Region.

Publications

None

Languages

English – read, write, speak
Afrikaans – read, write, speak

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental Assessment: Energy

Location: Coega Special Economic Zone, Port Elizabeth, Eastern Cape
 Project duration & year: September 2020 – April 2021
 Client: Engie Southern Africa (Pty) Ltd
 Name of Project: 200 MW Risk Mitigation Gas to Power Project
 Project Description: Scoping Report for the development of a 200 MW Gas to Power project in Zone 13 of the Coega Special Economic Zone, including a new mooring location in the Port of Ngqura for the importing of LNG.
 Job Title and Duties: Environmental Assessment Practitioner, Project Partner
 Value of Project: R 900 000

Location: Coega Special Economic Zone, Port Elizabeth, Eastern Cape
 Project duration & year: November 2016 - July 2019
 Client: Coega Development Corporation
 Name of Project: Coega 3000 MW Gas to Power Project
 Project Description: Detailed Scoping Report and development of project description for a 3000 MW Gas to Power project including infrastructure for the importing of LNG, regasification, gas distribution, and three 1000 MW gas turbine power plants.
 Job Title and Duties: Environmental Assessment Practitioner, Project Partner
 Value of Project: R 1,200 000

Location: Groot Winterhoek Mountains, Kirkwood, Eastern Cape, South Africa
 Project duration & year: November 2014 – present
 Client: Vulisango Holdings (Pty) Ltd
 Name of Project: Inyanda – Rooddeplaar 150 MW Wind Energy Facility
 Project Description: Environmental Assessment for the Inyanda-Rooddeplaar 150 MW Wind Energy Facility in the Groot Winterberg Mountains, Kirkwood, Eastern Cape
 Job Title and Duties: Environmental Assessment Practitioner, Project Review
 Value of Project: R 1,200 000

Location: Hopetown, Northern Cape, South Africa
 Project duration & year: April 2015 – Jun 2017
 Client: Afri-Coast Energy (Pty) Ltd
 Name of Project: Kloofsig 3 x 75 MW photovoltaic solar energy facility
 Project Description: Environmental Assessment for the 3 x 75 MW Kloofsig photovoltaic (PV) solar energy facility, Hopetown, Northern Cape
 Job Title and Duties: Environmental Assessment Practitioner, Project Review
 Value of Project: R 1,300 000

Location: Humansdorp, Eastern Cape
 Project duration & year: 2 months, 2013
 Client: Rushmere Noach Incorporated
 Name of Project: Banna Ba Pifhu 50 MW Wind Energy Project
 Project Description: External review of the Environmental Assessment for the 50 MW Wind Energy Project (17 turbines, ranging from 1.2 MW to 3.2 MW)
 Job Title and Duties: External Review
 Value of Project: R 50 000

Rob Gardiner

Principal Environmental Scientist

Key Experience:

Environmental Assessment: Energy
 Location: Cradock, Eastern Cape, South Africa
 Project duration & year: 12 months, 2012
 Client: Af-Rom (Pty) Ltd
 Name of Project: Dobbin 75 MW photovoltaic solar energy facility
 Project Description: Environmental Impact assessment
 Job Title and Duties: Environmental Assessment Practitioner / Project Manager
 Value of Project: R 600 000

Location: Victoria West, Northern Cape, South Africa
 Project duration & year: 12 months, 2012
 Client: Af-Rom (Pty) Ltd
 Name of Project: Brakpoort 75 MW photovoltaic solar energy facility
 Project Description: Environmental Impact assessment
 Job Title and Duties: Environmental Assessment Practitioner / Project Manager
 Value of Project: R 600 000

Location: Uitenhage, Eastern Cape, South Africa
 Project duration & year: 5 months, 2011
 Client: Afri-Coast Engineers (Pty) Ltd
 Name of Project: Ranger Wind Energy Facility
 Project Description: Environmental Screening
 Job Title and Duties: Environmental Assessment Practitioner / Project Manager
 Value of Project: ± R 100 000

Location: Uitenhage, Eastern Cape, South Africa
 Project duration & year: 1 month, 2014
 Client: Afri-Coast Engineers (Pty) Ltd
 Name of Project: Ranger Wind Energy Facility
 Project Description: Preparation of an Environmental Management Plan for 3 x 1 MW wind turbines on the Ranger game farm, adjacent to the Groendal Nature Reserve
 Job Title and Duties: Environmental Assessment Practitioner, Project Review
 Value of Project: ± R 50 000

Location: Blue Horizon Bay, Eastern Cape, South Africa
 Project duration & year: 1 month, 2014
 Client: Afri-Coast Engineers (Pty) Ltd
 Name of Project: Betshanger Wind Energy Facility
 Project Description: Preparation of an Environmental Management Plan for 3 x 1 MW wind turbines on the farm Betshanger, Blue Horizon Bay
 Job Title and Duties: Environmental Assessment Practitioner, Project Review
 Value of Project: ± R 50 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 8 months, 2012
 Client: Orion Engineered Carbons
 Name of Project: Orion 19.5 MW Cogeneration Plant
 Project Description: Environmental Assessment and Air Emission License amendment, for the development of a 19.5 MW electrical power cogeneration plant
 Job Title and Duties: Environmental Assessment Practitioner, Project Manager
 Value of Project: ± R 180 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental Assessment: Energy

Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration & year:	18 months, 2009 to 2010
Client:	Nelson Mandela Metropolitan Municipality
Name of Project:	NMBM / CEF 27 MW Wind Energy Facility EIA
Project Description:	Environmental Assessment for a 27 MW Wind Energy Facility on three potential sites within the Nelson Mandela Bay Municipal area
Job Title and Duties:	Environmental Assessment Practitioner / Project Review
Value of Project:	± R 1,600 000

Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration & year:	24 months, 2012 to 2013
Client:	Nelson Mandela Metropolitan Municipality
Name of Project:	27 MW van Stadens Wind Energy Facility
Project Description:	Environmental consulting services for the construction of the 27 MW van Stadens Wind Energy Facility
Job Title and Duties:	Environmental Assessment Practitioner / Project Review
Value of Project:	± R 1,400 000

Key Experience: Environmental Assessment: Linear projects

Location:	Addo road
Project duration & year:	Nov 2017 – Dec 2018
Client:	South African National Roads Agency SOC Limited
Name of Project:	Upgrade of the Roads R335 & R342 between Addo and Paterson
Project Description:	Environmental Assessment of the upgrade of National Roads R335 & R342 between Addo and Paterson, Eastern Cape (12 km), including environmental authorisation for borrow pits, Water Use Authorisations, and a Maintenance Management Plan.
Job Title and Duties:	Environmental Assessment Practitioner, Project Partner
Value of Project:	± R 850 000

Location:	St Marks to Sabalele village, Eastern Cape, South Africa
Project duration & year:	9 months, 2014
Client:	South African National Roads Agency SOC Limited
Name of Project:	Upgrade of the DR 08376 from the R61 at St Marks to Sabalele Village
Project Description:	Environmental Assessment of the widening and surfacing of the R61 at St Marks to Sabalele Village (1 km), including assessment of borrow pits and river crossings
Job Title and Duties:	Environmental Assessment Practitioner, Project Partner
Value of Project:	± R 300 000

Location:	Cradock to Middleburg, Eastern Cape, South Africa
Project duration & year:	9 months, 2012
Client:	South African National Roads Agency SOC Limited
Name of Project:	Upgrade of National Route 10, Section 4, Cradock to Knutsford
Project Description:	Environmental Assessment Services
Job Title and Duties:	Project Partner
Value of Project:	± R 250 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental Assessment: Linear projects

Location:	Ngcobo, Eastern Cape, South Africa
Project duration & year:	9 months, 2012
Client:	South African National Roads Agency SOC Limited
Name of Project:	Upgrade of Route 61, Section 6 from Qumanco River to Ngcobo Town
Project Description:	Environmental Assessment Services
Job Title and Duties:	Project Partner
Value of Project:	± R 250 000
Location:	Orange Free State, South Africa
Project duration & year:	9 months, 2012
Client:	South African National Roads Agency SOC Limited
Name of Project:	Upgrade of National Route 1, Section 14, between Trompsburg Interchange and Fonteintjie
Project Description:	Environmental Assessment Services
Job Title and Duties:	Project Partner
Value of Project:	± R 250 000
Location:	Graaff-Reinet to Cradock, Eastern Cape, South Africa
Project duration & year:	9 months, 2011
Client:	South African National Roads Agency SOC Limited
Name of Project:	Upgrade of Route 61, Section 2: Draairivier to Elinus Farm between Graaff-Reinet and Cradock
Project Description:	Environmental Assessment Services
Job Title and Duties:	Project Partner
Value of Project:	± R 250 000
Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration & year:	24 months 2009 to 2011
Client:	Nelson Mandela Metropolitan Municipality
Name of Project:	132 kV Overhead Powerline from Bloemendal to Tembani T-off
Project Description:	Environmental Impact Assessment
Job Title and Duties:	Project Partner / Environmental Assessment Practitioner
Value of Project:	± R 300 000
Location:	Uitenhage, Eastern Cape, South Africa
Project duration & year:	24 months 2009 to 2011
Client:	Nelson Mandela Metropolitan Municipality
Name of Project:	132 kV Overhead Powerline from Sans Souci Substation to the new Nivens Drift substation
Project Description:	Environmental Impact Assessment
Job Title and Duties:	Project Partner / Environmental Assessment Practitioner
Value of Project:	± R 300 000
Location:	Cradock to Middelburg, Eastern Cape, South Africa
Project duration & year:	7 months, 2010
Client:	South African National Roads Agency SOC Limited
Name of Project:	Upgrade of National Route 10, Section 4 (±24 km) Tafelberg to Middelburg
Project Description:	Environmental Assessment Services
Job Title and Duties:	Project Manager, Environmental Assessment Practitioner
Value of Project:	± R 100 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental Assessment: Linear projects

Location: Seaview, Eastern Cape, South Africa
 Project duration & year: 8 months, 2016
 Client: Nelson Mandela Bay Municipality
 Name of Project: Seaview Bulk Water Supply
 Project Description: Environmental Assessment for a bulk water infrastructure, including two 2.5 ML clear water reservoirs, one in the Island Nature Reserve, and 10 km of new pipelines, ranging from 200 mm to 700 mm diameter, near Seaview, Port Elizabeth
 Job Title and Duties: Environmental Assessment Practitioner, Project Review
 Value of Project: ± R 150 000

