

**APPENDIX A UNDERTAKING BY THE EAP AND THE
PROJECT TEAM CVS**

- A1. Undertaking by the Environmental Assessment Practitioner
- A2. Project Team CVS

APPENDIX A1 UNDERTAKING BY THE EAP

APPENDIX 1
DECLARATION OF THE EAP


I, Nickieva Stevens, declare that -

- I act as the independent environmental assessment practitioner in this application;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I will take into account, to the extent possible, the matters listed in Regulation 13 of the Regulations when preparing the application and any report relating to the application;
- I undertake to disclose to the applicant and the Competent Authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the Competent Authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the Competent Authority, unless access to that information is protected by law, in which case it will be indicated that such information exists and will be provided to the Competent Authority;
- I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in Section 49B of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;

- I have a vested interest in the proposed activity proceeding, such vested interest being:



Signature of the environmental assessment practitioner

ERM

Name of company:

Date

23 Jan 2018

UNDERTAKING UNDER OATH/ AFFIRMATION

I, Victoria Steves, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.

[Handwritten signature]

Signature of the Environmental Assessment Practitioner

ERM

Name of Company

23 Jan 2018

Date

[Handwritten signature]

Signature of the Commissioner of Oaths

2019-01-23

Date



APPENDIX A2 PROJECT TEAM CVS

Philip Johnson

Partner

Philip is a Partner and experienced project manager at ERM, with over 13 years of experience in managing environmental projects for a range of industrial clients. This has included overseeing environmental assessments for oil & gas, mining, manufacturing and commercial clients in Europe, Asia and the Middle East. Philip has completed contaminated land assessments, environmental audits, compliance reporting, and environmental impact assessments in a range of cultural diverse and challenging environments.



Email: philip.johnson@erm.com

LinkedIn: <https://www.linkedin.com/in/philip-johnson-147320b9/>

Education

- BSc. Environmental Management
Keele University, United Kingdom, 2003
- MSc. International Business
Royal Holloway, University of London, 2014

Professional Affiliations and Registrations

- Institute of Environmental Management and Assessment (IEMA); membership number 0134477
- Network for Industrial Contaminated Land in Africa (NICOLA)
- Australian Contaminated Land Association (ACLCA)

Fields of Competence

- Project management
- Contaminated site management
- Management of multi-site portfolios
- Environmental risk and liability assessments
- Environmental Due Diligence
- Environmental Management Plans

Key Industry Sectors

- Downstream petroleum
- Petrochemicals
- Petroleum Refining
- Manufacturing, Chemical and Pharmaceutical
- Mining
- Transport and Infrastructure

Key Projects with ERM

- **Data gap assessment and remediation appraisal, SABIC (Saudi Arabia Base Industrial Chemicals), Al Jubail, Saudi Arabia, 2018**
Responsible for assessment of ammonia contaminated groundwater at a methanol production facility in Al Jubail and implementation of remediation strategy. Project involved an initial data review and data gap analysis, before site characterization to enable the design of a remediation strategy for the site. A site visit was required as part of the project and involved meeting multiple project stakeholders, including representatives of the Royal Commission; the national Saudi regulator.
- **Environmental Site Assessment at a Liquid Mud Plant Fluids facility, Mtwara Tanzania, 2017**
Partner in Charge for an exit assessment at an industrial port site in Southern Tanzania, ERM completed a limited intrusive site investigation at a liquid mud plant fluids facility. The objective of the work was to evaluate the presence of any environmental impact related to operations at the site. The outcome of ERM's work informed the degree of likely impact at the site and whether additional intrusive assessment was required prior to exit from the site by current operators.
- **Environmental assessment support, Zuva Petroleum, Zimbabwe, 2017**
ERM delivered in-country training for environmental staff at Zuva Petroleum in order to allow Zuva to develop a programme of environmental assessment for their portfolio of assets. Technical support was provided to ERM's in-country facilitator in developing workshop content, and post-workshop support included preliminary review of Zuva's portfolio.
- **Litigation support, National Oilwell Varco (NOV), at a former waste facility, Tunisia, 2017/8**
As part of ongoing arbitration proceedings, ERM supported NOV in a legal dispute regarding environmental liability at a waste

facility in northern Tunisia. The project involved review of multiple historic site assessment reports in order to characterize the waste distribution and subsequent soil and groundwater contamination, and to build the legal case in support of NOV. ERM supported NOV's legal representatives through the project.