Location: Addo to Motherwell, Eastern Cape, South Africa
 Project duration & year: 36 months, 2007 to 2010
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: Nooitgedagt/Coega Low Level Scheme water supply pipeline
 Project Description: Environmental Impact Assessment
 Job Title and Duties: Project Partner / Environmental Assessment Practitioner
 Value of Project: ± R 500 000

Location: Gonubie, East London, Eastern Cape
 Project duration & year: 9 months, 2008
 Client: Eastern Cape Department of Roads and Public Works
 Name of Project: East Coast Resorts Road Upgrade
 Project Description: Basic Assessment
 Job Title and Duties: Project Partner / Environmental Assessment Practitioner
 Value of Project: ± R 150 000

Location: St Francis Bay, Eastern Cape, South Africa
 Project duration & year: 9 months 2003
 Client: Kouga Municipality
 Name of Project: St Francis Bay Bulk Water Supply (16 km) Pipeline
 Project Description: Environmental Scoping Study
 Job Title and Duties: Project Manager
 Value of Project: ± R 60 000

Location: Matatiele to Mount Frere, Eastern Cape, South Africa
 Project duration & year: 4 months, 2003
 Client: Eastern Cape Department of Roads and Public Works
 Name of Project: Environmental Assessment and Environmental Management Plan, Trunk Road 08015 (± 22 km), between Mount Frere and the R 56 between Matatiele and Mount Fletcher.
 Project Description: Environmental Scoping Study and Environmental Management Plan
 Job Title and Duties: Project Manager, Environmental Assessment Practitioner
 Value of Project: ± R 50 000

Location: Port Elizabeth, Eastern Cape
 Project duration & year: 2014
 Client: Airports Company South Africa
 Name of Project: Port Elizabeth Airport Runway End Safety Area and Strip Compliance
 Project Description: Environmental Assessment for the Extension of the Runway End Safety Area to comply with the recommendations of the International Civil Aviation Authority
 Job Title and Duties: Environmental Assessment Practitioner, Project Review
 Value of Project: R 140 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental Assessment: Mining & Industrial

Location:	Coega Special Economic Zone, Port Elizabeth, Eastern Cape
Project duration & year:	September 2020 – August 2021
Client:	ALO Polymers
Name of Project:	Coega Polyethylene Terephthalate Polymer Plant EIA
Project Description:	Environmental Assessment, including air emission licence, for a 900 ton per day polyethylene terephthalate (PET) polymer plant in the Coega Special Economic Zone
Job Title and Duties:	Environmental Assessment Practitioner, Project Partner
Value of Project:	± R 700 000
Location:	Coega Special Economic Zone, Port Elizabeth, Eastern Cape
Project duration & year:	6 months, 2013
Client:	African Oxygen Limited (Afrox)
Name of Project:	Afrox Air Separation Unit Basic Assessment
Project Description:	Environmental Assessment for the storage of dangerous goods (300 m ³ liquid oxygen) at the Afrox Air Separation Unit in the Coega Special Economic Zone
Job Title and Duties:	Environmental Assessment Practitioner, Project Partner
Value of Project:	R 90 000
Location:	Kimberly, Northern Cape
Project duration & year:	9 months, 2019
Client:	African Oxygen Limited (Afrox)
Name of Project:	Afrox Kimberly 90 m ³ LPG Basic Assessment
Project Description:	Environmental Assessment, including Major Hazard Installation risk assessment and Water Use Authorisation, for the storage of dangerous goods (90 m ³ liquid petroleum gas) at the Afrox Depot in Kimberly, Northern Cape.
Job Title and Duties:	Environmental Assessment Practitioner, Project Partner
Value of Project:	R 300 000
Location:	Great Dyke (Selous to Ngezi), Zimbabwe
Project duration & year:	2 months, 2016
Client:	Zimplats
Name of Project:	Expansion at the Selous Metallurgical Complex: Environmental & Social Risk Assessment and Environmental and Social Management Plan for Step 1
Project Description:	Environmental & Social Risk Assessment
Job Title and Duties:	Project Manager, Environmental Assessment Practitioner
Value of Project:	± R 150 000
Location:	Bas Congo Province, Democratic Republic of Congo
Project duration & year:	May 2013 - August 2013
Client:	Nyumba Ya Akiba sarl
Name of Project:	Nyumba Ya Akiba 3,000 tpd Cement Project
Project Description:	Environmental & Social Impact Assessment
Job Title and Duties:	Client Liaison, Environmental Assessment Practitioner
Value of Project:	± USD 350 000
Location:	Coega Special Economic Zone, Port Elizabeth, Eastern Cape
Project duration & year:	12 months, 2012/13
Client:	AfriSam (Pty) Ltd
Name of Project:	Coega 3,000 tpd Cementitious Material Grinding & Blending Plant
Project Description:	Environmental Impact Assessment
Job Title and Duties:	Project Manager, Environmental Assessment Practitioner
Value of Project:	± R 700 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental Assessment: Mining & Industrial

Location:	Great Dyke (Selous to Ngezi), Zimbabwe
Project duration & year:	12 months, 2012
Client:	Zimplats
Name of Project:	Phase 3 Expansion: Consolidated Environmental Impact Assessment
Project Description:	Environmental & Social Impact Assessment
Job Title and Duties:	Project Manager
Value of Project:	± R 2,500 000
Location:	Selous Metallurgical Complex, Zimbabwe
Project duration & year:	3 months, 2012
Client:	Zimplats
Name of Project:	Sulfur Dioxide Abatement Installation at Selous Metallurgical Complex (SMC)
Project Description:	Environmental & Social Impact assessment
Job Title and Duties:	Environmental Assessment Practitioner
Value of Project:	± R 1,500 000
Location:	Coega Special Economic Zone, Port Elizabeth, Eastern Cape
Project duration & year:	18 months, 2006/2007
Client:	Straits Chemicals
Name of Project:	Straits Chemicals Chlor-Alkali Plant EIA
Project Description:	Environmental Impact Assessment
Job Title and Duties:	Project Manager, Environmental Assessment Practitioner
Value of Project:	± R 1,000 000
Location:	Hankey, Eastern Cape, South Africa
Project duration & year:	4 months, 2009
Client:	Nkari Mining
Name of Project:	Prospecting EMP
Project Description:	Environmental Management Programme
Job Title and Duties:	Project Partner / Environmental Assessment Practitioner
Value of Project:	± R 100 000
Location:	Paterson, Eastern Cape, South Africa
Project duration & year:	6 months, 2010
Client:	Vulani Coronation Mining
Name of Project:	Prospecting permit application for silica mine
Project Description:	Environmental Management Plan for Prospecting Right
Job Title and Duties:	Project Partner
Value of Project:	± R 100 000

Key Experience: Environmental assessment: Housing / change in land use

Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration & year:	9 months, 2014
Client:	Nelson Mandela Bay Municipality
Name of Project:	Walmer erf 1948 Housing Development
Project Description:	Basic Assessment for mixed use housing development on a portion of erf 1948 Walmer (2,000 residential opportunities on 20 hectares) Nelson Mandela Bay
Job Title and Duties:	Environmental Assessment Practitioner, Project Review
Value of Project:	± R 250 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental assessment: Housing / change in land use

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 2014 – 2017
 Client: Nelson Mandela Bay Municipality
 Name of Project: Walmer erf 11305 Housing Development
 Project Description: Environmental Impact Assessment for mixed use housing development (1,700 residential opportunities on 43.74 hectares) on erf 11305, Walmer, Nelson Mandela Bay
 Job Title and Duties: Environmental Assessment Practitioner, Project Review
 Value of Project: ± R 1,200 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 2009 – 2016
 Client: Nelson Mandela Bay Municipality
 Name of Project: Seaview Low Cost Housing
 Project Description: Environmental Impact Assessment for the development of a 20 hectare site for the provision of 400 low cost housing units and associated wastewater treatment works, Seaview, Eastern Cape
 Job Title and Duties: Environmental Assessment Practitioner, Project Review
 Value of Project: ± R 470 000

Location: KwaNobuhle, Eastern Cape, South Africa
 Project duration & year: 2011 – 2013
 Client: Nelson Mandela Bay Municipality
 Name of Project: KwaNobuhle Area 11 EIA
 Project Description: Environmental Assessment (including public participation) of KwaNobuhle Extension 11, mixed-use housing development (3,000 residential opportunities on 143 hectares) near Uitenhage
 Job Title and Duties: Environmental Assessment Practitioner, Project Partner
 Value of Project: R 570 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 36 months, 2012 – 2015
 Client: Nelson Mandela Bay Municipality
 Name of Project: Jachtlake Integrated Human Settlement EIA
 Project Description: Environmental Impact Assessment for the mixed-use housing, commercial and industrial development in the Jachtlake Precinct (14,000 residential opportunities on 2,382 hectares), Nelson Mandela Bay
 Job Title and Duties: Environmental Assessment Practitioner, Project Review
 Value of Project: ± R 1 000 000

Location: Motherwell, Eastern Cape, South Africa
 Project duration & year: 36 months (2009 to 2012)
 Client: NuWay Housing
 Name of Project: Coega Ridge Integrated Housing Development
 Project Description: Environmental Assessment (including public participation) for the development of the integrated Coega Ridge housing project (3,200 hectares). High density node consisting of 38,000 residential opportunities, medium density node includes a golf course, equestrian centre and hotel, the low density node includes limited housing and a lodge.
 Job Title and Duties: Project Partner / Environmental Assessment Practitioner
 Value of Project: ± R 1 000 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental assessment: Housing / change in land use

Location: Gqebera, Walmer, Eastern Cape, South Africa
 Project duration & year: 12 months, 2010
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: Walmer/Gqebera Low Cost Housing EIA
 Project Description: Environmental Assessment and application for exemption, for the re-development of Areas Q, G and O, totalling 83 hectares, in Gqebera in the Walmer Township, Port Elizabeth
 Job Title and Duties: Project Partner / Environmental Assessment Practitioner
 Value of Project: ± R 250 000

Location: Rosedale, Uitenhage, Eastern Cape, South Africa
 Project duration & year: 9 months, 2009
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: Rosedale Low Cost Housing EIA
 Project Description: Environmental Assessment (including public participation) and Environmental Impact Assessment of development of a 41 hectares site for the provision of 877 low cost housing units at Rosedale, Uitenhage
 Job Title and Duties: Project Partner / Environmental Assessment Practitioner
 Value of Project: ± R 200 000

Location: St Albans, Eastern Cape, South Africa
 Project duration & year: 9 months, 2009
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: St Albans Low Cost Housing EIA
 Project Description: Environmental Assessment (including public participation) for the development of a 28 hectares site for the provision of low cost housing (600 units) at St Albans, Port Elizabeth
 Job Title and Duties: Project Partner / Environmental Assessment Practitioner
 Value of Project: ± R 300 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 12 months, 2006
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: SEA of the Greater Happy Valley area
 Project Description: Strategic Environmental Assessment
 Job Title and Duties: Project Manager
 Value of Project: ± R 150 000

Location: St Francis Bay, Eastern Cape, South Africa
 Project duration & year: 9 months 2006
 Client: Watersplash Investments (Pty) Ltd
 Name of Project: Change in Land Use Application for Part 2 of Farm 707, Osbosch 707
 Project Description: Environmental Scoping Study
 Job Title and Duties: Project Manager
 Value of Project: ± R 150 000

Location: Coega Special Economic Zone, Port Elizabeth, Eastern Cape
 Project duration & year: 18 months, 2005/2006
 Client: Coega Development Corporation
 Name of Project: Change in Land use of the Remainder of the Coega IDZ (± 7200 Hectares)
 Project Description: Environmental Impact Assessment
 Job Title and Duties: Project Manager, Environmental Assessment Practitioner
 Value of Project: ± R 500 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental assessment: Housing / change in land use

Location: Motherwell, Eastern Cape, South Africa
 Project duration & year: 6 months, 2005
 Client: Motherwell Urban Renewal Project
 Name of Project: Motherwell Golf Course
 Project Description: Environmental Scoping Study
 Job Title and Duties: Project Manager, Environmental Assessment Practitioner
 Value of Project: ± R 100 000

Location: Uitenhage, Eastern Cape, South Africa
 Project duration & year: 8 months, 2004/2005
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: Nelson Mandela Bay Logistics Park Scoping Study
 Project Description: Environmental Scoping Study
 Job Title and Duties: Project Manager, Environmental Assessment Practitioner
 Value of Project: ± R 100 000

Location: St Francis Bay, Eastern Cape, South Africa
 Project duration & year: 9 months, 2003
 Client: Golf Data
 Name of Project: St Francis Golf Links EIA
 Project Description: Environmental Impact Assessment
 Job Title and Duties: Project Manager, Environmental Assessment Practitioner
 Value of Project: ± R 300 000

Key Experience: Environmental assessment: Coastal management

Location: St Francis Bay, Eastern Cape, South Africa
 Project duration & year: 2002 to 2007 (including discontinuities)
 Client: Kouga Municipality
 Name of Project: St Francis Bay Beach Remediation
 Project Description: Environmental Impact Assessment
 Job Title and Duties: Project Co-ordinator for initial EIA, Project Manager for revision of EIR
 Value of Project: ± R 500 000

Location: Nelson Mandela Metropolitan Municipality, Eastern Cape, South Africa
 Project duration & year: 6 months, 2005
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: Integrated Beach Development Plan
 Project Description: Strategic Environment Assessment
 Job Title and Duties: Environmental Assessor
 Value of Project: ± R 100 000

Key Experience: Environmental auditing & due diligence

Location: George Industria, Western Cape, South Africa
 Project duration & year: 2 months, 2020
 Client: Coca-Cola Bottling (South Africa)
 Name of Project: Phase I Environmental Due Diligence of Erven 5314 and 16837
 Project Description: Phase I Environmental Due Diligence of Erven 5314 and 16837
 Job Title and Duties: Project Manager, Environmental Assessment Practitioner
 Value of Project: ± R 70 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental auditing & due diligence

Location: Grand Cape Mount County, Republic of Liberia
 Project duration & year: 1 month, 2016
 Client: Aureus Mining
 Name of Project: New Liberty Gold Mine
 Project Description: ISO 14001 compliance audit
 Job Title and Duties: Lead Auditor
 Value of Project: ± R 150 000

Location: Coega Special Economic Zone, Port Elizabeth, Eastern Cape
 Project duration & year: 6 months, 2012
 Client: Coega Development Corporation
 Name of Project: Environmental Due Diligence study for Zones 12 of the Coega Special Economic Zone
 Project Description: Phase 1 & 2 Environmental Due Diligence Study
 Job Title and Duties: Project Manager, Environmental Scientist
 Value of Project: ± R 250 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 2 months, 2014
 Client: SAB Miller
 Name of Project: Water Vulnerability Assessment for iBhayi Brewery, Perseverance, Port Elizabeth
 Project Description: Assess vulnerability to changes in quality and availability of water supply
 Job Title and Duties: Environmental Scientist
 Value of Project: ± R 150 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 2 months, 2009
 Client: SAB Miller
 Name of Project: Water Vulnerability Assessment for iBhayi Brewery, Perseverance, Port Elizabeth
 Project Description: Assess vulnerability to changes in quality and availability of water supply
 Job Title and Duties: Environmental Scientist
 Value of Project: ± R 100 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 2 months, 2009
 Client: Coca Cola Fortune (Pty) Ltd
 Name of Project: Water Vulnerability Assessment for Lakeside Plant, North End, Port Elizabeth
 Project Description: Assess vulnerability to changes in quality and availability of water supply
 Job Title and Duties: Environmental Scientist
 Value of Project: ± R 100 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 2 months, 2010
 Client: Environ, on behalf of Evonik
 Name of Project: Project Casablanca – Phase I Environmental Due Diligence of Algorax
 Project Description: Phase 1 Environmental Due Diligence Study
 Job Title and Duties: Environmental Scientist
 Value of Project: ± R 150 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental auditing & due diligence

Location:	Coega Special Economic Zone, Port Elizabeth, Eastern Cape
Project duration & year:	6 months, 2008
Client:	Coega Development Corporation
Name of Project:	Environmental Due Diligence study for Zones 6 & 7 of the Coega Special Economic Zone
Project Description:	Phase 1 & 2 Environmental Due Diligence Study
Job Title and Duties:	Project Manager, Environmental Scientist
Value of Project:	± R 250 000
Location:	Coega Special Economic Zone, Port Elizabeth, Eastern Cape
Project duration & year:	6 months, 2004
Client:	Coega Development Corporation
Name of Project:	Environmental Due Diligence study for Zones 1, 2 and 3 of the Coega Special Economic Zone
Project Description:	Environmental Due Diligence Study
Job Title and Duties:	Project Manager, Environmental Scientist
Value of Project:	± R 250 000
Location:	Luanda, Angola
Project duration & year:	2 months, 2002
Client:	BP
Name of Project:	BP Waste Management Audits
Project Description:	Third party waste contractor audits
Job Title and Duties:	Lead Auditor
Value of Project:	± R 50 000

Key Experience: Environmental monitoring & remediation

Location:	Paranam, Suriname
Project duration & year:	6 months, 2011 / 2012
Client:	Suriname Aluminum Company, LLC
Name of Project:	Geochemical assessment of pit lake water and sediment
Project Description:	Water quality monitoring
Job Title and Duties:	Environmental Scientist
Value of Project:	R 300 000
Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration & year:	2004 to present
Client:	Nelson Mandela Bay Municipality
Name of Project:	Landfill Monitoring
Project Description:	Monitoring of groundwater, surface water and landfill gas at the Koedoeskloof, Arlington, KwaNobuhle, and iBhayi Landfill Sites
Job Title and Duties:	Environmental Scientist, Project Reviewer
Value of Project:	R 3,500 000
Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration & year:	6 months, 2009
Client:	Nelson Mandela Bay Municipality
Name of Project:	North End Lake Water Quality Management Plan
Project Description:	Water Quality Management Plan
Job Title and Duties:	Project Manager, Environmental Scientist
Value of Project:	R 150 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental monitoring & remediation

Location: Struandale, Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 6 months, 2009
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: Decommissioning of the NMBM Gas Works
 Project Description: Basic Assessment
 Job Title and Duties: Project Partner / Environmental Assessment Practitioner
 Value of Project: ± R 150 000

Location: North End, Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 6 months, 2009
 Client: Transnet Capital Projects
 Name of Project: Decommissioning of Transnet's North End Ash Deposit
 Project Description: Site Contamination Assessment & Basic Assessment
 Job Title and Duties: Project Partner / Environmental Assessment Practitioner
 Value of Project: ± R 150 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 2 years, 2005/2007
 Client: Confidential
 Name of Project: Groundwater Contamination Assessment at manufacturing concern
 Project Description: Delineation and monitoring of chlorinated hydrocarbon plume in groundwater
 Job Title and Duties: Project Manager, Environmental Scientist
 Value of Project: ± R 600 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 2 years, 2003/2004
 Client: Client confidential
 Name of Project: In-Situ Chemical Oxidation of Chlorinated Hydrocarbon Contamination
 Project Description: In-situ chemical oxidation with potassium permanganate
 Job Title and Duties: Project Manager, Environmental Scientist
 Value of Project: ± R 500 000

Location: Port of Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 3 months, 2003
 Client: Transnet National Port Authority
 Name of Project: Water Quality Monitoring Programme for the Port of Port Elizabeth
 Project Description: Development of a water quality monitoring programme
 Job Title and Duties: Project Manager, Environmental Scientist
 Value of Project: ± R 50 000

Key Experience: Environmental assessment: Waste management

Location: Port of Port Elizabeth and Port of Ngqura, Eastern Cape, South Africa
 Project duration & year: 12 months, 2009/2010
 Client: Transnet National Ports Authority
 Name of Project: Waste Management Plans for the Ports of Port Elizabeth and Ngqura
 Project Description: Waste Management Plan
 Job Title and Duties: Project Partner
 Value of Project: ± R 500 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental assessment: Waste management

Location: Nelson Mandela Bay Municipality, Eastern Cape, South Africa
 Project duration & year: 24 months, 2008 to 2009
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: NMBM Waste Transfer Sites: Environmental Screening
 Project Description: Environmental Screening / Site selection
 Job Title and Duties: Project Partner
 Value of Project: ± R 300 000

Location: Cacadu District Municipality, Eastern Cape, South Africa
 Project duration & year: 2 months, 2008
 Client: Cacadu District Municipality
 Name of Project: Cacadu District Municipality: Integrated Waste Management Plan
 Project Description: Status Quo Assessment of Waste Management Facilities
 Job Title and Duties: Project Manager
 Value of Project: ± R 60 000

Location: Graaff Reinet, Eastern Cape, South Africa
 Project duration & year: 24 months, 2007 to 2008
 Client: Camdeboo Local Municipality
 Name of Project: Establishment of new landfill site for Graaff Reinet
 Project Description: Environmental Impact Assessment
 Job Title and Duties: Project Partner / Environmental Assessment Practitioner
 Value of Project: ± R 250 000