Key Projects Prior to Joining ERM

- **Environmental audit for iron ore mining operations, Cliffs Resources, Western Australia, 2014**
Completed environmental audits for a portfolio of three operational iron ore mine sites in Western Australia. The work was required in order to develop a risk register for management of operations at the sites and to implement measures to mitigate environmental risk identified.
- **Environmental appraisal of transport infrastructure design, City of Perth, Western Australia, 2013**
Coordinated an environmental impact assessment for proposed tunnel and rail infrastructure projects in for city of Perth. The project entailed working with the design and engineering teams in order to integrate environmental impact considerations into the initial design process.
- **Environmental Programme Manager, Shell, Kuala Lumpur, Malaysia, 2009 – 2011**
Country manager for environmental services provided to Shell retail, distribution and refinery sites across Malaysia. Responsible for six project managers and a total of twenty-five staff, undertaking site investigation, remediation and emergency incident response operations. Ensured that technical and health & safety expectations of the Malaysia programme was achieved, also responsible for procurement and performance of programme sub-contractors.
- **Environmental Management and Risk Management Plan, Port Dickson Refinery, Malaysia, Shell, 2010**

Developed an Environmental Management Plan (EMP) in response to known MtBE contamination to groundwater at Port Dickson Refinery, Malaysia. In extension to this initial work, a Risk Management Plan (RMP) was developed to implement necessary emergency leak response procedures applicable to the MtBE source at the site. The project included site investigation design, coordination of field teams for site investigation and periodic monitoring events, and development of risk-based monitoring triggers to address fluctuating contaminant concentrations.

■ **Environmental Site Assessment, BP, Rumaila Oil Field, Southern Iraq, 2010**

Part of a three-man team to undertake a due diligence and environmental assessment of the Rumaila oil field in Southern Iraq, prior to acquisition by British Petroleum. The work included an in-country evaluation of numerous production facilities and wellhead production sites in order to provide an environmental liability assessment in relation to operations at the field.

■ **Emergency spill response, Perak, Malaysia, Shell, 2010**

Coordinated the environmental element of the emergency response following a tanker spill incident in central Malaysia. Project involved rapid mobilization of field teams to a remote area of the Malaysian highlands in order to develop a conceptual site model for an area of rainforest impacted by a tanker roll over. Development of the CSM informed the necessary water sampling downstream and informed the likely affected receptors to be targeted in mitigation efforts.

■ **Product Recovery and Site validation, Chevron retail site, Johor Bharu, Malaysia, 2009**

Coordinated site investigation and product recovery resulting from an underground storage tank product loss in Johor Bharu, southern Malaysia. This emergency response project required immediate health and safety mitigation measures, with regard to potential direct exposure (dermal and inhalation) of site

workers. This was followed by a soil and groundwater investigation to delineate the extent of the spill, and the subsequent removal (of residual product and impacted soil). Following the initial investigation work, site validation confirmed suitability for ongoing use.

■ **Environmental Site Assessment and waste characterization, Pentridge Prison, Melbourne, Australia, 2009**

A comprehensive environmental site assessment completed at the site of the former Pentridge Prison, in order to assess the suitability of the site for a residential redevelopment. Works included a drilling programme, groundwater well installation, soil and groundwater analysis, and characterization of waste materials prior to landfill disposal.

■ **National environmental validation programme, PetroTec, New Zealand, 2008**

Responsible for the environmental assessment and validation reporting following removal and decommissioning of underground fuel tanks across New Zealand. As part of an asset replacement programme, project required coordination of all validation sampling, environmental analysis and reporting to ensure former fuel sites were validated and approved for respective future land use.

■ **Environmental Due Diligence, London UK, confidential finance client, 2007**

Project managed the due diligence assessment for an 84-site commercial portfolio (hotels). Project required environmental due diligence reporting for a portfolio transaction between two UK developers. Portfolio sold for £550 million (May 2006).

■ **Environmental Due Diligence, Munich, Germany, 2006**

Environmental audit of manufacturing facility in Munich. Conducted an environmental audit of a technical manufacturing plant as part of an international multi-site portfolio due diligence.

■ **Gas oil remediation, Watford, north London, confidential client, 2004**

Remediation for an industrial fuel spill in north London. Field representative, responsible for all site works and subsequent reporting to Environment Agency.