Location: Walmer, Eastern Cape, South Africa
 Project duration & year: 6 months, 2004
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: Walmer Gqebera Landfill Site: Landfill Gas Risk Assessment
 Project Description: Qualitative Environmental Risk Assessment
 Job Title and Duties: Environmental Assessor
 Value of Project: ± R 100 000

Location: iBhayi, Eastern Cape, South Africa
 Project duration & year: 9 months, 2002
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: iBhayi Landfill Site: Application for Buffer Zone Relaxation
 Project Description: Quantitative Environmental Risk Assessment
 Job Title and Duties: Project Manager
 Value of Project: ± R 150 000

Key Experience: Environmental Management Systems

Location: Nelson Mandela Metropolitan Municipality, Eastern Cape, South Africa
 Project duration & year: 3 years, 2002 to 2005
 Client: Nelson Mandela Metropolitan Municipality
 Name of Project: Environmental Management System implementation
 Project Description: Environmental Management System (ISO 14001 based)
 Job Title and Duties: Project Manager, Environmental Consultant
 Value of Project: ± R 1,200 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: Environmental Management Systems

Location: Cato Ridge, KwaZulu Natal, South Africa
 Project duration & year: 5 months, 2003
 Client: Assmang
 Name of Project: ISO 14001 Implementation
 Project Description: Environmental Management System (ISO 14001 compliant)
 Job Title and Duties: Project Review
 Value of Project: ± R 200 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 9 months, 2002
 Client: Delphi Catalysts
 Name of Project: 14001 implementation
 Project Description: Environmental Management System (ISO 14001 certified)
 Job Title and Duties: Environmental Consultant
 Value of Project: ± R 150 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 4 months, 2000
 Client: PPC
 Name of Project: PPC Grassridge Quarry: ISO 14001 implementation
 Project Description: Environmental Management System (ISO 14001 certified)
 Job Title and Duties: Technical advisor
 Value of Project: ± R 50 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 4 months, 1999
 Client: CSIR, Division of Textile Technology
 Name of Project: ISO 14001 implementation
 Project Description: Environmental Management System (ISO 14001 certified)
 Job Title and Duties: Technical advisor
 Value of Project: ± R 50 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration & year: 9 months, 1998/1999
 Client: Duracell Eveready
 Name of Project: Duracell Eveready: ISO 14001 implementation
 Project Description: Environmental Management System (ISO 14001 certified)
 Job Title and Duties: Environmental Consultant
 Value of Project: ± R 150 000

Key Experience: External Review

Location: Graaff-Reinet, Eastern Cape
 Project duration & year: 4 months, 2015
 Client: Richardt van Rensburg Inc
 Name of Project: Iharfu Minerals, erf 1814, Graaff-Reinet
 Project Description: Review of the Draft EIA & EMP for the mining of hard rock aggregate on erf 1814, Graaff-Reinet, adjacent to the Camdeboo National Park
 Job Title and Duties: External reviewer
 Value of Project: ± R 200 000

Rob Gardiner

Principal Environmental Scientist

Key Experience: External Review

Location: Port Elizabeth, Eastern Cape
 Project duration & year: 1 Month, 2015
 Client: Nelson Mandela Bay Municipality
 Name of Project: Kabega Road low level bridge review
 Project Description: Review of the environmental assessment and EMP for repair works to the Kabega Road low level bridge
 Job Title and Duties: External reviewer
 Value of Project: ± R 20 000

Location: Port Elizabeth, Eastern Cape
 Project duration & year: 2 months, 2014
 Client: Chlor Alkali Holdings
 Name of Project: Cerebos Closure Liability Assessment
 Project Description: External review of mine closure costs for Cerebos' Coega River, Sundays River, Swartkops River, and Berg River saltpans.
 Job Title and Duties: External reviewer
 Value of Project: R 200 000

Location: Port Elizabeth, Eastern Cape
 Project duration & year: 2 months, 2017
 Client: Nelson Mandela Bay Municipality
 Name of Project: N2 North Housing EIA
 Project Description: Review of the N2 North Housing EIA (2,949 residential opportunities on 112 hectares of developable area, and 114 hectares set aside for open space) and preparation of a successful Grounds for Appeal of the refusal of the Environmental Authorisation.
 Job Title and Duties: External reviewer
 Value of Project: R 200 000



Nicola Rump

Principal Environmental Scientist

Profession: Principal Environmental Consultant / Scientist

Nationality: South African (dual UK & SA passports)

Qualifications: MSc (Eco Physiology), Wits, 2005
BSc (Hons) (Zoology), UPE, 2002
BSc (Zoology, Biochemistry), UPE, 2001

Registrations: Certified Environmental Assessment Practitioner (EAP(SA)), Member of IAISA

Awards: None

Specialisation: Environmental Management Plans, permitting and compliance monitoring; Environmental Impact and Basic Assessments (to SA and IFC standards); Renewable energy, infrastructure, industrial and mining related projects; ecology

Additional relevant courses / training: International Finance Corporation (IFC) Environmental and Social Risk Management (ESRM) training for consultants, consisting of 5 days of intensive training followed by four practical workshops (2-3 days each) and a series of follow up sessions, running from January 2018 to November 2021. This training was provided by the IFC to qualifying consultants, and covered a wide range of topics aimed at assisting financial organisations in identifying, assessing, mitigating and monitoring the risks posed by potential investments.

Professional Interests: Risk management, international best practice, mining, renewable energy developments, conservation and restoration ecology, ecosystem services, impact assessment, environmental management, environmental compliance and due diligence audits, sustainable finance and ESG related issues.

I have been involved in EIAs and environmental management since 2007, both in South Africa and internationally. My experience includes 11 months in SRK's UK office (Cardiff) during 2011-2012, during which time (and subsequently, back in SRK's SA office), I gained experience on working on large mining projects and meeting the requirements of international funders (such as the IFC). I have also completed the IFC's Environmental and Social Risk Management training programme for consultants (in 2018). My expertise includes:

- Project management and co-ordination;
- Environmental impact assessments (BA / EIA / ESIA, both to South African standards and those of international funding organisations);
- Environmental management plans (including ESAP, ESMP, EMPr, ESMS);
- Environmental compliance auditing;
- Management of specialist studies;
- Environmental licensing / permitting;
- Stakeholder engagement;
- Due diligence / environmental legal compliance reviews;
- Provision of environmental input for a wide range of report types.

My core competencies include:

- Proficiency in using the various commonly used PC software e.g. MS Word, Excel, Powerpoint, Outlook and Project;
- Excellent report writing, review and compilation skills;
- Excellent presentation and communication skills (both verbal and written);
- Project management, including management of a large and diverse project team and budgets;
- Appointment and management of specialists / sub-consultants;
- Mentoring and management of junior staff;
- Identifying and pursuing new work opportunities, including budgeting and proposal writing

Employment Record:

2012- present	SRK Consulting (SA) , Port Elizabeth. Principal Environmental Scientist
2011 - 2012	SRK Consulting (UK) , Cardiff. Environmental Scientist
2008 – 2011	SRK Consulting (SA) , Port Elizabeth. Environmental Scientist.
2007 – 2008	Sigwela and Associates , Port Elizabeth. Environmental Control Officer.
2006-2007	Integrated Management Systems , Port Elizabeth. Personal assistant and trainee Management System consultant.
2006	Valmac Printers & Stationers , Port Elizabeth. General assistant to management; print consultant.
2005	NMMU , Port Elizabeth. Research Assistant – Botany Department.

Languages:	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Good	Good	Fair
Spanish	Basic	Basic	Basic

PROJECT EXPERIENCE

Key Experience:	IFC-ALIGNED LENDER RELATED WORK
Location:	Selous, Zimbabwe
Project duration/date:	April – June 2016
Client:	Zimplats
Name of Project:	Proposed Smelter expansion Project at Selous Metallurgical Complex (SMC) Environmental & Social Risk Assessment
Project Description:	ESRA for the expansion of existing smelter facilities at Zimplats' platinum processing plant, to inform further actions required with regard to environmental best practice management.
Job Title and Duties:	Project co-ordinator and Environmental Assessment Practitioner.
Value of Project:	~ R 150,000
Location:	Ethiopia (two mine sites)
Project duration/date:	October 2015
Client:	National Mining Corporation plc (NMIc)
Name of Project:	Okote Gold & Werri Gold & Base Metal Project, Ethiopia
Project Description:	Environmental and Social Impact Assessments (for local permitting requirements, as well as to lay the ground work for upgrading to international standards), for two gold mines in Ethiopia
Job Title and Duties:	Environmental Assessment Practitioner - provision of ad-hoc assistance to project team relating to report writing.
Value of Project:	~ USD 1,000,000
Location:	Bas Congo Province, Democratic Republic of Congo
Project duration/date:	May 2013 – October 2015
Client:	Nyumba Ya Akiba sarl. (NYA)
Name of Project:	NYA cement project ESIA update, addendum and implementation support
Project Description:	ESIA update and associated management plans (including RAP), as well as completion of further work required, in response to gaps in a previous ESIA (by another consultancy) identified through a due diligence undertaken on behalf of the IFC for the development of a cement plant, limestone quarry and associated infrastructure in DRC.
Job Title and Duties:	Project co-ordinator and Environmental Assessment Practitioner.
Value of Project:	~ USD 1,000,000
Location:	Lunsar, Sierra Leone
Project duration/date:	November 2010 – October 2012
Client:	Marampa Iron Ore Limited (subsidiary of Cape Lambert)
Name of Project:	Marampa Iron Ore ESIA

Project Description:	EIA for local authorisation and to meet future IFC-aligned lender requirements for the development of an iron ore mine and associated infrastructure around the town of Lunsar, Sierra Leone.
Job Title and Duties:	Project co-ordinator and Environmental Assessment Practitioner.
Value of Project:	~ R8,500,000

Key Experience: ENVIRONMENTAL IMPACT ASSESSMENTS

Location:	Coega Special Economic Zone, Port Elizabeth, South Africa
Project duration/date:	September 2020 – August 2021
Client:	ALO Polymers
Name of Project:	Coega Polyethylene Terephthalate Polymer Plant EIA
Project Description:	Environmental Assessment, including air emission licence, for a 900 ton per day polyethylene terephthalate (PET) polymer plant in the Coega Special Economic Zone
Job Title and Duties:	Project reviewer
Value of Project:	~R 700,000

Location:	Coega Special Economic Zone, Port Elizabeth, South Africa
Project duration/date:	September 2020 – August 2021
Client:	Engie Southern Africa
Name of Project:	Engie 200 MW Risk Mitigation Gas to Power Project
Project Description:	Screening study, Scoping phase and Air Emission License application for 200 MW gas fired power plant, including associated infrastructure for gas import.
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/manager
Value of Project:	~R 900,000

Location:	Coega Special Economic Zone, Port Elizabeth, South Africa
Project duration/date:	December 2019 - current
Client:	Coega Development Corporation / Mulilo Total Coega
Name of Project:	Coega Gas to Power Project
Project Description:	Environmental Impact Assessments and Air Emission License applications for 3000 MW Combined Cycle Gas Turbine Project, including associated gas infrastructure (project split into four separate EIAs), and including a 200 MW phase as part of the DMRE's Risk Mitigation IPPPP.
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/manager
Value of Project:	~R 1,200,000

Location:	Groot Winterhoek Mountains, Kirkwood, Eastern Cape, South Africa
Project duration/date:	2014 – 2017
Client:	Vulisango Holdings (Pty) Ltd
Name of Project:	Inyanda – Roodeplaat 187 MW Wind Energy Facility
Project Description:	Environmental Impact assessment for wind farm and associated infrastructure
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator
Value of Project:	~ R 1,200,000

Location:	Hopetown, Northern Cape, South Africa
Project duration/date:	April 2015 – June 2017
Client:	Afri-Coast Energy (Pty) Ltd
Name of Project:	Kloofsig 225 MW photovoltaic solar energy facility
Project Description:	Environmental Impact Assessment for solar energy facility (in 3 phases, each requiring a separate EIA process) and associated infrastructure
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/manager
Value of Project:	~R 1,300,000

Location:	Coega Industrial Development Zone, Port Elizabeth, South Africa
Project duration/date:	3 months, 2018
Client:	Confidential
Name of Project:	Wind to Water feasibility study
Project Description:	Environmental Feasibility Study for an integrated 150 ML/day desalination plant and wind energy project in the Coega industrial development zone
Job Title and Duties:	Report author

Value of Project:	Confidential
Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	March 2014 – September 2019
Client:	Nelson Mandela Bay Municipality
Name of Project:	Walmer Gqebera housing EIA, erf 11305
Project Description:	Environmental Impact Assessment for low cost housing development and associated infrastructure
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/manager
Value of Project:	~R 1,900 000
Location:	Harare, Zimbabwe
Project duration/date:	September 2013 - March 2014
Client:	PPC
Name of Project:	PPC Zimbabwe Harare cement grinding plant EIA
Project Description:	Supervision and review of an EIA for Zimbabwean environmental authorisation (with a subsequent potential update to meet lender requirements) for a cement grinding facility and associated infrastructure in Harare.
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator
Value of Project:	~ ZAR 1,600 000
Location:	Humansdorp, Eastern Cape, South Africa
Project duration/date:	March 2013 – September 2014
Client:	Woodlands Dairy
Name of Project:	Woodlands Dairy EIA & Waste License
Project Description:	EIA for the installation of an effluent treatment plant at a milk processing facility and the associated waste license application.
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/manager
Value of Project:	~ R400,000
Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	November 2010 – April 2019
Client:	Nelson Mandela Bay Municipality
Name of Project:	Seaview housing EIA
Project Description:	Site suitability screening and EIA for the development of a low income housing development and associated infrastructure, including on-site sanitation.
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/manager
Value of Project:	~ R1,500,000
Location:	Selous, Zimbabwe
Project duration/date:	February 2012 – July 2012
Client:	Zimplats
Name of Project:	Proposed Sulfur Dioxide (SO ₂) Abatement Installation Project at Selous Metallurgical Complex (SMC) EIA Amendment
Project Description:	EIA amendment for the installation of a scrubber and associated facilities for SO ₂ abatement at an existing platinum processing plant at Zimplats's SMC facility.
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator
Value of Project:	~ R750,000
Location:	Selous, Zimbabwe
Project duration/date:	August 2012 – February 2013
Client:	Zimplats
Name of Project:	Zimplats Phase 3 expansion consolidated EIA and EMP
Project Description:	Consolidated report summarising the project description and findings of various EIAs that have been conducted for Zimplats current operations and Phase 3 expansion, and compilation of an Environmental Management Plan for management of current and future environmental impacts.
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator.
Value of Project:	~ R3,000,000
Location:	Port Elizabeth, Eastern Cape, South Africa

Project duration/date: February 2009 – September 2010
 Client: Nelson Mandela Bay Municipality
 Name of Project: NMBM CEF 27 MW Wind Energy Facility EIA
 Project Description: EIA for a 27 MW wind farm (including comparative site suitability assessment and associated infrastructure)
 Job Title and Duties: Environmental Assessment Practitioner, project coordinator
 Value of Project: ~ R1,600,000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: 2008 - 2010
 Client: Nelson Mandela Bay Municipality
 Name of Project: Khayamnandi Extension Housing Project EIA
 Project Description: Environmental Impact Assessment for low cost housing development and associated infrastructure
 Job Title and Duties: Environmental Assessment Practitioner, project coordinator
 Value of Project: ~R 530,000

Location: Graaff-Reinet, Eastern Cape, South Africa
 Project duration/date: April 2008 – March 2010
 Client: Camdeboo Municipality
 Name of Project: Graaff-Reinet Waste Landfill Site EIA and Waste License Application
 Project Description: EIA for the selection of a suitable location for a new waste landfill site, and licensing thereof, including comparative site suitability assessment
 Job Title and Duties: Environmental Assessment Practitioner, project coordinator
 Value of Project: ~R350 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: July 2008 – September 2010
 Client: Nelson Mandela Bay Municipality
 Name of Project: NMBM Walmer Gqebera Housing EIA
 Project Description: Application for exemption from EIA for low-cost housing development in Gqebera Township
 Job Title and Duties: Environmental Assessment Practitioner, project coordinator
 Value of Project: ~R200 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: July 2006 - 2008
 Client: Jacques du Plessis
 Name of Project: Ferreira Farm residential development EIA
 Project Description: EIA for residential development
 Job Title and Duties: Environmental Assessment Practitioner, project coordinator
 Value of Project: ~R240 000

Key Experience: BASIC ASSESSMENTS

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/ date: March 2019 – March 2020
 Client: ACSA
 Name of Project: ACSA PE airport stormwater upgrade
 Project Description: Updated Basic Assessment for upgrades to stormwater infrastructure at the Port Elizabeth airport and Environmental Control Officer for construction
 Job Title and Duties: Environmental Assessment Practitioner, project coordinator/manager
 Value of Project: ~R 240,000

Location: Coega IDZ, Eastern Cape, South Africa
 Project duration/date: December 2018 – March 2020
 Client: BAIC South Africa
 Name of Project: BAIC paintshop BA
 Project Description: Basic Assessment and co-ordination of MHI permit application for development of paintshop and associated facilities for the construction of a new automobile plant at Coega IDZ

Job Title and Duties: Value of Project:	Environmental Assessment Practitioner, project coordinator/manager ~R 500,000
Location: Project duration/date: Client: Name of Project: Project Description:	Molteno, Eastern Cape, South Africa September 2018 – March 2020 Engie Southern Africa Molteno Wind Energy Project Screening study and overseeing of pre-construction monitoring for development of two wind energy facilities near Molteno. Project terminated by client before applying for environmental authorisation.
Job Title and Duties: Value of Project:	Environmental Assessment Practitioner, project coordinator/manager ~R 400,000
Location: Project duration/date: Client: Name of Project: Project Description:	Kouga municipal area, Eastern Cape, South Africa August 2018 - 2020 Kouga Municipality Kouga cemeteries BA and Section 30A Directive application Screening study and Section 30A applications/ Basic Assessments for development of four cemeteries at various locations in the Kouga municipal area, including Water Use Authorisation Applications
Job Title and Duties: Value of Project:	Environmental Assessment Practitioner, project coordinator/manager ~ R450 000
Location: Project duration/date: Client: Name of Project: Project Description:	Middelburg, Queenstown and Van Stadens, Eastern Cape, South Africa February - September 2016 Department of Transport (EC) DoT Traffic Control Centres BA Basic Assessments and Concept layouts (x 3) for development of traffic control centres at 3 locations (draft stage only – project terminated early by client)
Job Title and Duties: Value of Project:	Environmental Assessment Practitioner, project coordinator/manager ~ R200 000
Location: Project duration/date: Client: Name of Project: Project Description:	Baviaanskloof, Eastern Cape, South Africa July 2015 – July 2016 Another Way Trust Baviaanskloof Leopard Trail BA Basic Assessment for development of hiking trail facilities
Job Title and Duties: Value of Project:	Environmental Assessment Practitioner, project coordinator/manager ~ R100 000
Location: Project duration/date: Client: Name of Project: Project Description:	Hopewell conservation area, Port Elizabeth, Eastern Cape, South Africa March 2015 – June 2015 (project terminated early by client) AfriCoast Energy Hopewell Solar PV BA Basic Assessment for 9 MW solar PV facility
Job Title and Duties: Value of Project:	Environmental Assessment Practitioner, project coordinator/manager ~ R100 000
Location: Project duration/date: Client: Name of Project: Project Description:	Alexandria area, Eastern Cape, South Africa November 2014 – August 2019 Wycombevale Broers Boerdery Wycombevale Vegetation Clearing BA and subsequent amendment Basic Assessment for clearing of agricultural land for pastures
Job Title and Duties: Value of Project:	Environmental Assessment Practitioner, project coordinator/manager ~ R200 000
Location: Project duration/date: Client: Name of Project:	Cookhouse, Eastern Cape, South Africa March 2014 – September 2015 Blue Crane Route Municipality Cookhouse WWTW Upgrade BA and WULAs