Victoria Stevens

[Senior Consultant]

Vicky Stevens is a Senior Environmental Consultant in ERM with 13 years of experience in the field of environmental consultancy. Vicky specialises in Environmental Impact Assessments (EIAs) and Environmental Management Plans (EMPs) for developments occurring in the marine and coastal zone. She has both project managed, and reviewed a number of international oil, gas, marine and port development EIAs and associated EMPs.

Recent key experience in South Africa includes project manager and marine lead and compilation of the EIA Report for the installation and landing of the IOX Subsea Cable System to be Landed in East London and for the METISS Subsea Cable System to be Landed in KwaZulu-Natal .



Experience: 13 years' experience in EIAs & EMPs for developments occurring in the marine and coastal zone

LinkedIn: <https://www.linkedin.com/in/victoria-stevens-0656121b/>

Email: vicky.stevens@erm.com

Professional Affiliations & Registrations

- South African Council for Natural Scientific Professions (Pr.Sci.Nat. No: 400170/17)
- Member of the IAIA SA association

Fields of Competence

- Project Management and Compilation of EIAs and EMPs for offshore Oil & Gas exploration, development, production and decommissioning projects
- Project Management and Compilation of EIAs and EMPs for subsea cable projects
- Project Management and Compilation of EIAs and EMPs for offshore 2D and 3D seismic surveys
- Providing engineers with advice and guidance to ensure environmental compliance
- Environmental permitting reviews according to World Bank and IFC requirements
- Scoping studies, including multi-criteria analysis of alternatives
- Coastal Waters Discharge Permits
- Marine specialist and oceanographic studies
- Environmental monitoring of dredging operations
- Liaising with authorities, stakeholders, interested & affected parties and clients

Education

- MSc (Physical Oceanography), University of Cape Town (UCT), South Africa, 2005
- BSc (Hons) (Environmental and Geographical Science), UCT, 2002
- BSc (Zoology and Environmental & Geographical Science), UCT, 2001

Languages

- English, native speaker

Key Industry Sectors

- Offshore Oil & Gas exploration, development, production and decommissioning activities
- Marine Ports and developments
- Dredging Operations
- IFC Permitting reviews

Publications

- Stevens, V, Waldron, H, Brundrit. G and Harcourt-Baldwin, J (2005) The Threat and Cascade Method of Estuarine Health Assessment, South African Marine Science Symposium
- Stevens, V, Waldron, H, Brundrit. G and Harcourt-Baldwin, J (2005) The Threat and Cascade Method of Estuarine Health Assessment - A Logical Sequence from Human Impact to Biological Degradation via System Physics and Chemistry, Land Ocean Interactive Zone Conference