Project Description:	Basic Assessment and Section 21 c, i, f & g WULAs for upgrade of existing wastewater treatment works
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/manager
Value of Project:	~ R150 000
Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	March 2014 – June 2017
Client:	Nelson Mandela Bay Municipality
Name of Project:	Walmer Gqebera housing BA, erf 1948, and subsequent amendment and implementation support (license applications, etc.)
Project Description:	Site suitability screening, Basic Assessment and subsequent amendment thereof for transitional and permanent low cost housing development
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/manager
Value of Project:	~ R400 000
Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	April 2013 - March 2014
Client:	Airports Company of South Africa (ACSA)
Name of Project:	PE airport stormwater upgrade BA and WULA
Project Description:	Basic Assessment and water use licensing for stormwater upgrade at PE airport
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/manager
Value of Project:	~R135 000
Location:	East London, Eastern Cape, South Africa
Project duration/date:	April 2007 – August 2008
Client:	Eastern Cape Department of Roads & Transport
Name of Project:	MSA Gonubie roads upgrade BA
Project Description:	Basic Assessment and water use license applications for Gonubie roads upgrade
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator
Value of Project:	~R135 000
Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	January 2009 – July 2009
Client:	Makhetha Development Consultants (on behalf of NMBM)
Name of Project:	MDC Markman wastewater BA
Project Description:	Basic Assessment for construction of wastewater storage ponds
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator.
Value of Project:	~R70 000
Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	September 2008 – February 2009
Client:	Jacques du Plessis
Name of Project:	JDP Wells Estate Industrial Park BA
Project Description:	Basic Assessment for light industrial park
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator
Value of Project:	~R65 000
Location:	Upington, Northern Cape, South Africa
Project duration/date:	November 2009 – December 2010
Client:	Fluopro Investments (Pty) Ltd
Name of Project:	Upington 5 MW Solar Energy Plant
Project Description:	BA for the development of a 5 MW solar energy facility
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator
Value of Project:	~R120 000
Location:	Jansenville, Eastern Cape, South Africa
Project duration/date:	July 2010 - November 2010
Client:	Eonian Development (Pty) Ltd
Name of Project:	Eonian 10 MW Solar Energy Plant, Jansenville
Project Description:	BA for the construction of a 10 MW solar energy facility
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator

Value of Project:	~R55 000
Location:	Graaff-Reinet, Eastern Cape, South Africa
Project duration/date:	October 2010 – March 2011
Client:	Camdeboo Municipality
Name of Project:	Graaff-Reinet waste landfill closure BA and Licensing
Project Description:	BA for the decommissioning & rehabilitation of an existing waste landfill facility, and application for closure license.
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator
Value of Project:	~ R230 000
Key Experience:	ENVIRONMENTAL MANAGEMENT PLANS, LICENSING, AUDITING & OTHER REPORT TYPES
Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	September 2017- current
Client:	Nelson Mandela Bay Municipality
Name of Project:	NMBM Emergency Drought Relief Services (numerous sub-projects)
Project Description:	Environmental support to facilitate implementation of various drought relief projects (potentially including groundwater, desalination, effluent return schemes, and construction, expansion and repairs to supporting infrastructure). Services include EMPs, ECO, license applications (e.g. WULAs), Section 30A application in support of exemption from environmental authorisation processes due to emergency conditions, and fulfilling the associated reporting requirements.
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/ manager.
Value of Project:	~R4,700 000
Location:	Humansdorp, Eastern Cape, South Africa
Project duration/date:	September 2018- May 2021
Client:	Eskom
Name of Project:	Eskom Melkhout - Grassridge powerline upgrade ECO
Project Description:	Environmental Control Officer for the upgrade of a powerline between Melkhout and Grassridge substations (~40 km)
Job Title and Duties:	Project reviewer and manager.
Value of Project:	~R400,000
Location:	East London, Eastern Cape, South Africa
Project duration/date:	April 2018 – August 2018
Client:	Express Petroleum
Name of Project:	Express Petroleum fuel tanks 24G
Project Description:	Section 24G application for construction of fuel storage tanks with a combined capacity of approximately 800 m ³
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/ manager.
Value of Project:	~R70 000
Location:	Kouga, Koukamma and Ndlambe municipalities, Eastern Cape, South Africa
Project duration/date:	April 2017- June 2019
Client:	MSBA (on behalf of the EC DRPW)
Name of Project:	MSBA Causeways ECO & water quality sampling
Project Description:	Environmental Control Officer and post-authorisation submissions to authorities for repairs to river crossings on the Kap, Kromme, Sand and Kariaga rivers.
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/ manager.
Value of Project:	~R600 000
Location:	Graaff Reinet, Eastern Cape, South Africa
Project duration/date:	June 2017- 2019
Client:	Richardt van Rensburg Inc.
Name of Project:	Irhafu Sand Mining Appeal
Project Description:	Review in support of appeal against authorisation for sand mining in the Sundays River floodplain
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/ manager.

Value of Project:	~R50 000
Location:	Humansdorp, Eastern Cape, South Africa
Project duration/date:	June 2015- September 2019
Client:	Lex Gutsche Investment Trust
Name of Project:	RNA Aerodrome 24G Application
Project Description:	24G process for construction of an airstrip and associated infrastructure
Job Title and Duties:	Environmental Assessment Practitioner, project coordinator/ manager
Value of Project:	~R130 000
Location:	Motherwell canal, Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	June - October 2015 (Phase 1) & 2016 (Phase 2)
Client:	Nelson Mandela Bay Municipality
Name of Project:	Motherwell constructed wetland maintenance ECO (Phase 1 & 2)
Project Description:	Compilation of EMP and ECO function for maintenance and repairs to constructed wetland as part of a water quality improvement project at the Mother stormwater canal
Job Title and Duties:	Environmental Assessment Practitioner; Environmental Control Officer.
Value of Project:	~R50 000
Location:	Deal Party, Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	May 2008
Client:	Reclamation Group
Name of Project:	Reclamation Group Phase 1 Environmental Due-diligence
Project Description:	Phase 1 environmental due diligence site audit and reporting on environmental compliance aspects of recycling facilities
Job Title and Duties:	Environmental Assessment Practitioner
Value of Project:	~R30 000
Location:	Transnet facilities in Port Elizabeth and Uitenhage, Eastern Cape, South Africa
Project duration/date:	February – March 2014
Client:	KPMG
Name of Project:	KPMG Transnet absorbent mat due diligence audit
Project Description:	Audit of the effectiveness and adherence to SOPs at various Transnet Engineering facilities with regard to environmental aspects.
Job Title and Duties:	Environmental Assessment Practitioner, project co-ordinator.
Value of Project:	~R30 000
Location:	Kuyga township, Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	March 2014- January 2016
Client:	Aecom (on behalf of NMBM)
Name of Project:	Aecom Kuyga sewers ECO
Project Description:	ECO function for construction of the upgrade of sewers and construction of a pumpstation in Kuyga township
Job Title and Duties:	Environmental Control Officer and project co-ordinator/ manager.
Value of Project:	~R60 000
Location:	Graaff Reinet area, Eastern Cape, South Africa
Project duration/date:	April 2013 – March 2014
Client:	Department of Roads and Public Works (Eastern Cape)
Name of Project:	Camdeboo Borrow Pits licensing and EMP
Project Description:	License application for re-development of seven existing borrow pits in the Camdeboo district municipal area.
Job Title and Duties:	Environmental Assessment Practitioner, project co-ordinator/ manager.
Value of Project:	~R500 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: January 2012 – June 2014
 Client: MSBA (on behalf of DRPW)
 Name of Project: R102 maintenance vegetation clearing
 Project Description: EMP and ECO function for the clearing and management of vegetation in the road reserve, including relevant permits, for a road maintenance contract
 Job Title and Duties: Environmental Control Officer and project co-ordinator/ manager.
 Value of Project: ~R250 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: July 2014 – May 2015
 Client: Engen / Orion Engineered Carbons
 Name of Project: Orion PE Harbour Black Oil pipeline EMP
 Project Description: EMP and ECO function for TNPA approval for Black Oil pipeline replacement in Port Elizabeth harbour
 Job Title and Duties: Environmental Control Officer and project co-ordinator/ manager.
 Value of Project: ~R35 000

Location: Tsolo, Eastern Cape, South Africa
 Project duration/date: 2013 – 2014
 Client: Uhambiso Consult
 Name of Project: Tsolo WWTW Water Use License Application
 Project Description: Water quality management report and water use license application for the Tsolo waste water treatment works.
 Job Title and Duties: Environmental Control Officer and project co-ordinator/ manager.
 Value of Project: ~R45 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: November 2013 – February 2014
 Client: Engen / Orion Engineered Carbons
 Name of Project: Orion PE Harbour pipeline EMP
 Project Description: EMP and ECO function for TNPA approval for HFO pipeline refurbishment
 Job Title and Duties: Environmental Control Officer and project co-ordinator.
 Value of Project: ~R30 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: May – October 2013
 Client: Shell (Pty) Ltd
 Name of Project: Shell PE harbour trenches
 Project Description: Provision of environmental advice and compilation of EMP for TNPA approval for installation of product recovery trenches at Shell's lease area the PE harbour.
 Job Title and Duties: Environmental Assessment Practitioner, project co-ordinator.
 Value of Project: ~R30,000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: March 2012 – 2016
 Client: Nelson Mandela Bay Municipality
 Name of Project: Nooitgedacht / Coega Low Level Water Supply Scheme
 Project Description: ECO for construction of a bulk water supply pipeline and associated infrastructure (including reservoirs and water treatment works)
 Job Title and Duties: Environmental Control Officer, project co-ordinator.
 Value of Project: ~R2,300 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: July 2012 – January 2016
 Client: Metrowind
 Name of Project: Metrowind van Stadens wind farm
 Project Description: ECO for construction of a 27 MW wind farm and associated infrastructure.
 Job Title and Duties: Environmental Control Officer, project co-ordinator.
 Value of Project: ~R1,590 000

Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	August 2009 – March 2011
Client:	Nelson Mandela Bay Municipality
Name of Project:	Churchill Pipeline Upgrade
Project Description:	ECO for upgrade of Churchill pipeline and construction of booster pump station
Job Title and Duties:	Environmental Control Officer, project co-ordinator.
Value of Project:	~R200 000

Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	April 2008 – September 2008
Client:	Nelson Mandela Bay Municipality
Name of Project:	NMBM Moffett Dam
Project Description:	Compilation of EMP and ECO duties for repairs to dam wall
Job Title and Duties:	Environmental Control Officer, project co-ordinator.
Value of Project:	~R300 000

Location:	Herbertsdale, Western Cape, South Africa
Project duration/date:	May 2008 – September 2009
Client:	KFD Wilkinson Engineers (on behalf of DRPW)
Name of Project:	KFDW Herbertsdale culverts ECO
Project Description:	ECO overseeing repairs to damaged river crossings and culverts resulting from previous floods
Job Title and Duties:	Environmental Control Officer, project co-ordinator.
Value of Project:	~R145 000

Location:	King Williams Town, Eastern Cape, South Africa
Project duration/date:	August 2008
Client:	Chevron South Africa
Name of Project:	Chevron King Williams Town EMP
Project Description:	Environmental Management Plan for re-opening of service station (for approval by DME)
Job Title and Duties:	Environmental Assessment Practitioner, project co-ordinator
Value of Project:	~R12 000

Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	November 2010 – December 2010
Client:	Nelson Mandela Bay Municipality
Name of Project:	Heugh Road Upgrade EMP
Project Description:	EMP for widening and upgrading of Heugh Road.
Job Title and Duties:	Project reviewer.
Value of Project:	~R67 000

Location:	Port Elizabeth, Eastern Cape, South Africa
Project duration/date:	October 2010 – December 2010
Client:	Eris Property Group
Name of Project:	Construction of First National Bank Newton Park Building
Project Description:	EMP and ECO for construction
Job Title and Duties:	Project reviewer.
Value of Project:	~R11 000



Abby van Nierop

Environmental Scientist

Profession	Environmental Scientist
Qualifications:	BSc (Hons), Water Resource Management, Rhodes University, 2011 BSc, Environmental Science, Geography, Rhodes University, 2010
Registrations/ Affiliations	Member, IAISA

Specialisation

Environmental impact assessments, environmental management systems, ISO 9001, environmental management plans, environmental monitoring, and environmental auditing.