Key Projects

- Environmental Impact Assessment (EIA) Report for METISS Subsea Cable System to be Landed in KwaZulu-Natal, South Africa, ASN, 2018 – ongoing
Marine Lead and Project Manager
Responsible for project management and the drafting of a Scoping and EIA Report and the management of specialists for a subsea cable system, KwaZulu-Natal, South Africa.
- Environmental Impact Assessment Report for Noble Energy's Alen Gas Export Pipeline, Equatorial Guinea, Noble Energy, 2018
Marine Lead and Project Manager
Responsible for project management and the drafting of an EIA Report for the installation of an offshore natural gas export pipeline.
- Environmental Impact Assessment Report for IOX Subsea Cable System to be Landed in East London, South Africa, IOX, 2018 – ongoing
Marine Lead and Project Manager
Responsible for project management and the drafting of a Scoping and EIA Report and the management of specialists for a subsea cable system, East London, South Africa.
- Environmental and Social Impact Assessment (ESIA) Report for Offshore Exploration Drilling, Kenya, ENI, 2018
Marine Lead
Contributing to the drafting of a pre-ESIA and ESIA Report for an offshore exploration drilling project, offshore Kenya.
- Update of the Environmental Impact Assessment Report for the proposed 3D Seismic Survey for Petroleum Exploration Licence 39 Exploration Programme., Shell, 2018
Marine Lead
Responsible for the drafting of the update of the EIA Report for a 3D seismic survey in the western portion of the PEL 39 Licence Area
- Environmental Impact Assessment Report for Marine Shallow Seismic Acquisition in the Marine III licence area in the Republic of Congo, NewAge, 2017 – ongoing
Project Manager and marine lead
Responsible for the Project Management and drafting of an EIA Report for a shallow marine seismic survey project offshore Congo.
- Environmental Impact Assessment Report for Offshore Exploration Drilling, South Africa, ENI, 2017 – ongoing
Marine Lead and Project Manager
Contributing to the drafting of a Scoping and EIA Report and the management of specialists for an exploration drilling project, offshore South Africa.
- Environmental Impact Assessment Report for Offshore Seismic Survey Blocks W, S and EG21, Equatorial Guinea, KOSMOS, 2017 – ongoing
Marine Lead
Contributing to the drafting of an EIA Report for a seismic survey project in offshore Bioko Equatorial Guinea waters.
- Environmental Impact Assessment Report for Offshore Seismic Survey Block 11, Equatorial Guinea, ExxonMobil, 2017 – ongoing
Project Manager
Responsible for the drafting of an EIA Report for a seismic survey project offshore Bioko Island, Equatorial Guinea. The EIA Report compilation included an evaluation of the relevant legal and regulatory requirements; determination of the environmental (biological and physical) and social conditions; determination of potential impacts; and creation of a comprehensive mitigation and management plan.
- Update of Environmental Impact Assessment Report for Block I to Include Offshore Drilling, Equatorial Guinea, Noble Energy, 2017
Project Manager and Marine Lead
Responsible for the drafting of an EIA Report for additional offshore drilling activities in Block I, Equatorial Guinea. The EIA Report compilation included an evaluation of the relevant legal and regulatory requirements; determination of the environmental (biological and physical) and social conditions; determination of potential impacts; and creation of a comprehensive mitigation and management plan.
- Environmental and Social Due Diligence for an Offshore Platform, Norway, Confidential Investment Client, 2016
Marine Environment Lead
Project managed and undertook the desk-based component and write-up of an ESDD to international standards of an offshore platform for a client looking to invest in the project.

- Review of the Environmental and Social Impact Assessment of BUA Refinery and Petrochemical Project Ibeno, Nigeria, Confidential Client, 2017 to 2019
Reviewer
Reviewed the ESIA, on the behalf of the client, with the primary purpose to see that national requirements and lender requirements are both adequately considered.
- Environmental Impact Assessment Report for Offshore Seismic Survey Block B, Equatorial Guinea, ExxonMobil, 2017
Marine Lead
Contributing to the assessment of seismic noise on marine mammals and turtles for an Environmental Impact Assessment offshore Bioko Island, Equatorial Guinea.
- Summary Paper, IPIECA, 2017
Project Manager
Compilation of a summary document that outlines the areas of existing good practice and management measures that are currently implemented by the oil and gas industry in the marine environment to reduce potential impacts on Biodiversity & Ecosystem Services (BES) from specific aspects and dependencies.
- Dredging Specialist, Mozambique, Client Confidential , 2017
Marine Environmental Advisor
Compiling an Environmental Management Plan for the dredging operations inside Palma Bay, Mozambique.
- Environmental Impact Assessment for Offshore Exploration Drilling, Equatorial Guinea, ExxonMobil, 2016 – 2017
Marine Lead
Contributing to the drafting of an EIA Report for an offshore exploration drilling project offshore Bioko Island, Equatorial Guinea. The EIA Report compilation included an evaluation of the relevant legal and regulatory requirements; determination of the environmental (biological and physical) and social conditions; determination of potential impacts; and creation of a comprehensive mitigation and management plan.
- Environmental and Social Impact Assessment onshore and offshore Mozambique, Sasol, 2015 - 2017
Project Co-ordinator and Marine Lead
Project co-ordinator and Marine Lead of Scoping Study, Specialist studies, and the ESIA for the proposed offshore Oil & Gas Development
- Environmental Advisor, Cape Town, South Africa, Client Confidential, 2017
Marine Environmental Advisor
Providing advice and assistance to the client in terms of their marine environmental permitting (Coastal Waters Discharge Permits).
- Environmental and Social Impact Assessment, offshore Tanzania, BG, 2015 - 2016
Marine Lead
Marine Lead for the Environmental Impact Statement for two proposed Block-Wide Offshore Drilling projects.
- Marine Environmental Specialist, Multiple Gas to Power Projects, Confidential Client, 2015
Marine Specialist
Coastal effluent and associated marine impacts advisor for multiple gas to power projects.
- Environmental Management Programme for 3D Seismic Data Acquisition on the East Coast of South Africa, Schlumberger, 2015
Environmental Consultant
Composition and authorization of 3D Marine Seismic Environmental Management Programme.
- Environmental Impact Study for 2D Seismic Data Acquisition in the Benguela and Namibe Basins, offshore Angola, GXT Technology, 2015
Project Manager
Project management and composition of 2D Marine Seismic Survey Environmental Impact Study.
- Environmental and Social Impact Assessment Scoping Study, offshore Ghana, Confidential Client, 2015
Project Manager
Project management and composition of Scoping Study for the proposed offshore Oil & Gas development.
- Multi-products Pipeline Screening Study and EIA, Ethiopia & Djibouti, BlackRhino, 2015 – ongoing
Marine Lead and Advisor
Marine advisor for the screening study for the Environmental and Social Impact Assessment (ESIA) in Ethiopia and Djibouti for the BlackRhino MOGS (BRM) multi-products fuel pipeline from Djibouti to Awash in Ethiopia.

- Rapid Cumulative Assessment, Tema Port Upgrade and Expansion, Ghana, APMT, 2015
Report Writer
Composition of a Rapid Cumulative Assessment for the upgrade and expansion of Tema Port in Ghana.
- EPA Compliance Review EIA Report and Environmental Management Plan Review for Tema Port Upgrade and Expansion, Ghana, APMT, 2015
Environmental Advisor
Reviewed the EIA and Environmental Authorisation for the expansion and upgrade of the Tema Port in Ghana. Provided the client with advice regarding the implementation of the mitigation measures stipulated in the relevant reports and IFC compliance.
- Coastal Waters Discharge Permit, Port Elizabeth, South Africa, Shell, 2015
Project Manager
Assisted Shell with their Coastal Water Discharge Permit application for the Dom Pedro Jetty.
- Andy's truck Stop Basic Assessment, Port Elizabeth, South Africa, Shell, 2015
Environmental Consultant
Composition and authorization of a Basic Assessment for Andy's Truck Stop.

Key Projects before joining ERM

- Environmental feasibility and screening study for barging of construction materials, Kenya, Tullow Oil, 2015
Senior Consultant
Assisted with an environmental feasibility and screening study for the location of a port on Lake Turkana.
- EIR and EMP review for Tanker Farm & Berth and fuel transfer pipeline, South Africa, Oil & Gas client, 2015
Environmental Advisor
Reviewed the EIRs and EMPs that were conducted in 2013 for the development of a tanker farm, tanker berth and associated new fuel transfer pipeline in Walvis Bay. Provided engineers with advice regarding design and implementation of the mitigation measures stipulated in the relevant reports.
- Environmental advisor for a power plant, Ghana, Oil & Gas client, 2014 - 2015
Environmental Advisor

Provided engineers with advice regarding design and implementation of the mitigation measures stipulated in the relevant reports.

- Metolong Dam Water Supply Programme, Lesotho UNIK, 2014
Environmental Control Officer
Environmental Control Officer services for Metolong Dam Water Supply Programme in Lesotho.
- Lender's technical adviser for Kuvananga gas engine power plant, Mozambique, power client, 2014 - 2015
Environmental Auditor
IFC Environmental permitting review of the construction of a power plant in Mozambique.
- Botanical Constraints Study for Proposed Liquefied Natural Gas (LNG) Onshore Terminal, Saldanha, South Africa, PetroSA, 2014
Project Manager
Management of Botanical Constraints Study for Proposed LNG Onshore Terminal, Saldanha, Western Cape.
- Environmental Advisor, WorleyParsons Engineers, 2014 - 2015
Environmental Advisor
Assisting WorleyParsons Engineers with environmental authorisations for multiple projects.
- Amendment to an Existing Environmental Authorisation - Final Amendment Environmental Impact Assessment Report. Proposed Well Stimulation of Three Wells in the F-O Gas Field, Offshore Mossel Bay, SA, PetroSA, 2013 - 2015
Project Management and Senior Marine Environmental Consultant
Project management and compilation of an EIA of the proposed hydraulic fracturing of wells, in the F-O Gas Field, offshore South Africa. Management of all the specialist studies associated with the EIA.
- Environmental Advisor, Koeberg Nuclear Power Station, South Africa, Eskom, 2013 -2014
Marine Environmental Advisor
Providing advice and assistance to the client in terms of their marine environmental permitting (Coastal Waters Discharge Permits and EMPs). Compiling an Environmental Management Plan for the dredging operations inside the intake basin at Koeberg.