Expertise

Abby has developed his skills and expertise over the years as she has been involved in many different types National Environmental Management Act (NEMA) and National Environmental Management Waste Act (NEM:WA) Application processes for both private and governmental developments. Her Duties and responsibilities include:

- Environmental Assessments (Basic Assessment Reports and assistance with Scoping and Environmental Impact Reports);
- Environmental Management Plans;
- Environmental Auditing;
- Public Participation Process Co-ordinator;
- Mining Permit Applications;
- Water Use Licence Applications; and
- Forestry Applications.

Employment

2019 – present	SRK Consulting (SA), Port Elizabeth. Environmental Scientist.
2013 – 2019	Terreco Environmental cc, East London. Environmental Consultant.
2011	Rhodes University, Grahamstown. Practical Demonstrator – Geography Department.

Languages

English – read, write, speak (Excellent)
Afrikaans – read, write, speak (Good)

Abby van Nierop

Environmental Scientist

Key Experience:

Scoping and Environmental Impact Assessments

Location: Coega Special Economic Zone, Port Elizabeth, South Africa
 Project duration/date: December 2019 – May 2021
 Client: Coega Development Corporation / Mulilo Total Coega
 Name of Project: Coega Gas to Power Project
 Project Description: Environmental Impact Assessments for 3000 MW Combined Cycle Gas Turbine Project, including associated gas infrastructure (project split into four separate EIAs), and including a 200 MW phase as part of the DMRE's Risk Mitigation IPPPP.
 Job Title and Duties: Assistant Environmental Assessment Practitioner
 Value of Project: ± R 1,200,000

Key Experience:

BASIC ASSESSMENTS AND ENVIRONMENTAL MANAGEMENT PROGRAMMES

Location: Mkambati Nature Reserve, Eastern Cape, South Africa
 Project duration/date: 2013 – 2014 (13 months)
 Client: Mkambati Matters
 Name of Project: Proposed Construction of a Tourist Resort at the Mkambati Nature Reserve, Eastern Cape
 Project Description: Basic Assessment for the construction of a private tourist resort proposed for the Mkambati Nature Reserve.
 Job Title and Duties: Assisting Environmental Assessment Practitioner - conducting site visits; facilitation of public participation process; and assistance with Draft and Final Basic Assessment Reports and EMPr.

Location: Matatiele Ward 5 and 7, South Africa
 Project duration/date: 2014 (10 Months)
 Client: Alfred Nzo District Municipality
 Name of Project: Proposed Construction of the Matatiele Ward 5 and 7 Bulk Water Supply Scheme, Alfred Nzo District Municipality, Eastern Cape
 Project Description: Basic Assessment and EMPr for the construction of a bulk water supply pipeline and associated infrastructure (including reservoirs, boreholes, and pump stations)
 Job Title and Duties: Environmental Assessment Practitioner - Liaison with client and environmental authorities, conducting site visits, appointment and management of specialists, facilitation of public participation process, and author of Basic Assessment Report and EMPr.

Location: Matatiele Ward 15, South Africa
 Project duration/date: 2014 (11 Months)
 Client: Alfred Nzo District Municipality
 Name of Project: Proposed Construction of the Matatiele Ward 15 Bulk Water Supply Scheme, Alfred Nzo District Municipality, Eastern Cape
 Project Description: Basic Assessment and EMPr for the construction of a bulk water supply pipeline and associated infrastructure (including reservoirs, boreholes, and pump stations)
 Job Title and Duties: Environmental Assessment Practitioner - Liaison with client and environmental authorities, conducting site visits, appointment and management of specialists, facilitation of public participation process, and author of Basic Assessment Report and EMPr.

Abby van Nierop

Environmental Scientist

Key Experience: BASIC ASSESSMENTS AND ENVIRONMENTAL MANAGEMENT PROGRAMMES

Location: Mthatha, Eastern Cape, South Africa
 Project duration/date: 2015 – 2017 (13 months)
 Client: OR Tambo District Municipality
 Name of Project: Proposed King Sabata Dalindyebo Bulk Water Presidential Intervention Project
 Project Description: Basic Assessment and EMPr for the construction of a bulk water supply pipeline for Mthatha Central.
 Job Title and Duties: Environmental Assessment Practitioner - Liaison with client and environmental authorities, conducting site visits, appointment and management of specialists, facilitation of public participation process, and author of Basic Assessment Report and EMPr.

Location: Mount Frere, Eastern Cape, South Africa
 Project duration/date: April 2015 – June 2016 (11 months)
 Client: Alfred Nzo District Municipality
 Name of Project: Proposed Construction of the Sipetu Bridge, Mount Frere, Eastern Cape.
 Project Description: Basic Assessment, EMPr, and WULA for the construction of the new bridge in Sipetu.
 Job Title and Duties: Environmental Assessment Practitioner - Liaison with client and environmental authorities, conducting site visits, appointment and management of specialists, facilitation of public participation process, and author of Basic Assessment Report and EMPr.

Location: Lady Frere and Queenstown, Eastern Cape, South Africa
 Project duration/date: 2017 (11 months)
 Client: Chris Hani District Municipality
 Name of Project: Proposed Upgrading of the MR00661 road and bridge between Lady Frere and Queenstown, Eastern Cape
 Project Description: Basic Assessment, EMPr, and WULA for the upgrading of the MR00661 road and bridge between Lady Frere and Queenstown, Eastern Cape.
 Job Title and Duties: Environmental Assessment Practitioner - Liaison with client and environmental authorities, conducting site visits, appointment and management of specialists, facilitation of public participation process, and author of Basic Assessment Report and EMPr.

Key Experience: ENVIRONMENTAL CONTROL OFFICER (ECO)

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: August 2021- current
 Client: Nelson Mandela Bay Municipality
 Name of Project: Walmer Gqebera Low-Cost Housing (Erf 1948)
 Project Description: ECO function for the construction of the Temporary Relocation Area (TRA) and associated bulk services on Erf 1948, Walmer in Port Elizabeth
 Job Title and Duties: Monthly environmental auditing, DFFE plant removal permit application, supervision of contractor's environmental officer, provision of ad-hoc advice on environmental management as well as liaising with project team and environmental authorities.
 Value of Project: ~R200 000

Abby van Nierop

Environmental Scientist

Key Experience:

ENVIRONMENTAL CONTROL OFFICER (ECO)

Location: Port Elizabeth, Nelson Mandela Bay Municipality
 Project duration/date: July 2021 - Ongoing
 Client: Engen
 Name of Project: Baywest Engen 1 Filling Station
 Project Description: ECO function for the construction of the Engen 1 Stop Fuel Filling Station in Baywest.
 Job Title and Duties: Monthly environmental auditing, monitoring and advising on compliance with authorisations and EMPr, provision of ad-hoc advice on environmental management as well as liaising with competent authorities.
 Value of Project: ~R100,000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: August 2021- Ongoing
 Client: Nelson Mandela Bay Municipality
 Name of Project: NMBM Emergency Drought Relief - Moregrove Wellfields (three projects)
 Project Description: ECO function for the drilling and equipping for the Glendinningvale, Fort Nottingham and Fairview Wellfields borehole sites.
 Job Title and Duties: Compilation of EMPr, monthly environmental auditing, monitoring and advising on compliance with authorisations and EMPr, provision of ad-hoc advice on environmental management as well as liaising with competent authorities.

Value of Project: Confidential
 Location: Seaview, Eastern Cape, South Africa
 Project duration/date: July 2021- Ongoing
 Client: Nelson Mandela Bay Municipality
 Name of Project: NMBM Emergency Drought Relief – KwaNobuhle Supply Pump Station Augmentation
 Project Description: ECO function for the construction of an additional (KwaNobuhle) Supply Pump Station, and associated pipelines, at the Chelsea reservoir
 Job Title and Duties: Compilation of EMPr, monthly environmental auditing, monitoring and advising on compliance with authorisations and EMPr, provision of ad-hoc advice on environmental management as well as liaising with competent authorities.
 Value of Project: ~R150 000

Abby van Nierop

Environmental Scientist

Key Experience:

ENVIRONMENTAL CONTROL OFFICER (ECO)

Location: Pearston, Eastern Cape, South Africa
 Project duration/date: June – December 2020
 Client: Blue Crane Route Municipality
 Name of Project: BCRM Emergency Drought Relief: Pearston WWTW Upgrade
 Project Description: ECO function for the upgrade of the Pearston Wastewater Treatment Works
 Job Title and Duties: Monthly environmental auditing, monitoring and advising on compliance with authorisations and EMPr, provision of ad-hoc advice on environmental management as well as liaising with competent authorities.
 Value of Project: ~R400 000

Location: Port Elizabeth, Eastern Cape, South Africa
 Project duration/date: July 2020- July 2021
 Client: Eskom Holdings SOC Limited
 Name of Project: Eskom Grassridge – Sunnyside – Melkhout 132 kV Powerline
 Project Description: ECO function for the refurbishment of a 100 km powerline from Grassridge to Sunnyside to Melkhout
 Job Title and Duties: Monthly environmental auditing, monitoring and advising on compliance with authorisations and EMPr, provision of ad-hoc advice on environmental management as well as liaising with competent authorities.
 Value of Project: ~R500 000

Location: Port Alfred, Eastern Cape, South Africa
 Project duration/date: July 2015 (4 years)
 Client: SANRAL
 Name of Project: The Upgrade of the R72 Road between Port Alfred and the Fish River
 Project Description: ECO function for the construction of regional road and associated road infrastructure.
 Job Title and Duties: Monthly environmental auditing, WULA, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Port Saint Johns, Eastern Cape, South Africa
 Project duration/date: January 2019 (11 months)
 Client: Port St Johns Local Municipality
 Name of Project: The upgrading of Port St Johns Residential Streets: Marine Drive & Marine Drive Link 1 Roads
 Project Description: ECO function for the upgrading of residential roads and associated road infrastructure.
 Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Sipepetu, Eastern Cape, South Africa
 Project duration/date: December 2017 (24 months),
 Client: SANRAL
 Name of Project: The Upgrade of the DR08125 Road and DR08447 Road from the N2 National Road to Sipepetu Hospital
 Project Description: ECO function for the upgrading of provincial roads and associated road infrastructure.
 Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Abby van Nierop

Environmental Scientist

Key Experience:**ENVIRONMENTAL CONTROL OFFICER (ECO)**

Location: Middelburg, Eastern Cape, South Africa
Project duration/date: February 2015 (17 months)
Client: SANRAL
Name of Project: The Upgrade of the N9, Section 7 from Middelburg to Carlton Heights
Project Description: ECO function for the upgrading of a national road and associated road infrastructure.
Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Libode, Eastern Cape, South Africa
Project duration/date: 2017 – 2019 (30 months)
Client: SANRAL
Name of Project: The Construction of Bridges, Intersection Widenings and Livestock Underpasses on the R61: Section 8 from Libode East (Km28, 1)
Project Description: ECO function for the upgrading of provincial roads and associated road infrastructure.
Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Luchaba Nature Reserve, Mthatha, Eastern Cape
Project duration/date: 2014 – 2015 (11 months)
Client: SANRAL
Name of Project: The Construction of the Mthatha Dam Tourism Development in the Luchaba Nature Reserve: Phase III.
Project Description: ECO function for the construction of a 300 MI reservoir.
Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Idutywa, Eastern Cape, South Africa
Project duration/date: Match 2013 (10month)
Client: SANRAL
Name of Project: The Expansion and Rehabilitation of Two Idutywa Dams
Project Description: ECO function for the proposed expansion and rehabilitation work for a dam.
Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Lusikisiki, Eastern Cape, South Africa
Project duration/date: April 2016 (13 months)
Client: Department of Public Works
Name of Project: The Construction of the Lusikisiki SAPS Police Station and Package Treatment Plant
Project Description: ECO function for the construction a new police atation and package treatment plant
Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Abby van Nierop

Environmental Scientist

Key Experience:**ENVIRONMENTAL CONTROL OFFICER (ECO)**

Location: Gonubie, Eastern Cape, South Africa
Project duration/date: March 2013 (14 months)
Client: Buffalo City Metropolitan Municipality
Name of Project: The Upgrade Gonubie WWTW
Project Description: ECO function overlooking construction-related activities involved in the upgrading of a WWTW.
Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Port Edward, Kwazulu-Natal, South Africa
Project duration/date: September 2015 (20 months)
Client: SANRAL
Name of Project: The upgrade of DR08005 from Magusheni to Mzamba (R61) + 80 Km: Phase 1 and Phase 2
Project Description: ECO function for the upgrading of provincial roads and associated road infrastructure.
Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Elliotdale, Eastern Cape, South Africa
Project duration/date: March 2014 (48 months)
Client: SANRAL
Name of Project: The upgrade of DR180033 for Elliotdale to DR08327: Phase 1 and Phase 2
Project Description: ECO function for the upgrading of provincial roads and associated road infrastructure.
Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Bizana, Eastern Cape, South Africa
Project duration/date: April 2019 (7 months)
Client: SANRAL
Name of Project: The rehabilitation and regravelling of DR080116, DR08020, DR080121 and DR080144
Project Description: ECO function for the upgrading of provincial roads and associated road infrastructure.
Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Pietermaritzburg, Kwazulu-Natal, South Africa
Project duration/date: September 2017 (21 months)
Client: SANRAL
Name of Project: The Special Maintenance the National Route from Sanctuary Road I/C (15 15.1) to Cedara I/C (KM 1.6).
Project Description: ECO function for the upgrading of a national road and associated road infrastructure.
Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Abby van Nierop

Environmental Scientist

Key Experience:

ENVIRONMENTAL CONTROL OFFICER (ECO)

Location: Coffee Bay, Eastern Cape, South Africa
 Project duration/date: June 2013 (10 months)
 Client: Department of Roads and Public Works
 Name of Project: The construction of the new Coffee Bay Bridge
 Project Description: ECO function for the construction of a new bridge.
 Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Pitseng, Eastern Cape, South Africa
 Project duration/date: 2019 (5 months)
 Client: Elundini Local Municipality
 Name of Project: The repairs to the Pitseng Causeway
 Project Description: ECO function for the upgrading of an existing causeway together with the construction of gabions
 Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Mhlontlo, Eastern Cape, South Africa
 Project duration/date: June 2019 (4 months)
 Client: Elundini Local Municipality
 Name of Project: The repairs to the Mhlontlo Causeway, Elundini Local Municipality
 Project Description: ECO function for the upgrading of an existing causeway together with the construction of gabions.
 Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Hamburg, Eastern Cape, South Africa
 Project duration/date: April (13 months)
 Client: Ngqushwa Local Municipality
 Name of Project: Urban Regeneration Programme, Hamburg, Eastern Cape.
 Project Description: ECO function for the construction of a multidisciplinary centre.
 Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Gonubie, Eastern Cape, South Africa
 Project duration/date: June (14 months)
 Client: Buffalo City Metropolitan Municipality
 Name of Project: Upgrading of Gulls Way Road, Gonubie, Eastern Cape
 Project Description: ECO function for the upgrading of a residential road and associated road infrastructure.
 Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Abby van Nierop

Environmental Scientist

Key Experience:

ENVIRONMENTAL CONTROL OFFICER (ECO)

Location: Gonubie, Eastern Cape, South Africa
 Project duration/date: November 2016
 Client: Buffalo City Metropolitan Municipality
 Name of Project: Upgrading of Gonubie Main Road / East Gulls Way Intersection, Gonubie, Eastern Cape
 Project Description: ECO function for the upgrading of a main residential road and associated road infrastructure
 Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Location: Queenstown, Eastern Cape, South Africa
 Project duration/date: October 2018 (7 months)
 Client: Enoch Mgijima Local Municipality
 Name of Project: Ward 30 Regravelling ECO
 Project Description: ECO function for the upgrading of rural roads and associated road infrastructure.
 Job Title and Duties: Monthly environmental auditing, attendance of progress meetings, monitoring and advising on compliance with authorisations as well as liaising with competent authorities.

Key Experience:

ONSITE DESIGNATED ENVIRONMENTAL OFFICER (DEO)

Location: Noupoot, Northern Cape, South Africa
 Project duration/date: February 2015 (17 months)
 Client: Mainstream Renewable Power
 Name of Project: Proposed construction of an 80 MW Wind Energy Farm in Noupoot, Northern Cape.
 Project Description: Onsite DEO for the construction period of a 35 wind turbine Wind Energy Farm.
 Job Title and Duties:

- Ensuring that the specific construction contract is undertaken in accordance with the relevant environmental requirements of the EMP, specialist reports as well as Authorization/Permits issued for the project;
- Interaction with subcontractors to ascertain environmental compliance;
- Conduct environmental incident investigations with corrective actions and generating reports;
- Act as emergency coordinator in case of hazardous material spills;
- Advise and coordinates spill response activity;
- Assistance in compiling Environmental Risk Assessments;
- Attend weekly progress meetings with the Client;
- Represent the contractor at environmental monitoring meetings undertaken by competent authority (DWS, DMR and DEDEAT);
- Compiling environmental Method Statements;
- Oversee the implementation of environmental requirements of all Method Statement;
- Conduct environmental awareness training to all levels of staff on site;
- Compiling Toolbox Talks;
- Undertaking daily environmental compliance inspections;
- Compiling weekly and monthly environmental reports;
- Maintain and update permits for compliance with all applicable regulations;
- Manage waste management, spill management, sanitary waste management;
- Monitoring of water use, energy consumption, weather conditions and erosion;
- Managing rehabilitation and hydro seeding program;
- Managing Water quality monitoring;
- Facilitating the actions of the flora and Fauna Search and Rescue team;
- Facilitating the catch and relocation of fauna;

Abby van Nierop

Environmental Scientist

Key Experience:**ONSITE DESIGNATED ENVIRONMENTAL OFFICER (DEO)**

- Advise and direct staff on environmental regulations and compliance issues;
- Compile and maintain a legal register;
- Manage used oil collection and separation from contaminated water and soil; and
- Lead management of actions to control alien invasive vegetation and rehabilitation.

Appendix B: Contractor Code of Conduct

ENVIRONMENTAL CODE OF CONDUCT FOR BUILDING CONTRACTORS

Contractors shall ensure that all sub-contractors, employees, suppliers, agents, etc., are fully aware of the environmental issues detailed in the Environmental Management Programme. Contractors must investigate and comply with all existing regulations and laws/ bylaws unless the Relevant Authority grants specific written authority waiving compliance with any legislation.

The following list represents the basic Do's and Don'ts towards environmental awareness, which all participants in this project must consider whilst carrying out their tasks. These are not exhaustive and serve as a quick reference aid.

DO:

- **Clear your work areas of litter and building rubbish at the end of each day – use the waste bins provided and ensure that litter will not blow away.**
- **Maintain waste removal system.**
- **Dispose of cigarettes and matches carefully. (These pose a fire risk and furthermore littering is an offence.)**
- **Use the toilet facilities provided and keep them clean.**
- **Report dirty or full toilet facilities.**
- **Prevent contamination or pollution of streams and water channels.**
- **Concrete batching areas should be appropriately placed and cement effluent from washing areas should be contained and evaporated and the remaining sludge disposed of at a registered disposal facility.**
- **Report injured animals.**
- **Report heritage remains immediately.**
- **Ensure that vehicles and machinery do not leak fuel or oils.**
- **Report all fuel or oil spills immediately & stop the spill continuing.**
- **Confine work and storage of equipment to within the immediate work area.**
- **Prevent excessive dust and noise.**
- **Use safety equipment and comply with all safety procedures.**
- **Ensure a working fire extinguisher is immediately at hand if any “hot work” is undertaken e.g. Welding, grinding, gas cutting etc.**
- **Drive on designated routes only.**
- **Respect existing services at all times.**

DO NOT:

- **Remove or damage vegetation without direct instruction.**
- **Injure, trap, feed or harm any animals – this includes birds, frogs, snakes, lizards etc.**
- **Remove any heritage remains.**
- **Make fires.**
- **Allow cement or cement bags to blow around.**
- **Litter or leave food lying around.**
- **Allow waste, litter, oils or foreign materials into streams.**
- **Enter any fenced off or marked area.**
- **Overnight on site.**
- **Speed or drive recklessly.**