Compiling terms of reference for specialist assessments associated with the Coastal Waters Discharge Permits.

- Environmental Statements, Oil & Gas clients, UK, 2012
Marine Environmental Consultant
Writing multiple reports on the results of the 2012 post construction survey of the Noord Stream pipeline, in the Baltic Sea. Compiling noise assessments of the impact of seismic guns on marine mammals and fish in the North Sea. Managing and writing multiple PON15B applications. Scoping assessment for an Oil & Gas development in Shetland.
- Environmental Statements, Oil & Gas clients, UK, 2012
Project Manager and Marine Environmental Consultant
Project management and compilation of multiple decommissioning environmental statements in the North Sea. Reviewing Oil Pollution Emergency Plans (OPEP).
- Environmental Baseline Report, Oil & Gas client, Qatar, 2012
Project Manager and Marine Environmental Consultant
Project management and writing and editing of an Environmental baseline for an offshore oil development in the Arabian Gulf, Qatar.
- Environmental Statements, Oil & Gas client, UK, DONG, 2012
Marine Environmental Consultant
Editing and assisting in the management and compilation of an Environmental statement for the Glenrothes and Cragganmore condensate developments in the west of Shetland.
- PON15B, Oil & Gas clients, UK, 2011
Marine Environmental Consultant
Writing environmental descriptions and chemical justifications for multiple PON15Bs.
- Environmental Statement for the Sweep (Carrack), UK Shell, 2011
Marine Environmental Consultant
Writing, editing and managing the compilation of an Environmental Statement for the Sweep (Carrack).
- Environmental Statement, Endeavour, 2011
Marine Environmental Consultant
Writing, editing and assisting in the compilation and management of an Environmental Statement for the West Rochelle offshore condensate development.
- Scoping Report, Oil & Gas client, UK, 2011
Marine Environmental Consultant
Editing and assisting in the compilation of a scoping report for decommissioning an offshore Oil & Gas structure.
- Environmental Statements, ConocoPhillips, UK, 2011
Marine Environmental Consultant
Writing, editing and assisting in the compilation of two Environmental Statements for the Katy and Enochdhu offshore Oil & Gas developments.
- Environmental Statement, Oil & Gas client, UK, 2011
Marine Environmental Consultant
Writing, editing and assisting in the compilation of an Environmental Statement for the decommissioning of a gas field. Preparing materials and participating in a comparative assessment workshop.
- Environmental Statements, Nexen Petroleum UK Limited, UK, 2010
Writing, editing and assisting in the compilation of 2 Environmental Statements for the Blackbird and Golden Eagle Developments.
- Environmental Statement, BG Norge, UK, 2010
Writing the accidental release of hydrocarbons and mitigation measures sections of an Environmental Statement for the Knarr gas development. Formatting and reviewing document.
- Environmental monitoring of dredging and dredge spoil disposal in Cape Town harbour. (Transnet, South African Dredging Surveys, Rohde Nielson), SA, Transnet, 2007 - 2010
Marine Environmental Consultant
Implementing and maintaining real time monitoring of the environmental impact of dredging in Cape Town harbour. Implementing and maintaining monitoring of the dumping of the dredge spoil from the Cape Town harbour at the dump site. Analysis and processing of all the data collected. Reporting to the client on the environmental impact of the dredging in Cape Harbour and at the dumpsite. Real time plume tracking of the dredge spoil at the dumpsite.

- Cooling Water Discharge Assessment, Koeberg Nuclear Power Station, Eskom, SA, 2009
Marine Specialist
A desktop review of the environmental impact of the discharge of cooling water from a nuclear power plant off the west coast of South Africa was conducted.
- EIA for offshore oil & gas exploration drilling in Block 16, Angola, Maersk, 2009
Marine Environmental Consultant
Assisted in compiling an EIA of offshore drilling for Oil & Gas in Angola.
- Seismic survey by Sonangol in Block 3/05a, Angola, Sonangol, 2008
Marine Environmental Consultant
Assisted in the compiling of the environmental impact of Seismic surveying in Angola.
- A Physical Oceanography Environmental Profile for Beira, Mozambique, ERM, 2007
Marine Specialist
Preparation of an environmental baseline description for a proposed transportation of coal in Beira, Mozambique.